Appendix B: Response to Comments on the Westside Fire Recovery Draft EIS

Comment Period on the Draft Environmental Impact Statement

On March 6, 2015, the draft environmental impact statement (EIS) and supporting documents for the Westside Fire Recovery Project (Project) were posted to the project's webpage (http://www.fs.fed.us/nepa/nepa_project_exp.php?project=45579). Notifications of the publication of the draft EIS were sent to interested and affected parties, including other public agencies, tribes, adjacent property owners, and interested groups and individuals by email or by letter. On March 6, 2015, the Council on Environmental Quality granted the Forest Service alternative arrangements, shortening the required comment period on the draft EIS from 45 to 30 days. On March 13, 2015, a Notice of Availability was published in the Federal Register and a legal notice was published in the Siskiyou Daily News, beginning the 30-day comment period. On April 3, 2015, a notice of extension of the draft EIS comment period was published in the Federal Register and the Siskiyou Daily News. The comment period was extended an additional 15 days in response to public requests for additional review and comment time. Comments received by April 27, 2015, were considered timely and addressed in this response to comments. See the public involvement section of chapter 1 for details about public involvement.

Methodology

Comments received before or after the comment period on the draft EIS are included in the project record and are being considered for the decision but were not responded to by the agency. Comments received during the comment period were included in the project record, tracked upon receipt, and agency responses to them were prepared for this appendix. The agency requested comments to be submitted either electronically into the public reading room on the project's webpage (http://www.fs.fed.us/nepa/nepa_project_exp.php?project=45579) or by hard-copy to the Forest Service office. However, a large portion of these letters were hand-delivered to the Forest Service at the Medford, Oregon open house on April 21, 2015, as form letters (one letter submitted by multiple commenters).Other form letters were emailed to a variety of individual email accounts of Forest Service employees Submitted and tracked emails were then uploaded into the Comment Analysis and Response Application (CARA) database for coding. Comment letters and attachments were logged in and scanned into an electronic file and made available in the project's public reading room for public review. Codes were initially used to organize the comments received. Form letter comments were only coded once. For form letters, the database recognized "master form letters" (the first in a series of the same form letter) and "form plus" letters (form letters that match the master letter but deviate slightly). Each master form letter was coded. Then, form plus letters were compared to the master form; any additional substantive comments in the letter were coded. For coding, individual comments from within each comment letter were identified and highlighted. Based on the comments received, a unique coding list was developed. All comments were then coded using the CARA database system. Due to the number of comments received, comments were initially categorized by subject area as provided in coding structure report in the project record. The code used in not necessarily reflective of how the comment was addressed during response. Once comments were coded they were exported to a spreadsheet for review and response by the interdisciplinary team. Duplicate comments were deleted so that they were only responded to one time.

Some public comments included citations or references and/or attachments of various articles and publications. References were filtered from further consideration if they were:

- cited but not provided by the commenter, or hyperlinks were not functioning and references were not readily available to the agency;
- cited and provided but not related to the project;
- cited and provided but not related to comments from the commenter about the project; or
- cited and provided but not a scientific study (e.g. opinion pieces).

Some commenters cited references (e.g. published journal articles) but either did not provide the referenced document as an attachment to their comment or provided a non-functional website hyperlink. First, the agency attempted to find all references or citations that were cited but not provided. The agency was able to find many but not all of the cited references. We appreciated those individuals or groups who provided cited references as an attachment to the comments or took the time to confirm that the hyperlinks being provided as a part of their comment were functional. The project record includes a list of publically identified literature cited and how these were tracked and found, noting those that were not found. The project record also has a list of the comments received, including of cited references, and a review of whether or not the comment and cited reference was scientific in nature and related to the project and the commenter's discussion of the project. References of scientific literature that were cited, provided or found, and tied to comments were reviewed by the appropriate interdisciplinary team member to determine whether or not the comment and reference were relevant to the actions being proposed and their potential effects. Literature was incorporated into analysis as appropriate. The attachments and the full review of references cited are also available in the project record.

Below is a list of tables produced for this appendix.

- Table B- 1: Number of comments for or against an action alternative presented in the draft EIS.
- Table B- 2: Letter numbers, letter count, and a short summary of the master comment letters received during the draft EIS comment period.
- Table B- 3: List of unique commenters by letter number, name, organization, and submittal date.
- Table B-4: Forest Service response to comments.

Results of the Draft EIS Comment Period

A total of 13,413 comment letters were received during the draft EIS comment period for the Project. The agency received 265 unique letters, 21 master form letters, and 263 form plus letters (with slight modifications of the master form letters; the remainder of the letters were form letters identical to one of the 21 master form letters).

Many commenters expressed concerns about:

- Impacts to wildlife and wildlife habitat;
- Impacts to watersheds and fisheries resources;
- Procedures related to public comment and review opportunities (i.e. emergency situation determination and/or alternative arrangements) and/or decision and implementation timelines;
- Value of harvested timber;
- Fuels conditions post-fire and/or post-salvage, especially near communities and in the Wildland Urban Interface; and
- Forest Plan consistency or other legal requirements.

See Table B-4 for agency responses to comments.

Table B-1 below, compiled from the CARA database, quantifies comments which expressed a preference "for" or "against" a given action alternative presented in the draft EIS and opinions that were expressed for a given alternative "plus" a typical treatment or "minus a typical treatment. This table does not reflect all viewpoints expressed by commenters. For example, some comments that expressed preference for or against an alternative may have been coded as relating to specific resource area such as wildlife or fuels for the purposes of response. However, in most cases such comments were coded twice. The comment automatically considers any commenter names provided more than once as false duplicates. This resulted in some difficulty when generating an accurate number of total comments submitted. For example, many form letters were signed anonymously (as "anon") or were only identified by a common first name (e.g. "John"). As a result, roughly half of the comments were not accounted for in Table B-1. Of the comment letters received during the Westside Fire Recovery DEIS comment period, 549 unique, master, or form plus letters were coded by members of the interdisciplinary team. A large portion of these letters were delivered to the Forest Service at the Medford, Oregon open house on April 21, 2015, and expressed opposition to Alternative 2 in the DEIS. Other form letters were emailed to the Forest Service and included a mix of opposition and support for the project.

Table B- 1: Number of comments for or against an action alternative presented in the draft EIS.

Code	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Karuk Alternative
As is	257	1	3	6	123
Against	5,999	6	6	7	6
Plus (General)	12	1	1	0	7
Plus Salvage Harvest	39	1	0	1	0
Plus Roadside Hazard	1	1	0	0	0
Plus Site Prep and Planting	1	0	0	0	1
Plus Fuel Burn	4	0	0	0	1
Plus Fuel Break	3	0	0	0	0
Plus Fuel Treatment Other	5	0	0	0	0
Plus Temp Roads	0	0	0	0	0
Minus (General)	1	0	0	1	7
Minus Salvage Harvest	6	0	0	1	0
Minus Roadside Hazard	0	0	0	0	0
Minus Site Prep and Plant	0	0	0	0	0
Minus Fuel Burn	1	0	0	0	0
Minus Fuel Break	0	0	0	0	0
Minus Fuel Treatment Other	2	0	0	0	0
Minus Temp Roads	6	0	1	1	0

Below is a compilation of the form letters received during the comment period on the draft EIS for the Project. Several versions of form letters were received; Table B -2 outlines how many of each form letter were submitted and summarizes each letter. See the discussion about Table B-1 for how the numbers for Table B-2 were generated.

Table B- 2: Letter numbers, letter count, and a short summary of the master comment letters received during the draft EIS comment period

Master Form Letter Number	Letter Count	Short Summary of the Letter
12350	3	Form letter discussing the need to protect wilderness areas, re-planting of whitebark pine, and limited salvage within the Project area.
12467	2	Form letter opposing the proposed Westside Fire Recovery Project and overall salvage logging.
12549	1,005	Form letter expressing outrage over the proposed Westside Fire Recovery Project and concerns that the Project would harm wildlife and watershed's within the area. The letter also requests that the Project be rescinded.
16695	3	Letter from former southern Oregon residents opposing the proposed Westside Fire Recovery Project.
17111	2	Letter from Jerry Franklin that was also submitted by one other commenter.
17282	140	Letter outlining concerns that the proposed Westside Fire Recovery Project will harm water quality and salmon. Letter also supports implementation of the Karuk Alternative
17366	2	Letter outlining concern over the size of the proposed Westside Fire Recovery Project and potential harm to waters within the Project area.
17368	2	Letter urging implementation of the Karuk Alternative
20	3,585	Letter opposing the proposed Westside Fire Recovery Project and request that the Northwest Forest Plan be followed.
21	2	Letters from Siskiyou Land Conservancy outlining opposition to the proposed Westside Fire Recovery Project.
23	3	Letter outlining support of the Westside Fire Recovery Project and the need to implement the most ecological and economical alternative.
6570	1,275	Letter outlining opposition to the Westside Fire Recovery Project and claims that the Project is actually a proposal to clear-cut old growth forests.
6733	43	Letter asking that the Westside Fire Recovery Project be eliminated due to concerns over watersheds and wildlife habitat.
9310	2	Request to the Forest Service to protect important aspects of the Forest and limit proposed activities within the Westside Fire Recovery Project.
17489	13	Letter outlining support of the proposed Westside Fire Recovery Project, and support of the work that has gone into the development of the Environmental Impact Statement.

18942	129	Letter outlining support of the Project and support of an Emergency Situation Determination.
19,112	2	Letter outlining support of Alternative 2 of the proposed Westside Fire Recovery Project and the need to keep open communication with Regional and DC offices.
17286	6	Letter outlining support of the proposed Westside Fire Recovery Project and post-fire salvage logging.
17349	2	Letter outlining support of the proposed Westside Fire Recovery Project, post-fire treatment activities, use of Forest Service roads, fuel treatment activities, treatment around WUI areas, and plantations.
28	21	Letter outlining general support of the Westside Fire Recovery Project and its implementation as quickly as possible.

Table B-3 below provides a list of names and organizational affiliation of each unique letter received and identifies whether or not references were attached. Following Table B-3 are the letters submitted during the draft EIS comment period from the Environmental Protection Agency and North Coast Regional Water Quality Control Board. All comments can be viewed from the public reading room accessed from the project webpage at: http://www.fs.fed.us/nepa/nepa_project_exp.php?project=45579.

Table B- 3: List of unique commenters by letter number, name and organization (as identified during submittal), and submittal date.

Letter No.	Author Name	Organization	Submittal Date
1	Sproul, Bob	East Fork Lumber Company, Inc.	3/9/2015
2	moffatt, alden	ancient forest national park	3/10/2015
3	Ayres, Patrick		3/11/2015
4	McBroom, Dean		3/11/2015
5	Mosca-Clark, Vivianne		3/11/2015
6	Moffatt, Alden	ancient forest national park	3/11/2015
7	Johnston, Denver	Scoot Bar Fire Safe Council	3/15/2015
8	Hixon, Anthony	Local citizen	3/16/2015
9	Haney, Max	Sierra Pacific Industries	3/16/2015
10	Grace, Christina	Seiad Firesafe council	3/18/2015
13	Pace, Felice		3/19/2015
14	Svilich, Richard	American Forest Resource Council	3/19/2015
15	Moffatt, Alden	ancient forest national park	3/21/2015
16	Jereb, Jerome	None	3/23/2015
17	Kaufner, Doug	Back Country Horseman of California	3/23/2015
18	Harris, Jill	Rotary Club of Yreka	3/25/2015
19	Wuerfel, Jeremy	Timber Products Company	3/25/2015
24	Payne, Sandra		3/26/2015
25	Morone, John		3/26/2015
26	Bicego, Robert		3/26/2015

27	Ohlund, Barry		3/18/2015
31	Harris, David		3/27/2015
33	Dunning, Joan		3/27/2015
36	Fitzpatrick, Tim		4/1/2015
37	Sharnoff, Stephen		4/1/2015
38	Fitzpatrick, Tim		4/2/2015
3678	Artley, Dick		4/3/2015
3679	Livingston, Jill		4/4/2015
3680	Raymer, Terry		4/5/2015
3681	Moffatt, Alden	ancient forest national park	4/6/2015
5873	Heiken, Doug	Oregon Wild	4/7/2015
5874	Heiken, Doug	Oregon Wild	4/8/2015
6097	Herbert, David		3/26/2015
6271	Flann, Nicholas		3/25/2015
6646	Tasker, Kaitlin		4/3/2015
6924	Hoffman, David		3/26/2015
7136	Taormina, Carolyn		3/27/2015
7563	) Marie, (		4/8/2015
7580	Emily, Anon		4/8/2015
7776	Rooney, S.		4/3/2015
7794	McLaughlin, Michael		4/3/2015
7831	T, G		4/3/2015
7904	Fiske, Colin		4/3/2015
8435	Glass, Frank		4/3/2015
8701	S.F., Anon		4/8/2015
9122	Marissa, Anon		4/8/2015
9222	Jonathan, Anon		4/8/2015
10329	Linda, Anon		4/8/2015
10336	Michael, Anon		4/8/2015
10398	Jillian, Anon		4/8/2015
10450	Michael, Anon		4/8/2015
11365	Wayne, Anon		4/8/2015
11445	Randal, Anon		4/8/2015
12254	Sheryl, Anon		4/8/2015
12293	Mark, Anon		4/8/2015
12346	Sexton, George		4/8/2015
12347	Johnston, Denver		4/9/2015
12348	Lenz, Eric		4/11/2015
12349	David, Aaron		4/11/2015
12351	Rohde, Robert	Natural Solutions	4/6/2015
12352	Derry, Karen		4/6/2015
12353	Bennett, Grace		4/9/2015

12354	McLaughlin, Michael		4/6/2015
12356	Connelly, Matt and Susan		4/1/2015
12358	Briggs, Glen O.		4/1/2015
12359	Tyler, Kathleen		4/13/2015
12360	Haynes, Bruce		4/1/2015
12361	Clark, Katherine		3/29/2015
12362	Moore, Michael	Columbia Helicopters	4/14/2015
12363	Krall, Michelle		4/15/2015
12364	Pace, Felice		4/15/2015
12365	Menke, John		4/16/2015
12366	Jones, M.		4/18/2015
12367	Rainey, Gary		4/20/2015
12368	Pinkos, Tim		4/20/2015
12470	charles, Anon		4/9/2015
12471	John, Anon		4/9/2015
12972	hutchinson, janice		4/17/2015
13535	Viner, Doug		4/21/2015
13597	Dantine, D		4/12/2015
13780	kevin, Anon		4/9/2015
13834	Jim, Anon		4/9/2015
14307	Mary, Anon		4/11/2015
14451	olivier, Anon		4/11/2015
14501	Will, Anon		4/11/2015
14904	Christina, Anon		4/9/2015
15037	Brett, Anon		4/9/2015
15118	Charles, Anon		4/9/2015
15216	Tom, Anon		4/9/2015
15561	Beth, Anon		4/9/2015
16756	Mary, Anon		4/8/2015
16864	Sudjai, Richard		4/8/2015
16915	Harry, Anon		4/8/2015
16939	John, Anon		4/8/2015
16954	Peter, Anon		4/8/2015
16957	Whiteley, Jacob		4/21/2015
17112	Osborn, Brittney		4/21/2015
17223	Victor, Anon		4/15/2015
17233	Victor, Anon		4/15/2015
17280	Hilton, Sue		4/22/2015
17281	Pounds, Jacob		4/22/2015
17285	Stone, Jeffrey		4/23/2015
17290	Herrera, Kathy		4/23/2015
17295	Sansone, V. R.		4/23/2015

17305	Peters, Thomas		4/23/2015
17307	Luczyski, Richard		4/23/2015
17313	Sharp, Carol	Happy Camp Fire Safe Council, Inc.	4/23/2015
17315	Tereszkiewicz, Thomas		4/24/2015
17318	Most, Steven		4/24/2015
17320	Dupin, Dorie	Defenders Of Wildlife	4/24/2015
17325	Alderson, George and Frances		4/24/2015
17326	Chandler, Susan		4/24/2015
17328	Several Signatorees, Several Signatorees		4/16/2015
17329	LaMalfa, Doug		4/14/2015
17354	Lefevre, Marmi		4/9/2015
17355	Haynes, Brenda		4/13/2015
17357	Browning, Pat and Nita		4/19/2015
17358	Fitzpatrick, Tim		4/24/2015
17371	Moffatt, Alden	ancient forest national park	4/24/2015
17377	Perry, Ayn		4/25/2015
17379	Stineman,, James		4/26/2015
17384	White, Edwina		4/26/2015
17385	Carr, Patrick		4/26/2015
17387	Kim, Tai	Happy Camp Resident/Landowner	4/26/2015
17396	eaton, john	Mountain Area Preservation	4/26/2015
17397	Martin, Halimah		4/26/2015
17398	McKay, David		4/26/2015
17401	Johnston, Barbara Rose	Center for Political Ecology	4/26/2015
17402	Lewis, Sherman		4/26/2015
17403	Cooper, Laurence		4/26/2015
17409	Gardner, Bill		4/26/2015
17419	Savino, M.		4/26/2015
17427	Webb, Loraine		4/25/2015
17437	Lester, Paul	American Rivers	4/26/2015
17440	Smith, Henry	US Fish & Wildlife Service (not official)	4/26/2015
17442	Wright, Melinda		4/26/2015
17446	Bowles, Bruce		4/26/2015
17448	North, Jill		4/26/2015
17450	Boone, Foster		4/26/2015
17455	Thomas, Leonard		4/26/2015
17457	Levitus, Walt		4/26/2015
17459	Royce, Edwin		4/26/2015
17460	Motyka, Mark		4/26/2015
17464	Sauve, Kenny		4/27/2015
17465	Larson, Eugenia		4/27/2015

17471	Davis, Cynthia		4/27/2015
17472	covault, jonnel		4/27/2015
17474	Farren, Carol		4/27/2015
17478	richardson, rex		4/27/2015
17481	Courtright, Bruce	The National Institute for the Elimination of Catastrophic Wildfire	4/19/2015
17482	Schmidt, Bill		4/26/2015
17483	Trabucco, Dan		4/13/2015
17485	Allred, Ryan		4/27/2015
17486	Crawford, Mark		4/12/2015
17488	Greenberg, Karina		4/8/2015
17493	Richard, Pamela		3/27/2015
17494	Hite, Ryan	Boise Cascade, L.L.C.	4/27/2015
17497	Martin, Nadine		3/31/2015
17498	O'Cardiff, Ana		3/31/2015
17499	Krasner, Rachel		4/27/2015
17500	Guera, Suzanne		3/31/2015
17502	Gusky-Sharp, Kathy		3/31/2015
17503	Maki, Karen		3/31/2015
17505	None Provided, Julie		4/1/2015
17507	Royce, Edwin		4/26/2015
17508	Liddle, George	Friends Of The River	4/27/2015
17509	Groves, Jacob	Murphy Company	4/26/2015
17764	Mueller, Peter		4/27/2015
17873	richard, Anon		4/24/2015
17910	Terence, Sue		4/23/2015
17939	mjm1182@humboldt.edu, Anon		4/8/2015
17955	riverhair@gmail.com, Anon		4/9/2015
18147	headway@sisqtel.net, Anon		4/21/2015
18602	va.molitor@gmail.com, Anon		4/17/2015
18726	Gustin, Amy		4/25/2015
18747	Prather, Ed		4/26/2015
18845	Vanderveen, Anna		4/27/2015
18848	Gravina, Muriel		4/27/2015
18849	Costales, Ric	Siskiyou Forest Health Collaborative	4/26/2015
18850	Peters, Will		4/26/2015
18851	Mosier, Jerry		4/27/2015
18852	Hentz, Michael		4/26/2015
18853	Carleson, Eric	Associated California Loggers	4/26/2015
18857	Owens, Dylan		4/26/2015
18858	Ryberg, Erik		4/26/2015

18859	Klug, Rich		4/26/2015
18861	Perrochet, Julie	A member of the Public	4/27/2015
18862	Baker, Kimberly	Klamath Forest Alliance	4/27/2015
18863	O'Leary, Brendan		4/1/2015
18864	None Provided, Mahaia		4/1/2015
18865	None Provided, None Provided		4/2/2015
18866	Taranto, Julia		4/2/2015
18867	Oliver, Lauren		4/2/2015
18868	VanDuzer, Sydney		3/27/2015
18869	Challstrom, Gordon		4/20/2015
18870	Lindsay, Morgan		4/20/2015
18871	Anzo, Phillip	CALFIRE	4/20/2015
18872	Hall JR., Roy	Shasta Indian Nation	4/23/2015
18873	Nelson, Ian	PCTA	4/26/2015
18874	Maplesden Strickland, Elizabeth		4/21/2015
18875	Klug, Anon	Klamath Alliance for Resources & Environment	4/27/2015
18877	Smith, F. Richard		4/21/2015
18878	Attebery, Russell	Karuk Tribe	4/26/2015
18879	Harper, George And Alice		4/11/2015
18883	Livingston, John	Sierra Club Shasta Group	4/26/2015
18893	Bailey, Nadine	Family Water Alliance	4/27/2015
18894	Munson, James	EPA	4/26/2015
18895	Jones, David		4/27/2015
18896	Hilden, Brian		4/20/2015
18897	Bundy, Lorrie	resident	4/26/2015
18898	Richard, Pamela		4/26/2015
18899	Augustine, Justin	CBD et al.	4/26/2015
18900	Herrera, Kathy		4/21/2015
18901	Jones, Janet	Siskiyou County Resident	4/27/2015
18903	Augustine, Justin	CBD	4/27/2015
18904	Augustine, Justin	CBD	4/27/2015
18907	Livingston, John	Sierra Club Shasta Group	4/26/2015
18908	Augustine, Justin	CBD	4/27/2015
18909	Baker, Kimberly	Klamath Forest Alliance	4/26/2015
18910	Augustine, Justin	CBD	4/27/2015
18911	Augustine, Justin	CBD	4/27/2015
18912	Keel, Dylan		4/27/2015
18913	Lass, David	Trout Unlimited	4/27/2015
18915	Kessler, John		4/26/2015
18926	Brucker, Peter		4/27/2015

18927	Henson, Ryan	California Wilderness Coalition and Friends of the River	4/27/2015
18931	Colonna, Andy		4/27/2015
18934	Greenberg, Karuna	Salmon River Restoration Council	4/27/2015
18937	Dyer, Kerul	Klamath Riverkeeper	4/26/2015
18939	McBroom, Dean		4/23/2015
18978	Smith, Zane		4/16/2015
19019	James, Henry		4/16/2015
19073	Wienke, Kenneth	Boise Cascade, L.L.C.	4/26/2015
19074	White, Ann		4/26/2015
19075	Brockway, Marty		4/25/2015
19076	Wilson, Karen	South Fork Trinity Up-River Friends	4/23/2015
19078	Chichizola, Regina		4/26/2015
19079	McCovey, Jene		4/26/2015
19146	Mcphee, John		4/27/2015
19154	Pearson, Chris		4/23/2015
19155	Lefevre, Taylor		4/14/2015
19156	Anon, Anon		4/26/2015
19157	MacMullin, Robert	MacMullin Forestry and Logging	4/26/2015
19158	Olson, Eric		4/16/2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

APR 27 2015

Patricia A. Grantham, Forest Supervisor
Klamath National Forest HQ
Attn: Wendy Coats, Environmental Coordinator
1711 South Main Street
Yreka, CA 96097

Subject: Draft Environmental Impact Statement for the Westside Fire Recovery Project, Klamath National Forest, California (CEQ# 20150062)

Dear Ms. Grantham:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Westside Fire Recovery Project, Klamath National Forest, California. Our review is provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA understands that the current conditions in the Klamath National Forest are extremely vulnerable to fire, largely due to fire suppression, climate change and past forest activities such as planting proximity and replanting species to further future timber harvest rather than a diverse sustainable forest environment. However, we understand that past forest activities of managing forest purely for outputs such as timber rather than sustainability are no longer the Forest Service practice. Specifically, the Forest Service plans to replant a verity of conifer species to ensure the natural strength that comes with diversity of species. We also understand that due to the intensity of the fires in the project area, little if any seed storage is available in the burned areas. Therefore, allowing the area to naturally re-vegetate is not a viable solution. The DEIS indicates that existing hardwoods will be retained/encouraged and that replanting of conifers will include spacing to safeguard epicormic sprouting areas such as growth that emerge from the trunks of burned trees.

The Proposed Action would initiate forest recovery and the salvage of dead trees across more than 162,300 acres of National Forest System land, and would include 650 miles of roadside hazard treatments. The project proposes to use a combination of ground-based, skyline, and helicopter logging systems to facilitate timber removal. EPA acknowledges that removal of dead trees is not without adverse environmental impacts. However, leaving the dead trees would essentially amount to providing a pile of charcoal next to remaining intact forest which, would potentially lead to additional destruction when future fires occur, further degrading the environment.

EPA supports the use of best management practices to effectively protect water quality. We understand that the Forest Service is working with the State Water Quality Resources Control Board to implement mitigation measures to reduce adverse impacts to watersheds in the project area such as sedimentation and temperature variation.

The EPA commends the Forest Service for limiting operations in areas containing species of concern. We recommend that the Final Environmental Impact Statement fully commit to protecting intact critical habitat for species of concern such as the northern spotted owl, coho salmon, eagles and pacific fisher. While salvage of dead trees could destroy some potential habitat, we understand that the Forest Service anticipates that the vast amount of remaining unlogged charred and/or dead trees will be enough to sustain the surviving wildlife species dependent on post-fire environments. We recommend that the FEIS include the results of consultation with the United States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration if appropriate. We recommend that the FEIS include a closure and restoration plan for the proposed temporary roads and landings when the project is completed.

EPA appreciates that the Forest Service cites and uses recommendations in the 2014 Council on Environmental Quality Draft Greenhouse Gas guidance in the DEIS, and we believe it was helpful to include an estimate of greenhouse gas emissions. We also note that estimates of carbon storage were not provided, based on a conclusion that carbon storage "is not well quantified or thoroughly understood, especially at the project level." While a calculation of carbon storage may not be relevant in this particular fire recovery project, we recommend that the Final EIS provide additional information as to why carbon storage was not calculated, recognizing that the Forest Service has several tools and calculators that can estimate carbon storage. Finally, we also recommend that the FEIS include, in addition to estimates of average global temperature increases, estimates from the US Global Change Research Program for average temperature increases in the U.S.

The project area is culturally and spiritually important to Tribes and Tribal Consultation is an important component of the decision-making process associated with the project. We encourage the Forest Service to continue meaningful consultation throughout the NEPA process, with all potentially affected tribal governments. We recommend that the results of consultations with tribal governments and with the Tribal Historic Preservation Office/State Historic Preservation Office be included in the FEIS.

EPA has rated the DEIS and preferred alternative 2 as Lack of Objections—LO (see enclosed "Summary of Rating Definitions"). We support the best management practices and resource protection measures included in the project design. We recommend that the FEIS incorporate the additional measures and information specified above.

Thank you for the opportunity to review this DEIS. We also appreciate the Forest Service's coordination with us prior to and during our review, via phone calls and site visits. When the FEIS is released, please send one hard copy and one CD to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 972-3521, or have your staff contact James Munson, the lead reviewer for this project. James can be reached at (415) 972-3852 or Munson.James@epa.gov.

Sincerely,

Connell Cunning

for Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of the EPA Rating System

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category "1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category "2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category "3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

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CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

North Coast Regional Water Quality Control Board

April 27, 2015

Ms. Patricia Grantham
Attention: Ms. Wendy Coats
Klamath National Forest
1711 South Main Street
Yreka, CA 96097

Dear Ms. Grantham:

Subject: KNF Westside Fire Recovery Project DEIS Review

File: USDA – Klamath National Forest

On March 5, 2015, the United States Forest Service (USFS) published a notice titled, "Opportunity to comment on the Westside Fire Recovery Project." This notice stated, "The draft Environmental Impact Statement (EIS) for the proposed Westside Fire Recovery Project (Project) is now available for public review." The Project was developed in response to landscape-level changes to forested habitat resulting from the 2014 wildfires on the Klamath National Forest (KNF). The North Coast Regional Water Quality Control Board (Regional Water Board) appreciates the opportunity to comment on the Project and wish to remain on the mailing list.

In reviewing and analyzing the preferred alternative (Alternative 2), we are concerned that this alternative proposes activities with potential impacts to water quality that will not be mitigated to less than significant. Although this letter does not serve as a final determination, Regional Water Board staff currently do not believe that the Alternative 2 project would be eligible for coverage under Order No. R1-2010-0029, *Waiver of Waste Discharge Requirements For Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region* (Waiver). It is possible that Alternative 4, with some modifications, may be eligible for Waiver coverage. A final determination cannot be made until the final EIS with the alternatives is prepared and finalized and a Decision is issued. We will outline our concerns below.

JOHN W. COGHETT, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER
5550 Skylane Blvd., Suite A, Santa Rosa, CA 95403 | www.waterboards.ca.gov/northcoast

RECYCLED PAPER

The Project proposes to: 1) reduce safety hazards to the public and forest workers from falling trees or hazardous fuel conditions; 2) obtain the maximum economic commodity value from burned timber by offering a sale while the wood is still marketable; and 3) promote ecosystem sustainability by increasing the likelihood and speed by which burned forested areas are regenerated. Funds gained from the salvage logging can be used for additional restoration work. The preferred alternative (Alternative 2) project area is comprised of 214,848 total acres, including 184,502 acres of KNF land. Alternative 2 proposed treatments include: 11,700 acres of salvage logging; 650 miles of roadside hazard treatment along KNF roads, state highways, and county roadways; 22,900 acres of hazardous fuels treatment; and 7,900 acres of site preparation, planting, and vegetation release.

The Waiver waives certain activities conducted on NFS lands from the waste discharge requirements of Article 4 (commencing with Section 13260) of Chapter 4, Division 7 of the California Water Code, except as provided within the Waiver. In order to receive coverage under the Waiver, projects must meet specific eligibility criteria and conditions. Projects are defined as Waiver Category A (lower threat to water quality) or Category B projects depending on the risks of water quality impacts. The Westside Fire Recovery Project is considered a Category B project because it is a timber harvest project.

Condition number 14 on page 16 of the Waiver states, "Compliance with Waiver conditions will ensure that no significant environmental impact to water quality occurs from an activity covered by this Waiver. Activities that have potentially significant impacts to water quality that cannot be reduced to less than significant levels are not eligible for coverage under this Waiver and the USFS will need to submit a Report of Waste Discharge to the Regional Water Board." Our staff analysis of Alternative 2 suggests that potential impacts to water quality have not been mitigated to less than significant levels for the following reasons:

1. <u>Aquatic Conservation Strategy Compliance</u>
   The Northwest Forest Plan Aquatic Conservation Strategy Objectives Guidelines state that Forest Service and BLM-administered lands within the range of the northern spotted owl will be managed to maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. The standards and guidelines for Riparian Reserves prohibit or regulate activities that retard or prevent attainment of Aquatic Conservation Strategy objectives.

   Alternative 2 proposes about 3,920 acres of salvage units (about 2,000 acres of salvage logging) on steep, weathered granitic lands in Riparian Reserves. No salvage logging is proposed on inner gorges, active landslides or toe zones of dormant landslides. Also proposed is about 960 acres of site preparation and planting, 4,395 acres of roadside hazard tree removal, and 3,940 acres of fuels treatment on unstable lands considered to be Riparian Reserves. Alternative 2 also proposes construction of new log landings within aquatic Riparian Reserves and the reuse of existing log landings within Riparian Reserves. The number of new and reused landings could not be determined from the DEIS. These activities in Riparian Reserves may result in significant impacts to water quality, and the draft EIS has not

adequately proposed mitigation measures to reduce impacts to less than significant levels.

2. Roadside Hazard Treatments
Alternative 2 proposes to identify and remove hazard trees along about 650 miles of National Forest Transportation System roads, county roads, and state highways. This includes Maintenance Level 1 roads used by Forest Service employees and contractors for administrative purposes. Maintenance Level 1 roads are not routinely maintained.

Reopening 69 miles of Level 1 roads for salvage logging and hazard tree removal may result in significant impacts to water quality, especially in cumulatively impacted watersheds that have burned with a moderate or high intensity.

3. Cumulative Impacts
The water quality risk to channel morphology was evaluated in the Project DEIS using the ERA model. USLE and mass-wasting models were also used to assess cumulative impacts. These cumulative impact models rely on "risk ratio", which is the model results (ERA, USLE or mass-wasting) divided by the watershed threshold of concern (WTOC) (model results/WTOC). The threshold of concern for the risk ratio is 1.0. According to the DEIS, "The threshold of concern does not represent the exact point at which adverse cumulative impacts will occur. Rather it serves as a "yellow flag" indicating increasing susceptibility for adverse effects to beneficial uses in a watershed." For the DEIS, watersheds with risk ratios of less than 1.0 are considered to have a low risk of increased susceptibility for adverse effects to beneficial uses in a watershed. Watersheds with risk ratios between 1.0 and 1.5 have a moderate risk, and greater than 1.5 have a high risk.

For ERA, the DEIS states, "A low risk to channel morphology means that there is not likely to be a measurable change to peak flows and the channel bed, banks and floodplain will undergo natural modifications that are proportional to the storm events. A moderate risk indicates that peak flows may be artificially increased by the actions taken. The increased peak flow is likely to leave the channel susceptible to modifications that are slightly more than would occur under natural conditions. The perturbation of the geomorphic process would be over the short term (about two to four years). A high risk to channel morphology means that the increase in peak flows would lead to undesirable changes (such as channel straightening and loss of coarse wood) that would require long-term recovery (greater than 10 years)."

From the Westside Fire Recovery Report – Hydrology Report analysis, it appears all eleven 7th field watershed ERA risk ratios are greater than 1.0 post-fire, no action, with two of the eleven having risk ratios >1.5. According to this report, risk ratios increase in most cases when implementing the preferred Alternative 2, with three of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

A moderate risk indicates that peak flows may be artificially increased by

For the mass-wasting analysis, all nineteen of the 7th field watershed have risk ratios are greater than 1.0 post-fire, no action, with five of the nineteen watersheds >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the nineteen 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

USLE modeling shows similar results. All eleven of the 7th field watershed have risk ratios greater than 1.0 post-fire, no action, with five of eleven being >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2.

Our staff analysis of Alternative 2 raises concerns that conducting salvage harvest and associated activities in watersheds already exhibiting elevated risks for cumulative impacts could result in significant impacts to water quality, especially in watersheds that have burned with a moderate or high intensity.

4. Riparian Zone Treatments
Regional Water Board staff have reviewed the fire burn severity maps. In general, the burn intensity in riparian zones within the fire area was generally low or very low. This is because in most instances the fire backed into the riparian zone and the fire intensity decreased as the fire approached the stream. In a few areas such as the North Fork of the Salmon River and in White's Gulch, high winds caused the fire to burn with high intensity across the riparian corridor. In these areas, there is charred timber with bare mineral hydrophobic soil with very little surface cover. In some cases, there are steep slopes leading directly to perennial fish-bearing watercourses. Much of the tree branches, leaves, and needles were consumed in the fire. These areas will be subject to elevated erosion rates and increased sediment delivery to the watercourses due to the steep slopes, hydrophobic soils, and lack of surface cover for erosion control.

None of the alternatives evaluated in the DEIS of the KNF Westside Fire Recovery Project propose to treat riparian zones that burned in the fire with a moderate or high intensity. Treating these riparian areas, perhaps by falling some trees and leaving them on the ground, and/or spreading slash on bare soils, could help to break up the hydrophobic crust, provide temporary sediment storage, and increase infiltration rates. Treating the riparian areas that burned at a high intensity could provide significant benefits to water quality, but were not included in the proposed action.

Additionally, the proposed Project lacks an approved plan to treat legacy sediment sites. The Regional Water Board provided scoping comments on the Westside Fire Recovery Project to KNF on December 5, 2014. Below are excerpts of our comments on the preparation of a legacy site treatment program for the Project.

"It is our understanding that some treatment of legacy sediment sites along the NFS roads within the project area is being accomplished as a part of the USFS Burned Area Emergency Rehabilitation (BAER) program. The legacy site treatment that is planned or accomplished

under the BAER program may result in progress toward TMDL compliance but Regional Water Board staff cannot determine whether BAER activities alone will be adequate for USFS Waiver compliance without additional details of that work. Given the huge size of the Project area, treatment of all the legacy sites may not be a realistic goal. However, treatment of some of the high priority legacy sediment sites in the Project area may be necessary in order for the Project to be eligible for Waiver coverage. KNF must propose an acceptable legacy site treatment program for the Project to comply with the Waiver and demonstrate reasonable progress towards TMDL compliance."

The Regional Water Board received a draft legacy site treatment plan for the KNF Westside Fire Recovery Project on April 21, 2015, but has not yet had time to complete our review of the plan. An acceptable legacy site treatment program must be approved by the Executive Officer before Waiver coverage will be granted and Project activities can commence.

Most of the comments above are responding specifically to Alternative 2, the preferred alternative. Alternative 4 of the DEIS was designed to reduce watershed disturbance and impacts to water quality and fisheries, relative to Alternative 2, while still meeting the purpose and need for action on the Project. Alternative 4 addresses several of the above described water quality concerns, including not conducting roadside hazard tree removal and salvage logging on Maintenance Level 1 roads, and not constructing log landings within Riparian Reserves. It is possible that Alternative 4 could be modified to address the additional water quality concerns and be eligible for Waiver coverage. However, a final determination regarding Waiver coverage cannot be made until the final EIS is prepared with the alternatives finalized and a Decision is issued.

Thank you for the opportunity to comment on the KNF Westside Fire Recovery Project. If you have any questions, please contact Thomas Williams at (707) 576-2030.

Sincerely,

Matthias
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Water Boards
Matthias St. John
Executive Officer

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Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#11365-2	Dead and down firewood cutting permits need to be expanded and clear cutting by privately owned companies must be regulated when there are others who own property in the area to prevent the eyesore	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Regulation of activities on private lands is outside the scope of the Westside Fire Recovery EIS. The private property timber land clear cutting is the responsibility of the California Department of Forestry and or the actual timberland company that owns it. Cumulative Effects from private timber activities is considered in the Cumulative Watershed Effects model for the watershed and in cumulative effects analysis throughout Chapter 3 of the final EIS.
102.01 - Beyond Scope	#12349-6	This leads to my last point. The KNF should be actively working to make its lands and the communities within its land more fire-resilient through small-diameter fuels reduction projects, prescribed burning, and by allowing naturally ignited fires to burn more extensively when conditions permit (I do acknowledge that KNF is already doing so to an extent). However, I am concerned that the KNF is using activities that are likely to have wide support and that are generally good ideas, such as making the forests more fire-resilient and removing major hazards to workers and the public, as justification to harvest timber that otherwise would have been unjustifiable to log in the absence of wildfire.	See response to comment number 7-2. Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.01 - Beyond Scope	#12351-2	The Westside Fire of 2014 was not an unexpected event. Prior to US Forest Service existence, native people of the region understood the role of fire in this fire prone landscape,and had been managing the landscape for thousands of years. It was the lack of understanding and sound judgement by the US Government that led to the horrific fire, affected all living things, and releasing huge quantities of carbon and other toxic gases into the atmosphere that threatens human existence on Earth. Conquered descendants from Europe and other regions of the world no longer realize that we were conquered anymore. So, we think like the conquerors do that over population and consumption are justified and just a reality of our current circumstances. This interpretation of our human story is so familiar and widely accepted that people do not question whether anything should change about it or not. Thus, the Klamath National Forest has been given the unrealistic task of balancing commodity production and environmental protection that will result in the release of even greater quantities of toxic gases into our atmosphere under the pretext of sound land use management. Reoccurring catastrophic fires throughout the Klamath and Siskiyou Mountains will continue regardless of what the Klamath National Forest is allowed to implement by law.	This comment is beyond the scope of this project's analysis.
102.01 - Beyond Scope	#12353-2	would like to know how many timber sales were stopped by frivolous law suit in this area, what was the value of the timber before it was burned and what the value after the fires.	The number of law suits brought against the Klamath National Forest and the value of timber involved in any said law suits is outside the scope of the Westside Fire Recovery analysis. Litigation analysis is outside the scope of analysis of this EIS.
102.01 - Beyond Scope	#12353-4	The forests on our public lands are over grown and many areas have dead and dying trees from beetle infestations. These forests need to thinned, brush and other vegetation has to be removed, the water sheds Will have more water if this happens and our people will be more productive.	Treating forest lands affected by beetle infestations is outside the scope of the Westside Fire Recovery EIS.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#12359-1	As a resident of Siskiyou County since 1996, I have specific views of logging and forest health. My dad was a logger in the 1960's and as long as my brother and I stayed out of danger we were free to roam the woods. I grew up with the Forest being a huge part of my life. I grew up in Redway the heart of the redwood country. In the 1970's after college at CSUS in Sacramento, I went north to work in the mills of Washington State. I pulled green chain, drove a forklift, put sprinkler pipe up on the log decks, drove a water truck, worked on the chop saw, and my husband was a mill foreman at a different mill. We made a great living, benefits, wages, plus we were able to roam the forests nearby for personal activities. Then after the 1994 Northwest Forest plan went into effect, I saw the devastation to ways of life for the people in the logging communities in Washington were I was living. I moved to Siskiyou County and worked at the USFS in McCloud as a timber cruiser for two years. Basically the motto was "leave the best and take the rest" (best meaning healthy), and the slash was burned. What happened to this policy? We need to get back to it. On my on property on the east side a few miles out of Tennant, we have tried to keep the forest thinned and the slash removed. I have noticed after the light is allowed to get through the dense canopy and the slash is removed the vegetation especially the herb layer is returning. I see the deer returning for browse, the birds are coming back; we also have pine martens in the area, besides skunks, cougar etc. So on a very personal non-science based view, just one of observation, please log and keep logging, clear up most of the downed limbs and other slash, and bring the forest back to a viable, living, and ever changing entity and not keep it stagnant and in decay since the 1994 Forest Death Sentence was enacted.	Changing timber harvesting policy is outside the scope of the Westside Fire Recovery EIS.
102.01 - Beyond Scope	#14293-5	This is a [curse word] sham to allow cheap harvesting.. it has nothing to do with fire control and everything to do with $$$ for the timber companies.. If you were in the movie business, I'd say you were probably getting something sucked on when you made this decision.. shame on you.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. It is unclear how project design or effects should be adjusted. Beyond the scope of analysis.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#17111-7	Late-Succesional Reserves A brief review of the conceptual basis for the Late Successional Reserve (LSR) system is appropriate before commenting specificall y upon activities proposed for LSRs impacted by the 2014 fires on the Klamath National Forest. LSRs were establ ished to provide for old-growth ecosystems and related natural processes and constituent species, of which the NSO is one. The LSR system was designed as a well-distri buted geographic network using occurrences of high quality late-successional forest as a primary criterion for locating boundaries of specific LSRs. The team that designed the LSR system knew that large stand replacing disturbances would impact LSRs and, therefore, that the LSR network needed to be able to accommodate such disturbances. The team had had numerous experiences with such disturbances, including the 1980 Mount St. Helens eruption and the 1988 Yellowstone Fires. Hence, the team built sufficient redundancy into the LSR system so that it could accommodate large disturbances and still remain viable as a regional network. This redundancy would also allow for natural recovery processes within impacted LSRs. Building reserve systems that will accommodate natural disturbance regimes is, of course, a first principle in conservation biology (Lindenmayer and Franklin 2003). Creating a resilient LSR network ultimately resulted in a higher density and greater total acreage of LSRs than a reserve system that would simply have accommodated current habitat needs for NSO. This point is illustrated by comparing the LSR system with the Habitat Conservation Area (HCA) system proposed (and, at that time, judged to be adequate) for NSO (Thomas et al. 1990). The HCA system proposed approximately 5.5 million acres of reserves in addition to areas already reserved from timber harvest by Congress and the management agencies. The LSR network incorporated 7.4 million acres (in addition to already reserved lands) with an additional estimated contribution of 2.6 million acres of Riparian Reserves. The ultimate adoption of the LSR network as the basis for the NWFP reserve system resulted in a network that provided for much larger numbers of NSO than the proposed HCA network (Noon and McKelvey 1996), because the LSRs were focused on incorporating the highest quality old-growth forests, has a greater total reserved acreage, and created some very large reserves. I have documented the basis for my assertion that the LSR network was built to be resilient in the preceding paragraph; i.e. it was built to accommodate significant loss and continue to function as an effective reserve system for old-growth related species. One could say that the LSR system was overbuilt i n terms of immed iate habi tat needs. A major reason for doing this was the FEMAT planners belief that natural recovery processes could and should be accommodated following major disturbances to LSRs. Hence, guidel ines for salvage included statements such as: "Management objectives [following natural disturbances i n Late-Succesional Reserves] should focus on either simulating natural succession or allowing it to occur unimpeded," FEMAT 1993, p. IV-36, and "Because there is much to learn about the development of species associated with these [old-growth] forests and their habitat, i t seems prudent to only allow removal of conservative quantities of salvage material from Late-Successional Reserves and retain management options until understandi ng of the process has improved." FEMAT 1993, p. III-36. One might question the appropriateness of allowing natural recovery processes to proceed if stand-replacement fire behavior with the resulting high levels of fuels were not characteristic of the LSRs. However, approximately % of the affected area in the LSRs are habitats that belong to PAGs on which either stand-replacement or mixed fire regimes are characteristic and, therefore, on which large fuel loads would have been experienced in past post-fire environments.	See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised for a discussion of LSR. See Also Appendix E.
102.01 - Beyond Scope	#17307-1	It is time to revamp the the Forest Service Organization with hopeful policies that the public understands and will support	See response to comment number 4-2.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#17371-1	It was very nice meeting you and your staff in Medford a few days ago. I appreciate the opportunity to talk to you personally. There are some things that became obvious at the meeting. 1) Your agenda is driven by something that is hidden from all of us. 2) You have not read any of the responses to this scoping or deis personally. 3) You want to avoid a lawsuit very much. 4) You don't have much on the ground experience with the Klamath-Siskiyou Mountains. Really and truly. That's what I got from the meeting, aside from the fact that you and your staff are all pleasant people and are very interested in selling your point of view. One thing that struck me was that you didn't know what the Slater Butte fire was. Slater Butte is the main communication hub for the Westside project. The fire scar there is monumental and it tells the story of how the forest service responds to fire salvage. The whole mountain was clearcut in the early 70s and was jillpoked, a term that you didn't know. Jillpoked means all the hardwoods were also felled and then the whole mountain was burned at high temperature, without regard for anything except money. Then the whole mountain was planted with genetically "superior" fir and pine trees. In 1987, of course, the whole even aged thing went up in smoke again leaving nothing to show for all the so called restoration. Now, right across the river, you want to do it again. History does repeat itself. Sad but true. You've only been on the forest for 8 years; well, mostly in the Yreka desert. And your staff has mostly been here for less years. That is a problem. So, I guess I'm now talking to the mail room flunky. Please pass my letter on to Patricia. She really needs to know that there are a bunch of laws the Westside Project will break, as outlined by a lot of very smart people who really are passionate about keeping the Klamath National Forest biologically rich and the roadless areas in tact. She really needs to personally read every bit of the response comments, especially the comments that say the USFS is going to break this law and that law and the USFS is totally ignoring a mountain of recent science.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service prepared the Westside Fire Recovery EIS in compliance with the National Environmental Policy Act and other relevant federal and state laws and regulations as well as using the best available science.
102.01 - Beyond Scope	#18907-28	There should be a half mile no disturbance zone outside the boundary of all Wilderness, Backcountry, Research Natural Areas, Recommended Wild Rivers, and Inventoried Roadless Areas to protect the scenic beauty and allow for natural regeneration of natural forest conditions.	Changing regulations to, or boundaries of wilderness, Research Natural Areas, recommended Wild Rivers, and inventoried Roadless Areas is outside the scope of the Westside Fires Recovery EIS.
102.01 - Beyond Scope	#18907-9	7. No grazing from cows should be allowed within the perimeter of any of the three fire areas for many years to come. Grazing is known to be detrimental to springs, creeks, grasslands, and the entire environment. Cows should be kept out of the fire areas and no new grazing areas should be opened to compensate for the loss.	Changes the grazing policy on the Klamath National Forest is outside the scope of the Westside Fire Recovery EIS.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#18909-119	Johnny O'Neil LSR-354 LSRA 2-77, "A portion of this LSR originated as a HCA under the ISC's spotted owl management strategy. The HCA, which included portions of Seiad LSR, was intended to provide for 19 pairs of spotted owls in the future, that figure adjusted for demographic and environmental uncertainty." 2-78 , "This LSR currently has 34% of the capable land base in late successional habitat." "Mid- seral stands are a very important attribute for the development of future late-successional habitat. Mid-successional habitat currently accounts for 42% of the capable land base. Stands within this seral stage are key for developing into late successional habitat." 2-79 , "One particular area of concern for potential wildfire effects in this LSR are the acres in plantations. Past harvesting and fire salvage have created plantations scattered throughout the LSR. Sixteen percent of the LSR land base consists of plantations." "Plantations that have not been thinned or thinned and not treated increases the potential of loss not only to the plantation but also to the surrounding area." 2-79, "Road density within the Riparian Reserves of the LSR is above the mean for the 17 westside LSRs." "The percent of Riparian Reserves in plantation for the LSR is well above the mean (7.9%) for the Klamath's LSRs ." 2-79 , "The 1997 flood event resulted in 23 new slides over 26.5 acres on the Klamath portion of the LSR. A single slide in Horse Creek covered 15.4 acres. Channel scour affected 17.2 miles of stream in Seiad Creek and the East Fork of Horse Creek." 2-80 , "In terms of land base, the LSR provides some direct refugia for anadromous species, primarily steelhead. Road density within the Johnny O'Neil LSR (2.4) is just above the mean of the seventeen west side LSRs (2.3). On average, there are 0.9 road crossings per mile of stream within the LSR. This value is also just above the mean for the 17 west side LSRs (0.8 per mile of stream). When combined with the percentage of Riparian Reserves in plantation, the Johnny O'Neil LSR ranks low for aquatic environment connectivity." 2-80, "Botanical surveys over past years have confirmed the presence of 3 survey and manage vascular plants within the LSR. Cursory surveys for lichens and fungi have identified suitable habitat for several species in portions of the LSR. A considerable amount of the LSR has been surveyed for amphibians, revealing the occurrence of Siskiyou Mountains salamander at many locations." 2-80, "Great gray owls have been heard during surveys that have occurred along Siskiyou Crest." 2-80, "Johnny O'Neil provides approximately 20,420 acres of nesting/roosting habitat and 7,370 acres of foraging habitat for a total of 27,790 acres of suitable spotted owl habitat (Map Figure 7). An additional 8,850 acres could potentially provide spotted owl habitat. Given that the LSR is at 76% of capable, it is 1 percentage point within its expected range of 75-85% of capable." 2-82, "In conclusion, the Johnny O'Neil LSR, in combination with Seiad LSR, perform all the intended functions of CA 15 and OR 73. There are some portions of critical habitat that fall within "matrix," but overall, the intent of the critical habitat designation is exceeded by LSRs. 2-82, "The south west portion of the LSR, in the Seiad Creek drainage, however, is severely lacking in the distribution of LSOG habitat. Much of the area is dominated by early seral vegetation. Overall, the distribution and connectivity of LSOG habitat, relative to other Forest LSRs is moderate." Collins Baldy LSR-355 LSRA 2-83, "The LSR has its origin as a HCA under the ISC's strategy. Its primarily intent was to provide connectivity to HCAs farther east. Its future expected spotted owl pairs, adjusted for demographic and environmental uncertainty, was 3 pairs." 2-84, "Late-successional habitat is currently lacking within this LSR, 13% of the capable ground."	See response to comment number 18909-116.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#18909-120	2-84 , "The fire risk one of the highest of all the LSRs, rating of 1.08, but only 12% has historically burned. This could be due to the proximity of Collins Baldy look out and early detection of fires." 2-85 , "The area is checkerboard ownership with high levels of harvest occurring over the past several years. Fuels have been allowed to accumulate, increasing the fire hazard. When considering the surrounding area of high fuel accumulation from the activity fuels, the fire behavior potential can change dramatically. Flame lengths would be at a point to where aircraft and equipment would be needed. This increase in fuels dramatically increases the probability of a stand replacement fire." 2-85, "Road density within the Riparian Reserves is the second highest of the 17 west side LSRs." "Road density within the Collins Baldy LSR (3.3) is above the mean (2.3), and is the fourth highest of the 17 westside LSRs. On average, there are 1.1 road crossings per mile of stream within the LSR. This value is above the mean for the 17 west-side LSRs (0.8 per mile of stream)." 2-85 , "Botanical surveys over the last several years have confirmed presence of two Survey and Manage vascular plant species within the LSR. Cursory surveys for lichens have identified suitable habitat along and upslope from the Klamath River. Amphibian surveys have occurred in portions of the LSR resulting in one known location of Siskiyou Mountains Salamander to date." 2-86 , "The results yielded fisher detections at 14 different stations during the survey period. Fisher detections occurred in Kinsman Creek, Dona Creek, Collins Creek, Singleton Creek, Gumboot Creek, Crooker Gulch, and along the ridge between Mill and McKinney Creeks. The results of this survey were somewhat surprising, given the fragmented nature of habitat throughout the sample area." 2-87 , "The Collins Baldy LSR provides approximately 4,600 acres of nesting/roosting habitat and 4,500 acres of foraging habitat for a total of 9,100 acres of spotted owl habitat (Map Figure 7). An additional 2,930 acres have the potential to provide spotted owl habitat. Given that the LSR is at 76% of capable, it is 1 percentage point inside its expected range of 75-85% of capable." 2-87, "Collins Baldy LSR overlaps almost entirely with critical habitat unit CA 16." 2-87, "Critical habitat unit CA 16 is about 12,370 acres. Table 2-103 summarizes overlap of CA 16 with Collins Baldy LSR and other land allocations. Approximately 99% of the critical habitat unit overlaps with the LSR. There is no overlap with other "reserved" land allocations." 2-87 , "Collins Baldy LSR includes 12 spotted owl activity centers. This exceeds the spotted owl pair objective for the critical habitat unit." 2-88 , "Currently, 1,630 acres or 13% of capable, are vegetated in LSOG habitat. This is the lowest proportion of capable ground vegetated in LSOG habitat, amongst the 11 LSRs covered in this assessment." 2-88, "The few stands of LSOG forest that occur are located in the upper reaches of Kinsman Creek, Dona Creek, and Franklin Gulch. Overall, the distribution of LSOG habitat throughout the LSR ranks low." 2-88, "Overall, the distribution and connectivity of LSOG habitat throughout the LSR ranks low."	This comment appears to be random citations from the Forest Late-Successional Reserve Assessment concerning the Collins-Baldy Late-Successional Reserve on the east side of the Scott River in Mill Creek. There are no Westside Fire Recovery Project activities proposed in the Collins - Baldy Late-Successional Reserve. This comment is outside the scope of this analysis.
102.01 - Beyond Scope	#18909-9	Looking at the Salmon Salvage timber sale recently implemented this winter, it is apparent that the intense amount of activity fuels left behind presents a serious fire risk. The deep bed of fuels is nearly or completely impenetrable, such that the Klamath National Forest is not sure how to treat the area and is considering torching the area with a helicopter. This presents its own dangers such as high intensity burning that may irreversibly harm soils or spread to adjacent areas. Further, there is little to no chance of natural recovery in the treated area because there is so much fuel on the ground. We are led to speculate that if these areas were left unlogged they would have already begun to regenerate, contrary to the argument in the DEIS that logging leads to forests growing back faster. The Salmon Salvage project is a much smaller area than what the agency is proposing in the Westside project, and thus the potential fire risk left by the proposed activities of the Westside project would be much larger than that left by Salmon Salvage. The DEIS fails to adequately explain the timing of treating activity fuels, as seen from the Salmon Salvage project, which are possibly too deep to be treated manually and on the slopes that are too steep to be treated mechanically.	The effects of the Salmon Fire Salvage project are outside the analysis area of the Westside Fire Recovery Project analysis, with the exception of how they are considered for cumulative effects analysis. That being said, treatments for the Salmon Salvage Project are still ongoing to address fuels conditions. We acknowledge the need to treat activity-generated fuels for this project, which is evidenced by the fact that we propose such treatments, including prescribed underburning, site preparation, fuel management zones and WUI treatments; see Chapter 2 of the final EIS for a description of proposed actions. Fuels treatments will break-up the amount and continuity of fuels across the landscape. About five years after the 2014 fire, most areas will be ripe for the prescribed underburning proposed in Chapter 2 of the final EIS. Timing of all burning activities must adhere to pertinent air quality regulations and a smoke permit that is administered by the local County Air Resource Agency.
102.01 - Beyond Scope	#18918-8	Also, I realize that the U.S. Fish and Wildlife Service has been playing games (and bowing to timber industry pressure) by continued refusal to list either the Pacific Fisher or the Humboldt Marten as threatened or endangered species. Such further fragmentation of habitat - and on a landscape scale - which would be done under the Westside "Fire Recovery" proposal, is exactly the kind of behavior that could drive these forest carnivores to extirpation and extinction.	U.S. Fish and Wildlife Service policy is outside the scope of the Westside Fire Recovery analysis.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#18926-11	The DEIS acknowledges on page 179 that there are no regulations requiring private landowners to protect sensitive plant species or reduce the spread of NNIS species. However, there are no suggestions to integrate private landowners' management activities to align with the Forest Service's goals for this project. It is recommended that guidelines for attempting to gain private landowner cooperation via alignment of management methodology be incorporated into the DEIS or FEIS. ! ! Environmental Consequences	Regulation of activities on private property is outside the scope of the Westside Fire Recovery EIS. The Forest Service does facilitate work on private lands through the Rural Advisory Committee and other program work that is outside the scoping of this project. Contact Forest Service fuels/fire program manager for more information.
102.01 - Beyond Scope	#19079-1	What is the chemical make up of the fire retardant used to suppress the Westside fire? How many gallons were used? What was the method of delivery, the spreading of the retardant? What was the criteria for choosing one retardant over another? What adverse side effects does this retardant have on wildlife and aquatic life? What effects does the retardant have on soil PH levels? Does the retardant effect the ability for the ground soil's nutrients to be taken up into the plants?	Fire retardant use, method of delivery and effects of retardant use during the 2014 fire season is outside the scope of the Westside Fire Recovery analysis.
102.01 - Beyond Scope	#19079-8	When was the date of the accidental spill of fire retardant in the Klamath River? What accidental spill near the Klamath River landed direct on Klamath River waters? What was the fire retardant used during and throughout the Westside Fire? When did the applicator company report the accident? Was California Fish and game notified of the spill? Was US Fish and Wildlife informed of the spill? Was NOAA informed of the spill? Was the Yurok Tribe informed of the spill?	See response to comment number 19079-1.
102.01 - Beyond Scope	#34-3	The Forest Service has made signifiant and admirable progress away from the old, rogue agency of ancient forest liquidation toward an agency of legitimate, responsive ecological managers. The Klamath's own Gooseneck District has demonstrated ecologically sound, scientifically validated logging in the recent past, and yet the Supervisor's office is overcome by ecological and scientific amnesia in the aftermath of a fire that its own fire ecologists recognize as a historically familiar event. The FS could allow the forests affected by fire to set a demonstrative example of the capacity for intact old-growth forests to regenerate without intervention, as has been documented in the recovery of forests from the 2002 Biscuit fire on the nearby Klamath NF. This would help the FS to break the cycle of self-fulfilling prophecy that post-fire forests require logging, which in turn leads to overstocked stands of small-diameter trees, which in turn lead to greater vulnerability of stand-replacing fire. If the Klamath pursues this appalling conversion of old-growth forest into a fiber planation, it will be condemned to an indefinite sentence of firefighting, not the integration of ecologically benign fire that its scientists recommend.	The recovery of forests from the 2002 Biscuit fire is outside the scope of the Westside Fire Recovery analysis.
102.01 - Beyond Scope	#4-2	The project uses a varied approach to essential fuels reduction, including salvage, hand release, mastication, livestock grazing, reforestation, and underburning. In my opinion the planned actions are not aggressive enough, but adequate given the legal and political barriers and also restrictive timelines. Changes in ESA, NEPA, adjustments to LSR, and designated road less areas are imperative to allow professionals to manage the forest in an effective and efficient manner. Constant loud, uninformed, biased, non-local litigations have long delayed or restricted similar restoration actions in the region. I'm sure it's well known and understood that to delay further only compounds an already proven catastrophic situation. It is my hope that good science, history, and professional management can salvage and restore the lands of my grandfathers. Implementing this project is a good start.	Changes to Endangered Species Act, National Environmental Policy Act, Late-Successional Reserve and designated Roadless Area regulation and policy are outside the scope of the Westside Fire Recovery EIS.
102.01 - Beyond Scope	#5873-127	BLM's Western Oregon Plan Revision DEIS (p. LII) admits that structurally complex young forests develop old forest characteristics twice as fast as structurally deprived initial conditions. This is a serious indictment of salvage logging.	The Bureau of Land Management's Western Oregon Plan Revision draft EIS is beyond the scope of the Westside Fire Recovery analysis.

Code	Comment Number	Comment Text	Response
102.01 - Beyond Scope	#5873-145	The Warner Creek LSR salvage project on the Willamette National Forest endeavored to retain trees 20 inches and over. REO found it consistent with the LSR Standards & Guidelines. Consider the following excerpt from the REO review: Snags should be retained when they are likely to persist until late-successional conditions have developed. Complies. The project proposes to remove all dead trees within 1.2 to 2 acre circles in dispersed group selection areas, and all dead trees less than 20" dbh (those less likely to survive as snags during the next 80 to 100 years; i.e., the period of creation of LS/OG conditions) from a 50-foot area around the group selection salvage sites. … The project occurs in an area with nearly 100% tree mortality. The proposal anticipates that within the 492-acre group selection prescription, approximately 98 acres of dispersed openings 1.2 to 2 acres in size would be created. Within the 492-acre group selection, dead trees 20" dbh and larger surrounding these 98 acres of dispersed openings will be retained for snag and coarse woody debris recruitment. REO Review of Warner Creek Salvage. http://web.archive.org/web/20050226202105/http://reo.gov/library/lsr/letters/270lsr.htm	The Regional Ecosytem Office review of the Warner Creek Late-Successional Reserve Salvage project is outside of the scope of the Westside Fire Recovery analysis. The Regional Ecosytem Office has reviewed the Westside Fire Recovery EIS and has found the proposed actions to be consistent with Late-Successional Reserve standards and guidelines. All correspondence between the Forest and the Regional Ecosytem Office, including the Regional Ecosytem Office's findings regarding consistency, can be found in the project record. See Appendix E of the final EIS: Proposed Activities in Late-Successional Reserves, Westside Fire Recovery Project, Klamath National Forest.
102.01 - Beyond Scope	#5873-17	Prepare a new programmatic EIS on young complex forests. The agency must prepare a new programmatic EIS to consider the effect of salvage logging on young complex forests and the development of complex older forest. The agencies should not conduct any more salvage logging until they have fully disclosed and considered current scientific understandings about the role of fire and other disturbances in forest development.	Preparing a programmatic EIS on the effects of salvage logging in young forests and the development of complex older forests is outside the scope of the Westside Fire Recovery EIS. The project draft EIS analyzes the site specific effects of the no action, the proposed action and Alternatives.
102.01 - Beyond Scope	#5873-17	Prepare a new programmatic EIS on young complex forests. The agency must prepare a new programmatic EIS to consider the effect of salvage logging on young complex forests and the development of complex older forest. The agencies should not conduct any more salvage logging until they have fully disclosed and considered current scientific understandings about the role of fire and other disturbances in forest development.	Preparing a programmatic EIS on the effects of salvage logging in young forests and the development of complex older forests is outside the scope of the Westside Fire Recovery EIS. There is not requirement to prepare a programmatic EIS. The responsible official has chosen to complete analyze impacts of this project with one project-level site-specific EIS to meet the requirements of National Environmental Policy Act. Best available science is referenced throughout the final EIS and supporting documents. The final EIS analysis the direct, indirect, and cumulative site specific effects of the no action, the proposed action, and Alternatives to it.
102.01 - Beyond Scope	#5873-2	Forest plan objectives related to wood production after wildfire need to be reconsidered in light of new information on the adverse effects of salvage logging and the ecological value of natural recovery after fires.	Revision of the Forest Plan objectives is outside the scope of this analysis. The commenter fails to disclose new information for the agency's consideration. The existing Forest Plan currently provides management direction on the Klamath National Forest until the Forest Plan is revised. The impacts of salvage harvest are disclosed throughout Chapter 3 of the EIS. Analysis is based upon best available science as cited in the final EIS and supporting documents.
102.01 - Beyond Scope	#5873-65	The shortage of snags in the decades following stand replacing fire is acknowledged by the Forest Service on page 136 of the Wallowa-Whitman National Forest's Trail Vegetation Management Project EA (October 2012).	The Wallowa-Whitman Environmental Assessment is outside the scope of this project. See Chapter 1 of the EIS under the discussion of salvage in Late Successional Reserves; there is no shortage of snags in the project area.
102.01 - Beyond Scope	#8739-1	Additionally, I depend on a pristine environment there for one of my prescriptions authorized by my attending health practitioner. Any monopoly activity in this area threatens my personal health and wellness. This medication is ONLY available in that area.	Prescription medication availability is beyond the scope of the Westside Fire Recovery EIS.
102.01 - Beyond Scope	5873-20	The agency must prepare a programmatic EIS to comprehensively disclose and consider: a. the natural range of variability and existing rarity of complex young forests (e.g., young forests that are unsalvaged after disturbances). Since large snags are outside the natural range of variability across the landscape, the agency must retain all large snags to start moving the landscape toward the natural range of variability, or the agency must carefully justify in the NEPA analysis every large snag it proposes to remove. See Jerome J. Korol, Miles A. Hemstrom, Wendel J. Hann, and Rebecca A. Gravenmier. Snags and Down Wood in the Interior Columbia Basin Ecosystem Management Project. PNW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/049_Korol.pdf. This paper estimates that even if we apply enlightened forest management on federal lands for the next 100 years, we will still reach only 75% of the historic large snag abundance measured across the interior Columbia Basin, and most of the increase in large snags will occur in roadless and wilderness areas.	See response to comment number 5873-17.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#10-2	I also feel that replanting should be done, not plantation style, but with wildlife health a priority and that the ridge tops kept bare to prevent spread of fires. No live hardwoods should be cut down. We should consider what might be best to plant in a region that will be drier...?cactus?	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for proposed actions; plantation style replanting is not proposed. In response to comments, the final EIS clarifies site preparation, planting, and release criteria and treatments. Hardwoods are not proposed for cutting or removal, except for limited, strategic fuels treatments.
102.02 - Position, No Rationale	#10362-1	How can the Forest Service even consider this terrible plan. Are they being bought off by those who will gain financially? I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project. I believe money is behind this awful plan.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed; see Chapter 2 of the final EIS for a description of the proposed actions. See Chapter 1 of the final EIS for a discussion of salvage logging in Late Successional Reserves.
102.02 - Position, No Rationale	#10398-1	Forests are the earth's lungs. The earth, as you might have heard, is running a fever. Any meteorologist or climatologist will confirm. When a patient is in the hospital with a fever, do you remove a big chunk of the lung? And when the earth is dead, sirs, where do you propose we should live?	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See the climate change section in Chapter 3 of the EIS for a discussion of related effects.
102.02 - Position, No Rationale	#10465-1	The proposed logging plans are a cruel joke, and would impact the waters,creatures, and habitat for thousands of years...maybe forever. That forest is doing more for California and the globe by just being than some corporation could even imagine, let alone replace.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a discussion of effect by resource area and Alternative.
102.02 - Position, No Rationale	#10564-1	I remember when a stand was made to keep the clear-cutting from happening some 25 years ago. My parents owned property in the "California Pines", an area that was beautifully rugged and relatively untouched. The community stood with guns, and ready to fight as the timber companies tried to steal thier lumber then.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed; see Chapter 2 of the final EIS for a discussion of the proposed action.
102.02 - Position, No Rationale	#10870-1	Are you kidding me? More greedy bastards cutting down forrests for money! Let me go chop down your homes and see how you like it! You [obsenity] are going to kill this planet and everyone on it, because you want more money. I spit on you. I	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The management indicator species analysis explores the effects of the project on identified important habitat associations per the Forest Plan. The drought conditions are considered in the affected environment.
102.02 - Position, No Rationale	#11093-1	We must preserve our ancient forest ofr sake of our children and our children's children. Please do not be short-sighted on this issue - It's time to cut profits, not trees!!! Save our trees and god's sake (and the sake of all living being upon this planet!!!) Bless you if you do :)	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project doesn't proposed to remove any ancient forests. See Chapter 2 of the final EIS for a description of what is being proposed.
102.02 - Position, No Rationale	#11835-1	If we have to continue to protest these type of clear-cutting old-growth reserves then we will because it is irresponsible stewardship of our forests will destroy ecosystems and important habitat. This is unacceptable and I am outraged.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed; see Chapter 2 of the final EIS for a description of the proposed actions.
102.02 - Position, No Rationale	#11835-2	I ask you not to log in protected important wilderness, wildlife and watersheds!	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No logging is proposed in designated Wilderness. Wildfire and watershed habitat is throughout the project area; see Chapter 3 for a disclosure of effects by resource area and Alternative.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#11850-1	Please take an ethical approach and tell the truth about just what you are up to. The words you use: "restoration" "salvage" all are disingenuous. I despair. We cannot live without our great forests. The earth is groaning.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#11908-1	It is unconscionable that with cavalier, devil-may-care attitudes, you folks are willing to sell out to timber companies (probably Chinese owned) and drop kick our heritage as well as ruin habitat for wild creatures without so much as a sliver of concern or culpability. How shameful! Please, please connect the dots with what is right for the American people, the American way of life and her creatures. These are our national treasures that I personally don't want squandered to the highest bidder with a pocketful of change.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#12214-1	A decision to permit logging on the Klamath National Forest is absolutely unsupportable. Please follow your own rules, and stop this from happening--do what you need to do, which you know is environmetally sane, wise, ethical and moral.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project is consistent with the Forest Plan and other relevant law, regulation, and policy, as disclosed in the final EIS.
102.02 - Position, No Rationale	#12232-2	The Forest Service needs to meet its obligation to be a good steward of this land that belongs to all Americans, rather than hand it on a silver platter to industrial interests who have already recklessly logged everything else.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project design and analysis is based upon best available science as described throughout the final EIS and supporting documents.
102.02 - Position, No Rationale	#12314-1	This is but the latest scheme by the corporate forest raiders--aided and abetted by their water-carriers (you know whom I'm talking about)--to grab more easy cash from taxpayers. I have hiked and backpacked pretty extensively in the Klamath NF over the years. I've experienced the rugged beauty and recoiled at the atrocities perpetrated by the forest-killing corporados. This must stop, now.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#12334-1	Please know that the marble mountain wilderness is one of my favorite places in the world!!! As a 12 year resident of Oregon that had to move back east, this is a place I want to return to. The views, the wildflowers, the lakes, the wildlife…	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No logging is proposed in designated Wilderness with this project under any Alternative, as described in Chapter 1 of the final EIS.
102.02 - Position, No Rationale	#12353-3	I understand that much of these areas were burned so hot that the soil was damaged and will not support any sort of reforestation for a very long time, however I feel that as much of this land should be replanted with a variety of trees, plants and grasses as soon a possible.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project does propose re-planting with a variety of tree species, as described in Chapter 2 of the final EIS.
102.02 - Position, No Rationale	#12361-1	The clear cutting that was done has caused the road to need upgrading almost yearly. To clear cut up from a paved road and creek system is not right. Clear cutting is a cheap way of logging and not good anywhere. It is happening at Taylor Lake area and Etna Mountain too. Our forest are losing more and more large trees and the small dieing trees are being left to burn. It is not a better forest or more fire resistant, it's being done for profit only. I see all kinds of Forest that have been "managed" and they are still full of dead and dieing trees left to burn when a fire does happen. Don't take my word for it, drive or walk through and see for yourselves. These huge slash piles are left for years at a time, some never get dealt with and the under brush still there to burn. Yes, the drought in California and other states is making fires harder to stop once they get going but that too is Mother Nature. We can' make water but lets not get rid of our forest because of it. We need to think about where we build some homes and try harder to make areas safer around our own properties. The Forest Service and Logging Companies need to do a better job with the underbrush and dead trees not Old growth and live trees. Please get out into the forest and look for yourselves. Mother Nature does a great job on her own. Our forest should not be for sale.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed with this project; see Chapter 2 of the final EIS for a description of proposed actions. The effects of no action are disclosed by resource area throughout Chapter 3 of the final EIS. Green trees will be retained; see response to comment number 12346-55.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#12363-2	The Westside Fire Recovery Project would be detrimental to the organisms utilizing the land. This would be especially harmful to the salmonids in the streams impacted by the runoff from these logging locations and the spotted owls that have been shown to continue to utilize post-fire habitat in established territories for nesting and feeding. Roadless areas, such as the Grider Creek drainage need to be left alone, as do important coho salmon streams such as Tom Martin Creek and it's entire drainage. The "restoration" effort that will be conducted is also minimal, especially considering the lack of funds towards this effort. There needs to be funds for the entire "restoration" effort (of slash) after logging, not just 1/3 of it.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 5873-19. Consideration of funding for the Westside Fire Recovery project implementation is outside the scope of the analysis.
102.02 - Position, No Rationale	#12366-1	By clearcutting the timber in this area, you will be killing the forest, not recovering it! Our national forests should not be considered ATM machines for logging companies. They are our public treasures. There are other ways to foster equitable prosperity in the region. We need these forests to remain uncut for our livelihoods and our survival. Please think about the future for everyone, not quick bucks for a few.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6924-1. No clear-cutting is proposed; see Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#12368-3	This logging need to happen in order to decrease the fire danger in this area. Being a resident in this area, it is important to me to have this forest cleaned up and healthy.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#12443-1	Having long been the owner of 25 acres of deciduous forest (which is a LOT in Central New Jersey) I know that foresters will produce any kind of "conservation" plan that they are paid to do. This may be legal from a technical viewpoint, but it's a lousy long-term solution to protecting forests.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#12467-1	Please follow your own rules and do not log healthy forests in the Westside Salvage Project in Klamath National Forest.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Also see response to comment number 18918-22 and comment number 18926-33. The commenter incorrectly asserts that the proposed actions are against "our own rules"; the project is consistent with the Forest Plan and other law, regulation, and policy.
102.02 - Position, No Rationale	#12467-2	Please don't use wildfires as an excuse to fast-track logging in protected forests!!	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#12467-3	The emphasis should be on restoration, not further degradation.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Restoration is a stated objective of the project; see Chapter 1 of the EIS under the purpose and need.
102.02 - Position, No Rationale	#12549-1	The Westside project would destroy the Caroline Creek eagle nest area and would harm Late-Succesional Reserves (LSRs), Riparian Reserves, imperiled native wildlife, endemic species, wild salmon, water quality, Wild and Scenic Rivers, Visual Quality Objectives, meadows, soils, geology, botany, cultural resources and vital biological legacies. Fuels treatments may never be funded and the project would endanger river communities.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The decommissioned section of Forest Road 46N62 (also referred to as the “Caroline Creek Road”) will remain closed. Sections of decommissioned road associated with dropped salvage units were also dropped. These roads include decommissioned sections of 45N56YA, 46N42Y, and 46N78, which will remain closed. See Chapter 1 for changes between the draft and final EIS. See Chapter 1 of the final EIS for a discussion of salvage in Late Successional Reserves. Effects of the project are discussed throughout Chapter 3 of the final EIS by resource area and Alternative. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#12549-5	Post-fire logging is not recovery. The DEIS is so full of inadequacies it should be rescinded. If you want to sustain the health, diversity, and productivity of the Klamath National Forest to meet the needs of present and future generations the agency should follow the law and serve the people by working on a long-term fire strategy plan that is good for wildlife, watersheds and the people.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter says that the draft EIS is inadequate but doesn't describe how. See Chapter 1 for the purpose and need and Chapter 3 for effects analysis of the proposed actions. The project complies with law, regulation, and policy. The Forest has a Fire Management Plan that incorporates the Forest Plan and is regularly updated.
102.02 - Position, No Rationale	#12643-1	the ignorance of men is the enemy of mama nature why is it that the most educated people commit the worst crimes against nature and humanity? men has turn earth into a painful place for all living beings...when you do wrong nothing goes unpunished	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#13381-1	Although I live near the California Coast about 50 miles North of San Francisco, I am very concerned with the health of our forests in the west and have seen first hand the kind of damage that logging as proposed in this plan can do.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#13780-1	Stop unnescessarily destroying our forests.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#13867-1	am writing from the perspective of a citizen who makes a personal commitment to practice what I preach and to attempt to limit the environmental impact through my daily lifestyle. Recreational pursuits also include visiting and camping within national parks and driving through our national forests. I am highly invested in their sustainability. For these reasons, I strongly support the position developed below by the Rainforest Action Network.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 1 of the final EIS for a description of the purpose and need of the project, including restoration.
102.02 - Position, No Rationale	#14451-2	Let the forest grow !	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#14501-1	There is so little beauty left. Please join it.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#14822-1	The following form letter succinctly states the concerns that I and many others have about this DEIS. I am deeply saddened that the Forest Service would be supportive of such a destructive logging plan, and choose to ignore the irreparable harm harm which will be done.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15243-1	Is your job to protect and sustainably manage forests, or exploit and destroy them?	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#15243-2	I was born in the beautiful state of California, and I would like it to stay a beautiful state, not an over-farmed, over-developed and over-logged wasteland.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15305-1	I have backpacked into the Marble Mts a few times - in the area that burned last summer. Maneaten Lake Is an awesome place and the Wooley Creek watershed is so wild, that if Bigfoot exist, they live in that valley.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15335-1	We can count on a few greedy exploiters to enrich themselves by the age-old process of taking what does not belong to them, and selling it off, as money in their pockets now is more important to them than the future of the public that owns the land.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15431-1	the ignorance of men is the enemy of mama nature why is it that the most educated people commit the worst crimes against nature and humanity? men has turn earth into a painful place for all living beings...when you do wrong nothing goes unpunished	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15436-1	These actions are clearly motivated by profit, not by fire protection. This is not the contribution forestry is meant to make to our global and local environmental challenges.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#15490-1	First I am shocked by the plan to allow the logging of the Daniel Boone Forest in Pulaski and Whitley Counties in Kentucky. This land belongs to us all. Not to be sold at wholesale, costing us money for corporate profit.	This comment is outside the scope of this project.
102.02 - Position, No Rationale	#15617-1	Clear-cutting in old-growth? I thought that green-driven insanity, that annihilation of our most precious gene pools, had been banned a long time ago! Come on, you people! This is the Forest "service"????	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed. Snags and other legacy components are being retained; see the wildlife project design features in Chapter 2 of the final EIS for details.
102.02 - Position, No Rationale	#16-1	I support alternative 2. I am hopeful that salvage can start soon and provide jobs and marketable timber. This alternative would also benefit local schools and the county roads department through the forest reserve funding formula set up by congress a long time ago. The hard work and consideration of the KNF staff is greatly appreciated and valued.	Comment of support. Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#16695-2	This logging project ignores what the Forest Service should have learned from a number of studies, including those conducted by its own agency scientists, concerning post-fire forest regeneration and the deleterious affects of post-fire salvage logging.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#16695-4	As a former resident of southwest Oregon who retains great affection for our precious forests, I shudder at the ecological carnage that Westside timber sale would wreak on over 60,000 acres, including precious roadless areas and old-growth forest, consisting of both living trees and snags. Contrary to the falsehood implicit in the term 'salvage,' these dead trees are extremely valuable as reservoirs for moisture and nutrients. In designating them for 'salvage' logging, a term that clearly implies a negation of these ecological values by 'salvaging' their economic value as the only extant one, the Forest Service confuses and undermines the public understanding of forest ecology that it attempts to communicate elsewhere. The FS, if it were reading its own studies and public literature concerning forest ecology, would not plan or enact so ecologically fallacious a management construct as "salvage logging" after a fire.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We understand the importance of leaving snags and downed wood on the landscape and have included wildlife and watershed project design features in this project for this purpose (final EIS, Chapter 2). See the glossary of the final EIS for a definition of salvage harvest. The final EIS incorporates best available science into the design and analysis of the project; see final EIS and supporting documents.
102.02 - Position, No Rationale	#16939-1	The fires are bad enough. Please don't increase the direct damage to the soil and biome, but the indirect damage caused by increasing levels atmospheric CO2 that lead to more drought and fires.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17111-8	Hence, it would appear to me that the fire effects experienced were characteristic of what would be expected in the majority of the LSR area proposed for salvage in the Westside Fire area.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17258-1	How can you still be cutting old-growth? Have we learned nothing of the delicate nature of an old-growth ecosystem? Does money still trump saving the last few percent of remaining ancient forests? Do I really have to tell my grandchildren what a forest might have looked like before Europeans took over here because there are none to actually show them	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17301-2	In addition, I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17385-1	The level of logging and road building proposed is too much for the multiple uses that are intended for all national forests, and will damage the particular values that make this area of the KNF truly spectacular. While some removal of hazard trees along roads and fuels treatments are needed to protect local communities, I am concerned that the plan will continue efforts to eliminate fire, even good fire, and promote turning this remarkable natural area into a tree plantation.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-14.
102.02 - Position, No Rationale	#17396-1	I wish to protest strongly against the proposed "salvage" logging in the Klamath Forest. The clear cutting and road building will do more damage than the fire did.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed. The construction and re-construction of roads for temporary use is minimal. See Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#17446-1	I am opposed to any expansion of blogging interest in the Klamath area	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#17466-1	I am very concerned about the Project's potential impact on water quality and threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild & Scenic Rivers, and roadless areas (some of which have been proposed in legislation as additions to the Marble Mountain Wilderness).	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a disclosure of effects by resource area and Alternative. No treatments in Wilderness are proposed under any Alternative. No salvage harvest in proposed in Roadless Areas; however, limited roadside hazard treatments are proposed where exiting roads intersect Roadless Areas. See Chapter 1 of the final EIS for a discussion of management areas and see Chapter 2 for a description of the proposed actions.
102.02 - Position, No Rationale	#17466-2	The level of logging and road building proposed is simply too much. While some removal of hazard trees along public roads and strategic fuels treatments are needed to protect local communities, I am concerned that the Forest Service plan overall will continue to perpetuate the agency's century-old exclusion of fire and plantation forestry.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed. The construction and re-construction of roads for temporary use is minimal. See Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#17466-3	I am particularly concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection. In addition, I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a disclosure of effects by resource area and Alternative. No treatments in Wilderness are proposed under any Alternative. No salvage harvest in proposed in Roadless Areas; however, limited roadside hazard treatments are proposed where exiting roads intersect Roadless Areas. See Chapter 1 of the final EIS for a discussion of management areas and see Chapter 2 for a description of the proposed actions.
102.02 - Position, No Rationale	#17479-1	The Klamath River is one of the most important rivers in California. We have continually degraded the habitat and have continually degraded the fishery with over logging and clearcutting. This project will continue this process and potentially eliminate what is left of the steelhead and salmon runs on the river. This would be an absolute disaster that would be irreversible.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed. See Chapter 2 of the final EIS for a description of proposed action. See Chapter 3 of the final EIS for a disclosure of effects to aquatic resources.
102.02 - Position, No Rationale	#17496-2	The project is one of the largest timber sales in recent Forest Service history and should be given a hard look. Required surveys and other environmental assessment should be undertaken on a site-specific basis and disclosed to the public before the initiation of a public comment period, which was not done in the current DEIS. The DEIS should analyze real world results rather than unscientific and unsubstantiated assumptions of analysis. The project should be canceled and a proposal addressing biological needs, ESA and fisheries needs, community fire protection needs and the region-wide reintroduction of fire should be considered. The project as proposed is simply irresponsible, short sighted, and expedited in a way that sacrifices all values beyond economic salvage.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This comment contains inaccurate information that appears to be from a source other than the agency. The project is not the largest timber sale in recent history. See response to comment number 17371-1. See Chapter 2 of the final EIS for a description of what is being proposed.
102.02 - Position, No Rationale	#17496-4	The project also has strong negative implications for the threatened fisheries of the Klamath River and its tributary streams, northern spotted owl habitat, Pacific fisher habitat, and the maintenance of fire-resilient forest conditions. The project will increase future fire hazards in the forests and adjacent to the communities of the Klamath, Scott, and Salmon River watersheds. The project will also detract from the agency's obligation to protect communities from fire by practicing responsible and effective fuel reduction adjacent to homes, communities, ingress and egress roads, and strategic ridgelines. Instead, the agency has expended huge volumes of money and resources on illegal salvage logging operations far from homes and communities and within some of the most diverse and important watersheds on the West Coast.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 for a disclosure of effects by resource area and Alternative. The project is proposed to reduce fire risk and fuels hazards and to improve long-term watershed conditions.
102.02 - Position, No Rationale	#17498-1	Please preserve our wildlife for future generation, for job creation, and for the animals, themselves	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#17505-1	It is vital that you do everything in your power to protect our forests and the precious wildlife living within them. Please make sure to keep the health of all living things and protection of natural resources as your first priority.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17506-1	Oh my, to be in your position with the amazing amount of power for one woman. I can trust, as also being a woman, that you will take into consideration the most sustainable and ecologically sound decision for this project. I ask that you remain humble and compassionate, thinking if those sacred things other than money. We sincere thanks, in advance.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#17764-1	I do not agree that the Westside Salvage Timber Sale is in need of an Emergency Situation Determination stamp by the Chief of the Forest Service.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 17501-2.
102.02 - Position, No Rationale	#17910-1	What science or experience has informed the decision to further degrade an already seriously impacted landscape? The negative impacts and irreparable harm that salvage logging has often caused in the past make this project untenable and unacceptable.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 1737-11. The methodology used for analysis of each resource is summarized in the draft EIS and detailed in the individual resource reports.
102.02 - Position, No Rationale	#18852-49	33) As a permanent resident of the Elk Creek watershed, I will be specifically affected by this project.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18863-1	Be on the right side of history. Stop this please.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Chapter 1 and 2 discuss the purpose and need and the proposed action for hazard tree removal.
102.02 - Position, No Rationale	#18876-2	This area needs a leader like you to take on better plans and ensure that only regenerative and sustainable logging is done with water quality in mind as well as threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild & Scenic Rivers, and roadless areas being protected.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18878-10	Rugged mountainous topography, heavy fuel loadings Qackstraw fallen snags and trees), and limited access made fire suppression efforts extremely challenging. (Pg 2) Comment: Without documentation which can be cross referenced the latter portion of the above statement beyond the obvious rugged mountainous topography is specious at best. At worst it is used to have the narrative fit a pre-determined outcome such as the Refined Proposed Action.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18878-12	Pg.6 "There is a need for restored and fire-resilient forested ecosystems." Comment: Our management philosophy and direction calls for a fire-adapted ecosystem which allows for fire to be an integral component of resiliency. The Refined Proposed Action will not allow for a transition back to a fire-adapted ecosystem that occurred before the fire-suppression period.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Wildfires provide some benefits to forest ecosystems such as snag and downed wood creation and short-term fuels reduction in areas of low intensity burns. However, intensely burned forested areas may be slow to recover and heavy fuel loading will result from fallen snags. See Chapter 1 in the draft EIS and the vegetation analysis discussion in Chapter 3 of the draft EIS for more detail of how the proposed action Alternatives would meet the purpose and need of restored and fire-resilient forest ecosystems. See Chapter 2 of the final EIS for a review of the Karuk Alternative and how it was considered and incorporated. See Chapter 1 for a summary of consultation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18878-80	In general the Karuk Tribe is fully supportive of roadside hazard treatments along access and egress routes for community safety and to support our often stated goal of putting fire 4of11 back on a fire adapted and dependent landscape. However, we are concerned with the amount of road miles overall, in particular by treating along Maintenance Level (ML) 1, 2 roads. There is also concern as to conditions of all ML roads pre and post project implementation and the impact to fisheries resources in both the short and long term.	Thank you for your comments on the Westside Fire Recovery Project. To provide for both public and Forest worker safety and future fire suppression efforts, roads classified in all maintenance levels were considered for roadside hazard treatments. Adjustments have been made to remove roadside hazard treatments from certain roads in the preferred or modified Alternative 3. Only hazard trees identified by the criteria listed in Chapter 2 of the draft EIS will be removed. Where no hazard trees are present, there will be no hazard tree removal. Effects to aquatic resources are summarized in Chapter 3 of the draft EIS and detailed in the aquatic resources report. See Chapter 2 of the final EIS for a review of the Karuk Alternative and how it was considered and incorporated. See Chapter 1 for a summary of consultation.
102.02 - Position, No Rationale	#18883-15	No activity of any kind should occur in Inventoried Roadless Areas. This includes roads across roadless areas to access other areas where equipment or people will do work.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No salvage harvest is proposed in Roadless Areas. However, other treatments including roadside hazard treatments (salvage logging where roads intersect Roadless Areas for safety), fuels treatments, and planting are proposed within Roadless Areas. See Chapter 1 and 2 for details of what is being proposed. Chapter 3 of the final EIS has a discussion of effects for Roadless Areas.
102.02 - Position, No Rationale	#18883-16	No activity of any kind should be allowed in late-seral or old-growth stands and no harvesting of individual trees over 30” diameter at breast height (DBH) should be allowed.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. There is no diameter limit; however, snags and legacy components, including large snags are being retained as described under the wildlife project design features in Chapter 2 of the final EIS.
102.02 - Position, No Rationale	#18896-1	I implore you to manage this project in a balanced fashion. Balance my need for enjoying wilderness values, rivers and streams, healthy forests and wildlife, and sharing it with my kids and theirs, in other words the public interest with any commercial needs which are motivated by financial interests. Life has shown me too many examples of clearcut public forests, and subsequent plantation style lands, and lacking wild values, due to USFS and public lands management	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is being proposed; see Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#18898-1	I wrote you, but I did not hear back from you. I am still worried sick about the disastrous consequences to the wildlife in the Klamath National Forest region if this plan to log so extensively goes through. We are supposed to protect endangered and threatened species- this timber plan violates that law and our trust in you to protect our rights to clean water and natural beauty.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. .Responses to comments received on the Westside Fire Recovery follow regulations from 40 CRF 1503.4. Responses to comments on the draft EIS are detailed in the final EIS.
102.02 - Position, No Rationale	#18907-11	9. Skyline logging is extremely damaging to the forest floor. This activity will tremendously increase the already bare soil mobility. Climate change is already demonstrating that increased intensity of precipitation is occurring and predictions are that it will occur in the future. These high intensity storms will increase soil particle mobilization of bare soils and skyline logging techniques will exacerbate the already fragile surface soil and cause deep gully erosion in steep areas.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a discussion of effects by resource area, including climate and soils.
102.02 - Position, No Rationale	#18907-26	The Forest Service should not be treating the Wildland Urban Interface to protect private property. Private property owners are responsible for protection of their property and not the Forest Service. Many communities have expanded with roads and many buildings into areas that used to be dense forest. If the private property owners want to do fire protection, then they can do it on their own in accordance with the laws that regulate fire and logging on their private property. This project should not be justified to protect these sprawling home sites and structures.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No treatment on private property is proposed with this project. Work within the Wildland Urban Interface is proposed nearby and adjacent to private property only. See Chapter 2 of the final EIS for a description of proposed actions. See response to comment number 18907-4.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18907-3	What is a purpose and need for the project is taking measures to make the forest ecosystem resilient and sustainable. This should be the single greatest purpose of the project.	The purpose and need of the Westside Fire Recovery project is to address worker and public safety and access, safe conditions for firefighters performing fire suppression for community protection, create a project that is economically viable, meeting project objectives and benefiting our local communities, and restoring fire-resilient forested ecosystems. The purpose and need is described in detail in Chapter 1 of the draft EIS.
102.02 - Position, No Rationale	#18907-4	Alternative 2 is the proposed action. It appears to take the most extreme position on removal of trees and is the most adverse action to erosion, sediment production, protection of spotted owl and fisher habitat, habitat connectivity, and legacy components (i.e. old growth trees) and late-successional reserves. A new alternative should be developed and analyzed that incorporates the concepts listed herein.	The Forest Service developed 16 Alternatives to the proposed action; six Alternatives were designed to achieve the purpose and need and were studied in detail. The Alternatives are described in detail in Chapter 2 of the draft EIS. The Forest received an additional Alternative from the Karuk Tribe on March 5, 2015, which it has been incorporated into Appendix G of the draft EIS.
102.02 - Position, No Rationale	#18909-11	Another seemingly false statement in the DEIS page 112: "In some cases of high severity burn, there are no living conifer trees available to provide potential seed for potential regeneration for several miles." Please provide us with the locations of these areas.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The location of high severity burn areas within the Westside Fire Recovery project area can be seen on Rapid Assessment of Vegetation Condition after Wildfire (RAVG) maps in Appendix A of the draft EIS. This condition is most evident in portions of the Walker Creek drainage, including the East Walker Creek, upper O'Neil Creek, and Slinkard Peak areas. There are very few conifer trees remaining in these areas capable of providing potential seed sources for future potential natural regeneration needs in the near term.
102.02 - Position, No Rationale	#18909-12	The DEIS page 112 assumes that, "[t]he removal of these dead trees will help ensure effective and timely restoration of burned treatment stands." This is written under the Affected Environment section and is a broad assumption not based on the best available science. This is just one example of the false information throughout the DEIS, because the agency is proposing to extract an undisclosed number of living green trees within larger units	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Westside Fire Recovery draft EIS was developed using the best available science. The vegetation section of Chapter 3 in the draft EIS, describes the methodology and analysis indicators used to determine effects to vegetation, and a discussion of various scientific literature is incorporated to support the evaluation of effects from the stands to be treated. No living, green trees are proposed for removal. See response to comment number 12346-55.
102.02 - Position, No Rationale	#18909-13	On page 113 the DEIS assumes that "[w]ithout salvage, site preparation and planting, severely burned stands will likely be replaced by shrubs and brush (Skinner, Taylor and Agee 2006); regeneration of conifers and restoration of forested wildlife habitat may take decades….Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18909-14	The 2014 fires burned within the range of historic variability. The soil burn severity for all the fires in the project area was below 10%, according to the Burned Area Emergency Reports even with the few extreme wind events that led to large areas of high severity. The Shatford et al 2007 study, referenced in the DEIS, highlights the importance of shrub growth on conifer regeneration, at DEIS page 143: "Across the range of Douglas-fir forest types (from the drier Douglas-fir through Douglas-fir/tanoak series), abundance of conifers was positively associated with cover of hardwoods and shrubs (Figure 7). Because this range of Douglas-fir associations describes a continuum of increasing productivity (Atzet et al. 1992), we interpret the positive relationship between hardwood and shrub cover and seedling abundance as a response to increased site productivity and availability of resources to vegetation in general (Whittaker 1960)." On page 144, "Seedling establishment was, however, conspicuously high on all sites within the white fir series; hence, competition from broad-leaved species does not seem to present a serious obstacle to conifer establishment there." On page 144: "We predict that conifer mortality will remain low and height growth will accelerate as individuals continue to emerge above the shrub layer (Conard and Radosevich 1982)." "Although short-term gains may be made from shrub removal, long-term benefits of increased nutrient levels and ultimately sustained conifer growth warrants additional consideration (Busse et al. 1996). The appearance of broad-leaved species from stumps, roots, or seeds can stabilize soils and reduce erosion hazards after fires. Where heat or drought may be limiting seedling establishment, shrubs facilitate natural tree regeneration and growth by providing shade and conserving moisture (Minore 1986, Kitzberger et al. 2000). The presence of vegetation also may play a critical role in attracting birds and mammals that act as agents of seed dispersal (Vander Wall 1990). Areas of shrub and hardwood cover benefit a variety of wildlife species (Alldredge et al.2001)."	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment includes quotes from the draft EIS. It is unclear in what way the commenter is asking the agency to adjust its treatments or effects analysis based upon this comment.
102.02 - Position, No Rationale	#18912-7	Lastly, and on a more personal note that relates less to the project, and more to my ethics, I believe that the Westside Fire Recovery Project makes it clear who the most important user group of the forest is. Yes, of course this timber has a short time frame to contribute lots of money to the forest (and even more to the Treasury of the US), but particularly the act of seeking an Emergency Decision status on this project isolates all other user groups of the forest. I hope you reconsider requesting this Emergency status because of the damage that bypassing a public appeals process will do to the Forest Service's relationship with the public. Financially, I think the Forest needs to bite the bullet, and wait another year to implement the cutting (excluding that which is safety related) and to respect a process that is more inclusive of the public and leaves more time for analysis of the proposal by the scientific community.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. An emergency situation determination has been granted by the Chief for this project; see Chapter 1 of the final EIS for details.
102.02 - Position, No Rationale	#18914-4	Regarding LSRs, I support the recommendations offered by Dr. Jerry Franklin.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See the beginning of Chapter 3 of the final EIS for a description of responsible opposing points of view, including those of Dr. Jerry Franklin.
102.02 - Position, No Rationale	#18915-2	REDUCE FOREST FUELS. As we have seen in recent years, and especially in 2014, fuel levels on western forests are at extreme levels that threaten the ability of those lands to remain forested and provide the multiple benefits that society expects from their public lands. Additionally, with the increasing severity of wildfires there is an increase in levels of atmospheric pollutants including CO, CO2, methane, and particulates among others. These burned forests are not only having a negative effect on the atmosphere and on local communities, but they are losing their ability to store carbon and act as carbon sinks. As the National Forest System addresses climate change and the interactions of the National Forests and the climate, it is critical that public lands do not become net emitters of carbon, which is where we are currently headed. Therefore, all post-fire project and all forest management projects need to work to reduce fuel loads and reduce the potential severity of the wildfires that will come as part of the natural processes of our western forests.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Other project planning and implementation is outside the scope of the Westside Fire Recovery project and its analysis. The effects of this project on climate change, emissions, and fuels is disclosed in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18915-3	RECOVER THE VALUE. The National Forest System used to generate revenue to benefit the nation and local counties and communities. A portion of this revenue was returned to the counties as a payment in lieu of property taxes to help mitigate the impact of tax exempt lands to those counties. In the last 20 plus years, public lands have become more of a burden on the counties where they occur. The Forests and Ranger Districts do provide some local economic benefit from their employees living in the communities, but as many communities have seen, the reduction in and loss of PILT funds have led to the loss of tax generating infrastructure and jobs associated with harvesting and manufacturing wood products from National Forests. The National Forests need to proactively manage their lands to the extent allowed by law, and this includes salvaging dead and dying trees. In the case of wildfire, these salvage activities need to be promptly executed in order to minimize the loss of value and benefit to the Forest, to the affected communities, and to society as a whole. The argument that snags are needed for certain wildlife species is a false one, implying that the harvesting of these snags will have a negative impact on wildlife. The public forests in the western US have hundreds of thousands, if not millions, of snags left from previous fires and from areas that have experienced significant levels of mortality from disease and insect infestation. Whenever possible, as in this case, the public forest lands need to have dead and dying trees harvested to the extent feasible as quickly as possible.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Economic benefit is a part of the purpose and need of this project; see Chapter 1 of the EIS. Chapter 3 of the EIS has an economic analysis of this project's impacts along with the cumulative effects and other projects, as applicable. Dead trees or snags are being salvaged to the extent that it meets the purpose and need of the project, Forest Plan standards and guidelines, and other applicable law, regulation, and policy.
102.02 - Position, No Rationale	#18915-4	RESTORE THE FORESTS. The National Forest System leadership, including Regional Office managers, has acknowledged that the condition of the public forest lands is not healthy. Decades of fire suppression, combined with a lack of significant management over the last 20 years, has led to forest conditions that are less and less sustainable. While these forest evolved with the inclusion of fire, stand conditions were such that there were not the large wildfires destroying thousands of acres of forest. Researchers have shown that stand conditions were much more open and resilient to fire and, prior to the early 1900s, included significant amounts of annual burning. It has been stated that the scope and scale of forest restoration activities need to be drastically increased on public lands if those lands are to be retained as forests. A review of the areas of major wildfires from the past 20 years shows large landscapes that have become deforested. These former forests are now dominated by dense brush and heavy fuels awaiting the next fire to clean the ground to bare soil and start the cycle over again. Recent research has shown that stands experiencing a severe wildfire are more likely to repeat that scenario and develop a loop where the ecological processes maintain a brush and woody fuel habitat that may last for decades to centuries. Forests will likely develop, eventually, but it may be centuries down the road, and in the meantime less carbon will be stored, and it will be emitted into the atmosphere more frequently through wildfire. Ecologically and environmentally, forest restoration is the only sane action for public land managers to pursue. The National Forests need to be managed and maintained in a forested condition.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The affected environment of the project area after the fires as well as historic conditions have been considered for analysis, as described in the vegetation section of Chapter 3 of the EIS. The effects of the proposed actions on fuels conditions and climate change are disclosed in Chapter 3 of the EIS.
102.02 - Position, No Rationale	#18918-1	Thanks for accepting comments on the Westside so-called "Fire Recovery" Project. I contend that this project is almost entirely about timber industry greed colluding with a bureaucracy that has a deep desire to enlarge itself. When you see "Westside Fire Recovery Project" mentioned below, please consider the term "Fire Recovery" as having parentheses - since it doesn't take much on-the-ground or in salmon stream experience to realize that the more heavy equipment and active management are used following fires, the worse the ecosystem recovery will be.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18918-14	I note the bogus excuse under "Emergency Situation Determination" pursuant to 36 CFR 218.21. I note that part of the definition of an "Emergency Situation Determination" is "avoiding a loss of commodity value sufficient to jeopardize the agency's ability project objectives directly related to resource protection or restoration." However, I have already pointed out that the first and third alleged "needs" that the WFRP addresses are bogus. To the KNF, they often see "resource protection" as protecting trees they want the timber industry to later butcher. With the admitted great biodiversity in the Klamath region, explain how planting more monoculture conifer plantations is related to either resource protection or restoration.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Planting more monoculture plantations is not proposed in the Westside Fire Recovery project. Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Tree species used for planting will include a variety of suitable species. An average of 130 to 300 trees per acre will be planted to achieve acceptable levels of stocking, depending on the site conditions, and trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units. See Chapter 2 in the draft EIS for more information about the proposed action and Alternatives. See response to comment number 17501-2.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18918-15	Let's now turn our attention to the four bullet points on page iii of the DEIS which says that, "The purpose and need of the project is to address the following:". I have already addressed the bogus first point. I object to the second point because continuing the fire suppression / conifer plantation mentality will not make communities more fire-safe. The third is partly on economic viability of the timber, but it says "and benefitting our local communities". The boom-bust cycle and deleterious impact that the WFRP will have on native salmon streams and rivers of the area will benefit only a greedy few in such local communities, so the third purpose and need is also bogus. And finally, "There is a need for restored and fire-resilient forested ecosystems." Logging snags and older forests to replant monoculture conifer plantations is not natural restoration, and it would tend to increase rather than decrease catastrophic or other fire danger	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter quoted the purpose and need of the project, as described in Chapter 1. See Chapter 3 of the final EIS for a disclosure of effect by resource area, including fuels, aquatics and hydrology. Monoculture planting is not being proposed; see Chapter 2 of the final EIS for a description of proposed actions, including site preparation, planting, and release.
102.02 - Position, No Rationale	#18918-16	It is clear that continued liquidation management practices in the Klamath National Forest will lead toward more catastrophic fires - not less. The National Institute for the Elimination of Catastrophic Wildfire is obviously a joke (unless one wants to cement most of our national forests!). It likely was invented to give the timber industry a cloak of inclusiveness but still pandering to their every whim. Without delving into its formation, one assumes it is primarily a timber industry front groups alleged collaborative. Need I remind you that national forests are public land, and is not supposed to be primarily for private plunder and liquidation. Thus, what Siskiyou County interests would want to do with the areas impacted by the 2014 fires should not be given any more heed than what a housewife in Imperial County's preferences for the area would be	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Scoping comments from the public, other agencies, and tribes were used to formulate issues concerning the proposed action. Based on the issues identified through public comment on the proposed action, and in accordance with 40 CFR 1502.14, the Forest Service developed Alternatives to the proposed action. See Chapter 1 of the EIS for details of public involvement. The Forest did not give any preference to issues identified from any one agency, tribe, group or individual. See Chapter 1 and 2 of the EIS for how public scoping comments and input from other agencies and governments have been addressed.
102.02 - Position, No Rationale	#18918-18	Clearly, any mitigations are woefully inadequate to prevent a deterioration of old-growth forest habitat (majorly impacting the Northern Spotted Owl), to prevent major silting of native salmon streams and rivers, and to allow forest carnivores enough canopy so that they can still survive in northwestern California.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a description of effects to northern spotted owl, Coho salmon, and hydrological conditions. The project's purpose and need include the restoration of wildlife and watershed conditions, as described in Chapter 1 of the final EIS.
102.02 - Position, No Rationale	#18918-2	I urge rejection of all action alternatives except perhaps for the proposed Karuk alternative. Recall that the Karuk have no land-base, so basically the Klamath National Forest is the center of their culture and universe. They also have a traditional sacred relationship with the salmon of the area, so any further deterioration of the watercourses of the Klamath River or its tributaries threatens not only nutritional vitality for the Karuk people, but impacts their way of life by further threatening Coho salmon, Spring Chinook, and various other native salmon stock in the watersheds of Siskiyou County.	Thank you for your comments on the Westside Fire Recovery Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Consultation with the Karuk Tribe is ongoing.
102.02 - Position, No Rationale	#18918-20	In summary, this document tries to further the myth that conifer plantations and more intensive logging and roading operations will somehow bring about resource protection and restoration. The timber industry and their lackeys at land management agencies will not improve the fire regime and will not improve community safety	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See EIS Chapter 3, Responsible Opposing Views and Agency Response.
102.02 - Position, No Rationale	#18918-22	Need I remind the Klamath National Forest that you are supposed to uphold environmental laws, not just pander to the worst in the timber industry. I guess I need to remind the White House Council on (so-called) Environmental Quality about that supposed guidance as well. This is a national disgrace! Stop your callous, greedy, destructive proposal and behavior! Follow the Northwest Forest Plan and the Aquatic Conservation Strategy. Larger trees that have survived fire ARE the resilient ones, or may help the next generation along naturally. Stop the sham, and reject all action alternatives (while considering some important points made by the historically-abused Karuk tribe. Sincerely concerned, Bruce Campbell	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Westside Fire Recovery project was developed to meet standards and guidelines of the Northwest Forest Plan, the Klamath Forest Plan, and Aquatic Conservation Strategy objectives and desired watershed conditions from the Forest Plan.
102.02 - Position, No Rationale	#18918-4	The USFS should cease in championing the "junk science" that acts like the older forests (including snags) are the problem, whereas unbiased observers would see the combination of fire suppression along with massive clearcutting and conifer plantations as what has made habitat for many species go downhill in the Klamath - Siskiyou bioregion.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Project design and analysis incorporates best available science, as referenced throughout the final EIS and supporting documents. Also see Chapter 3 of the final EIS for a discussion of opposing points of view.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18918-5	Looking at the three things that the KNF proposes to do, it is clear that the first and third points / proposals are bogus, and the proposed action alternatives are all about timber industry profits. A number of trees were removed from road areas during the wildfires, and those were nearly all the trees that could be considered a "safety hazard" "to the public and forest workers." Snags generally hold hillsides together, so there is less danger with them standing in general.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18918-6	The claim of the third thing that KNF proposes to do (according to October 8, 2014 letter), which is to "increase the likelihood and speed by which burned forested areas are regenerated", turns reality on its head. When there is major truck, bulldozer, and logging equipment (heavy vehicle) disruption - especially on steep slopes - the odds of regeneration decreases rather than increases. However, the KNF claim would be the case if what they seek is more conifer plantations (all the same age and all the same species) which are a tinder-box for fire so that it can grow toward a catastrophic intensity, but it is clear that leaving burned areas alone are best method to have natural generation and this would certainly help in protecting our already strained river and stream habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18918-9	Clearly, there is too much scheduled logging of Northern Spotted Owl habitat to guarantee its survival. I see this as the case even if the Barred Owl was not making serious inroads into some of the NSO's territory.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See the effects of this project and other cumulative actions on northern spotted owl habitat in Chapter 3 of the EIS. Other logging of northern spotted owl habitat is outside the scope of this project and its analysis.
102.02 - Position, No Rationale	#18926-15	Wildlife Unessecarily Put At Risk of Extinction! Several species of wildlife are unnecessarily put at risk, including threatened and endangered species, survey and manage species, indicator species and others. The cumulative effect alone of the hardwoods will be 1,318 acres of hardwood habitat being removed and would not function as habitat in the near future.! Species recognized on the KNF as being associated with hardwoods are the Acorn woodpecker and the Western gray squirrel. The KNF forest plan standards require that pure hardwood stands be managed for !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-22. Affects to hardwood-associated species are detailed in the Terrestrial Wildlife section in Chapter 3 or the draft EIS.
102.02 - Position, No Rationale	#18926-16	Neo-tropical Migratory Birds! The regional decline of migratory birds is a significant issue. Numerous studies have reported local and regional trends in breeding and migratory bird populations throughout North America. These studies suggest geographically widespread population declines that have provoked conservation concern for birds, particularly neotropical. The 2005 report from the Klamath Bird Observatory indicates that several species of songbirds are suffering declining population trends at the regional level.! The DEIS states the project would result in up to 21,650 acres of habitat being affected but fails to consider the actual impacts of proposed treatments on neo-tropical migratory birds.! ! Salvage in Late Successional Reserve (LSR) Inconsistent with the Northwest Forest Plan and Unacceptable!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-22. Affects to Migratory Birds are detailed in the Terrestrial Wildlife section in Chapter 3 of the draft EIS.
102.02 - Position, No Rationale	#18926-33	In the DEIS the preferred alternative violates the Clean Water Act, including provisions of the Basin Plan and national forest waiver permit. ! ! Proposed Action Violate the Endangered Species Act - The preferred alternative in the DEIS threatens Coho salmon because of the large amounts of sediment it would deliver to streams in addition to sediment delivered because fire suppression actions. The negative affects on the Norther Spotted Owl and the fisher are unscientifically directed and not acceptable. The preferred alternative would violate the Endanger Specie Act.! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-22. The Westside Fire Recovery project complies with regulations implementing National Environmental Policy Act, which further require that to the fullest extent possible, agencies shall prepare EISs concurrently with and integrated with environmental analyses and related surveys and studies required by the Endangered Species Act of 1973, the Clean Water Act of 1948 (as amended in 1972 and 1987) , and other environmental review laws and executive orders.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18927-1	CalWild and Friends of the River are very concerned about the Project's potential impact on water quality and threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild and Scenic Rivers, and roadless areas (some of which were proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 as additions to the Marble Mountain and Russian Wilderness areas). The level of logging and road building proposed is simply too much. The preferred alternative and its supporting analysis is a perfect example of the old axiom: "Man plans, god laughs." Although we appreciate the detailed and methodical approach taken by the USFS in this analysis, the decision to proceed with Alternative 2 fails to take into account external factors such as continued drought, future flood, additional fires, and even shortfalls in the federal budget. Any of these factors, individually or combined, could easily result in increased and unacceptable environmental impacts and ultimately, the failure of this project to meet its ambitious objectives. Adherence to plan direction, standards, and guidelines is no substitute for caution. It's like assuming you will be impervious from harm as long as you operate your automobile according to all traffic laws. We all know that outside factors can and will often intrude sometimes catastrophically.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Cumulative effects analysis was conducted in accordance with 40 CFR 1508.7. Current and future foreseeable actions considered for analysis for the Westside Fire Recovery Project boundary are listed in the draft EIS. Reasonably foreseeable future actions are defined in 36 CFR 220.3 as those Federal or non-Federal activities not yet undertaken, for which there are existing decisions, funding, or identified proposals. Identified proposals for Forest Service actions are described in §220.4(a)(1). See response to comment number 18878-16 about implementation funding.
102.02 - Position, No Rationale	#18930-1	this logging proposal endangers key ecological processes. The road construction, harvest quotas, and overall impact of the operation has the risk of detrimentally affecting both the future forest ecology and the salmon population. The severity of this burn has already put regeneration and erosion at a serious risk. Let the record reflect that the community was aware of the risks and potential costs of this logging operation and that sufficient effort was made to communicate these risks to those in control of said operation. There can be no claim of good faith should it be proven that this logging operation detrimentally impacted the salmon run or the ecological recovery of this area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The effects of this project on vegetation and aquatic resources, including fish such as Coho salmon, are disclosed in Chapter 3 of the EIS. The project has some long-term beneficial effects on Salmon and its habitat. Mitigations to minimize negative impacts of the project on Salmon and other resources have been incorporated into project design; see the watershed project design features in Chapter 2 of the EIS. As described in Chapter 3 of the EIS, negative indirect impacts of salvage harvest on aquatic species and their habitat is expected to be discountable.
102.02 - Position, No Rationale	#18931-2	Regarding Management Direction (DEIS pg. 7) : "Direction for this project comes from the KNF Land and Resource Management Plan (Forest Plan) of 1995, as amended." Comment: Unfortunately, the "problem statement" in the DEIS under Purpose and Need (DEIS pg iii), namely: "The Westside Fire Recovery project was developed in response to changes to forested habitat resulting form the 2014 wildfires on the KNF," implies that the Forest Plan did not achieve the optimistic predictions of the previous 1995 Forest Management Plan, as amended: From the KNF Fire Management Plan; Desired Conditions (LRMP pages 4-15 through 4-16) states the following: "The Forest will continue to be one of the most biologically diverse areas in the Nation. Biological diversity, although variable within natural limits at the stand and landscape levels, will be essentially the same as it is today at the Forest level. There will be a mosaic of vegetative patterns across the Forest. The composition and structure of forest, rangeland, and aquatic ecosystems will be within the natural range of variability. These ecosystems will function in a healthy manner and be resilient to changes, including repeated fires. (emphasis mine) Quality habitat will be present for aquatic and terrestrial species. Habitat will be conducive to the movement and interaction of species and to movement across landscape and Forest boundaries. The distribution of species will help insure perpetuation of healthy populations. "The amount of acres burned in high intensity wildfires will have decreased significantly due to the large, aggressive fuel management program reducing fuel loading throughout the Forest. There will be more acres of lower intensity fires similar to conditions prior to 1900. These lower intensity fires will begin to create a more open forested condition in many areas. "The landscape will appear to be primarily shaped by ecological processes, rather than management activities. Openings in the forest canopy created by vegetation management will not be readily evident. Existing clear-cut units that are apparent today will blend into the surrounding vegetation in the future, as planted trees mature and visual restoration projects soften sharp contrasts in line, form, and color."	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project is designed to be consistent with the goals and standards and guidelines of the Forest Plan. The objectives of the Westside Fire Recovery project dovetail with the desired future conditions of the Forest Plan in that both seek to create and maintain fire resilient ecosystems and diverse habitat conditions. Although some of the high severity patches created during the 2014 fires are likely attributable in part to the delayed implementation of projects designed to achieve the desired future conditions of the Forest Plan, the Westside Fire Recovery project should create conditions that facilitate achievement of Forest Plan goals.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18934-1	We are very disappointed that the Klamath National Forest has chosen to pursue a preferred alternative for the Westside Fire Recovery Project that disregards so much of the positive work over the past two year accomplished by the Western Klamath Restoration Partnership (WKRP). While the WKRP cannot provide comments as an entity to this project (the Forest Service and other federal agencies are participants), the values, threats, strategies, and collaboratively developed zones of agreement provide a road map for developing upslope management projects that are supported by the diverse array of WKRP participant groups and individuals. The preferred alternative (Alternative 2) appears to more closely resemble the salvage logging timber sales that followed the 1977 Hog Fire and Siege of '87 Fires.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18934-3	While the Purpose and Need address portions of these values, it is critical to remember that participants in the WKRP agreed to only work on projects that positively affect all of these shared values. We request that you utilize the good work accomplished through the WKRP and analyze in the Final EIS how the various alternatives and the selected alternative affect these values. This analysis should look at the social, cultural, ecological, and economic effects of proposed actions in light of recent published literature and research on these topic as they relate to the values above. Specifically, the National Cohesive Wildland Fire Management Strategy defines a new paradigm for preparing for, managing, and recovering from wildfires, that strongly supports the Karuk Alternative and the strategies identified in the Western Klamath Restoration Partnership plan that was funded by the Klamath National Forest (online at: http://karuk.us/images/docs/dnr/2014%20Western%20Klamath%20Restoration%20Partnership_Restoration%20Plan_DRAFT_FINA%20%20%20.pdf).	Thank you for your comments on the Westside Fire Recovery Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Environmental effects of the Westside Fire Recovery proposed action and Alternatives follow regulations in 40 CFR 1502.16 and uses the best available science. The Forest received an additional Alternative from the Karuk Tribe on March 5, 2015, which has been incorporated into Appendix G of the draft EIS.
102.02 - Position, No Rationale	#18935-1	The DEIS overlooks relevant factors and fails to account for scientific information regarding effects of salvage logging to wildfire behavior and effects	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Effects of the proposed action and Alternatives to fire and fuels are described in Chapter 3 of the draft EIS.
102.02 - Position, No Rationale	#18937-1	On behalf of Klamath Riverkeeper, we are gravely concerned that the preferred alternative published in the DEIS for the Westside Project threatens sensitive salmon habitat and thereby our communities who depend on the Klamath River and tributaries in the Klamath River and its tributaries for jobs, recreation and cultural survival. In addition, the preferred alternative in the preferred alternative in the Westside Project would log on three sides of the Marbled Mountain Wilderness and directly along the Pacific Crest Trail.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 for a disclosure of effects by resource area and Alternative.
102.02 - Position, No Rationale	#18937-10	A perspective to consider: The Westside project surrounds three sides of the Marble Mountain Wilderness, a national treasure. The terrain is extremely rugged and steep with slopes commonly reaching 65 percent. The ecological and monetary costs of fire suppression actions were extreme, upwards of $200 million tax-payer dollars. Fire suppression constructed nearly 200 miles of bulldozed ridge top fire breaks, dumped thousands of gallons of fire retardant in sensitive areas including at least one under-reported misapplication directly into in the Klamath River.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#18937-4	Unfortunately, the DEIS fails to allow for this sound alternative to prevail. The DEIS fails to provide adequate or consistent analysis, fails to account for connected actions (like future fire suppression and current logging plans), relies on antiquated models and science, and fails to adequately analyze for cumulative impacts. In addition, the rush to "get the cut out" has led to sloppy accounting within the DEIS, including inaccuracies within summary tables, misleading maps and contradictions between documents and referenced studies.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18934-3 and number 18927-1.
102.02 - Position, No Rationale	#18937-7	The preferred Alternative 2 in the DEIS, which appears to be the predetermined outcome for the project decision, undermines existing protections for healthy fisheries, rivers and streams, wildlife, forest ecosystems, vegetation, cultural traditions and local communities.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#18937-8	The project proposal also disregards the planning priorities identified by the Western Klamath Restoration Partnership (WKRP) (see attached plan). In addition, the project defies the Karuk Tribe's proposed Eco Cultural Resource Management Plan by continuing a regime of fire exclusion, artificial regeneration and widespread commercial logging on steep slopes in sensitive, post-fire landscapes.	Thank you for your comments on the Westside Fire Recovery Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.See response to comment number 18907-4.
102.02 - Position, No Rationale	#18937-9	Legal violations and concerns The preferred action will violate the Aquatic Conservation Strategy (ACS) in a variety a ways, including ignoring Northwest Forest Plan ACS objectives for designated Geological Riparian Reserves to allow for salvage logging and road building in Key Watersheds (see commenter George Sexton's detailed explanation submitted 4/9/2015 #45579). The Westside DEIS also violates the National Environmental Policy Act, Clean Water Act, Endangered Species Act, Northwest Forest Plan, KNF Land Resource Management Plan, Northern Spotted Owl Recovery Plan and the recommendations in Late Successional Reserve and Watershed Assessments. We urge decision-makers within the KNF to consider the consequences of project approval on future collaboration efforts with Tribes, restoration organizations and other partners in the Klamath and beyond. We recommend that KNF immediately consult with the Karuk Tribe and WKRP to completely rework the proposal into a community-supported post-fire recovery project. Otherwise, the KNF will imply through action that Forest priorities will continue the antiquated regime of proposals beholden to special industrial timber interests and fire exclusion politics. Klamath Riverkeeper would like to re-assert the entirety of the careful analysis and bibliography submitted into the Administrative Record by hereby referencing commenter George Sexton on 4/9/2015 (#45579). In addition, we agree with and hereby reference the entirety of the content of commenter Kimberly Baker's addendum to Mr. Sexton's comments, submitted 4/27/2015 (also #45579).	Thank you for your comments on the Westside Fire Recovery Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.See response to comment numbers 18898-1, 18926-33,18918-22 and 18907-4.
102.02 - Position, No Rationale	#18939-5	Position Statement: Forest Management Siskiyou County California, Klamath National Forest Let us look first where we've been to see where we're at. In the early days Native people and then cattlemen with regimens of natural fire burn systematically to create a mosaic of 25-30% grasslands, multi-age class areas of brush, hardwoods, and conifers. The country was balanced and it worked for man, fish and wildlife. Forest Service management brought an end to system-wide burning. They initiated maximum timber harvest (The Klamath Cut) with large blocks of mature timber harvested and also mandated forest timber quotas. Which led to soil instability, watershed dysfunction, and massive fuel loading. The '70's saw new people, ideas, and untested philosophies. The Flower children had arrived. Protests were popular along with the use of litigation based in the much maligned establishments legal system halted legitimate management. Timber harvest and other projects declined to almost nothing. These tactics made management projects to costly and slow to be effective. Mills closed, economy slumped, communities declined, schools closed, and fuels continue to grow. Catastrophic fire occurred in '29, '55, '77, '87, '04, '06, '08, '13, and '14. Management tactics employed '77 through '08 that work in Arizona, Colorado, and Southern California are imported. Fire on the ground on lower slopes produce hot devastating burns in drainages well in excess of the original fire's potential. Late '87, '13, and '14 fires in Salmon River saw a more patient approach and reduced firing efforts. Altered tactics produced cooler underburns and a mosaic effect. Excessive salvage in '77 and '87, left untreated, created massive light and medium fuel loading. In '04, '06, and '08 there was little to no salvage. Untreated produced massive light, medium, and also very heavy fuels throughout the landscape. Some areas have burned multiple times since. The fire of '13 saw salvage and restoration efforts similar to proposals presently considered. Completed projects on the Salmon River show promising results. The White's fire of '14 saw a similar fire control approach with many positive components and a constructive restoration outcome is expected. With aggressive treatment the goal of multi species varied age class mosaic is possible. The Happy Camp burn managed in Southern California style again produced catastrophe on a massive scale.	See Chapter 1 for a discussion of the historic fire regime of the Klamath Province. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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102.02 - Position, No Rationale	#18939-6	Policy changes that direct toward historic mosaic conditions * Move management emphasis away from timber harvest towards wildlife, watershed, fuel reduction, and native cultural goals. * Veto black line theory, within the box burn theory, and replace with a more patient approach. Avoid fire on the ground on the lower 2/3 of slopes * Create and maintain pre-attack on a landscape basis. * Redraw and revise the FMP, LSR, and designated roadless areas to able to manage these areas. * Go back to using available fire resources other than just agency's crews, including but not limited to, non- agency, fire and rescue, "pick-up" firemen, and non-fire Forest Service personnel. * Fight fire at night with all available resources. * Rapid initial response and reassess "let-burn" policy * Keep supervisors with local experience in place during a fire incident. * Build top-level managers with a depth of local experience. Replace managers going out with local experience. * Holistic Watershed Management o Get away from single species management (i.e. timber, spotted owl, salmon, yellow legged frog) o Revise ESA o Streamline NEPA to speed project preparation and let the Forest Service get to work. o Government needs help fighting radical opinion litigation o Help educate an uninvolved public on management decisions and forest conditions o Public consultation with government agencies on projects * Focus on Fuels Reduction o Use important topographical features for fuels reduction projects o Focus on the backlog of old clear-cut maintenance for fire and wildlife management o Form landscape sized pre-attack linear system o Design with planned re-entry for maintenance on completed projects o Cohesive linear projects	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the final EIS for what is being proposed. See Chapter 3 for a disclosure of effects by resource area and Alternative.
102.02 - Position, No Rationale	#19073-3	Most of the taxpayers and local citizens would prefer to see as many acres treated as possible within the framework of regulatory restrictions and short times frames required to accomplish some level of restoration. This has been seen in past public poling of citizens in the Northwest in the past.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#19075-3	It appears that the USFS is using this proposal as an opportunity to convert roadless areas into log farms. The logic here may be that log farms produce more revenue than roadless areas, unless they burn up before harvest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Roadless Areas will not be converted into log farms. The only logging proposed in Roadless Areas is roadside hazard treatments (where roads intersect Roadless Areas). See Chapter 2 for a description of proposed actions. See Chapter 3 for a disclosure of effects to Roadless Areas.
102.02 - Position, No Rationale	#19076-7	It is erroneous to claim that a local mill will benefit, as there are none.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#19112-8	Please keep the Regional Office, Washington Office, Congressional representatives, and OGC in the communication loop and on good terms. Without their support, the risk of losing the project is high. We do not need a repeat of the Megram Fire Recovery litigation scenario.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#19112-9	If during the appeals and litigation processes concessions must be made to see the project through fruition, we would recommend altering prescriptions in remote areas far from communities. Examples would be burn only, no salvage; deleting helicopter units with long flight turns; deleting units with primarily small diameter trees; deleting units with large green tree components. Again, these recommendations are only if needed to see the rest of the proposal implemented, and only in areas far from communities and other improvements. Hopefully no concessions need to be made. Diligent timber sale administration and post-salvage clean up must be tended to. Please allocate the resources needed to accomplish these tasks. Thank you and staff for your hard work. Sincerely, John and Sheryl Allen Seiad Valley	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#19-5	To meet your stated objectives, it will be important to complete your NEPA analysis as quickly as possible to allow for salvage logging to take place in the 2015 operating season. There will likely be only five months that operations cab feasibly take place on this project, (July 2015-November 2015). This means that each one month delay in starting timber operations will reduce the amount of work that can be accomplished on this project by 20%!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.
102.02 - Position, No Rationale	#19-7	Salvage harvesting will play an essential role in successful establishment of the new stand of trees. As stated earlier, removing the standing trees will eliminate the potential for large amounts of fuel remaining on the site, possibly leading to re-burns. Additionally, there is less potential damage to seedlings as snags deteriorate and fall to the surface. Parties that submit comments about this project or state otherwise are simply anti-logging and are not truly interested in restoration/rehabilitation.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#20-1	I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6924-1. No clear-cutting is being proposed. Salvage harvest is proposed in geologic Riparian Reserves. No salvage harvest is proposed in hydrologic Riparian Reserves; however, roadside hazard treatments (where roads intersect Riparian Reserves), fuels treatments, and site preparation and planting are proposed within hydrologic Riparian Reserves. See Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#20-2	Fire is an inevitable and natural occurrence in this planning area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#21-3	Fire is a natural and, indeed, essential element of the ecology of the Klamath National Forest, but to log in late-successional areas that have been burned would turn the net positive of recent fires into a devastating ecological catastrophe.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#23-2	The Draft Environmental Impact Statement proposes Salvage Logging which I believe is necessary and ecologically important to hasten the natural state. I encourage the management of the Klamath Forest to also thin the forest to reduce the amount of water being diverted by the trees at the expense of our watersheds. Your original master management plan called for a forest that has less board feet than currently exists. This not only increases the fuel available for a catastrophic fire, as was experienced, but it also decreases the amount of water captured in the streams and rivers. In a drought, as we are currently experiencing, this exhausts are watersheds. There are additional reasons why it is important to Salvage Log this fire-damaged landscape, they are: * Post-fire landscapes are ripe for the spread of pests and disease; * Post-fire landscapes provide a greater risk of another catastrophic fire to re-engulf the region and destroy the entire forest. The sooner the forest can return to a natural, healthy growing state the greater the benefit for the watershed and all living beings that inhabit and recreate in it.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Reducing the amount of water being diverted by the trees from local watersheds is beyond the cope of the Westside Fire Recovery EIS.
102.02 - Position, No Rationale	#23-4	I hope you and your staff will consider the hypocrisy the environmental groups (such as EPIC, KS Wild, NEC, Riverkeeper, Klamath Forest Alliance, etc.) present to millions of acres of public lands - of which I believe precludes any standing in these forest-related matters. These environmental groups, and others like them, will line up to produce vast anti-logging campaigns and do everything possible to prevent any action in the Klamath Forest while allowing and participating in marijuana grows. They stand silent and do nothing to fight the true scourge to our forests -marijuana grows. It is a little known fact that some of the members and staff of these groups are actually the growers. These growers bring poisons and fertilizers, and litter the area with dead animals and trash. * These same environmental groups have no problem with any sediment when decommissioning roads or removing invasive species but will not allow for any forest management practices.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#3679-2	As for reforestation, I like the plan of planting in clusters to mimic natural units. Also I am pleased to see that hardwoods are finally being considered as "trees". That is, green hardwoods will be included in the average spacing. I do hope that the burned oaks already sprouting back will be considered "green".	Hardwoods would be counted in tree stocking as noted in the comment.
102.02 - Position, No Rationale	#4-6	Reforestation o Wider spacing for planned reentry and maintenance o Leave some areas unplanted o Vary conifers and hardwoods with respect to original species	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#5-1	With all the parts that have to be balanced for any region, this can be very big to deal with. Live vibrant forest need some dead trees and brush. Small animals use this to live in and other live in the dead trees. Dead plant matter creates dirt. Simple. Small plants / grasses, etc are needed as well as trees. The replanting also has to deal with less water, as it looks like there will be more drought. Balance between what grows there now and what will grow better with out so much water, so there would be a better transition	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#5873-101	[S]alvage may be desirable in the wildland-urban interface zone …	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#5873-131	Jerry Franklin has said of salvage logging in LSRs that “Salvage would be completely antithetical to the goals of reestablishing late-successional forest habitat. Retention of the large snags and logs are essential to natural recovery processes and none of this material can be viewed as in excess to ecological needs.” Jerry Franklin, Comments on the Siskiyou NF’s Biscuit Fire Salvage DEIS, Jan. 20, 2004.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#6199-1	the ignorance of men is the enemy of mama nature, why is it that the most educated people commit the worst crimes against nature and humanity. men has turn earth into a painful place for all living beings...this means	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#6924-1	So "late-successional" Old-Growth reserves and geological riparian reserves survived the Wild Fires as nature intended and you use it as an excuse to clear cut!?	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Clearcutting is an even-aged management silvicultural system applied to green forest stands for the purpose of regenerating a new age class. No clearcutting is proposed for the Westside Fire Recovery project. See Chapter 2 of the final EIS for a description of proposed actions.
102.02 - Position, No Rationale	#6947-1	"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method." -- Theodore Roosevelt	General quote. It is unclear how this quote relates to the project design or analysis.
102.02 - Position, No Rationale	#6947-2	"Our government is like a rich and foolish spendthrift who has inherited a magnificent estate in perfect order, and then has left his fields and meadows, forests and parks to be sold and plundered and wasted." -- John Muir	General quote. It is unclear how this quote relates to the project design or analysis.
102.02 - Position, No Rationale	#6947-3	It is horrifying that we have to fight our own government to save the environment." -- Ansel Adams	General quote. It is unclear how this quote relates to the project design or analysis.

Code	Comment Number	Comment Text	Response
102.02 - Position, No Rationale	#6947-4	"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish-indeed, all the living creatures of prairie and woodland and seashore-from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement." -- Theodore Roosevelt	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#6947-5	"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." -- Aldo Leopold	General quote. It is unclear how this quote relates to the project design or analysis.
102.02 - Position, No Rationale	#7-1	We appreciate the efforts of the USFS to move forward quickly on the Westside Fire Recovery Project. The salvage logging is very much needed, so that 10-15 years from now we do not have even more devastating fires after the brush has grown up amid these fire-killed trees. Thank you.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.02 - Position, No Rationale	#7-2	One thing that our community desperately needs is more clearing on USFS public lands that are adjacent to private lands in our community. During the past ten years, we have conducted several clearing projects to provide defensible space around residences, and also to clear larger tracts of private land in and around our community. Much of this has been funded by grants in coordination with the Northern California Resource Center, and many of our residents here have also done extensive clearing on their own effort. However, when public lands adjacent to our residences remain overgrown, this greatly reduces the effectiveness of efforts to keep our community safe and defensible from wildfire because these overgrown areas can serve as conduit to bring fire right into our community.	A primary purpose and need of the Westside Fire Recovery project is to address the need for safe conditions for firefighters performing fire suppression for community protection. Proposed activities to address this include, salvage of fire-killed and other hazard trees along roadways and near infrastructure and removal of roadside hazard trees to maintain current and future safe ingress and egress from the forest. See the discussion in Chapter 1 for more detail.
102.02 - Position, No Rationale	#7580-1	I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project. This is exactly the kind of ill-conceived plan that has been exposed time and time again in recent decades as harmful and exploitive and has been stopped before it could damage the land and its inhabitants. I trust science and sense can carry the day once more ... but it is discouraging that those who seek profit at the expense of the earth keep coming back again and again for another run at it.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed; see Chapter 2 for a description of proposed actions.
102.02 - Position, No Rationale	#8821-1	The following is a viable response to what you are considering. I'll add my own words. What are you thinking? We've already pushed California to the tipping point. Are you truly willing to gamble the state's (and country's) future on such short-sighted, profit-based actions? If so, start packing your family's bags. Good luck in finding a safe place to land that's not being ravaged by others thinking the same way. You can make a difference now, and still live a good life. Either that, or you can gamble.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
102.05 - Procedural, already addressed through project design	#17111-10	Snags, Logs, and Coarse Woody Debris (CWD) The role of CWD in the development of late-successional forest habitat is an important factor to consider in evaluating the appropriateness of salvage activities in the Westside project area, particularly within the LSRs. Most of the salvage proposed in the LSRs is on PAGs where large volumes of snags and logs following wildfire are characteristic. Large snags and logs are the most important surviving structural elements or biological legacies of a forest disturbance (Franklin et al. 2002), excepting only surviving large live trees. Importance, in this case, refers to the roles of these structures in: (1) Providing essential habitat for an immense array of species; (2) Maintaining important ecosystem functions; and (3) Stucturally enriching the young forest stand, making it possible for mid- and late successional species to re-colonize the stand much earlier in its chronological development than would otherwise be the case (Franklin et al. 1987). The importance of large snags and down wood for a broad array of species is recognized in the EIS document. These structures provide habitat for early as well as late successional species and sustain many important ecosystem processes (e.g., Harmon et al. 1986). However, the long persistence and multiple roles played by the large pulse of snags, logs, and other CWD provided by the stand-replacement event (Harmon et al. 1986; Maser et al. 1988) do not appear to be adequately recognized in the analysis of how much of this wood should be retained. For example, large Douglas-fir logs continue to fulfill important ecological functions, such as habitat for small mammals and salamanders, for 200 to 250 years after their death. Cedar snags can persist for at least as long as I Yi centuries and as logs for over twice that long. The massive input of large dead wood is characteristic and critical to stand development processes and the ultimate provision of habitat for late-successional species following stand replacement fires (Maser et al., 1988; Franklin et al. 2002). As noted these wood structures may persist and play functional roles for several centuries, particularly in the case of decay resistant species. Large pines may also persist as snags for several decades and additional periods as logs on the forest floor. In fact, the entire recovering forest ecosystem will depend upon this pulse of CWD until it reaches a point in its development where the new stand begins to generate snags and logs of comparable size and heartwood content-generally between 100 and 200 years (Maser et al. 1988; Franklin et al., 2002). Consequently, basing snag and CWD retention following salvage on levels of these structures found in existing mature and old forests is not appropriate; all of this initial pulse of wood is needed to reach those levels one to two centuries ji-0111 now! Indeed, the use of mature forests as a standard for CWD is pmticularly inappropriate since this is the period when CWD levels are at their lowest level during the entire natural developmental sequence from stand-replacement fire to old growth (see diagram in paper by Spies in Maser et al. 1988). It certainly does not appear to me that the approach taken in the DEIS reflects an appreciation of the fact that this one-time input oflarge and decay resistant CWD is all that the recovering forest ecosystem is going to get for the next 100 to 200 years. The importance of snags, logs, and other CWD is recognized in FEMAT's (1993) scientific analysis. For example (my underlining for emphasis): Because of the important role of dead wood in late-successional and old-growthforest ecosystems, and because there is much to learn about the role of dead wood in the development offorests, only limited salvage is appropriate in Late-Successional Reserves . . . The Final Dra ft Recover y Plan (for the NSO Z would allow removal o[small-diameter snags and logs, but would also require retention of snags and logs likely to persist until the new stand begins to contribute significant quantities of coarse wood y debris. " FEMAT 1993, p. IV-37. Snags provide a variety of habitat benefits for a variety of wildl(fe species associated with late-successional forests. Accordingl y, {ollo·wing stand-re placing disturbances. management should focus on retaining snags that are likel y to persist until late successional conditions have developed and the new stand is again producing large snags. FEMAT 1993, p. III-37. Following a stand replacing disturbance, management should retain adequate coarse woody debris quantities in the new stand so that in the.f i1ture it will contain amounts similar to natural regenerated stands. The analysis that determines the amount of coarse wood y debris to leave must account for the Iii/ I period o{/ ime before the new stand be gins lo contribute coarse wood y debris .... FEM AT 1993, p. III-37.	We acknowledge the importance of course woody debris, snags and other legacy components on the landscape. Project design features for course woody debris, snag, and other legacy components under watershed and wildlife address this concern and meet Forest Plan direction for these resources. Project design features for watershed and wildlife have been updated since the draft EIS to improve mitigations for these resources. See response to comment number 18918-22. With the exception of the incidental tree, no green trees are proposed for harvest; see response to comment number 12346-55 or chapter 2 for what is being proposed. See the beginning of Chapter 3 for responsible opposing points of view. Also see Chapter 1 for a discussion of salvage harvest in Late Successional Reserves. See Chapter 3 under aquatic resources, vegetation, fuels, soils and wildlife for the effects of the proposed actions.

Code	Comment Number	Comment Text	Response
102.05 - Procedural, already addressed through project design	#17387-4	"Concentrate salvage in areas where permanent strategic fuelbreaks are needed to control and contain future planned and unplanned ignitions: salvage to create 300 foot wide fuelbreak along existing dozer firelines on ridges that are in strategic locations for future burn control. Design treatments to allow for use of prescribed fire in high severity burned areas. Plan strategic controlled burns that can use recent fire footprints as control features.	Procedural statement. Chapter 2 in the draft EIS describes and compares the Alternatives considered for the Westside Fire Recovery project. Already addressed through project design. Ridgetop fuels treatments, underburns, and salvage near ridgetop fuels treatments are all proposed treatments in the Westside Fire Recovery Project. Salvage units of high severity fire areas, where adjacent to ridgetop fuels treatments, are proposed for many areas across the project area. In the Fire and Fuels Report under the "Fire Suppression Capability" heading it states that "Fuels treatments identified along strategic ridge and road systems will enhance future fire management activities including fire suppression, managing unplanned ignitions, and implementation of prescribed fire. Maintaining these treatments provides opportunities for fire managers to focus resources on priority locations, such as the WUI. These treatments also provides opportunities to utilize confine and contain strategies on future fires where untreated areas still contain high densities of snags and inhibit safe work areas for fire suppression resources."
102.05 - Procedural, already addressed through project design	#17387-8	Clean up all activity fuels and existing excess fuels in salvage units so that fuels/fire hazard is low after salvage is completed.	Procedural statement. See response to comment number 17387-4.
102.05 - Procedural, already addressed through project design	#18907-22	The Karuk Tribe alternative in Appendix G deserves a thorough analysis.	Procedural statement. Chapter 2 of the EIS includes a section of Alternatives considered through consultation. Where portions of the Karuk alterative have been incorporated into the proposed actions, Chapter 3 of the EIS discloses the effects of those actions.
102.05 - Procedural, already addressed through project design	#18907-23	The Salvage Harvest definition on pages 30 and 31 of the DEIS states: "In determining what individual trees will be harvested, standing dead trees 14 inches in diameter at breast height or greater will be considered…". Does this mean that all trees dead or alive less than 14 inches in diameter will be left in all treatment areas?	Procedural statement. In salvage treatment areas only standing dead trees greater than 14 inches in diameter will be considered for salvage if they meet the 70 percent or greater chance of dying within the next 3 to 5 years. This is describe in Chapter 2 of the draft EIS. After salvage treatment, trees less than 16 inches in diameter will be treated using site preparation treatments as described in Chapter 2 of the draft EIS in units that are proposed for mechanical yarding or skyline yarding. For units proposed for manual site prep or mastication trees that are not removed by salvage will remain in the stand unless there is a concern for safety.
102.05 - Procedural, already addressed through project design	#18907-27	The Scoping Proposal released 10/8/2014 indicates on Table 4 that salvage harvesting would occur in 2618 acres of Inventoried Roadless Areas which is completely inappropriate as these areas may be further protected as part of Wilderness or other roadless use in the future. Page 11 of the same document states: "No salvage harvest is proposed within Wilderness, Backcountry, Research Natural Areas, Recommended Wild Rivers, Inventoried Roadless Areas, or Riparian Reserves". Why has the Forest Service in the DEIS reversed its previous Scoping Proposal decision against allowing harvesting in Riparian Reserves?	Procedural statement. No salvage harvest is proposed within inventoried Roadless Areas, or Riparian Reserves associated with stream channels (hydrologic Riparian Reserves). Chapter 2 in the draft EIS clarifies the statement from page 11 of the scoping letter by differentiating treatments in hydrologic Riparian Reserves from treatments in geologic Riparian Reserves. Salvage is proposed in geologic Riparian Reserves, not hydrologic Riparian Reserves.

Code	Comment Number	Comment Text	Response
102.05 - Procedural, already addressed through project design	#18918-13	Some areas are called "roadless" for a reason. Stay the hell out of there - and don't helicopter-log either! Have some respect! Zero roads and logging in roadless areas	Procedural statement. See response to comment number 18907-27. No road building or salvage harvest is proposed within any inventoried Roadless Areas. See Chapter 2 of the EIS for a detailed description of proposed actions.
102.05 - Procedural, already addressed through project design	#18918-17	Also, there is inadequate attention of the documents toward some negative ecological impacts of fire breaks. What will hold the soil together? Is soil liable to erode downhill and silt native salmon streams from some of these areas? Will herbicides be used on fire breaks? Which herbicides - and with what inert ingredients? Will any plants be tolerated on fire breaks? Which ones? Would some areas be considered "too steep" for a fire break (either due to likelihood of erosion impacting a stream / river below, or otherwise)? I also object that the DEIS mentions herbicide use on private timberland in the region more than it does use of herbicides by the USFS. Does the proposal to "release" some areas under the WFRP mean herbicides will be applied. Which ones -- with which inert ingredients?	Procedural statement. See response to comment number 17387-4. None of the Alternatives include the use of pesticides, herbicides or fertilizers. Effects to soil and aquatic resources are described in Chapter 3 of the draft EIS.
102.05 - Procedural, already addressed through project design	#18926-12	The DEIS states that "Alternative 2 proposes construction or reconstruction of temporary roads, installation and removal of stream crossings, and construction of log landings in Riparian Reserves" (Chapter 3, p. 201-202). This seems counter-intuitive to the established goal of protecting riparian reserves, since salvage logging has already been excluded from these areas, and only hand-methods of site preparation will be used. The additional disturbance created by the construction of roads, stream crossings, and landing sites will undermine the U S Forest Service's efforts to minimize disturbance in these areas. It is recommended that alternative sites for roads and landings be established, if possible. Some stream crossings are inevitable, but they should be minimized in number and placed strategically to provide access to the greatest possible area of the treatment unit while minimizing adverse effects on Riparian Reserves.! ! Non- Strategic Roads Should Be Clearly Identified in the DEIS or FEIS !	Procedural statement. See the response to comment number 17387-4. While effects of these activities on channel morphology is minor to undetectable at the watershed scale, site-scale effects are anticipated from some infrastructure. Further detail on site-scale effects is provided in the Hydrology and Aquatic resources reports. Your editorial suggestion for the final EIS is appreciated.
102.05 - Procedural, already addressed through project design	#19076-14	What happens Up-River is key to water quality. This proposal must use the best available science.	Procedural statement. See response to comment number 1737-11.
102.05 - Procedural, already addressed through project design	#19076-2	We do not understand why the boundaries are defined by the 3 fires, instead of the watershed boundaries.	Procedural statement. The Westside Fire Recovery project was developed in response to landscape-level changes to forested habitat resulting from the 2014 wildfires on the Klamath National Forest. The project boundary was extended beyond the fire perimeters in order to incorporate hazardous fuel reduction treatments and fire breaks within one-quarter mile of private property structures. Although project boundaries were established based on 2014 fire perimeters, hydrologic analysis considered existing conditions and potential effects of project Alternatives in all of the watersheds that contained a portion of the fire area. This framework resulted in effects analyses being performed for ten 5th field watersheds, for example.
102.05 - Procedural, already addressed through project design	#20-6	Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-22.

Code	Comment Number	Comment Text	Response
102.06 - Procedural, already addressed in DEIS	#12348-1	My comments are submitted as a concerned citizen who went through the Beaver fire and the fact that I have seen the devastation of the Scot Bar section of the Happy Camp Complex while assisting to replace a water system destroyed be the fire there. The burned trees that remain have been thoroughly burned in to the cambium layer and as a result the trees are dead. They have brown needles and are beginning to fall. When they do, they will be the dead fuel providing the continuous layer for the next fire. The few remaining that did not die have been weakened to the point that they will not survive the rush of bugs that they do not have the system remaining to fight. They will then die adding to the dead fuel loading on the land. All of this adds to the fire danger that we can reduce now. While reducing the fire danger, the US Forest Service can get back to a critical job of conservation of resources by LOGGING the dead and dieing trees providing: 1. Jobs critical in this county 2. Additional revenues for the local and federal government 3. A place for new trees to be planted to renew the land 4. Allow the renewed land to reinvigorate the animal populations displaced by the fires. In a way, we were lucky to have had a mild winter following the burning of the hundreds of thousands of acres. While not providing us the water that we need, the short number of days of heavy rain showed us the devastation that is still possible while not creating more widespread devastation. This year was the first that I had to clear 30 - 36 inch culverts in my road. In all, I had to clear seven (7) culverts backed up by the silt and rock washing down from the heavily burned areas above my land. Through this winter, I was awakened by waters rushing down the draws near my house for the first time in the ten (10) years that I have owned the property. I lost about seventy-five (75) chords of dry standing firewood but it was replaced by newly dead Oak and Madrone trees killed by the fire. I've spent a lot of time cutting and hauling these dead trees to places that are maintained for the purpose of splitting the wood. As I do this on my land and see the private timber companies clearing up the devastation on their properties, I always wonder at the continuing losses as the public lands, blackened by the fires, just sit idle and die providing nothing to anyone except the next fire. There has been enough devastation and loss! We must approve a plan to maximize the good for PEOPLE from these fires. Alternative five provides this!! It will improve the vistas, provide some protection from the next fire and allow us to get something back in the way of jobs and financial gain for the local and federal government from the devastation of last year.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.06 - Procedural, already addressed in DEIS	#12364-6	Do not increase the risk of future fires becoming catastrophic by establishing thousands of acres of highly flammable tree plantations.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18918-14.
102.06 - Procedural, already addressed in DEIS	#12365-2	Secondly, the Happy Camp Fire area provides an opportunity to improve owl and other wildlife habitats. Previously many sites were overstocked with plantations in need of thinning not providing likely owl habitat now or in the future. The plan for replanting in lower density stands makes good sense especially if underbuying management becomes a more commonly used practice. This I highly favor and have expressed interest in working with the new District Ranger on using low intensity fire even in the Marble Mountains where relatively easy opportunities exist now. I have extensive experience in such burning even in old-growth conifer forests.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
102.06 - Procedural, already addressed in DEIS	#16957-1	The implementation of salvage logging on these areas damaged by stand replacing fire will only further damage the fragile soils that are devoid of vegetative cover. When a high intensity fire sweeps through a landscape, the logs left behind are an essential component to reestablish an organic, duff layer over the soil. Salvage logging at the scale proposed will remove tremendous amounts of carbon, and other nutrients out of the system just as the landscape needs those nutrients the most. How will the forest service quantify how salvage logging with effect the natural regeneration of the forest, and the effects of removing this level of biomass from the ecosystem when the slopes are at their most fragile state?	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment 18927-1. Effects to soils, snags and downed wood, and vegetation are summarized in the draft EIS, and detailed in the individual resource reports.

Code	Comment Number	Comment Text	Response
102.06 - Procedural, already addressed in DEIS	#17387-5	Retain all green trees at time of salvage logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6733-1. See Chapter 2 of the EIS for clarification about live or green trees as it relates to prescriptions. This suggestion was received during scoping and considered as part of an Alternative. See description of Alternative C under "Alternatives considered but eliminated" in Chapter 2 of the EIS. See Chapter 2 of the EIS for a description of the treatments proposed by Alternative. With the exception of an incidental tree, none of the action alternatives in this project propose green-tree removal. Green trees will be retained; see response to comment number 12346-55.
102.06 - Procedural, already addressed in DEIS	#18878-82	In regards to any proposed hazardous fuels treatments we are in tacit agreement to the following with the inclusion of: 1) Protection of infrastructure (500ft radius); 2) Roadside treatment (150-300 ft buffer); 3) Fire Fighter Safety; 4) Protection of private property; 5) Utilization of a local workforce to cooperatively accomplish planned activities within and adjacent to landscapes defined by reasonably identifiable control features, and 6) Facilitates the restoration of cultural burning practices and establishment of areas available for managing fires for resource benefits in the interest of restoring natural fire regimes and reducing the cost of needed suppression efforts.	Utilization of a local workforce to accomplish planned activities and the restoration of cultural burning practices is beyond the scope of the Westside Fire Recovery EIS. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. See Chapter 1 for a summary of consultation.
102.06 - Procedural, already addressed in DEIS	#18907-23	The Salvage Harvest definition on pages 30 and 31 of the DEIS states: "In determining what individual trees will be harvested, standing dead trees 14 inches in diameter at breast height or greater will be considered…". Does this mean that all trees dead or alive less than 14 inches in diameter will be left in all treatment areas?	In salvage treatment areas only standing dead trees greater than 14 inches in diameter will be considered for salvage. These trees will be cut if they meet the 70 percent or great chance of dying within the next 3 to 5 years “Marking Guidelines for Fire-Injured Trees in California.” This is describe in Alternative 2 section of the draft EIS. After salvage treatment the trees less than 16 inches in diameter will be treated using site prep in the site preparation in units that are proposed for mechanical yarding or skyline yarding of dead trees less than 16 inches in diameter. For units proposed for manual site prep (less than 10 inches) or mastication (less than 12 inches) trees that are not removed by salvage (trees between 14 inches and 12 inches) will remain in the stand unless there is a concern for safety.
102.06 - Procedural, already addressed in DEIS	#18909-1	The Westside DEIS considers four action alternatives: The agency's Preferred Alternative 2, Alternative 3 in general considers Northern spotted owls, Alternative 4 considers Coho and Alternative 5 considers Late-Succesional Reserves (LSRs). It is not appropriate for the agency to separate these alternatives as it has a responsibility to all species and to protect, maintain and enhance LSRs and Riparian Reserves. The Wildlife Biological Assessment (BA) and the Fisheries BA both consider different alternatives, which are a mix and match of different alternatives and select additions and omissions of different types of treatments in different places.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Procedural statement. The proposed action and all Alternatives for the Westside Fire Recovery project were developed following the requirements for 40 CFR 1502.14 and were developed to be consistent with standards and guidelines of the Forest Plan and other law, regulation and policy, protecting northern spotted owl, Coho Salmon , and Riparian Reserves, for example. Alternatives may be developed to address more than one significant issue, and no specific number of Alternatives is required. Reasonable Alternatives to the proposed action that fulfills the purpose and need and address unresolved conflicts related to the proposed action were analyzed in detail in Chapter 3 of the draft EIS. Alternatives continued to be modified as the agency consulted with U.S. Fish and Wildlife Service and National Marine Fisheries Service under Endangered Species Act; this progression resulted in the development of a modified Alternative 2 and then the modified Alternative 3 (preferred), as described in the final EIS.
102.06 - Procedural, already addressed in DEIS	#18909-16	We remind the agency that the vast majority of the larger units and approximately half of all other treatments are within Late-Succesional Reserves, designated to maintain and protect species. The conclusion of the Shatford study at page 144 states, "In contrast with previous observations (Hayes 1959, Stein 1986), our findings suggest that the prognosis for achieving reasonable conifer densities are fair to excellent, even on sites with high cover of broad-leaved shrubs and hardwoods. Although conifer growth may be delayed by competition over the short term, benefits in terms of wildlife habitat and site fertility should be considered. Viewing ecosystem recovery as a variable and dynamic process highlights the limitations of short-term studies (Donato et al. 2006) that provide an incomplete picture of the regeneration process. In addition, assertions that burned areas, left unmanaged, will remain unproductive for some indefinite period (Sessions et al. 2004) seem unwarranted. A more complete understanding of the tradeoffs among management options is necessary to resolve current controversies."	There is no disagreement that over time, trees will become reestablished within severely burned areas, but as noted in responses to the literature below, in some places this may take many decades. We note that guidelines for risk-reduction salvage in Late Successional Reserves and were provided in the Forest Plan and that recommendations for management were provided in the Forest's Late-Successional Reserve Assessment. (See Appendix E). The Project as proposed is consistent with both the recommendations of the Late-Successional Reserve A and the guidelines of the Forest Plan. Because Late Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions (Northwest Forest Plan C-14; Late-Successional Reserve A 1-24). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et al. 2008). Research has also shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995; Omi and Kalabokidis 1991). Without site prep and planting, we agree that trees will become reestablished over a period of years to decades, even in severely burned areas. Distance from seed sources will significantly influence the amount of time for trees to become established. There are several patches that are well in excess of 1,000 acres in Walker and Grider Creek where reestablishment of trees may take decades. Given the fire frequency in the Klamath Province it is probable that areas

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			where fuels are not treated will go through several cycles of stand replacement fire until surface fuels created by the 2014 Westside fires have been reduced to the point that a low to moderate fire severity regime has been reestablished. This fire cycle would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions. Even in Alternative 2, the most intensive salvage harvest Alternative, about 14,500 acres (6,630 salvage, 7,860 site prep and plant) or 28% of 52,000 acres of moderate-high severity burn would be replanted; over 70% of the moderate-high severity burn area would proceed unimpeded through the long early seral plant community phase described by the commenter. Green trees will be retained; see response to comment number 12346-55. Forest Vegetation Simulation (FVS) modeling (Appendix E, Attachment 1) shows that reforestation will establish forested conditions more rapidly by treating surface fuels and planting trees than by natural succession. It also shows that where surface fuels have been treated by salvage logging and site preparation, the ensuing stand is more resilient to fire than untreated areas. If surface fuels are treated, the risk of future stand replacement fires would be reduced, increasing the probability that planted conifers can persist into the future. In the FVS model, planted stands where fuels had been reduced began to show late-successional stand conditions typical of the Klamath Province with 40% canopy closure and 18 inch diameter at breast height trees in 90 years compared to over 200 years for untreated stands to reach the same stage. The planted trees in areas where fuels have been successfully reduced are expected to provide “islands” of coniferous forest in a sea of brushfields perpetuated by reburns where fuels have not been reduced. This would provide a measure of vegetative diversity that would not otherwise be present on the landscape. These planted stands have a much higher probability of achieving and sustaining the desired late successional stand condition for the Late-Successional Reserve than do unplanted areas as shown in the FVS modeling (Attachment 1). In response to Shatford, et al. 2007 as in Chapter 3 Vegetation of the EIS: "...the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites". Response to: "Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk" The review of Donato et al 2006 by Newton et al 2006 (M. Newton, S. Fitzgerald, R. R. Rose, P. W. Adams, S. D. Tesch, J. Sessions, T. Atzet, R. F. Powers, C. Skinner) is applicable to Westside Resource Recovery Project EIS reforestation circumstances. As per the findings of Newton et al in the review of Donato et al, they noted the following: “Donato et al. (1) recently concluded that logging 2 to 3 years after wildfire kills natural regeneration and increases fire risk. The research may make a valuable contribution, but the study lacks adequate context and supporting information to be clearly interpreted. Here, we discuss the papers methods and conclusions in the context of relevant management objectives and the forestry knowledge base concerning natural regeneration processes, mortality from logging, and fuel accumulations in southwestern Oregon and northwestern California. Donato et al. (1) made inferences about natural regeneration processes, mortality from logging, and fuel accumulations without presenting key information regarding (i) agency postfire management directives for reforestation or downed wood levels (2), (ii) implications of delays in postfire plan implementation, or (iii) important environmental and disturbance descriptors such as plant associations, fire intensity, seed tree proximity, and weather patterns. Results from their study cannot be readily extrapolated because it was a short-term observational study of site-specific forest operations governed by agency management objectives. Other management plans, operations, or conditions could yield different results (3). In the case of the 2002 Biscuit Fire, logging was postponed for 2 years, allowing more seeds to germinate and increasing seedling exposure to injury during logging (4). Donato et al. cite a lack of scientific data regarding the management of public forests after large fires. However, it should be noted that conifer reforestation (planted and natural) and vegetation ecology have been widely studied in the region. Studies show variable responses with plant association, competing vegetation, local climate, soils, and other factors (5, 6). Hobbs et al. (5) provide a synthesis of 13 years of research in southern Oregon and northern California. Fewer studies have examined reforestation after wildfire, especially over longer periods (4, 7–9), but damage to natural regeneration after delayed salvage logging was reported more than 50 years ago (4, 8)…” Natural regeneration affects analysis is described in Chapter 3, Vegetation of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed conifer associations were not sampled in the Shatford et al. study. More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008). In larger patches where the majority of the trees were killed by the fire, reestablishment of forest cover would rely on natural regeneration and may take decades or longer. For the larger, contiguous areas of high-

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			severity burn, distance from seed sources may further delay natural regeneration. In some cases of high-severity burn, there are no living conifer trees available to provide potential seed for potential natural regeneration for several miles."
102.06 - Procedural, already addressed in DEIS	#18934-15	The responsible official should consider issuing a decision in multiple RODs that separate contentious timber salvage actions from fuels treatments and prescribed fire actions so that litigation against salvage actions do not prevent actions that will actually improve forest conditions and reduce future fire risk. Late-Succesional Reserves The Northwest Forest Plan (NWFP) created Late-Succesional Reserves (LSRs) to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth forest related species including the northern spotted owl. By clear intent and design, LSRs were allocated separately from lands managed for the production timber products. In fact, the NWFP states that, in LSRs, "Salvage will not be driven by economic or timber sale program factors." (NWFP SFEIS F-21). Further, "salvage guidelines are intended to prevent negative effects on late-successional habitat, while permitting some commercial harvest" (NWFP S&Gs, C-13), and, one of the primary objectives of LSRs is "development of old-growth forest characteristics including snags" (NWFP S&Gs B-5). The Westside DEIS does not substantiate how salvage logging in LSRs will prevent negative effects on late-successional habitat nor how the proposed salvage logging will meet NWFP guidelines that "salvage operations should not diminish habitat suitability now or in the future" (NWFP S&Gs, C-13). In fact, by its very nature, salvage logging in LSRs will remove snags that are essential to the development of old-growth characteristics. In summary, the NWFP does allow limited salvage operations in LSRs for the express purpose of ecological benefit and the establishment or preservation of late-successional habitat and forest conditions. Economic is relegated to an ancillary benefit, not the driving purpose. The DEIS has not demonstrated the ecological benefit of salvage logging in LSRs and, in fact, the vast majority of scientific studies have concluded that such salvage logging actually causes ecological harm and increases fuel loading and susceptibility to future high-intensity fires. Similarly, site prep and planting is antithetical to the purpose of the LSRs by artificially created even aged stands with an unnatural density of trees (even at the lower than typical densities proposed in this project). There are no burned areas in the Whites Fire footprint that are not situated within sufficient distance of adequate natural seed stock from surviving trees and, as such, the entire burn area will naturally regenerate without intervention. The natural time frame for development of forest in the region is upwards of 100 years. LSRs were created to be of adequate size and distribution on the landscape to be able to sustain natural disturbances, such as the 2014 Westside fires, and recover naturally. The DEIS discloses the areas to be planted but does not provide convincing scientific basis for interrupting the natural process of recovery after fire nor does it disclose the potential for intensifying future wildfire behavior by creating densely stocked forests via the site prep and planting activities. All salvage harvest should be limited to matrix land and any replanting should be limited to existing plantations that have proven successful and are in locations that will not impede the future management of fire for beneficial purposes.	With respect to decision documents, the Deciding Official has discretion for organization of the Record of Decision and whether there will be one record of decision (ROD) or multiple RODs. At the time of this writing, that had not been determined. The Record of Decision for the Westside Fire Recovery FEIS will follow regulations from 40 CFR 1505.2. Within the Record of Decision, the responsible official will determine whether to implement the proposed action, an alternative to the proposed action, or choose no action at this time. See response to comments # 18878-12, # 16957-1, and # 18918-14. The Whites fire burned approximately 42,400 acres in the project area. Of those, approximately 26 percent exhibit very high vegetation burn severity effects. Areas of high severity burns experienced 75 percent or greater vegetation mortality, loss of canopy and understory cover, and loss of duff layers and large woody debris.An extensive discussion of salvage in Late Successional Reserves (LSRs) is provided in EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised. Please refer to that discussion for questions concerning salvage in LSRs. See also Appendix E. Retaining all of the fire-killed trees currently on the landscape is likely to create future surface fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Figure 7; Fuels Report – Chapter 3). Also, as noted by Taylor and Skinner (1997) and Skinner (2002), dead wood in the Klamath province rarely lasted long enough, even in a low to moderate fire severity environment, to actually decompose because snags and down logs are receptive to embers, and once partially rotted, are easily consumed by fire. The Westside Fire Recovery Project seeks to meet the objective described in Guidelines for salvage in the Forest Plan by:• Retaining large "legacy" trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less severity or less frequently. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with hydrologic Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around hydrologic Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Appendix A, Figure 7). • "Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm most larger snags because they will not yet have developed the punky surface that is receptive to embers."While the risk of loss of snags and down wood from future fires cannot be eliminated, implementation of these measures would provide a higher probability of retaining surviving green trees, snags and down wood similar to the patterns described by Skinner (2002) and Taylor and Skinner (1996) typical of the Klamath Province, than leaving areas completely untreated.Natural regeneration affects analysis is described in Chapter 3, Vegetation of the EIS: ""Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed conifer associations were not sampled in the Shatford et al. study. More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008). In larger patches where the majority of the trees were killed by the fire, reestablishment of forest cover would rely on natural regeneration and may take decades or longer. For the larger, contiguous areas of high-severity burn, distance from seed sources may further delay natural regeneration because of long distances to trees capable of producing seed.

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102.06 - Procedural, already addressed in DEIS	#18937-2	The Westside DEIS considers four action alternatives and a map of the Karuk Alternative. Three of the action alternatives specify increased considerations for controversial impacts within the logging plan, specifically habitat for Northern Spotted Owls (Alternative 3), impacts to Coho salmon (Alternative 4) and effects on Late-Succesional Reserves (Alternative 5). These alternatives are an inappropriate because the agency has a responsibility to improve conditions for wildlife including habitat, water quality and soil productivity as defined under the purpose of the National Forest Management Act (NFMA).	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.See response to comment number 18909-1.
102.06 - Procedural, already addressed in DEIS	#19079-3	Cumulative effects must be considered.	Procedural statement. See response to comment number 18927-1.
102.06 - Procedural, already addressed in DEIS	#5873-10	Extensive road use and road construction will cause unacceptable cumulative watershed effects, including erosion, sediment production, habitat fragmentation, etc.	Procedural statement. The Forest used standardized Cumulative Watershed Effects models (Equivalent Roaded Area, Universal Soil Loss Equation, Mass Wasting) to assesseffects of past, present, and reasonably foreseeable activities for the Westside Fire Recovery project. The Cumulative Watershed Effects model results by 7th field watershed for direct and indirect effects, and forcumulative effects, for analysis indicators are in the appendices of the hydrology report, or see Chapter 3 in the draft EIS for a summary of Cumulative Watershed Effects and other related effects. See Chapter 2 of the EIS for project design features designed to minimize impacts on resources.
102.06 - Procedural, already addressed in DEIS	#5873-19	Numerous studies also document the cumulative impacts of post-fire logging on natural ecosystems, including the elimination of bird species that are most dependent on such conditions, compaction of soils, elimination of biological legacies (snags and downed logs) that are essential in supporting new forest growth, spread of invasive species, accumulation of logging slash that can add to future fire risks, increased mortality of conifer seedlings and other important re establishing vegetation (from logs dragged uphill in logging operations), and increased chronic sedimentation in streams due to the extensive road network and runoff from logging operations."	Procedural statement. See response to comment number 18927-1. Effects to Migratory Bird species, soils, snags and downed wood, vegetation, aquatic systems, and roads are summarized in the draft EIS.
102.06 - Procedural, already addressed in DEIS	#5873-9	Salvage logging will delay vegetation recovery and will retard watershed recovery and will violate the Aquatic Conservation Strategy of the Northwest Forest Plan.	Because Late Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions (Northwest Forest Plan C-14; Late-Successional Reserve Assessment 1-24). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et al. 2008). Research has also shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995; Omi and Kalabokidis 1991). Forest Vegetation Simulation (FVS) modeling (Attachment 1) shows that reforestation will establish forested conditions more rapidly by treating surface fuels and planting trees than by natural succession. It also shows that where surface fuels have been treated by salvage logging and site preparation, the ensuing stand is more resilient to fire than untreated areas. If surface fuels are treated, the risk of future stand replacement fires would be reduced, increasing the probability that planted conifers can persist into the future. In the FVS model, planted stands where fuels had been reduced began to show late-successional stand conditions typical of the Klamath Province with 40% canopy closure and 18 inch diameter at breast height trees in 90 years compared to over 200 years for untreated stands to reach the same stage. Without planting, trees will slowly become reestablished over a period of 10-50 years in severely burned areas, but the probability of a late-successional coniferous forest becoming established is low because of probable reburns. It is probable that areas where fuels are not treated will go through several cycles of stand replacement fire until surface fuels have been reduced to the point that a low to moderate fire severity regime has been reestablished. This would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions. The comment also provides no evidence that risk reduction salvage would violate the Aquatic Conservation Strategy. A complete Aquatic Conservation Strategy assessment is found in the Project Record and is summarized in Chapter 3.

Code	Comment Number	Comment Text	Response
102.06 - Procedural, already addressed in DEIS	#6733-1	I urge you to cancel the Westside project as it proposed in the Draft Environmental Impact Statement. Salvage logging is highly controversial and all of the action alternatives propose logging green trees and a great amount of disturbance on very fragile and steep slopes in over 67 watersheds. Eliminating and harming habitat for imperiled species is contradictory to your responsibilities. Late-Succesional Reserves are in place to enhance and maintain habitat for species that are dependant on complex natural older forest habitats. Further, salmon streams are already choked with sediment as a result of fire suppression efforts and last summers fires. I value post-fire ecosystems, Wild and Scenic Rivers, large legacy trees, wildlife corridors and the rare and endemic species living in these forests and rivers. Please allow for natural recovery and choose an alternative that best protects our watersheds, wildlife and river communities for the long-term.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See responses to 12414-1 and 6924-1. The EIS analyses the effects of the proposed actions and the no action for comparative purposes. See Chapter 2 of the EIS for proposed actions of each Alternative--the project does not propose the logging of green trees with the exception of green trees necessary to access snags for harvest (when cable logging) and hazard trees that pose an immediate danger; see response to comment number 12346-55. The portions of the project in Late-Successional Reserve are designed to meet the goals of Late-Successional Reserve, as stated in the Forest Plan. Chapter 2 of the EIS includes project design features for the protection of watersheds, salmon habitat, wild and scenic rivers, and terrestrial wildlife. See Chapter 3 of the EIS for the disclosure of effects of the no action and proposed action Alternatives in comparative format. See the affected environment section of Chapter 3 for a description of the post-fire condition by resource. See Chapter 3 of the EIS for effects of the proposed actions on resources by resource area. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. We have actively been undergoing consultation with National Marine Fisheries Service and U.S. Fish and Wildlife Service for actions that may impact federally-listed species. This consultation has resulted in the modified Alternative 3 being the preferred Alternative in the final EIS. Also see a discussion of salvage in Late Successional Reserves in Chapter 1 of the EIS and the Appendix about salvage in Late-Successional Reserve that was submitted to the multi-agency Regional Ecosystem Office (who concurred with the Forest Service proposal and findings). See Chapter 1 for the purpose and need statements, which include improvements to watershed and wildlife habitat. The project has been designed to mitigate for the protection of Wild and Scenic Rivers, legacy trees, wildlife corridors and rare/endemic species; see Chapter 2 of the EIS for project design features.
102.07 - Procedural, addressed through no action alternative	#17387-7	but see no need to fell hazard trees or conduct roadside fuels treatment on roads that are currently not open or drive-able.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.. See response to comment number 18878-80.
105 - Editorial	#18878-11	Pg. 6 Table 1-1and1-3 are confusing and do not match.	Editorial comments are appreciated and were considered in the updates for the final EIS.
105 - Editorial	#18878-17	Table 1-6: Existing and Desired Conditions DEIS: Progressively increasing fuel loadings where potential flame lengths are projected to exceed four feet. Flame lengths over four feet are resistant to fire suppression tactic (Pg 13) Comment: This statement is repeated twice.	Editorial comments are appreciated and were considered in the updates for the final EIS.
105 - Editorial	#18878-6	The text and table S-1 describing acres of land impacted by the 2014 Fires do not match and should be corrected.	Editorial comments are appreciated and were considered in the updates for the final EIS.
105 - Editorial	#18909-39	Inconsistency in Baseline Habitat Like analysis indicator 1, there are massive inconsistencies between tables. For example, in table 3-7 on page 142 of the DEIS, KNF states there are 41,513 acres of Critical Habitat in the analysis area. Included in this are 7,944 acres of nesting/roosting habitat, 8,466 acres of foraging habitat, and 7,967 acres of dispersal habitat. Table 3-8 on page 145 of the DEIS likewise states there are 41,513 acres of Critical Habitat in the analysis area. However, table 3-8 has 6,921 acres of nesting/roosting habitat, 8,074 acres of foraging habitat, and 7,925 acres of dispersal habitat. Table 3-9 on page 149 purports to show the change in Critical Habitat under alternative 2. According to table 3-9, there only 36,408 of Critical Habitat in the analysis area.	Editorial comments are appreciated and were considered in the updates for the final EIS.

Code	Comment Number	Comment Text	Response
105 - Editorial	#18909-40	It is impossible to analyze the project impacts because of the numerous inconsistencies in the DEIS and supporting documents. According to DEIS table 3-9 on 149, Alternative 2 will remove a total of 536 acres of nesting and roosting habitat, 605 acres of foraging habitat, and 617 acres of dispersal habitat. The text discussing the changes to Critical Habitat from Alternative 4 on page 149 of the DEIS does not make sense in light of the stated changes under Alternative 2. The DEIS states: "The effects of alternative 4 on critical habitat are similar to alternative 2 except fewer acres of critical habitat will be removed." However, the same paragraph then states under Alternative 4, "There is a loss of 1,195 acres of nesting/roosting, 2,642 acres of foraging and 2,781 acres of dispersal." In other words, though we are told in one sentence that Alternative 4 will remove fewer acres of Critical Habitat than Alternative 2, the number provided by the Service state that Alternative 4 will remove 659 more acres of nesting/roosting, 2,037 more acres of foraging, and 2,164 more acres of dispersal habitat than Alternative 2. Table 2-34 states that Alternative 1 would have cumulatively impact 552 acres of Critical Habitat. However, the test on page 147 states that Alternative 1 would only affect 452 acres. Table 3-10 also states that Alternative 1 will cumulatively impact 442 acres. Again, the DEIS is so faulty that it makes the comparison of alternatives impossible.	Editorial comments are appreciated and were considered in the updates for the final EIS.
105 - Editorial	#18926-13	Page 284 of the DEIS states, "Indirect short-term increase in use from firewood cutting of felled (non-merchantable) trees left along non- strategic roads from roadside hazard treatments." Please clearly identify all of the non-strategic roads in the project area.! !	Table 3-37 on page 284 of the draft EIS states, "Increased short-term use of burn areas for firewood cutting and deer hunting."
110.02 - Coordination, Consultation	#17764-3	If you don't make serious changes and consult more directly with the Karuk Tribe, there will be a large backlash from the community and your job security will be in jeopardy.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
110.02 - Coordination, Consultation	#17910-9	Collaboration with the Karuk Tribe Natural Resources Department.	See responses to 17910-10 and 19710-11. Consultation is described in Chapter 1 of the EIS. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
110.02 - Coordination, Consultation	#18852-18	It has been discussed that the Karuk Tribe was not fully involved and engaged in the planning of the project, which is another oversight threatening the validity, design and long term benefit associated with this project.	The Forest initiated government to government consultation with federally recognized tribes in response to this project that included the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Karuk Tribe, and the Quartz Valley Indian Reservation. The Karuk Tribe has raised specific concerns regarding salvage and reforestation actions and project timelines. Meetings with Forest line officers and staff, and Karuk Department of Natural Resources staff and council members are occurring on a weekly basis. The Forest will continue consultation efforts with all parties to ensure there is a full understanding of the project and that the resource concerns of these groups are recognized and addressed.
110.02 - Coordination, Consultation	#18878-66	The Karuk Alternative demonstrates that we do not oppose the salvage of trees that are hazards to human safety and infrastructure; however, we do oppose post-fire salvage logging for purely economic-political purposes at the expense of water quality, fisheries, and cultural resources. We remain concerned that very little of our input provided in the consultation process have resulted in any significant alterations of the proposed action. In our view, the Klamath National Forest failed in its obligations to engage in true government-to-government consultation.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.The purposed and need, relevant issues, and effects analysis demonstrate that salvage harvest is not being purely done for economic reasons and that there are resource benefits to the treatments proposed. See response to number 18852-18 about consultation.

Code	Comment Number	Comment Text	Response
110.02 - Coordination, Consultation	#18878-67	According to the USDA Departmental Regulation 1350-002, Tribal consultation is the timely, meaningful, and substantive dialogue between USDA officials who have delegated authority to consult, and the official leadership of Federally recognized Indian Tribes, or their designated representative(s), pertaining to USDA policies that may have tribal implications. It is our view that KNF's consultation was neither timely, meaningful, or substantive. Despite our concerns with the consultation process, we still believe that there is time for KNF to address our concerns and to provide assurances that project implementation, including but not limited to contract management and post implementation monitoring, can be conducted in accordance to the agreed terms and conditions. Finally, the need to reintroduce more natural fire regimes to the landscape cannot be overstated. It is critical that we work together to make our forests more fire resilient in the face of a changing climate and the need to protect our local communities from the risks associated with catastrophic wildfire. Any project proposed which does not include 20 of22 this component is contrary to our past practices, present needs, and future vision for the Klamath Basin.	Thank you for your comment on the Westside Fire Recovery Project. Please refer to comment number 18852-18 regarding consultation with federally recognized tribes. We agree with the need to reestablish a low-moderate severity, frequent fire regime. Restoring a fire resilient ecosystem is one of the objectives of the project.
110.02 - Coordination, Consultation	#18909-115	Below are excerpts from the Pacific Southwest Research Station22 concerning planning and decision making after large wildfires, with emphasis in bold print. 22 Olsen, Christine S.; Shindler, Bruce A. 2007. Citizen-agency interactions in planning and decisionmaking after large wildfires. Gen. Tech. Rep. PNWGTR- 715. Portland, OR: U.S. Department of Agriculture, Forest Service,Pacific Northwest Research Station. 37 p. Participatory Processes Are Essential to Long-Term Success Public responses and support are intricately linked to the processes used to involve (or exclude) citizens. After all, a major wildfire event has affected everyone's forest community, not just the forest management agency responsible for managing these lands. How citizens are incorporated into decisions that affect their livelihood and quality of life is critical to their judgments (Shindler et al. 2002). One route is to listen to individual preferences and attempt to assuage individuals or interest groups independently. Another is to structure public processes to determine what a community of people acting together believe is right, not just merely what vocal individuals prefer. Policies based on shared community values often require engaging all relevant parties about what is best for a particular setting (Sagoff 1988). It follows that the public's idea of fair treatment includes the quality of these procedures and the ability to be active participants (Tuler and Webler 1999). This ultimately translates to how citizens will feel about the decisionmakers. Conclusion: By its nature, and the promise of more large wildfires in our future, the problem of post-fire decision making will be a continuing, long-term concern. It will require arrangements for innovation, experimentation, and collaboration that contribute to our knowledge base and influence our collective judgment. We are disheartened that after two years of collaboration with the Western Klamath Restoration Partnership (Partnership) the agency refuses to recognize or engage local communities with such a large scale planning effort. Rather than offer to give a presentation five or six months into planning, the agency could have started a conversation with the group about how our watersheds should be managed post-fire. Regardless, the Partnership, in which the KNF is a partner, has agreed upon shared values. These values include: 1. Fire Adapted Communities 2. Restored Fire Regimes 3. Healthy River Systems 4. Resilient Bio-diverse Forests/Plants/and Animals 5. Sustainable Local Economies 6. Cultural and Community Vitality We believe that the Westside project as proposed would harm or hinder all of the values the Partnership shares. Despite missed past opportunities the agency still has the opportunity to do "what a community of people acting together believe is right."	From the initiation of the project through release of the final EIS the Forest consistently engaged the public, local officials, federally recognized tribes, state, local and federal regulatory agencies, and local organizations. The Forest used typical means of engaging the public, such as legal notices, public open houses, news releases, information on the web, social media, and field trips to the project area. Additionally, the creation of two local collaborative groups were formed, which included a Citizens' Advisory Committee that was approved by the Siskiyou County Board of Supervisors, and The Westside Klamath Steering Committee that was formed by National Institute for the Elimination of Catastrophic Wildfire. Both collaborative groups were charged to serve as advocates for actions regarding the recovery and restoration of the Westside Fire Recovery project area that are reflective of, and responsive to, the needs of the residents of Siskiyou County; help evaluate the draft EIS; and to suggest guidance for finding balance between protecting resources (such as wildlife, fisheries, and water quality) and protecting human life and safety, public infrastructure, private property, and communities.
110.03 - Trust, Credibility	#12254-1	Kindly remember that your job is to Protect, not destroy, the forests that belong to All Americans. You are supposed to be working for us, Not for the timber companies.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service is an agency that strongly promotes sustainable conservation land management practices. We are mandated by law to achieve quality land management under the "sustainable multiple-use management concept" to meet the diverse needs of people while protecting the resource.

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110.03 - Trust, Credibility	#12346-4	Page 32 of the DEIS reveals the Forest Service proposes to salvage log 7,560 acres of large-diameter wildlife snags located in units within the Reserves while page 35 of the DEIS indicates that an additional 10,630 acres of roadside logging are planned in the LSRs. Page 63 of the DEIS acknowledges that all action alternatives developed for consideration by the Forest Service involve the logging of LSRs. While the "summary" introduction to the DEIS acknowledges impacts to LSRs from salvage logging as a "significant issue" necessitating analysis in the DEIS, no actual analysis of project activities on the LSRs is provided in the document. In contrast to this omission, the DEIS does contain short analysis sections addressing some project impacts on Wild and Scenic Rivers and on Inventoried Roadless Areas, neither of which were (self) identified by the agency as "significant" issues necessitating analysis and disclosure in the document. The DEIS does not even contain a map illustrating the location of the LSR land use allocation.	Late-Successional Reserves (Late-Successional Reserve) are a land allocation in the Forest Plan of the Klamath National Forest. The Draft EIS disclosed proposed actions in the Late-Successional Reserve in numerous locations. Table 1-5 identifies goals for management of Late Successional Reserves. Multiple tables in Chapter 2 identify proposed salvage, fuels treatments, roadside hazard reduction and site prep and plant activities that would occur in Late Successional Reserves in each Alternative. Table 2-12 identifies concerns about impacts on late successional habitat in Late Successional Reserves and how that concern was addressed. Table 2-23 identifies various measurement indicators for the effects of salvage harvest and site preparation in Late Successional Reserves by Alternative. Other activities in Late Successional Reserves were identified as potential cumulative effects in Chapter 3. Table B-1 identified Late Successional Reserves as a potential concern. Alternatives 3 and 5 were developed to have less impacts on Late Successional Reserves than the Proposed Action. Environmental consequences of an action are the same regardless of the land allocation where they occur so the statement that environmental consequences in Late Successional Reserves were not addressed is not correct. The draft EIS clearly displays the actions in Late Successional Reserves in Chapter 2 and the environmental consequences of those actions in Chapter 3. A simple comparison between Alternatives displays this.
110.03 - Trust, Credibility	#12346-44	In March 2015 the Roseburg BLM signed a decision record to implement the Rabbit Mountain Fire Safe Cow post-fire project located in the LSR land use allocation. That decision is attached to these comments. Unlike the KNF, the Roseburg BLM must adhere to the Oregon and California Land Act which the BLM interprets as a "timber primacy" 1 The Westside DEIS states "the actual area where harvest will occur will not be known until hazard tree evaluations are completed." DEIS, 33. NEPA requires the Forest Service to analyze the effects of the proposed action now, not after the ROD is signed. 16 statute. Despite this, the BLM has taken a much different approach to LSR roadside logging then have KNF timber planners. Unlike the KNF, the BLM is limiting roadside "hazard tree" logging to a distance of "1.5 tree heights below roads, 1.5 tree heights above roads on slopes less than 35 percent, and 2.5 tree heights above roads on slopes greater than 35 percent." Further, "[o]nly trees that are dead will be felled" and "[w]here physically and operationally practicable, topping of dead hazard trees will be considered as an alternative to felling." The KNF roadside LSR timber grab contains none of these sideboards. Instead, trees up to 250' feet above and below roads will be removed regardless of slope and live trees contributing to NSO suitable and critical habitat will be felled and removed.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service is an agency that strongly promotes sustainable conservation land management practices. The Rabbit Mountain project is outside the scope of this project's analysis. The Westside Fire Recovery Project analyses the effects of the project, as proposed. The draft EIS described the larger area being evaluated and the GIS analysis used to refine the area of evaluation. The final EIS further refined those areas considered for roadside hazard treatment for the purposes of analysis. In all cases, the analysis in the final EIS analysis the greatest possible impacts based upon the actions proposed, including roadside hazard treatments. Site-specific concerns and conditions were reviewed and considered during develop of the proposed actions and its analysis. Also see project design features in Chapter 2 for roadside hazard treatments that addressed on a unit basis where such mitigations will be applied. The description of roadside hazard treatments has been updated in the final EIS to clarify green tree removal. With the exception of the incidental tree, no green trees are proposed for harvest; see response to comment number 12346-55.
110.03 - Trust, Credibility	#12346-48	Our scoping comments on proposed fire salvage logging in this planning area contained an extensive list of attachments and an exhaustive bibliography. Yet most of these studies are not relied upon or meaningfully addressed by the agency. Instead the Forest Service elected to cherry-pick a small handful of studies that have questionable utility to the actions being proposed. How did the agency select these studies? Why are they more relevant than the body of literature submitted previously by our organizations? Does the Forest Service contend that scientific controversy does not exist regarding the effects of post-salvage logging on firefighter safety, reforestation, and ecological health? Unlike the Zhang article (located in the Cascades, on private industrial forestlands, in which no actual research or plots were used) a 2007 article by Shatford et al. from the Journal of Forestry involved research in the Klamath Siskiyous regarding reforestation of public lands after wildfire disturbance. The article is entitled, Regeneration after Forest Fire in the Klamath-Siskiyous: How Much, How Soon? We provided the article to the Forest Service during project scoping.	Direct, indirect, and cumulative effects to wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, as well as management requirements to minimize adverse effects, are addressed in the EIS, with appropriate references to the scientific literature. The Forest Service acknowledges that there is uncertainty and conflicting science for some of the management actions. However, impacts to forest resources have been analyzed based on the rational presented and input from Pacific Southwest Research Station scientists. Numerous scientific publications are cited and utilized in the assessment of effects, showing both positive and negative effects. The literature reviews listed in the comment are referenced and cited in the EIS in the discussion of effects of the Alternatives on various resources. The existence of diverse thought in scientific literature does not equate to scientific controversy nor does a scientific controversy exist because the commenter has a differing opinion than the Agency about a project. Such a controversy exists when scientific evidence specifically evaluating the environmental effects of the action calls into question the analysis or findings in the EIS. The paper noted in the comment, Shatford et al. (2007) is cited several times and their findings carefully considered in Chapter 3, Vegetation. In considering Shatford et al. (2007), there is no disagreement that trees will become reestablished over time without planting but it may take several decades in large burn areas that are far removed from seed sources (EIS Chapter 3 – Vegetation). We note that approximately 80% of the Project area that burned with moderate to high severity will not be planted and will go through the natural regeneration process described by Shatford et al. (2007). The Forest Service has acknowledged scientific controversy where it exists and has responded to adverse opinions concerning the effects of the West Side Fire Recovery held by respected scientists. See Chapter 3, Responsible Opposing Views and Agency's Responses. See also comment 17910-2.

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110.03 - Trust, Credibility	#12346-6	In other words, KNF timber planners are not alone in their desire to circumvent the NWFP in order to place economic objectives above ecological objectives within the Reserve land use allocation. However, unlike the BLM, rather than amend the Forest Plan to place economic considerations above all other resource values, here the Forest Service is instead simply proposing to ignore the ecological function and purpose of the LSRs that it proposes to clearcut.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment is not supported by rational or evidence. As described in Chapter 1 and 3, the project is consistent with the Forest Plan and considers and addresses the protection and improvement of resource conditions. Effects, positive or negative to resources are disclosed in Chapter 3 of the EIS. The proposed action within Late Successional Reserves is designed to protect and promote Late-Successional Reserve habitat. Effects on Late-Successional Reserve by the varying amounts of proposed treatment in the action Alternatives is disclosed in Chapter 3 of the EIS.
110.03 - Trust, Credibility	#12368-4	It is a sad state of affairs when private land in the area, and I am speaking of the Fruitwood Growers properties, is better taken care of than our National Forest!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
110.03 - Trust, Credibility	#17764-4	If any part of this plan does get approved and you are granted an Emergency Situation Determination on the project, there will be a lot of eyes watching the actions of the people who work in the forest under contract.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. An Emergency Situation Determination has been approved by the Chief of the Forest Service. Pursuant to the emergency situation determination the Final EIS and Record Of Decision will be released at the same time, eliminating the requirement of an objection period, pursuant to 36 CFR 218.21. See response to comment number 17501-2.
110.03 - Trust, Credibility	#17910-11	If our past experience in the Klamath-Siskiyou is any indication, political expedience and getting out the cut will win the day over science, and we will once more watch the degradation of our already seriously impaired watersheds as salvage logging proceeds.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
110.03 - Trust, Credibility	#17910-2	FIRE RISK: Without slash removal and ONGOING MAINTENANCE (which our experience tells us rarely happens due to lack of budget), it is highly questionable whether salvage logging will reduce or increase future fire risk. This is especially true in the case of salvage sales, which are generally sold cheaply and then use 40-60% for admin. Any remaining money from the sale is woefully inadequate for the cleanup of slash that is necessary, much less ongoing maintenance. Furthermore, cleanup is all but impossible in roadless areas and helicoptor units. After the Hog Fire of 1977, the area between the Salmon River and Godfrey Ranch was salvage logged. In 1987 the same area burned, but this time it took 3 hours rather than the 3 days it took for the fire to cover the same ground in 1977, and it burned at high intensity. This is not an unusual scenario. In the KNF, fires blew up in the logging slash in the Hog Fire, the Yellow Fire, the Specimen Fire, the Glasgow Fire, to name but a few. The Biscuit Fire of 2002 burned more severely in areas that had been salvage logged and replanted, compared to similar areas that were also burned in a 1987 fire but had been left to regenerate naturally, according to a new Oregon State University study. It found that fire severity was 16 to 61 percent higher in logged and planted areas, compared to those that had burned severely and were left alone in a fire 15 years earlier. The study was done in areas that had burned twice -- once in the 1987 Silver Fire, and again in the massive 2002 Biscuit Fire, one of the largest forest fires in modern U.S. history. "Many forest managers in the past have assumed that salvage logging after a severe forest fire, along with replanting new trees, will reduce future fire severity," said Jonathan Thompson, a doctoral student at OSU in the Department of Forest Science, and lead author on the study. "This is based on the assumption that removing dead trees reduces fuel loads and planting conifers hastens the return of fire resistant forests." "However, those assumptions have never really been tested," Thompson said. "This analysis showed that, after accounting for the effects of topography, Silver Fire severity and other environmental variables, the Biscuit Fire severity was higher where they had done salvage logging and planting."	We agree that without follow-up activity fuel treatment, salvage logging would increase fire risk and intensity because it would convert smaller diameter limbs and tops to surface fuels that readily carry fire (Thompson et al. 2007). All Alternatives include the treatment of salvage-created slash for this reason. See Chapter 2 of the EIS for the acres proposed for treatment in the action Alternatives. (Refer to comment number 18878-16 for a discussion funding for slash treatments.) In the cited Thompson et al. study the authors note: "Records of site preparation and their effectiveness in reducing fuels in the plantations are incomplete; however, at least 17 of the 44 plantations are reported as ''broadcast-burned.'' In a separate analysis, we found that these 17 plantations also burned with higher severities than comparable unmanaged stands. The planting component of the system is intended to promote long-term regrowth of conifer trees, but it also creates dense or continuous fuels that are at elevated risk of high severity fire." This finding by Thompson et al. is important because it describes the very condition we don't want to create in the Westside Fire Recovery Project. Stocking in the Thompson et al (2007) study typically ranged from 600 to 1,100 trees per hectare (240-440 trees per acre). These are much higher than proposed stocking levels in the Westside Fire Recovery Project. From Thompson et al., we conclude that the plantations described were dense continuous fuels. We agree that plantations of that nature are at risk of being consumed in future fires, and can in fact help propagate high intensity fire. What is unknown in this discussion is the amount of slash present from previous salvage operations, or how slash from competing vegetation release was handled. We do know that when dense young stands are combined with untreated, or inadequately treated logging slash, the result is a volatile mix that is prone to high severity fire. In the Westside Fires, 70 percent of plantations exposed to fire survived. The common denominator in plantations that survived was treated activity fuels (Varak, personal communication). This is consistent with findings of Weatherspoon and Skinner (1995). In the Westside Fire Recovery, we propose to treat the activity fuels (slash) from salvage logging, and plant at lower densities and variable spacing to create stands with discontinuous fuel that would be resilient to fire and could tolerate low to moderate severity fires typical of the Klamath Province. Thompson et al (2007) note that "reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved." That is exactly the objective of the Westside Fire Recovery Project in salvage harvest units. The reforestation stocking objective after planting in the Westside Fire Recovery Project is a stand of 75 to 225 variably spaced young trees with treated, discontinuous activity fuels, not densely stocked regularly spaced plantations that form continuous fuel beds. Stand density would vary with slope position and aspect with lower stocking on upper slopes and south and west aspects and higher stocking on north and east aspects that would form a closed canopy on lower slopes. Hardwoods would be included in the target stocking levels so the number of conifers would be less where hardwoods occur. Most reforestation units in the Westside Fire Recovery would be planted at lower densities as most of the units are on upper slopes. We also anticipate there would losses from future fires that would further reduce stand density. Our long term objective is 30-50

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			large, variably spaced, fire resilient trees per acre with openings as described by Taylor and Skinner (1996). Text has been added to Chapter 2 of the EIS and silvicultural prescriptions to make this point clear. Although future management of plantations is beyond the scope of this document, our goal is to create stand conditions where low intensity fire can be reintroduced at an early age and fuel discontinuity maintained. The Forest Plan for the Klamath National Forest specifically provides for the reintroduction of fire to accomplish this objective (Forest Plan 4-8). We also acknowledge that slash removal and maintenance of fuels treatments are important in reducing future fire risk. The Westside Fire Recovery Project has fuels reduction and maintenance activities to remove excess fuel loading to reduce fire hazard and increase suppression capability. The Fire and Fuels Report (summarized in Chapter three of this EIS) provides an in-depth analysis of the fuel loading and predicted resistance to control that will result from fire killed trees under the no-action and action Alternatives. The Fire and Fuels Report displays projected surface fuel loads predicted over a 50-year period, based on completion of implementation actions and are also described in graphs within the EIS. Fuel loading reduction actions are also described in the EIS and are projected to significantly reduce surface fuel loading. The fuels strategy for this project looks at roadside fuels treatments, hazardous fuels treatments (WUI, prescribed burns, and strategic ridgetops), and salvage and site preparation. All fuels treatments are aimed at reducing fire hazard into the future. Thompson et al. (2007) conclude that “The decision to salvage-log and plant, or not, after fire depends on a number of management considerations including risk of future high-severity fire, reducing hazards to fire fighters, timber revenue, and conservation ofbiodiversity.” These are considerations in the development of the Westside Fire Recovery Project.
110.03 - Trust, Credibility	#18878-7	DEIS: "The Karuk Tribe has raised specific concerns regarding reforestation actions and project timelines" (Pg V) Comment: This statement is, at best a clumsy paraphrasing of our Scoping Comments. To ensure there is no misperception of our initial and in some cases ongoing concerns, we are re-submitting our original scoping comments for the record.	Comments received during the scoping period from the Karuk Tribe were incorporated into the draft EIS in Appendix G with the Karuk Alternative was available for public review and comment. Aspects of the Karuk Tribe Alternative were incorporated into other proposed action Alternatives, including the preferred Alternative 2. Consultation has been ongoing to address concerns of the tribes surrounding reforestation and project timelines. In response to Karuk concerns, the proposed action has been clarified regarding reforestation. There is also response / discussion about this concern in Chapter 2 of the EIS under review of the Karuk Alternative. The agency is proceeding in accordance with National Environmental Policy Act regulations and other required timelines. The Forest is working with the Karuk and other federally recognized tribes on a programmatic agreement prior to decision. Consultation is ongoing. Consultation is summarized in Chapter 1 of the EIS. These concerns are being addressed through on-going tribal consultation. See EIS Chapter 3, Responsible Opposing Views and Agency Response for a discussion of reforestation.
110.03 - Trust, Credibility	#18878-8	It is readily apparent the "issues determined to be relevant" coincide with the obvious desire by the Klamath National Forest (KNF) to extract as much revenue from this proposal as possible. This predetermined outcome is glaringly clear in the Preferred Alternative 2.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment is not supported by rationale or evidence. No Alternative has been predetermined, which is evidence by modified Alternative 3 becoming the preferred Alternative in response to Forest Service consultation efforts and in response to public comments during the comment period.
110.03 - Trust, Credibility	#19092-4	Take a cue from the wildlife and nature and do not let fast tracking ruin your reputation for thoughtful, scientific, professional evaluation. Big timber companies do the clear-cut method, your agency is for the people, please act intelligently. If you don't then it just gives the rabid, unscientific public an excuse to go to court over the environment again.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment is not supported by rationale or evidence. The Forest Service developed an EIS in accordance with the National Environmental Policy Act and all applicable federal and state laws and regulations. The action Alternatives were developed through a public process that included scoping, public meetings, a public comment period for the draft EIS and consultation efforts with tribes and regulatory agencies.
110.03 - Trust, Credibility	#20-3	It is unacceptable to exploit wildfire to fast-track controversial and illegal logging of protected forests that belong to all Americans. The Northwest Forest Plan becomes meaningless if reserves are only protected until timber planners decide to log them.	The Forest Service developed an EIS in accordance with the National Environmental Policy Act and all applicable federal and state laws and regulations. The EIS included a no action Alternative, a proposed action and three action Alternatives that were analyzed in detail by subject matter scientists with all known environmental impacts disclosed based on the best information and data available. The action Alternatives were developed through a public process that included scoping, public meetings, a public comment period for the draft EIS and consultation efforts with tribes and regulatory agencies.
110.03 - Trust, Credibility	#20-5	Klamath National Forest timber planners are not above the law. The Forest Service needs to meet its obligation to be a good steward of the land.	The Forest Service takes our responsibility as stewards of public lands as a core mission value. As such, the Klamath National Forest abides by the Code of Federal Regulations, Forest Service Manual and the Forest Land and Resource Management Plan to implement objectives of sustainable multiple-use management practices.

Code	Comment Number	Comment Text	Response
110.03 - Trust, Credibility	#34-2	I shudder at the ecological carnage that the Westside timber sale would wreak on over 60,000 acres, including precious roadless areas and old-growth forest, consisting of both living trees and snags. Contrary to the falsehood implicit in the term 'salvage,' these dead trees are extremely valuable as reservoirs for moisture and nutrients. In designating them for 'salvage' logging, a term that clearly implies a negation of these ecological values by 'salvaging' their economic value as the only extant one, the Forest Service confuses and undermines the public understanding of forest ecology that it attempts to communicate elsewhere. The FS, if it were reading its own studies and public literature concerning forest ecology, would not plan or enact so ecologically fallacious a management construct as "salvage logging" after a fire. Moreover, this project would damage the fragile soils that need to be left alone to regenerate, not subject to mechanical shear and friction from heavy machinery in their unclothed condition, not buffered from physical stress as is soil with normal vegetative detritus.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We recognize the importance of retaining snags and woody debris on the landscape and protecting soil resources. For this reason, the project incorporates snag retention and woody debris retention; see watershed and wildlife project design features in Chapter 2 of the final EIS. The salvage harvest is a fuels reduction activity that will, over time, help protect the remaining adjacent forest habitats and promote that late successional character by accelerating the regeneration to a forested stand that will eventually regain those 'old growth' characteristics. The fuels reduction and the timber sale components of this project are tools to achieve the overall goals of a healthy forest, including improvements to habitat. Management requirements to implement the proposed action were designed to protect water quality and watershed conditions and are derived from Regional and National Best Management Practices, Riparian Conservation Objectives, and are in compliance with the Forest Plan. See Chapter 2 of the final EIS for a description of the acres proposed for treatment in the modified Alternative 3 (and other action Alternatives), as it has been clarified since the draft EIS. See response to comments 12346-55. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
110.03 - Trust, Credibility	#3679-4	I am concerned that in the units with lesser mortality, the prep crews will mark too heavily. This has happened many times in the past. This would pertain to roadside hazard removal as well (i.e. don't be overzealous in deciding what is a hazard	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment is not supported by rationale or evidence. See Chapter 2 of the EIS, "In determining which individual trees will be harvested, guidelines in Report #RO-11-01 "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) will be used by marking crews. These guidelines were developed using peer-reviewed scientific literature to evaluate tree species in northern California for mortality. " Net salvage harvest proposed does not include Riparian Reserves, snag retention areas, or areas with less than 50% mortality. Live trees (those with greater than 70% probability of survival) within units are leave-tree marked for retention and will not be harvested. Most patches where more than 50% of the trees are alive (RAVG 1 and 2) have been flagged out of stands in Alternative 3 Modified. Significant mortality continues to occur in stands that were 25-50% mortality (RAVG 2) at the time the RAVG data was generated last fall so RAVG mapping in GIS may no longer reflect on-the-ground conditions. This is snag retention areas within the salvage harvest units, as described in Chapter 2 of the final EIS. See response to comments 12346-55. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
110.03 - Trust, Credibility	#7794-1	As a frequent visitor to KNF, especially its relatively intact areas, and studying ecological and biological issues I have come to understand that the "Westside Fire Recovery Project" in the Klamath National Forest is merely an institutionalized and rather corrupt practice that has done severe damage to indigenous species, and results in improper clearcutting of old-growth trees.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
110.03 - Trust, Credibility	#7831-1	How greedy! It' YOUR job to protect the Forests, not succumb to the CORRUPTION of our society. "Westside Fire Recovery Project" in the Klamath National Forest is actually a plan to clearcut old-growth trees. Prove to US citizens and the world that you will do the RIGHT THING and protect old growth trees. For your children, and your children's children. Forever.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comments are not supported by rationale or evidence. The purpose and need for the Westside Fire Recovery Project includes fuel reduction, restoration of wildlife habitat and watershed condition, and public safety as major components of ecosystem recovery, in addition to recovering value from deteriorating timber. See Chapter 1 of the EIS for the rationale on why salvage harvest is proposed in Late Successional Reserves. The Forest Service is an agency that strongly promotes sustainable conservation land management practices. We are mandated by law to achieve quality land management under the "sustainable multiple-use management concept" to meet the diverse needs of people while protecting the resource. There is a distinction between clear-cutting and salvage logging treatments. Clearcutting is an even-aged management silvicultural system applied to green forest stands for the purpose of regenerating a new age class. Trees are selected and removed in groups up to 40 acres in size followed by artificial and/or natural regeneration. On the other hand, salvage logging involves removing dead trees after wildfires in order to remove hazards to public safety, capture the economic value of burned trees, and remove excessive fuel accumulation. Tree mortality is a result of the wildfire. Dead trees exceeding those needed by other resources are removed. The intensity of the fire and the size of the burned areas is highly variable. Some salvaged areas may appear similar to clearcuts but the difference is that the salvaged trees were killed and their size and location was determined by the wildfire. Some openings caused by wildfires are large. Salvage is generally followed by artificial and/or natural regeneration. An objective of the preferred action Alternative identified in the EIS will incorporate timber salvage treatments that will be limited to areas of moderate to high severity vegetation mortality. Management direction for salvage in Late-Successional Reserves will follow the Forest Plan. (EIS Chapter 2, Alternative 2) The salvage harvest is a fuels reduction activity that will, over time, help protect the remaining adjacent forest habitats and promote that late successional character by accelerating the regeneration to a forested stand that will eventually regain those 'old growth' characteristics. The fuels reduction and the timber sale components of this project are tools to achieve the overall goals of a healthy forest.
110.0401 - Violates Law/Regulation/Policy	#12549-4	The Westside DEIS is contrary to many environmental laws and violates the National Environmental Policy Act by failing to take a hard look at cumulative effects, failing to use plain language, failing to consider the difference or benefits of moderate and high severity fire, fails to consider geologically unstable areas as Riparian Reserves, fails to consider visual quality from the Pacific Crest Trail, fails to honestly consider climate change, fails to consider public trust resources such as clean water, carbon storage, wildlife and recreation and fails to adequately consider culturally significant wildlife and plants, increased fire risk or the ecological costs.	The Westside project meets the requirements of the CEQ National Environmental Policy Act regulations at 40 CFR 1500 et. seq. and the Forest Service National Environmental Policy Act regulations at 36 CFR 220. See Chapter 3 for a discussion of the project's effects, including cumulative effects to geologic resources, visual resources including the PCT, climate change , fire, and cultural resources.
110.0401 - Violates Law/Regulation/Policy	#13-2	The FS preferred alternative is also illegal. It would violate the Clean Water Act, including provisions of the Basin Plan and national forest waiver permit. The FS preferred alternative would also threaten Coho salmon because of the large amounts of sediment it would deliver to streams in addition to sediment delivered because of ill-conceived and largely ineffective discretionary fire suppression actions. Therefore, the FS preferred alternative would violate the ESA.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The preferred Alternative and other action Alternatives was designed to meet standards and guidelines of the Forest Plan and to meet applicable law, regulation, and policy. Through consultation with regulatory agencies, including the U.S. Fish and Wildlife Service for Endangered Species Act compliance, the Forest Service developed a modified Alternative 3 as the preferred Alternative. The effects of the Alternatives for these resources are described in Chapter 3 of the EIS in comparative format.
110.0401 - Violates Law/Regulation/Policy	#17111-21	I would conclude that the salvage activities proposed within LSRs as part of the Westside Fire Recovery Plan are inconsistent with NWFP intent and direction for management of LSRs, includi ng their treatment following a major disturbance.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter doesn't describe how the project is inconsistent with the Northwest Forest Plan. The project complies with NFMA through consistency with the Forest Plan. The Forest Plan incorporates the Northwest Forest Plan. Therefore, by being compliant with the Forest Plan, the project is consistent with the Northwest Forest Plan. Salvage in Late Successional Reserves is permitted with the Forest Plan; see Chapter 1 of the final EIS for a discussion of salvage in Late Successional Reserves. Also see correspondence with the Regional Ecosystem Office regarding proposed treatments.

Code	Comment Number	Comment Text	Response
110.0401 - Violates Law/Regulation/Policy	#18909-2	The Westside DEIS should be fully rescinded because of its arbitrary and capricious nature, the count of inconsistencies, scientifically unsound assumptions and the lack of any cumulative effects analysis. The purpose of the National Forest Management Act, or "NFMA," is to ensure that planning on National Forests appropriately considers and protects the needs of wildlife, wildlife habitat, water quality, and soil productivity. 16 U.S.C. § 1604 (a)-(i). The forest program emphasis for the biological environment in the KNF LRMP at page 4-6 states: "Manage for desired compositional, structural, and functional attributes of biologically diverse forest, rangeland, and aquatic ecosystems consistent with ecological processes in the province. Recognize the importance of the interactions of ecosystems at the regional, landscape, and site levels. Maintain diverse and productive wildlife, fish, and Sensitive plant habitats as an integral part of the ecosystem." The Westside DEIS violates the National Forest Management Act, National Environmental Policy Act, Clean Water Act, Endangered Species Act, Northwest Forest Plan, KNF Land Resource Management Plan and the recommendations in the Northern Spotted Owl Recovery Plan, Late Successional Reserve and Watershed Assessments.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Position statement, not supported by rationale or evidence. The commenter fails to describe how the project is arbitrary and capricious, inconsistent, or scientifically unsound. The project complies with NFMA through consistency with the Forest Plan. The Forest Plan incorporates the Northwest Forest Plan. Therefore, by being compliant with the Forest Plan, the project is consistent with the Northwest Forest Plan. Salvage in Late Successional Reserves is permitted with the Forest Plan; see Chapter 1 of the final EIS for a discussion of salvage in Late Successional Reserves. Also see correspondence with the Regional Ecosystem Office regarding proposed treatments. The project does not result in inconsistencies with the referenced standard and guideline. Best available science is cited throughout the final EIS and supporting documents.
110.0401 - Violates Law/Regulation/Policy	#19078-1	I wish to express my disapproval of the Westside Timber Sale due to impacts to the Klamath River's key salmon refugia, cumulative impacts to forest and watershed, and violations of the Clean Water Act, the Endangered Species Act, NEPA and California's Porter Cologne law. I incorporate by reference the comments of the Klamath Siskiyou Wildlands Center, the Center for Biological Diversity, the Karuk Tribe and the Environmental Protection Information Center and the Klamath Forest Alliance.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Note that cumulative impacts are analyzed and disclosed by resource area in Chapter 3. The commenter does not specify how the proposed project violates the listed laws.
110.0401 - Violates Law/Regulation/Policy	#5873-43	In a January 3, 2014 letter to the Forest Service following the Rim Fire, several scientists said: We are also concerned that your proposal under-estimates the cumulative impacts of postfire logging and its potential effects on ecological integrity and forest health. In particular, the proposal seems to violate the National Forest System Land Management Planning Rule of 2012 (36 CFR Part 219) that directs the Forest Service to maintain the ecological integrity of a planning area as it relates to “the completeness of wholeness of an ecosystems composition, structure, function, and connectivity.” Postfire logging is inconsistent with the intent of the planning rule as it would greatly diminish ecological integrity of important postfire wildlife habitat while removing habitat for at-risk species, as noted.	This project, including salvage harvest, is consistent with NFMA through it's consistency with the Klamath Forest Plan. The 2012 planning rule (at 36 CFR 219) directs the development of forest plans since 2012. All impacts are analyzed and disclosed in Chapter 3 by resource.
110.0401 - Violates Law/Regulation/Policy	#7136-1	I am writing in response to the proposed logging in the Westside Salvage Progect. Having been around clearcut logging, I am convinced there is no other reason for it than greed. It is my understanding that it is illegal in these protected forests. I have spent time in other countries where the wildlife and wild landscapes have been categorically destroyed by human hands. Wildfires are destructive, yes, but the biological diversity is still constructive after a fire, whereas landscapes and wildlife become desolate after a clearcut. Please consider what we have to lose, and conversely, what we have to gain by these decisions.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Position statement, not based on rationale or evidence. This project involves salvage harvest not clear-cutting. Clearcutting is an even-aged management silvicultural system applied to green forest stands for the purpose of regenerating a new age class. Trees are selected and removed in groups up to 40 acres in size followed by artificial and/or natural regeneration. On the other hand, salvage logging involves removing dead trees after wildfires in order to remove hazards to public safety, capture the economic value of burned trees, and remove excessive fuel accumulation. Tree mortality is a result of the wildfire. Dead trees exceeding those needed by other resources are removed. The intensity of the fire and the size of the burned areas is highly variable. Some salvaged areas may appear similar to clearcuts but the difference is that the salvaged trees were killed and their size and location was determined by the wildfire. Some openings caused by wildfires are large. Salvage is generally followed by artificial and/or natural regeneration. Effects to resources, including wildlife are disclosed in Chapter 3 of the EIS.
110.07 - Appeals, Objections, Litigation	#18859-4	As I'm sure you are aware, litigation of any and all of KNF projects is a tactic employed by many groups in an effort to preclude any type of management from our forests. This litigation is not about making a better project, but to delay the project long enough so that all the value of the products has been lost, thus making the project economically difficult to implement.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. It is up to a court to decide the merit of any lawsuit.
110.08 - Forest Plan Consistency	#12346-2	The DEIS provides no compelling rationale to support the agency's focus on commercial logging and road construction within protected LSRs. The DEIS fails to analyze and disclose the impacts of the proposal to focus logging and road construction in the Reserves. While the DEIS at least discusses (some) of the impacts and issues surrounding Riparian Reserve management, it is silent regarding impacts to LSR structure, function and objectives.	The final EIS has been updated with more information on the topic. See Chapter 1 for a discussion of salvage harvest in LSRs. See throughout Chapter 3 for a discussion of the effects of roads and salvage logging. See Chapter 3 for a review of Forest Plan consistency for LSRs.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#12346-3	The DEIS limits its discussion of LSRs to a few sentences disclosing the massive acreage of Reserve logging that is proposed while avoiding any substantive or qualitative analysis or disclosures regarding the effects of such logging on late-successional forest structure, ecological processes or ecological recovery. Indeed, the DEIS utilizes the term "recovery" to exclusively refer to the desire to "recover" the maximum economic value from the Reserves by logging them at the soonest possible date, which is inconsistent with the NWFP. NFP SFEIS F-21 ("Salvage will not be driven by economic or timber sale factors" in LSRs).	See response to comment number 12346-2. See Chapter 1 of the final EIS for a discussion of salvage harvest in Late Successional Reserves. The purpose of the Westside Fire Recovery is to reduce fuel within burned areas and accelerate recovery to a late-seral condition while also generating an economic product. The project is consistent with the Forest Plan, which incorporates direction from, and is consistent with the Northwest Forest Plan. Position statement, not supported by scientific rationale; the term recovery is not solely referring to economic value. The question of salvage in Late Successional Reserves was anticipated in the development of the Northwest Forest Plan and was squarely addressed in the Northwest Forest Plan ROD. The report of the Forest Ecosystem Management Assessment Team provided the basis for the Northwest Forest Plan. Forest Ecosystem Management Assessment Team considered salvage with three different prescriptions, ranging from no salvage, to salvage with minimum guidelines. Prescription 2, (Forest Ecosystem Management Assessment Team II-18) which limited salvage in Late Successional Reserves was carried through to the Northwest Forest Plan ROD. "Valuable trees that are dead can be used for commercial purposes with the attendant employment and economic benefits. …Increased fire danger or risk to insect and disease resulting from large accumulations of dead trees can be reduced in an economically feasible fashion. Avoided are the perceptions of economic waste if patches of dead trees are not salvaged." (Forest Ecosystem Management Assessment Team II-18) The topic of salvage in Late Successional Reserves generated public responses in the Northwest Forest Plan requesting salvage be restricted only to Adaptive Management Areas. The Secretaries of Agriculture and Interior, the signing officials for the Northwest Forest Plan, noted their logic for salvage in Late Successional Reserves in the Response to Comments (Northwest Forest Plan ROD, Page 66): "Salvage is not required to be beneficial, but is designed to permit recovery of a timber volume in those instances where catastrophic events clearly kill more trees (resulting in more snags and down logs in the short and long term) than are needed to maintain late successional conditions."
110.08 - Forest Plan Consistency	#12346-32	All action alternatives developed for consideration by the Forest Service call for post-fire road construction in Key Watersheds. Alternative 4 would reduce (but not eliminate) road construction in Key Watersheds. During the scoping process for this project commenters requested that the agency develop an alternative that implemented the "Beschta Recommendations" that would prohibit road construction in sensitive recovering post-fire forests. The KNF refused to develop such an alternative to its road building plans. By identifying previously closed or decommissioned roads in Key Watersheds as available for both roadside logging and log haul, the KNF establishes that it has not in fact "banked" credits for alleged road density reductions in Key Watersheds. Hence all projects that rely on allege road closures in Key Watersheds to mitigate for the ubiquitous construction of logging roads in KNF timber sales are in violation of the ACS and the NWFP. Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 524 F.3d 917, 935-36 (9th Cir. 2008) (federal agency may not rely on this speculative activity to off-set adverse effects); NFP, C-37 (WR-3: Do not use mitigation or planned restoration as a substitute for preventing habitat degradation). The Westside DEIS "Forest Plan Consistency checklist" contends that the project is "compliant" with Key Watershed road standards because allegedly "the project will not increase the amount of system roads in Key Watersheds." Emphasis in original. The word "system" (italicized or not) never appears in the LRMP Key Watershed standard 6-24. Instead 6-24 clearly requires that "there will no be increase of roads in Key Watersheds" and "for each mile of new road constructed one mile of road should be decommissioned." It does not appear that the KNF has met standard 6-29 in any Key Watershed within the Westside planning area. Instead of following the direction to "prioritize roads for relocation and restoration or closure, based on the impact to Forest resources" the agency is proposing to re-open previously closed and decommissioned roads in order to maximize timber harvest.	Chapter 2 of the EIS describes the road access Connected Actions associated with each action Alternative. See Chapter 2 of the EIS under Alternative considered but eliminated from detailed study, which includes an Alternative responsive to the Beschta report. See response to comment number 12346-26 about the consideration of an Alternative using the Beschta recommendations. See response to comment 17403-1 that describes the development of Alternative 4 that reduces road construction and identifies some of the trade-offs. Existing roadbeds are not being used to maximize timber harvest as suggested by the comment, but to minimize or avoid the environmental consequences associated with the construction of new roads.None of the action Alternatives would add roads to the National Forest Transportation System. There is no prohibition on the construction and use of roads in Key Watersheds in the Forest Plan so long as the temporary road is "put to bed" after use, and it does not prevent attainment of Aquatic Conservation Strategy objectives. Temporary roads would be used in each of the Alternatives in varying amounts (see EIS Table 2-31: Comparison of miles of roads and acres of treatment). Temporary roads would either be newly constructed, utilize existing roadbeds, or reopen previously decommissioned roads. All temporary roads, regardless of their origin, would be closed and hydrologically stabilized after salvage logging activities are completed (see Project Design Features: Watershed - 5 and Watershed - 24). In other words, the road density in Key Watersheds would be the same when operations are concluded as it was prior to implementation. This fully complies with Forest Plan 6-25. The project interdisciplinary team considered these actions in compliance with Forest Plan Guidelines 6-29. The commenter speculates that the project fails to comply with Northwest Forest Plan. Arguing that the Project fails to comply with Guideline WR-3 (MA 10-12 in the Forest Plan) by closing temporary roads is illogical. Forest Plan MA 10-12 is intended to prevent watershed restoration projects from being used to justify a project, not to prohibit the mitigation of impacts by actions such as closing a temporary road. Also see response to comment number 12364-1.
110.08 - Forest Plan Consistency	#12346-8	In the Westside Project the Forest Service has taken the exact opposite approach recommended by the NWFP. The agency is proposing extensive (rather than limited) salvage logging across tens of thousands of acres in the Reserves and is proposing to remove large diameter snags from logging units while leaving the least valuable (for wildlife and mills) small diameter snags in the units.	See Chapter 1 for a discussion of salvage harvest in Late Successional Reserves. See the Appendix of the EIS for a review of project's consistency with the aquatic conservation strategy objective, related to treatments in Riparian Reserves. See Chapter 2 for a description of what is proposed, including project design features, including snag, legacy component, and coarse-woody-debris retention. The Forest Plan incorporates direction from, and is consistent with, the Northwest Forest Plan. The project is consistent with the Forest Plan.
110.08 - Forest Plan Consistency	#12467-4	Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves.	Procedural statement. See response to comment number 18918-22.The project complies with the Forest Plan, which incorporates direction from, and is consistent with, the Northwest Forest Plan. See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves. See Chapter 3 of the EIS under geology for a discussion of geologic reserves, as applicable.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#15118-1	California is in its fourth successive year of its worst drought in history, and you want to cut down more trees; trees which create a watershed. No one can help that kind of stupid. Here's a philosophical question for you. If it's justifiable to do one thing which is illegal (i.e. illegal logging) then are all illegal acts justifiable? I would use a modus ponens paradigm to solve this and the logical answer comes out as yes. So, we don't want to hear your loggers whinning about getting shot. What you're planning is illegal. Climate change is real. Stop being stupid.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter to of the final EIS for a description of proposed actions; no clear-cutting is proposed. Effects to wildlife and aquatic species from the project and Alternatives are disclosed in Chapter 3 of the EIS. The agency recognizes that we are in the fourth year of drought; however, the trees proposed for salvage harvest include areas of high to moderate vegetative mortality; see Chapter 2 of the EIS for a description of what is being proposed. The project is consistent with Forest Plan direction, law, regulation, and policy. See response to Comment number 16695-4.
110.08 - Forest Plan Consistency	#16756-1	We're watching! Follow your own rules that protect important wildlands, wildlife and watersheds.	The project is consistent with Forest Plan direction, law, regulation, and policy.
110.08 - Forest Plan Consistency	#17387-2	A summary is provided at the beginning of these comments. I would conclude that the salvage activities proposed within LSRs as part of the Westside Fire Recovery Plan are inconsistent with NWFP intent and direction for management of LSRs, including their treatment following a major disturbance. Salvage will make no positive contribution to the reestablishment o f late-successional forest habitat or to the early successional ecosystems that provide habitat for NSO prey species, among many others.	The project complies with the Forest Plan, which incorporates direction from, and is consistent with, the Northwest Forest Plan.
110.08 - Forest Plan Consistency	#18851-3	The Klamath National Forest, and much of the Western US is known to be Highly Departed from its ecological Reference Conditions (primarily due to historic wildfire suppression). It would seem essential to demonstrate how well the project's alternatives would support the attainment of the Forest's ecological target conditions (The Historic "Reference condition" plus necessary adjustments to compensate for climate change, etc). Could it be that some areas should be reforested in approaches that are adjusted to meet the KNF's target conditions ? Isn't that the true purpose of Klamath Forest Plan Biological Diversity S&Gs 6-1 and 6-14, to identify how well a project would attain this target ?	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See responses to 12414-1 and 6924-1. The intent of the Westside Fire Recovery is to accelerate burned stands towards a late-successional condition and to reduce risk of wildfire to developing stands in the future. The agency recognizes that the area has departed from historic conditions, including but not limited to fire return intervals--see Chapter 3 of the EIS. The project is consistent with the goals and standards and guidelines of the Northwest Forest Plan, as incorporated into the Forest Plan, including ones related to biological diversity. The agency recognizes the importance of the resources found within the Klamath Province and Klamath-Siskiyou Bioregion. Project design features in Chapter 2 of the EIS are designed to mitigation resource impacts and meet legal requirements. See Chapter 3 of the EIS for a disclosure of effects by resource area, including botany, climate change, air quality, aquatic resources, vegetation, and fuels.
110.08 - Forest Plan Consistency	#18851-4	The project proposal does not adequately protect the Scenery values of the forest, or its local residents and tourists, primarily because it fails to apply standard wildfire restoration scenery protection measures, such as those recently applied on the Mt Hebron Fire Recovery Project. These include: 1) Retention of a representative pattern of standing dead trees within all High and Moderate Sensitivity views, with the specific purpose of retaining the forest's natural scenic character, and retaining visible evidence of the forest's natural wildfire processes. 2) Reduce the height and scenery impacts due to project-created stumps, skidding and yarding activities. These protection measures have proven to be fully implementable, produce negligible effects upon other resource objectives, and consistently benefit resources such as wildlife and watershed. If these measures are not applied, adverse LONG TERM scenery impacts would persist along many of the Forest's most highly valued recreational settings and tourism attractions. The project's Scenery report is helpful and informative in many respects, however has some important shortcomings that have very likely adversely influenced the Project's scenery outcomes:	The Westside Fire Recovery is consistent with all direction regarding scenery and visual quality objectives provided in the Forest Plan.
110.08 - Forest Plan Consistency	#18858-9	The Forest Plan issues raised by Dr. Franklin must also be confronted squarely.	Procedural. The agency has responded to comments provided during the comment period.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#18909-4	Northwest Forest Plan Ecological Principles for Management of Late-Succesional Reserves Basis for Forest Management - Standards and Guidelines: "One goal of these standards and guidelines is to maintain late-successional and old-growth species habitat and ecosystems on federal lands. Another goal is to maintain biological diversity associated with native species and ecosystems in accordance with laws and regulations." "The intent is to maintain natural ecosystem processes such as gap dynamics, natural regeneration, pathogenic fungal activity, insect herbivory and low intensity fire." B-1 "Structure and Composition- Four major structural attributes of old-growth Douglar-fir forests are; live old growth trees, standing dead trees (snags), fallen trees or logs on the forest floor and logs in streams." B-2 "In some cases, however, natural reburns occurred, resulting in relatively little carryover of live trees as a legacy from old-growth condition. Where considerable live and dead material was left following fires, young stands contained many old-growth structures and presumable old-growth associated organisms, including organisms associated with coarse woody debris on the forest floor." B-3 "These reserves represent a network of existing old-growth forests that are retained in their natural condition with natural processes, such as fire, allowed to function to the extent possible. The reserves are designed to serve a number of purposes. First, they provide a distribution, quantity, and quality of old-growth forest habitat sufficient to avoid foreclosure of future management option. Second, they provide habitat for populations of species that are associated with late-successional forests. Third, they will help ensure that late-successional species diversity will be conserved." B-4 "Tree mortality is an important and natural process within a forest ecosystem. Diseased and damaged trees and logs are key structural components of late successional and old-growth forests. Salvage of dead trees affects the development of future stands and habitat quality for a number of organisms. Snag removal may result in long-term influence on forest stands because large snags are not produced in natural stands until they become large and begin to die from natural mortality. Snags are used extensively by cavity-nesting birds and mammals such as woodpeckers, nuthatches, chickadees, squirrels, red tree voles, and American marten. Removal of snags following disturbance can reduce the carrying capacity for these species for many years." B-8 Intensely burned forests continue to provide for a suite of species including old-growth dependent species. The proposal to log large snags from the reserves would disallow them to function naturally and would curtail the conservation of diversity. The proposed project would eliminate late-successional species habitat and would remove rare and valuable ecosystems. Removing large snags and green trees as proposed would remove biological legacies and diversity associated with native species and ecosystems and does not comply with the National Forest Management Act, Northwest Forest Plan, KNF Land Resource Management Plan, Northern Spotted Owl Recovery Plan or the recommendations in Late Successional Reserve Assessments.	Citations provided are from the Northwest Forest Plan, not from the Klamath Forest Plan which incorporated it. Page numbers for the quotes were not provided. The language that is not standards and guidelines may not be incorporated into the Klamath Forest Plan. The Westside Fire Recovery is consistent with standards and guidelines presented in the Forest Plan, which incorporates, and is consistent with, the Northwest Forest Plan. Retention of snags and Coarse Woody Debris are addressed through project design features (Chapter 2 of the EIS). Effects to species are disclosed in the Wildlife, Aquatic Resources, and Botany sections of the EIS. With the exception of the incidental tree, no green trees are proposed for harvest; see response to comment number 12346-55.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
110.08 - Forest Plan Consistency	#18909-6	Felling and removal of large trees, whether they are alive or dead, removes large material that is normally handed down from one stand to the next. The loss of this material has serious adverse consequences for wildlife, hydrology, soil, etc. These legacies are often described as "lifeboats" that allow species to persist in post-disturbance forests and/or return more rapidly to post-disturbance forests. The Northwest Forest Plan (NFP) contains numerous standards and guidelines (S&Gs) constraining post-fire management options, especially within Late-Successional Reserves. See generally, S&Gs C- 13 - C-16. The Forest Service must comply with these and other S&Gs in developing and implementing the proposed project, and must document how it is complying with each of these provisions. See Or. Natural Res. Council Fund v. Brong, 492 F.3d 1120 (9th Cir. 2007) (holding post-fire logging within two LSRs unlawful for failure to comply with NFP provisions); see also Or. Natural Res. Council Fund v. Brong, No. 04-693-AA (D. Or. filed July 2, 2004); League of Wilderness Defenders v. Forest Service, No. 05-1246-JO (D. Or, filed Aug. 11, 2005).	Legacy trees are retained to the degree that they occur within the project area (see wildlife project designed features, final EIS Chapter 2). See Appendix E for a discussion of salvage within Late Successional Reserves and documentation that the project is consistent with Forest Plan direction. See also Response 17111-1 which addresses retention of large wood and persistence of that material on the landscape. See also EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#19-2	The Final EIS should include a discussion of the impacts that land management allocations had on the severity of the fires, and the associated change to wildlife habitat. Areas within Late-Succesional Reserves, Inventoried Roadless, and Critical habitat for the northern spotted owl burned at much higher intensities than areas outside of these designations. This result is most evident within the Happy Camp Complex. Furthermore, these land allocations severely limited the effectiveness of the small amount of management that had taken place within these designations in the last few years prior to the fires,(i.e. Seider Timber Sale). Only a miniscule amount of acreage was treated within these areas, and only very limited reductions in density took place. The result was arbitrarily high levels of basal area and canopy closure were left post harvest due to the management restrictions. More specifically, these land allocations directly resulted in high intensity, stand replacing fire behavior. Since the intent of these management areas is primarily to maintain or improve larger diameter trees and late successional wildlife habitat, it must be recognized that the net effect of these land allocations had a direct influence on the intensity of the fire behavior.	The impact of [presumably the past management of] Forest Plan land allocations on the severity of the 2014 fires is beyond the scope of this project and the analysis of it. The EIS is required to disclose the impacts of the proposed action on the affected environment, as described in Chapter 3 of the EIS. The project is consistent with Forest Plan direction, including meeting the standards and guidelines for treatments within management areas (or land allocations). Chapter 1 and 2 of the EIS include some discussion of these considerations in terms of treatment.
110.08 - Forest Plan Consistency	#21-2	The Westside Salvage Project is illegal under the Northwest Forest Plan.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Position statement, not supported by rationale or evidence. The commenter fails to describe how the project is illegal. The standards and guidelines of the Northwest Forest Plan are incorporated into the Forest Plan. The project is consistent with the Forest Plan, and indirectly, also with the Northwest Forest Plan. By being consistent with the Forest Plan, the project meets the legal requirements of the National Forest Management Act.
110.08 - Forest Plan Consistency	#33-1	I have become aware of yet another salvage logging scheme in the Klamath National Forest-----The Westside Salvage Project------ that may be excused in the name of cutting wood that is "dead" and would otherwise "go to waste." I hate salvage logging and I even suspect those who use fire as an excuse to log. Fire is natural, and gradually decaying wood holds and rebuilds precious soil on our mountain slopes. According to the Northwest Forest Plan, this proposed salvage logging is not allowable. Please act mindfully and with an eye toward preservation of our forests. Too much is being logged already. The Forest Service needs to do its job and not bow to "timber planners."	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Statements not supported by scientific rationale. The standards and guidelines of the Northwest Forest Plan are incorporated into the Forest Plan. The project is consistent with the Forest Plan, and therefore, also with the Northwest Forest Plan. The question of salvage in Late Successional Reserves was anticipated in the development of the Northwest Forest Plan and was squarely addressed in the Northwest Forest Plan ROD. The report of the Forest Ecosystem Management Assessment Team provided the basis for the Northwest Forest Plan. Forest Ecosystem Management Assessment Team considered salvage with three different prescriptions, ranging from no salvage, to salvage with minimum guidelines. Prescription 2, (Forest Ecosystem Management Assessment Team II-18) which limited salvage in Late Successional Reserves was carried through to the Northwest Forest Plan ROD. “Valuable trees that are dead can be used for commercial purposes with the attendant employment and economic benefits. …Increased fire danger or risk to insect and disease resulting from large accumulations of dead trees can be reduced in an economically feasible fashion. Avoided are the perceptions of economic waste if patches of dead trees are not salvaged.” (Forest Ecosystem Management Assessment Team II-18) The topic of salvage in Late Successional Reserves generated public responses in the Northwest Forest Plan requesting salvage be restricted only to Adaptive Management Areas. The Secretaries of Agriculture and Interior, the signing officials for the Northwest Forest Plan, noted their logic for salvage in Late Successional Reserves in the Response to Comments (Northwest Forest Plan ROD, Page 66): “Salvage is not required to be beneficial, but is designed to permit recovery of a timber volume in those instances where catastrophic events clearly kill more trees (resulting in more snags and down logs in the short and long term) than are needed to maintain late successional conditions.” See Chapter 1 of the EIS for more discussion of salvage in Late Successional Reserves.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#5873-128	LSRs provide habitat for cavity dependent species. Diminishment of the habitat for species associated with dead wood will violate the Northwest Forest Plan. The Northwest Forest Plan clearly anticipated that salvage logging within LSRs must be limited to provide quality habitat for Black-backed woodpecker, white-headed woodpecker, and Williamson's sapsucker. To benefit the black-backed and white-headed woodpeckers, and Williamson's sapsucker in the Eastern Cascade Range, potential mitigation measures would be to reduce harvest and salvage in old-growth areas. Because of the strength of Late-Succesional Reserves under the selected alternative, standards and guidelines limiting salvage and thinning in those reserves, and matrix management standards and guidelines that specifically incorporate mitigation for white-headed and black-backed woodpeckers, we conclude that these potential mitigation measures are not necessary. NWFP ROD page 31. Salvage logging will clearly diminish habitat for these three species. If the agencies certainly can't claim to be providing abundant high quality habitat for cavity associated species in the Matrix, so if they don't provide for snag associated species in the reserves, then they really don't provide sufficient habitat for cavity dependent species anywhere, so a new programmatic EIS would be required to rework the regional management framework to provide adequate habitat for viable populations of snag associated species.	The Forest Plan incorporates direction from, and is consistent with, the Northwest Forest Plan. Forest Plan Standards and Guidelines include retention of coarse woody debris and snags on the landscape. See Chapter 2 for a list of applicable project design features. Analysis of effects to wildlife species is presented in the wildlife section of the EIS. See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves.
110.08 - Forest Plan Consistency	#5873-13	Salvage logging that removes large old trees for fuel reduction will violate LRMP standards, such as MA5-28 "Silvicultural activities aimed at reducing risk shall focus on younger stands in LSRs. … Salvage activities should focus on the reduction of catastrophic … fire threats." Post-fire landscapes are not particularly prone to reburn and the best available science shows that salvage logging and replanting will make fire hazard worse, not better.	See response to comment number 18926-7. See the wildlife project design project design features in Chapter 2 of the EIS; legacy components are being retained within salvage harvest units as described in the project design project design features. Further, Riparian Reserves and snag retention units within and immediately adjacent to salvage harvest units are being used to meet snag retention requirements. The Forest Plan does not limit silvicultural management or salvage only to younger stands. The full quote of the standard and guideline provides a more accurate portrayal of the Forest Plan and its intent, as follows: "Silviculture activities aimed at reducing risk shall focus on younger stands in Late Successional Reserves. The objective will be to accelerate development of late-successional conditions while making the future stand less susceptible to natural disturbances. Salvage activities should focus on the reduction of catastrophic insect, disease and fire threats. Treatments should be designed to provide effective fuel breaks wherever possible. However, the scale of salvage and other treatments should not generally result in denigration of currently suitable owl habitat or other late-successional conditions. See Chapter 1 of the EIS for a discussion of salvage in Late Successional Reserves and compliance with the Klamath National Forest Late Successional Reserve Assessment and Forest Plan. The "Fire Synopsis" section of the Fire and Fuels report analyzes fire hazard and shows that proposed salvage activities followed with site preparation fuels treatments will reduce fuel loading and fire hazard. In anticipation of controversy over salvage in Late-Successional Reserve, Chapter 1 of the EIS discusses direction consistent with law, policy and guidelines for salvage harvest. The primary reason that salvage harvest is proposed within the Late-Successional Reserve is to reduce future heavy fuel accumulations that will result from fire killed trees and thus reduce the risk of future high severity fire that would delay the development of late successional stand conditions. The Ninth Circuit Court of Appeals ruled in the Timbered Rock decision that salvage could proceed in certain circumstances in an Late-Successional Reserve; which are consistent with the Westside Fire Recovery project. Further information on this can be found in Chapter 1 of the Essie response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#5873-133	The Northwest Forest Plan ROD (p B-8, 9) says Salvage of dead trees affects the development of future stands and habitat quality for a number of organisms. Snag removal may result in long-term influences on forest stands because large snags are not produced in natural stands until trees become large and begin to die from natural mortality. Snags are used extensively by cavity-nesting birds and mammals such as woodpeckers, nuthatches, chickadees, squirrels, red tree voles, and American marten. Removal of snags following disturbance can reduce the carrying capacity for these species for many years. Coarse woody debris is a necessary component of forest ecosystems. This wood provides habitat for a broad array of vertebrates, invertebrates, fungi, mosses, vascular plants, and micro-organisms. Arthropods, salamanders, reptiles, and small mammals live in or under logs; woodpeckers forage on them; and vascular plants and fungi grow on rotting logs. Provision for retention of snags and logs normally should be made, at least until the new stand begins to contribute coarse woody debris. Many natural disturbances do not result in complete mortality of stands. For example, recent fires in the Oregon Western Cascades Province killed 25 to 50 percent of trees within the areas burned, leaving 50 to 75 percent of the stands intact. The surviving trees are important elements of the new stand. They provide structural diversity and provide a potential source of additional large snags during the development of new stands. Furthermore, trees injured by disturbance may develop cavities, deformed crowns, and limbs which are habitat components for a variety of wildlife species. The ROD also says that the intent of salvage in LSRs is to "prevent negative effects" ROD page C-13, but the EA does not identify any negative effects and this project would be preventing. In fact, when viewed from a landscape perspective, there are no negative effects to be avoided, and if there were this project would not do so. The Northwest Forest Plan ROD also says that "salvage operations should not diminish habitat suitability now or in the future." But this project will diminish habitat quality by removing standing trees for safety reasons and by putting adjacent forests at risk from damage from edge effects. The ROD says that "all standing live trees should be retained" ROD page C-14, but standing trees and snags may need to be cut for safety reasons. The NEPA document failed to consider just keeping workers out of the safety zone around hazard trees.	The project adheres to Forest Plan standards and guidelines, which incorporate direction from the Northwest Forest Plan. Forest Plan Standards and Guidelines provide for retention of snags and Coarse Woody Debris. The EIS clearly describes the nature of fuel conditions after the fire, and indicates that those elevated fuels conditions pose a substantial potential risk of severe burning to developing forest stands. With the exception of the incidental tree, no green trees are proposed for harvest; see response to comment number 12346-55. See Chapter 1 for a discussion of salvage harvest in Late Successional Reserves.
110.08 - Forest Plan Consistency	#5873-134	In considering the perceived conflict between public safety and LSR objectives around Lake of the Woods, the Rogue River National Forest has said, "The dead and dying trees that are typically identified as hazards to public safety are exactly what LSRs were created to protect, as these are the types of trees that provide habitat for many old growth dependent plants and animals."	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service recognizes the benefits of snags to wildlife habitat, as disclosed; however, the purpose and need of the project includes improvement to public and worker safety, as disclosed in Chapter 1 of the EIS. Project design features have been incorporated; see Chapter 2. Effects of treatment on wildlife and safety are disclosed in Chapter 3 of the EIS.
110.08 - Forest Plan Consistency	#5873-143	The Northwest Forest Plan ROD states "salvage to reduce such risks should focus only on those areas where there is a high risk of large-scale disturbance." The EIS has not documented the existence of high risk or made a credible case whether and how each of the proposed actions will reduce such risks.	Comment provides no evidence other than the opinion of the commenter. Risk posed by fuel accumulation from fire-killed trees is described in Chapter 3 - Fuels. See also Appendix E. The project is consistent with standards and guidelines in the Klamath Forest Plan, which incorporates and is compliant with the Northwest Forest Plan. The project meets the standards under both risk reduction and salvage harvest disclosed in the late successional reserve assessment and the Forest Plan, as incorporated from the Northwest Forest Plan. See Chapter 1 of the EIS for a discussion of salvage harvest in Late-Successional Reserve and how this project meets those standards.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#5873-181	The FEMAT scientists recognized that … Salvage of dead trees has significant effects on the development of future stands and the suitability as habitat for a number of organisms. Snag removal results in long-term impacts on the forest community because large snags are not produced by the new stand until trees become large and begin to die from natural mortality (often a period of 50-100 years). Snags are used extensively by cavity nesting birds and mammals such as woodpeckers, nuthatches, chickadees, squirrels, red tree voles, and American marten. Removal of snags following disturbance can significantly reduce the carrying capacity of these specie for many years. … … Salvage policies of options generally ranged from no salvage to limited salvage as permitted by the Final Draft Recovery Plan for the Northern Spotted Owl (USDI 1992). This plan would allow removal of small diameter snags and logs but would also require retention of snags and logs likely to persist until the new stand begins to contribute significant quantities of coarse woody debris." FEMAT page IV-37. The May 6, 1994 Scientific Analysis Group Q&As clearly indicated the intent of the NFP ROD that salvage for risk reduction in LSRs must be consistent with the salvage recommendations in the Final Draft Recovery Plan for the Northern Spotted Owl (December 1992). See below. The agency must retain all large snags because they are the most likely to last the longest and fill the snag recruitment gap as the post-fire landscape recovers from the fire. The so-called "brain book" that agency staff use to clarify the direction in the Northwest Forest Plan ROD urges the agency to use the requirements from the final Draft Recovery Plan for the Northern Spotted Owl which requires retention of all scorched trees that "may live" as well as all snags over 20 inches because these live trees and larger snags are most likely to last more than 100 years and help to fill the temporal gap in snag recruitment as the post-fire stand develops. Denton K, 1994. "SEIS Team/Scientific Analysis Group Qs &As [Summary]" May 6, 1994 ("[T]hese responses represent what the SEIS Team intended for many of the standards and guidelines… The following document is a compilation of those SEIS Team questions ands SAG responses that relate to standards and guidelines contained in the final Record of Decision."). "Salvage in LSRs to Reduce Fire Risk (SAG2;Q#9): Under Alternative 9, is salvage [in Late-Succesional Reserves] permitted to reduce fire hazard or risk? How and who defines acceptable risk? "SAG response: Salvage can be used to reduce risk throughout the range of the owl based on the salvage guidelines adapted from the final draft recovery plan. Silvicultural prescriptions can be used to reduce risk in areas subject to large scale disturbance (east side) using guidelines for reducing large scale disturbance adapted from the final draft recovery plan. (S&Gs pages C-13 and C-12)"	The project adheres to Forest Plan standards and guidelines, which incorporate direction from the Northwest Forest Plan. Forest Plan Standards and Guidelines provide for retention of snags and Coarse Woody Debris. The EIS clearly describes the nature of fuel conditions after the fire, and indicates that those elevated fuels conditions pose a substantial potential risk of severe burning to developing forest stands. With the exception of the incidental tree, no green trees are proposed for harvest; see response to comment number 12346-55. See Chapter 1 of the EIS for a discussion of salvage harvest in Late-Successional Reserve and how this project meets those standards.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#5873-182	The salvage recommendations in the Final Draft Recovery Plan for the Northern Spotted Owl (December 1992) provide: 1. "Diseased and damaged trees are key structural components of suitable owl habitat... planning must acknowledge the considerable value of retaining dead and dying trees in the forest" 2. "salvage should not diminish the suitability for owls now or in the future" 3. salvage should be limited to areas with less than 40% canopy closure, and >10 acre disturbances, 4. "Surviving trees provide a significant residual of larger trees in the developing stand... Consequently, all standing live trees should be retained, including those injured (e.g. scorched) but likely to survive." 5. "focus on retaining snags likely to persist until suitable owl habitat has developed and the new stand is again producing large snags," 6. "snag retention guidelines should be developed for each physiographic province based on the general guidance provided in this section... Retention of all 20-inch dbh snags should be a starting point... Snags larger than 20 inches dbh are important to cavity nesters in all provinces, and have relatively slow decay rates. Smaller diameter snags are generally less important to cavity nesters and are less likely to persist until suitable habitat develops. Thus, the salvage of these smaller diameter snags should not impair the development of suitable habitat" 7. "guidelines are intended to prevent negative effects on owl habitat" 8. "because there is much to learn about the development of owl habitat, it seems prudent to allow only conservative quantities of salvage material from suitable owl habitat" 9. "although there is some uncertainty concerning the optimum density of snags to be provided for spotted owls, management to provide maximum likely benefit for owls and their prey is an appropriate strategy" 10. "retain adequate CWD quantities in the new stand so that in the future it will still contain amounts similar to naturally regenerated stands," etc. 11. "In addition to the stand level salvage guidelines, the cumulative effects of any proposed salvage should also be considered at a larger scale. One focus of the analysis should be on spotted owl activity centers known before the disturbance and thought to still be occupied after the disturbance. Where owls are still thought to be inhabit the area to be salvaged, the possible effect of the salvage around their activity centers should be considered. In particular, special consideration should be given to stands that could again provide foraging opportunities for owls in the near future. For example, small disturbances or the edges of large disturbances may provide habitat for owl prey and access to that prey by owls. Also, denser clumps of residual dead trees may offer foraging opportunities by owls. The most current knowledge of prey species should be considered in these cases, and special guidelines developed for these areas. The cumulative impact of salvage in these area should be considered." The final draft recovery plan salvage guidelines are partially excerpted in the Feb 1994 Spotted Owl FSEIS Volume II Appendix B, pages B-75 to B-77. The response to comments in Appendix F (page F-37) of the 1994 FSEIS makes clear that the salvage Standards & Guidelines in the NWFP ROD are derived from the Final Draft Northern Spotted Owl Recovery Plan (1992). The FEMAT report also spelled out the consequences if excessive salvage is allowed in LSRS, that is a. “the short- and long-term contributions of salvaged areas to Late-Succesional Reserves would be decreased. b. “There would be greater risks to watersheds [than if salvage were more limited] c. “There would be high levels of distrust of agency motives.” FEMAT page II-18. These are serious adverse consequences that are not disclosed and considered in the DEIS. Proposed activities, especially commercial log removal, will violate requirements to maintain long-term soil productivity. Soil compaction and erosion, loss of coarse woody debris, and erosion all adversely affect long-term productivity. Removal of a major fraction of the available organic matter through salvage of large trees will adversely affect soil productivity for decades or centuries. All the commercial removal activities will impede development of high quality LSR habitat in violation of the NFP ROD and violate the requirement to focus LSR salvage on long-term LSR objectives. See NFP ROD p. C-14. Salvage logging that removes most of the large material from extensive areas will prevent development of complex young forest reduce options to develop complex old forest. LSRs were set aside primarily for spotted owls and other species associated with late-successional old-growth. Salvage logging will adversely affect spotted owls and their prey. Proposed activities, especially commercial log removal, will violate the requirement to maintain optimal late-successional habitat, (such as by reducing cavity nesting opportunities for spotted owl prey such as flying squirrels and reducing woody debris far below optimal levels for ground-dwelling spotted owl prey species	The project adheres to Forest Plan standards and guidelines, which incorporate direction from the Northwest Forest Plan. Forest Plan Standards and Guidelines provide for retention of snags and Coarse Woody Debris. The EIS clearly describes the nature of fuel conditions after the fire, and indicates that those elevated fuels conditions pose a substantial potential risk of severe burning to developing forest stands. With the exception of an incidental tree, green trees are not proposed to be harvested; see Chapter 2 for a description of what is being proposed. See response to comment number 12346-55. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
110.08 - Forest Plan Consistency	#5873-3	Northwest Forest Plan standards allowing salvage logging in LSRs are 20 years out of date and need to be updated to respond to the best available science showing that development of complex old forests should start with complex young forests, not young forests simplified by salvage logging that removes structure, truncates succession, and homogenizes vegetation composition.	Revision of the Northwest Forest Plan is outside the scope of this EIS. The existing Northwest Forest Plan provides management direction until revision does occur. The impacts of salvage harvest are disclosed throughout Chapter 3 of the EIS. Analysis is based upon best available science as cited in the final EIS and supporting documents. See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves. Also see correspondence with the Regional Ecosytem Office regarding consistency of this project with the Forest Late Successional Reserve Assessment.
110.08 - Forest Plan Consistency	#5873-4	Salvage logging is contrary to the desired objectives for all reserve land allocations, including LSRs and riparian reserves. The Klamath Forest Plan says that the desired condition of LSRs is "Snags are common…" (Klamath LRMP p 4-83) In the decades after fire, snags are NOT common, and salvage logging will make that much worse.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Only a small portion of the fire affected area is being salvage harvested (Chapter 2 of the EIS, modified Alternative 3). See the wildlife section of Chapter 3 for a discussion of snags being left on the landscape. See response to Comment number 16695-4.
110.08 - Forest Plan Consistency	#5873-44	Current studies also have concluded that complex early seral habitat, created by higher-severity fire, has declined substantially since the era of fire suppression . Yet there are no forest plan provisionsto protect this habitat. Thus, in closing, there is a consensus of scientific opinion that post-fire logging and artificial conifer plantation establishment is one of the most ecologically damaging activities that could occur after mixed-severity fire. DellaSala, Hanson, Bond, Hutto, Halsey. 1-3-2014 letter to the USFS regarding Rim Fire salvage. http://www.californiachaparral.org/images/rimfirescientistsignonletter12_13_2013.pdf	Direct, indirect, and cumulative effects to wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, as well as management requirements to minimize adverse effects, are disclosed in Chapter 3 of the EIS, with appropriate references to the scientific literature. The Forest Service acknowledges that there is uncertainty and conflicting science for some of the management actions. However, impacts to forest resources have been analyzed based on the rational presented and input from Pacific Southwest Research Station scientists. Numerous scientific publications are cited and utilized in the assessment of effects, showing both positive and negative effects. See the beginning of Chapter 3 of the final EIS for a discussion of responsible opposing points of view. The Rim Fire actions and effects are outside the scope of this project.
110.08 - Forest Plan Consistency	#5873-72	The federal forest agencies now recognize that current methods and assumptions concerning snag habitat standards are outdated, and the old snag standards do not ensure enough snags to meet the intent of the standard, yet the agencies have not adjusted their management plans to account for this new information nor have they developed new standards that are consistent with the latest scientific information. As explained on the DecAID website: Why is DecAID needed? National Forest LRMP standards and guidelines for management of snags and down wood in the Pacific Northwest were based on wildlife species models and tools that were developed in the 1970s and 1980s (Thomas et al. 1979, Neitro et al. 1985, Marcot 1992, Raphael 1983). New information about the ecology, dynamics, and management of decayed wood has been published since then, and the state of the knowledge continues to change. Rose et al. (2001) report that results of monitoring indicate that the biological potential models are a flawed technique (page 602). There has been an evolution from thinking of large woody material as habitat structures, to thinking of decaying wood as an integral part of complex ecosystems and ecological processes. This paradigm shift has made the management of dead wood a much more complex task. We can no longer expect to go to our LRMPs or the biological potential model to get one number for the amount or size of snags and down wood that we can apply to all projects and to all acres. We are directed to use the best available science to manage ecosystems, and the best available science simply will not support business as usual for managing dead wood. http://www.fs.fed.us/r6/nr/wildlife/decaid-guide/ A few of the problems with the old standards are: • They failed to account for the fact that the number of snags needed for roosting, escape, and foraging can exceed the number of snags needed for nesting; • They failed to recognize that the number of snags needed to support viable populations of secondary cavity users may exceed the needs of primary cavity excavators; • The old standard failed to account for the size height of snags favored by some species; • In applying the old standards the agencies often fail to account for rates of snag fall and recruitment; • The old standards fail to recognize non-equilibrium conditions in our forests, i.e. some species rely on the natural large pulses of snags associated with large disturbances; • The old standards fail to account for the differential use of space and population density of different species; • The old standards ignore other important habitat features of dead wood, e.g. loose bark, hollow trees, broken tops, etc.	We agree that thinking on dead wood in the Klamath Province has evolved since the Forest Plan was signed in 1995 however that does not mean the Forest Plan as written does not provide for the needs species found on the Forest. We note that the Forest Plan was updated in 2010. The Klamath National Forest's Forest Plan incorporated the best available science at the time it written. Although there are many opinions and science-based findings from Mt. St. Helens and other locations, those findings are not necessarily applicable to the Klamath because fire regimes, and thus snag persistence, may be different than that found in the Klamath. No evidence other than general statements is presented that the Klamath's Forest Plan is not adequate. As a practical matter, roadside hazard cleanup (estimated 1,300 acres of concentrated mortality) and proposed salvage harvest in Alternative 3 Modified (estimated 5,800 acres) would likely affect less than 15% of the moderate to high severity burn areas (about 52,000 acres) in the Westside Fire Recovery Project area. Within all of those areas where salvage harvest or hazard tree removal would occur, Forest Plan standards for snags and coarse woody debris would still be met.An important vein of research in recent years has been the cycling of dead wood (including snags) and fuel loading created by stand replacement fire. Central in this discussion is the fire regime of the Klamath Province. Many reviewers presume the fire regime of the Klamath is the same as the more mesic forests of western Oregon Cascades and Coast Range. The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of snags and coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006), not "stand-replacement or mixed" that is typical in the Coast Range and western Oregon and Washington Cascades. , as noted by Taylor and Skinner (1997) and Skinner (2002), dead wood in the Klamath province rarely lasts long enough to actually decompose because snags and down logs are receptive to embers, and once partially rotted, are easily consumed by the frequent fires typical of the province. In a fire regime dominated by low to moderate severity effects, tree mortality with wildfire is by definition generally low. In the Klamath Mountains, patches of moderate to high severity fire, when they did occur historically, were more likely on upper slope positions and on south and west-facing aspects (Skinner et al. 2006). Patches of high severity would produce a pulse of snags and then eventually down logs, until those logs were consumed by subsequent fires. Because frequent low-moderate severity fires consume wood, it is unlikely that coarse woody debris accumulated to levels seen in more mesic old-growth Douglas fir forests of Oregon and Washington (Taylor and Skinner 1997). In the Klamath Mountains snags and logs were likely clustered in time and space, with long intervals and large areas where dead wood was sparse (Skinner 2002). Since the LRMP was developed in 1995, research has shown that even the amounts of snags and coarse wood debris noted in the LRMP may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values.

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			Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve."This suggests that even the amounts shown in the Forest Plan may exceed the historical amounts of wood found in the frequent, low severity fire environment of the Klamath Province. Under historical conditions, an event with the amount, large patch size and geographic extent of high severity fire that occurred in the Westside Fires would have been highly unlikely to occur because there would have been substantially less surface fuel, less fuel continuity and lower stand density compared to contemporary conditions. The limited surface fuels and discontinuous canopy that existed prior to the fire suppression era made it more likely that fire would burn on the ground rather than traveling into the tree canopy. Under historical conditions, there would have also been much less dead wood (both snags and down logs), with large areas on upper slopes and south and west aspects where there would have been little dead wood. The late successional stand structure under historical conditions would have been shaped by frequent low to moderate intensity fire that consumed most of the dead and down wood on upper slopes, and created a patchy stand structure with complex mosaics of age, size and structure (Wills et al. 1994). Large dead and down wood would have been present on lower slope positions, but at much lower densities than today. Beardsley and Warbington (1996) noted that "Fire suppression has altered the forest structure and created a buildup of fuels to such an extent that a natural fire in such an unnatural situation might put any remaining old growth forests at risk." Simply put, at the time of the Westside Fires there was a higher density of continuous surface fuels and trees because of fire suppression. As a result, the post-fire environment has a far higher density of standing snags than would have existed naturally in a post-fire environment. Retention of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current LSR land allocation (EIS Chapter 3 – Fuels). Therefore, we do not agree that all fire killed trees, or all large fire killed trees must be retained. To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The LSRA (1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the LRMP. These metrics were developed from studies of late successional and old-growth forests in northern California.An often express standard is that large structures (snags and down wood) should be retained until the next stand is capable of producing them. That standard cannot be met without breaking up the large areas of continuous fuels created by the Westside Fires (EIS Chapter 3 – Fuels; See also Appendix E). The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large "legacy" trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm most larger snags because they will not yet have developed the punky surface that is receptive to embers.Peterson et al. (2015) observed that: "post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels.See also, EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised.
110.08 - Forest Plan Consistency	#5873-76	Back in the early 1990s the Forest Service recognized the their forest plans were not adequate to maintain populations of spotted owls and they tried to develop plans to conserve spotted owl without following NEPA and NFMA procedures. The courts said they had to stop cutting owl habitat until they had complied with environmental laws. This is the same situation we find ourselves in today with dead-wood associated species. The agencies should stop harming dead wood habitat until they have a legal plan to conserve associated species over the long-term. Seattle Audubon Society v. Epsy, 998 F.2d 699, 704 (9th Cir. 1998) (an agency must re-examine its decision when the EIS "rests on stale scientific evidence and false assumptions").	See response to 5873-72. It is an extension of this comment, and is responded to there.

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110.08 - Forest Plan Consistency	#5873-8	Salvage logging will not meet standards & guidelines for snag habitat. Leaving just a few snags after salvage logging will meet standards for just a few years, until those few retained snags fall down and are not replaced. 9. The current snag habitat standards in the Northwest Forest Plan are based on outdated science ("potential population" methodology) and these standards do not provide enough habitat for the diverse life needs of many different species that use snags and dead wood. Meeting ecosystem objectives requires more snags than are called for in current standards, and more green trees are needed to recruit those higher snag levels. The FS needs to follow NEPA and NFMA procedures to consider new science, consider alternative standards, and finally adopt new standards that meet all the needs of wildlife (and other ecological functions) provided by snags and dead wood. Reducing snags on such a grand scale as this (and with such long-term impacts on the snag gap) is not permissible until the FS adopts new standards.	See Response to 5873-72 and 12346-55.
110.08 - Forest Plan Consistency	#6271-1	I appreciate your work in developing the Northwest Forest Plan since it balances the need to protect "late-successional" old-growth reserves and geological riparian reserves, and focusses logging along major access roads. I was dismayed to learn that these well developed policies are to be ignored so that recently burned areas in the KNF can be logged. Such logging on steep unstable slopes will damage the ecological values of the area and go against settled policy in the Northwest Forest Plan. Please follow your plan and stop this irresponsible logging project.	The Westside Fire Recovery project is project-level National Environmental Policy Act, not planning level analysis under NFMA. The development of the Northwest Forest Plan is completed, per the 1994 record of decision. The Klamath Forest Plan, signed in 1995 incorporated the Northwest Forest Plan. The project is consistent with standards and guidelines in the Klamath Forest Plan, and therefore, the Northwest Forest Plan. See Chapter 2 of the EIS for a description of proposed treatments (modified Alternative 3) and associated project design features for resource mitigation.
110.08 - Forest Plan Consistency	#6277-2	Bird nesting is severely curtailed: Haggard, M., and W. L. Gaines. 2001. Effects of stand-replacement fire and salvage logging on a cavity-nesting bird community in eastern Cascades, Washington. Northwest science 75, no. 4 (2001): 387-396. Saab, Victoria A., Robin E. Russell, and Jonathan G. Dudley. "Nest densities of cavity-nesting birds in relation to postfire salvage logging and time since wildfire." The Condor 109, no. 1 (2007): 97-108. I am profoundly disturbed by the danger to indigenous and threatened species which will most likely be exacerbated by the continuing and extreme loss of forest interior habitat and its most probable effects on forest species of this clearcut logging of late-successional old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project. Fire is an inevitable and natural occurrence in this planning area. It is unacceptable to exploit wildfire to fast-track dangerously fragmenting, controversial and illegal logging of protected forests that belong to all Americans. The Northwest Forest Plan becomes meaningless if reserves are only protected until timber planners decide to log them. I take grave exception to this policy pandering only to private logging interests at the expense of species diversity, healthy conservation policies, and endemic populations of species at risk from loss and fragmentation of interior habitat blocks of sufficient size through devastating "salvage" which depauperates all and all the future. Please recognize the scientific work of fire ecologists, assist the ecological grounds of a nnonconsumptive future for impacted communities and sufficiently respect and consider the tradition and resource-understanding of local tribes. Please focus on restoration and fire safety instead of pushing clearly deleterious and unscientific, divisive and controversial clearcut logging proposals on steep slopes in key watersheds and in critical wildlife habitat. Klamath National Forest timber planners appear to be acting contrary to best known practices, and this Timber Sale must NOT be approved. The Forest Service needs to meet its obligation to be a good steward of the land. Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves. Please deny the Westside Timber Sale, and any further salvage logging policies.	Salvage harvest is proposed to reduce fire risk and promote the regeneration of future habitat. We disagree with the assertion that salvage in LSRs in inappropriate or inconsistent with plan direction; see the Salvage in Late Successional Reserve section of Chapter 1 of the final EIS. Also see the beginning of Chapter 3 for a discussion of responsible opposing points of view. 5873-72 The Westside Fire Recovery is consistent with the Forest Plan, which includes standards and guidelines from, and is consistent with, the Northwest Forest Plan. The Westside Fire Recovery project maintains snags and coarse woody debris on the landscape for use by wildlife species through project design (see Chapter 2 of the EIS). No clear-cutting is proposed. See watershed project design features in Chapter 2 of the final EIS; logging on steep slopes is not proposed. The EIS incorporates best available science. Tribal consultation has been ongoing. Effects to resources are disclosed in Chapter 3 of the EIS.

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110.08 - Forest Plan Consistency	#6646-1	I'm writing because I'm very concerned that the "Westside Fire Recovery Project" in Klamath National Forest may cause undue harm to our local forest resources. As an environmental scientist, born and raised in Oregon, I have come to understand that fire is an integral part of ecosystem functioning, as are old growth trees. Post-fire logging will stunt the natural recovery processes of the forest and remove essential ecosystem elements. Salmon, one of our area's most charismatic and prized species, will be negatively impacted, not to mention numerous other organisms and ecosystem function overall. While economic development is important to the success of many communities, it is not an excuse to exploit the ecosystem resources on our reserved lands. Post-fire logging would cause undue harm for years to come, and leave our forests beyond a recoverable state. Please, if you value our forest resources, which make the Pacific NW so unique, please implement the Northwest Forest Plan and withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge the importance of old growth characteristics; see Chapter 2 of the final EIS for wildlife project design features that retain legacy components. As described in the purpose and need, the project will promote restoration of habitat and watersheds. See Chapter 2 for a description of legacy site treatments and treatments in Riparian Reserves for this purpose. See Chapter 3 of the final EIS for a discussion of effects by resource area and Alternative. See the beginning of Chapter 3 of the final EIS for a discussion of responsible opposing points of view.
110.08 - Forest Plan Consistency	#7563-1	I am shaking my head, by the extreme clearcut logging of late successional and old growth reserves as well as geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project. I'm hoping it doesn't happen however, Fire is a possible and natural occurrence down the road in this planning area. A great reason why I am including my letter. It is unacceptable allowing this illegal logging of protected forests that belong in the hands of earth loving Americans. The Northwest Forest Plan becomes meaningless if reserves are only protected until timber planners deciding on logging them. This needs immediate change. Also, a program start up of take a tree / plant a tree, must be in place immediately. From the damage already occured on previous deforestations. It takes much time waiting on a tree growing upwards in the direction of adulthood, giving us all their benefits of oxygen, medicines, music and protecting wildlife's home base. Kindly join us now, with fire ecologists, forestry specialists, impacted communities and local tribes focusing on restoration and fire safety instead of what seems like pushing divisive and controversial clearcut logging proposals on steep slopes in key watersheds and critical wildlife habitats. Klamath National Forest timber planners should not be allowed acting above the law. The Forest Service needs meeting of the minds, in betterment with its obligation, practicing being a good steward of the land. Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late successional and geological reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This comment is not supported by scientific rationale. In areas proposed for salvage harvest, site preparation and planting are also proposed. The project does not proposed clearcutting; see Chapter 2 for a description of proposed actions, including project design features for resource protection. The Forest Plan, which incorporates all direction from the Northwest Forest Plan, does allow for salvage harvest in Late Successional Reserve. The project also meets other law, regulation, and policy. See Chapter 1 for a discussion about salvage harvest in Late Successional Reserves. See the Chapter 1 sections on Purpose and Need for the proposed treatments and Management Direction for information on how the proposed treatments comply with all law, regulation, policy, and Forest Plan direction in an effort to reach the desired conditions.
110.08 - Forest Plan Consistency	#8435-1	I'm writing out of concern that the "Westside Fire Recovery Project" in the Klamath National Forest is in fact a plan to clearcut old-growth trees. Such clearcutting is irresponsible, and seems economically driven rather than science-driven -- which is counter to the purpose of reserved lands. I would expect any biologists worth their salt to advise against such clearcutting, as it disrupts the natural post-fire recovery in such late successional forests, and would degrade salmon habitat. Do not exploit last summer's wildfire to push through short-sighted practices such as clearcutting of old growth. Rather, allow this naturally burned habitat to achieve true recovery, including recovery of at-risk species such as coho, northern spotted owl and the Pacific fisher. Please adhere to the Northwest Forest Plan and withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project.	The Forest Plan, which incorporates all direction from the Northwest Forest Plan, does allow for salvage harvest in Late Successional Reserve. See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves. No clear cutting is planned. See Chapter 2 of the EIS for what is being proposed, including project design features for mitigation. Snags are being retained as are legacy components, as consistent with project design. See Chapter 3 for a discussion of project impacts by resource area. This is not a "green" timber sale but a salvage harvest and restoration project in response to the effects of the 2014 wildfires. The project has been designed in response to the purpose and need statements in Chapter 1 of the EIS and in consideration of best available science, as described throughout the final EIS and supporting documents. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See response to comment number 6271-1.

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110.08 - Forest Plan Consistency	5873-129	The Northwest Forest Plan ROD page 66 says that "Salvage is not required to be beneficial" but the February 1994 Biological Opinion for the Northwest Forest Plan disagrees. The Northwest Forest Plan Standards & Guidelines must be interpreted to err on the side of caution and retain all large trees. The BiOp says: a. "ASSUMPTIONS: To ensure that the analysis under section 7 of the Act had a measurable baseline, or starting point, the following assumptions were identified to assist in the development of this opinion: 1. Riparian and Late-Successional Reserves (LSRs) will retain reserve status and will not be available for timber production other than as provided in Alternative 9 (i.e., salvage and silvicultural treatments beneficial to the creation of late-successional conditions)." P 4. b. "the alternatives presented in this SEIS propose a network of designated areas managed primarily to protect and enhance habitat for the northern spotted owl and other late-successional and old-growth forest related species" p 5. c. "Late-Successional Reserves would be managed to protect and enhance habitat for late-successional and old-growth related species including the northern spotted owl and marbled murrelet. Some level of silvicultural treatment (such as thinning young stands) is permitted in certain age stands to accelerate the development of old-growth habitat characteristics, subject to review by the Regional Ecosystem Office…. Stand and vegetation management of any kind, including prescribed burning, is considered a silvicultural treatment and is subject to review." p 5. d. "SPOTTED OWL ACTIVITY CENTERS: … Salvage of dead trees would be based on guidelines adapted from the Final Draft Spotted Owl Recovery Plan…" p 7. e. "CONSERVATION RECOMMENDATIONS: … Restricting harvest activities in LSRs to thinning and other silvicultural treatments that are beneficial to creation of late successional forests as identified in Alternative 9 is believed, at the present time, to be necessary to promote the conservation and recovery of listed species consistent with Section 7(a)(1) of the Endangered Species Act." P 48.	The Westside Fire Recovery intends to accelerate recovery of burned landscapes into forests with late-successional characteristics while maintaining habitat values in the interim. Salvage harvest proposed within Late Successional Reserves is for the promotion of future habitat and for the reduction of fire risk in Late-Successional Reserve and for northern spotted owl habitat. See Chapter 1 for a discussion of salvage harvest in Late Successional Reserves. The Forest Plan incorporates direction from, and is consistent with, the Northwest Forest Plan. The project is consistent with the Forest Plan and the Late Successional Reserve assessment. See correspondences with Regional Ecosytem Office in Appendix E of the final EIS. See Chapter 1 for a discussion of salvage in LSRs. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See the Wildlife section of Chapter 3 for a discussion of Forest Plan consistency.
110.08 - Forest Plan Consistency	5873-129	The Northwest Forest Plan ROD page 66 says that "Salvage is not required to be beneficial" but the February 1994 Biological Opinion for the Northwest Forest Plan disagrees. The Northwest Forest Plan Standards & Guidelines must be interpreted to err on the side of caution and retain all large trees. The BiOp says: a. "ASSUMPTIONS: To ensure that the analysis under section 7 of the Act had a measurable baseline, or starting point, the following assumptions were identified to assist in the development of this opinion: 1. Riparian and Late-Successional Reserves (LSRs) will retain reserve status and will not be available for timber production other than as provided in Alternative 9 (i.e., salvage and silvicultural treatments beneficial to the creation of late-successional conditions)." P 4. b. "the alternatives presented in this SEIS propose a network of designated areas managed primarily to protect and enhance habitat for the northern spotted owl and other late-successional and old-growth forest related species" p 5. c. "Late-Successional Reserves would be managed to protect and enhance habitat for late-successional and old-growth related species including the northern spotted owl and marbled murrelet. Some level of silvicultural treatment (such as thinning young stands) is permitted in certain age stands to accelerate the development of old-growth habitat characteristics, subject to review by the Regional Ecosystem Office…. Stand and vegetation management of any kind, including prescribed burning, is considered a silvicultural treatment and is subject to review." p 5. d. "SPOTTED OWL ACTIVITY CENTERS: … Salvage of dead trees would be based on guidelines adapted from the Final Draft Spotted Owl Recovery Plan…" p 7. e. "CONSERVATION RECOMMENDATIONS: … Restricting harvest activities in LSRs to thinning and other silvicultural treatments that are beneficial to creation of late successional forests as identified in Alternative 9 is believed, at the present time, to be necessary to promote the conservation and recovery of listed species consistent with Section 7(a)(1) of the Endangered Species Act." P 48.	This comment is largely a recitation of the assumptions of the Biological Opinion for northern spotted owl on the Northwest Forest Plan and is not specific to the environmental consequences of the proposed Westside Fire Recovery Project. Management direction for the Westside Fire Recovery Project is found in the Forest Plan of the Klamath National Forest, not the Biological Opinion for the Northwest Forest Plan. The Westside Recovery Project seeks to protect and enhance late successional forest habitats by reducing the probability of future stand replacing fire and accelerating the development of late successional stand condition in the fire area. The Forest Service must consult with, and receive a Biological Opinion from the U. S. Fish and Wildlife Service on any actions that may affect northern spotted owls. See correspondences with Regional Ecosytem Office in Appendix E of the final EIS. See Chapter 1 for a discussion of salvage in LSRs. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See the Wildlife section of Chapter 3 for a discussion of Forest Plan consistency.

Code	Comment Number	Comment Text	Response
111 - Public Involvement	#17501-1	Despite the fact that the public comment period was extended for an additional fifteen days, I believe that the comment period should be extended even further to allow for further public review of this massive, landscape scale project. The fact that the KNF has not completed botanical or wildlife surveys for this project I do not see how the public can make informed and meaningful comments according to NEPA standards and guidelines. Without the relevant data and scientific review that normally goes into a project of this scale, the public will be left out of this process, or at least will only be able to comment on the portion of the project that has so far been completed.	The Forest Service developed an EIS in accordance with the National Environmental Policy Act and all applicable federal and state laws and regulations. From the initiation of the project through release of the final EIS the Forest consistently engaged the public, local officials, federally recognized tribes, state, local and federal regulatory agencies, and local organizations. The draft EIS and supporting documents were released for public review during the comment period. There is no requirement for surveys to be completed at the time of public comment. In fact, many surveys are ongoing through implementation of the project. Project design features are developed, as appropriate, to address the need to protect resources as information is determined; see botanical project design features in Chapter 2 of the EIS for an example of this. Forest Plan consistency was reviewed by the IDT and included in analysis. In accordance with 36 CFR 220.3,"Adaptive management. A system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting those outcomes; and, if not, to facilitate management changes that will best ensure that those outcomes are met or re-evaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain."
111 - Public Involvement	#18852-10	It is unfortunate that professional input from esteemed ecologists and cultural specialists (i.e. conservation biologists, academia, scientific studies, cultural input et. al.) is not incorporated in greater detail, and specifically referenced in the DEIS.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The proposed action and action Alternatives were developed through a public scoping process in strict accordance with the National Environmental Policy Act and all applicable federal and state laws and regulations. The action Alternatives were analyzed in detail by subject matter scientists with all known environmental impacts disclosed based on the best information and data available. Impacts to forest resources have been analyzed based on the rational presented and input from Pacific Southwest Research Station scientists. Numerous scientific publications are cited and utilized in the assessment of effects, showing both positive and negative effects. The literature reviews listed in the comment are referenced and cited in the EIS in the discussion of effects of the Alternatives on various resources. Best available science is considered throughout the EIS and supporting documents and is responded to throughout response to comments on the draft EIS.
111 - Public Involvement	#18852-56	I am concerned that the final determination of alternatives & management for the "Westside Recovery" project will not allow for necessary input, partially as a result of the shortening of the period from the "Draft Environmental Impact Statement" to the "Record of Decision". As stated within the "Westside Fire Recovery Project" Draft Environmental Impact Statement (DEIS): "There would be no provision for administrative challenge (objection) prior to issuance of a Record of Decision". As there is a stated flexibility from the Klamath NF Forest Supervisor (Patricia Grantham) to integrate aspects of multiple alternatives, this final "recommendation" should also be available for public comment and review.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 17501-1. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-2.
111 - Public Involvement	#18865-1	How may I stay involved?	The formal comment period for the draft EIS has now closed, however the Forest encourages public engagement from project initiation through implementation.
111 - Public Involvement	#18907-1	The Draft EIS public comment period should be increased by at least additional 60 days to allow for reading and commenting. The 450 page document is very detailed with 5 major alternatives and 1 alternative provided by the Karuk Tribe. The public deserves more than a 45 day period to comment.	The Forest Service developed an EIS in accordance with the National Environmental Policy Act and all applicable federal and state laws and regulations. This project is compliant with the regulations at 40 CFR 1500-8. From the initiation of the project through release of the final EIS the Forest consistently engaged the public, local officials, federally recognized tribes, state, local and federal regulatory agencies, and local organizations. The draft EIS and supporting documents were released for public review during the comment period. There is no requirement for surveys to be completed at the time of public comment. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Please refer to comment number 17501-1. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-2.

Code	Comment Number	Comment Text	Response
111 - Public Involvement	#18918-3	I am appalled that the Klamath National Forest has the nerve to contact the White House Council on Environmental Quality to ask for smaller time frames within which one can comment about the major plans by the action alternatives to severely damage habitat and watercourse quality in the Westside "Fire Recovery" Project area. Apparently, it might really be the White House Council on Pandering to Timber Industry Interests, but that group should be focused on enforcing rather than skirting our environmental laws. (IN THE FINAL EIS, PLEASE EXPLAIN WHO EXACTLY FROM THE KLAMATH NATIONAL FOREST WORKED WITH WHOM AT THE WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY TO WORK OUT THIS ARRANGEMENT TO GET LESS TIME FOR INPUT ON THIS WORST PROPOSAL FOR NATIVE SALMON WATERSHEDS THAT THE LOWER 48 STATES HAS SEEN IN RECENT DECADES.)	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Alternative arrangements are consistent with National Environmental Policy Act regulations per 40 CFR 1506.11. Rationale for why it was requested and the approved, including the names of who approved it, can be found on the project's website and in the record. Forest Supervisor Patricia Grantham extended the comment period by 15 days (from 30 to 45 days) after receiving Alternative arrangements that reduced the required timeline from 45 to 30 days. This adjustment was made in order to provide additional time for public review and comment. Since the draft EIS comment period, the agency decided not to seek Alternative arrangements to eliminate the requirement of the 90-day wait period between draft and final EIS or the 30-day wait period between the final EIS and ROD, as originally considered. See Chapter 1 of the EIS for more details about Alternative arrangements as it relates to this project.
111 - Public Involvement	#18934-10	Alternative Arrangements The Council on Environmental Quality (CEQ) granted an expedited comment period for the DEIS and is considering eliminating the requirement for 90 day period between the publication of the Draft EIS and the Record of Decision (ROD), as well as the 30 day period between the publication of the Final EIS and the ROD, pending the Forest address the issues raised in their letter March 6, 2015. In reading this letter, it is clear CEQ is strongly encouraging the Forest to enhance public stakeholder engagement, improve government-to-government consultation with area tribes, and actively discuss several of the key issues raised by conservation groups and tribes since this project's inception, through the process to formulating the Final EIS. We have spoken with CEQ and clarified that while the WKRP can't be engaged like other collaborative groups, since the Forest is a participant along with other federal agencies, the WKRP strategies mutually agreed to by a diverse group of stakeholders should have been formulated into an alternative for analysis. The Karuk Tribe created an alternative based on collaboration with MKWC, SRRC, and environmental groups, and other local individuals that demonstrates how the WKRP strategies apply to the Westside Project. Should the Karuk Alternative, or some very similar alternative be chosen for implementation, we would consider supporting the expedited timeline for this process with CEQ.	Since the draft EIS comment period, the agency has decided not to seek additional Alternative arrangements for the Westside Fire Recovery project. This includes not seeking exception to the 90-day wait period between the draft and final EIS or the 30-day wait period between the final EIS and the ROD. See Chapter 1 of the EIS for a discussion of Alternative arrangements. See the public involvement section of Chapter 1 of the EIS and the consultation discussion under Chapter 1 of the EIS. The Forest has engaged the public through scoping and comment periods in accordance with the regulations at 40 CFR 1500; see Chapter 1 of the final EIS. The Forest's consultation efforts with the Karuk tribe have been unprecedented on this Forest; see Chapter 1. See the end of Chapter 2 (under Alternatives considered through consultation) for details on how the Karuk Alternative has been considered and incorporated to the extent practical. See response to number 18934-8 regarding the WKRP strategy.
111 - Public Involvement	#18934-7	The two local collaborative groups formed to provide input on this project to the Klamath NF on this project (one by Siskiyou County, the other by the National Institute for the Elimination of Catastrophic Wildfire) lacked members of the environmental community or the Karuk Tribe. While these collaborative efforts did capture the thoughts of local participants with deep land knowledge born from living in this place, the membership in these groups shared a common belief that salvage logging should be maximized for the greatest social, economic and ecological good. Unfortunately, the dialogue and mutual understanding that could have taken place had the diversity on these collaborative groups been more inclusive did not occur. These two collaborative groups appear to be wholeheartedly supporting the Forest in implementing Alternative 2, or some more aggressive alternative as yet to be defined. This does not fairly represent many residents of Western Siskiyou County.	The collaborative groups were not developed by the agency and their membership and mission is not determined by the agency. The creation of two local collaborative groups were formed, which included a Citizens' Advisory Committee that was approved by the Siskiyou County Board of Supervisors, and The Westside Klamath Steering Committee that was formed by National Institute for the Elimination of Catastrophic Wildfire. Both collaborative groups were charged to serve as advocates for actions regarding the recovery and restoration of the Westside Fire Recovery project area that are reflective of, and responsive to, the needs of the residents of Siskiyou County; help evaluate the draft EIS; and to suggest guidance for finding balance between protecting resources (such as wildlife, fisheries, and water quality) and protecting human life and safety, public infrastructure, private property, and communities. From the initiation of the project through release of the final EIS the Forest consistently engaged all members of the public, local officials, federally recognized local tribes, state, local and federal regulatory agencies, and local organizations. See Chapter 1 of the EIS for a description of the public involvement efforts made by the agency in accordance with 40 CFR 1506.6.Comments and recommendations from the two collaborative groups will be considered along with all of the other public comments that were received in response to the draft EIS, including many from local residents. The Forest will continue to work closely with the Karuk Tribe and other tribes prior to making a decision on this project. The collaborative groups were developed outside of agency control; their membership was not determined by the agency. In response to consultation and public comment, the Forest Service has developed a modified Alternative 3, which is the preferred Alternative of the final EIS. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
111 - Public Involvement	#18934-8	We are disappointed that several comments suggesting the Forest utilize the values and strategies outlined in the Cohesive Strategy and the WKRP to restore historic fire regimes were not considered relevant to alternative development. How we manage fires in the future on this landscape is directly tied to whether or not this project creates strategic fuelbreaks around communities, re-plants moderate and high severity fire areas to produce even-aged conifer stands, and prepares for the re-introduction of prescribed fire (or managed wildfires) into these burn footprints.	The Forest Service developed issues and Alternatives in response to public comments from scoping. See Chapter 1 and 2 for issues and Alternatives developed, respectively. The project incorporates concepts mentioned in this comment, including strategic fuel breaks, re-plantings where appropriate, and prescribed underburning. Treatment areas within the Westside Fire Recovery Project are anticipated to make resilient ecosystems and make communities within the project area safer. These are components of the Cohesive Strategy and the Western Klamath Restoration Partnership. The treatment design of the Westside Fire Recovery Project will assist in future wildland fire suppression efforts as well as areas in which prescribed fire and other treatment activities can take place. The Vegetation and Fire and Fuels Reports, Chapter 3 of the EIS, describes proposed treatments and analyzes their effects.

Code	Comment Number	Comment Text	Response
111 - Public Involvement	#18937-5	Also worthy of note is the discrimination that occurred during the public comment period. Some people could easily access a printed version of the DEIS and associated planning appendixes and maps, but others relied on public sources of information, which were often difficult to navigate and/or access. In other words, attaining a large document with comparable alternatives and obscure maps became an obstacle for public participation.	The agency made documents available to the public in accordance with 40 CFR 1506.6. The agency did not discriminated. Contact information of where to request additional information was provided in all draft EIS distribution material; see federal register publications and distribution material in the project record and project website. The Forest Service posted the draft EIS and supporting documentation on the project's website, which is accessible to anyone from the public. From the website, the public had the choice of reviewing it electronically or printing documents. Hard-copies of the draft EIS were also made available at Klamath National Forest offices, libraries, and community centers as well as shared at some public meetings (after publication). Hard-copies were also made available upon request, and the Forest Service did share copies as requested. Because of the number requested, the Forest Service printed more copies for distribution. See Chapter 1 for more information about public involvement.
111 - Public Involvement	#18937-6	In addition, maps included in the DEIS were duplicative and difficult to read. Unique and significant features of the landscape, including rivers, streams, roads and landmarks were difficult to discern without additional resources. These features of the project's promotion incurred cost and contributed to local public involvement. In addition, public meetings hosted by project managers to discuss the Project were facilitated with methods that discouraged programmatic understanding and relied on individual discussion with Project managers for information. This, in addition to the "get the cut out" priority voiced by KNF, tainted the public process for evaluation and involvement required under NEPA. As a member of the local community and on behalf of my constituency at Klamath Riverkeeper, I can attest to a lack of knowledge among affected citizens of this the proposed large salvage logging and roadside logging project. Very few local people understand the number and location of clearcut logging units, riparian area logging, road building and hauling of commercial logs through small communities. Frankly, people do not understand the scale, scope or seriousness of the Westside Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Scoping of the Westside Fire Recovery project was carried out in accordance with the requirements of 40 CFR 1501.7. The Forest provided maps for public project review and involvement compliant with 40 CFR 1506.6(b). Landscape features and roads were provided on the maps. Maps were provided in the back of the draft EIS, which was available on the project's webpage and hard-copy at several locations and by request. 11X17 map booklets by Alternative were also posted online. Also posted were 8.5 X 11 map booklets by Alternative that were 1: 63,360 scale. All electronic maps were provided in .PDF format and were georeferenced (meaning you can search by latitude and longitude), searchable (e.g. by key word search of site locations or roads), capable of being zoomed-in to see details at larger scales, and color blind friendly. The Forest Service conducted multiple public meetings and provided presentations at other group meetings, as invited. See Chapter 1 of the EIS for details. The intention of the agency is clear in the purpose and need described Chapter 1 of the EIS. Chapter 2 of the EIS describes the proposed actions, including the modified Alternative 3 which has become the preferred.
111 - Public Involvement	#18942-1	I am writing to express my support the Westside Fire Recovery Project on the Klamath National Forest. To ensure this project is successful, I urge you to issue an Emergency Situation Determination (ESD) as soon as possible. An ESD is critical to allowing both the Forest Service and our communities to successfully salvage burned timber, reduce safety hazards, and increase the likelihood and speed of reforestation. If the ESD is not issued, the value of the burned timber will significantly diminish, making the recovery process much more difficult and expensive. I am concerned that if you don't issue this request, communities near the Klamath National Forest will see major forest hazards, increased dry fuels buildup and additional costs for salvage logging and roadside hazard tree removal. It would also deny communities the opportunity to raise much-needed revenue for critical local services. Our communities and local National Forest are at risk. Please issue an Emergency Situation Determination for the Westside Fire Recovery Project without delay.	Statement of support. Position statement; see response to comment number 16695-4. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-1 and 2. See response to number 12368-1.
111 - Public Involvement	#18978-1	Dear Tom, The Klamath NF (R-5) has requested an Emergency Situation Determination allowing them to proceed with the Westside Fire Recovery Project. I know you are not inclined to listen to retirees on these matters, but I would be negligent not to speak out. As retired R-5 Regional Forester I am unable to stand back and not support a timely recovery plan for this area. Too many instances within the National Forest System have been improperly denied reasonable response to the need for fire restoration. Right here in my back yard in Oregon there are devastating examples of neglect that will extend the damage to watersheds and restoration of the natural ecosystem for several generations. I urge you to do what is right and not simply listen to those who insist that these devastating events should be left to nature. Our National Forests do not deserve such neglect.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-1 and 2. See response to number 12368-1.
111.01 - Outreach/ Education	#17481-18	Public information needs to be reader friendly. More direct mailings would reach more people with the facts.	Thank you for your suggestion regarding the Westside Fire Recovery Project. The Forest did distribute direct mailings for scoping and comment period. See Chapter 1 of the EIS and the project record for distribution details.

Code	Comment Number	Comment Text	Response
111.01 - Outreach/ Education	#17481-6	One more comment is about public involvement. I know what a pain it is to involve adjacent property owners, especially with a large project like this on the fast track. A PO Box newsletter (something more attractive to readers than a scoping letter) could go a long way to keep the public informed. My impression is that the public in and around the proposed action have no clue what is going on. My environmentalist neighbors think "they are going to log it anyway" and those interested in economics think nothing is being done.	Thank you for your comment and suggestion regarding the Westside Fire Recovery Project.
111.01 - Outreach/ Education	#18879-8	Alternative 2 will conduct salvage logging and fuel treatment/site prep/reforestation near or directly adjacent to the Pacific Crest Trail (PCT). This is appropriate recovery treatment for those sites. What appears to be missing is a serious, well designed interpretive effort to explain the rationale behind these activities and the objectives being accomplished. The PCT is heavily used by a broad array of local, regional, national,and international hikers who are not familiar with the short term/long term costs and benefits of management. It is likely that the movie "Wild" will trigger an increase in use over the next several years. Without an effective explanation of the objectives being accomplished by the recovery treatments a lot of these users will have a negative reaction to what they see. There is a BIG OPPORTUNITY here.	Thank you for your suggestion regarding the Westside Fire Recovery Project. The Forest will post a simple one page flyer at Cold Spring Trailhead and Grider Creek Campground outlining the 2014 fire event, the project's purpose and need, and recovery objectives and treatments.
111.01 - Outreach/ Education	#19079-7	Why was the Yurok Tribe not included in the list of tribal people consulted? What effort was expended to notify the tribe?	The Yurok Tribe was not included in government to government consultation with local federally recognized tribes because the Yurok's territory doesn't include any of the lands managed by the Klamath National Forest.
111.01 - Outreach/ Education	#6425-1	I attended one of your open house's on this project and came away very disappointed with the way it was presented. It was as if you didn't want to have to face questions. A group of people looking at multiple maps which may or may not be one of the alternatives, then taking questions about what they were seeing to each other and to the FS personnel everyone talking at once only to find there were no answers forthcoming. Sound confusing? It was!	The Forest Service sponsored six open houses, six presentations and field trips for the public prior to the release of the draft EIS with the intent to inform, consult, and involve interested parties in an interactive, in-person manner. Multiple open houses were also provided by the Forest Service during the comment period. See Chapter 1 of the EIS and the project record for details. It was the intent of the Forest Service that these preliminary open houses, presentations and field trips provide information for the public so that when the draft EIS was published, interested parties were prepared to make informed comments on the proposed action and Alternatives. Input from the public open houses were captured and included in the draft EIS and project record for consideration in the decision.
111.02 - Collaboration, Meetings	#17481-42	Regarding page v of DEIS, The Westside Klamath Steering Group, Bruce Courtright clarified a statement about the group's purpose which states "The purpose of the group is to generate, through a collaborative process, consensus recommendations to the Forest Service". Bruce stated this is misleading and clarified that while the group will generate recommendations it will include individual comments regardless of consensus. Can this section be altered? The group consists of experienced and qualified persons that can make recommendations. Although, he did mention that so far no one from group has objected to any of the concerns or comments of fellow participants. Larry Alexander added that group members in attendance or participating through phone or email will help to determine any recommendation decisions moving forward.	Thank you for your comments regarding the Westside Fire Recovery Project, clarification to the purpose of The Westside Klamath Steering Committee has been added to the final EIS to reflect individual comments from the group will be considered in determining recommendations.
111.02 - Collaboration, Meetings	#17481-49	Would like to see input similar to the Eddy Gulch LSR project, and more work like it. CWPP became part of the design.	This recommendation is beyond the scope of analysis for this project.
111.02 - Collaboration, Meetings	#17481-50	A representative of our Steering Group should be invited to all of these meetings. There should be transparency for all consultation meetings between the USFWS, NOAA Fisheries and the FS regarding our Westside Recovery.	Thank you for your comment regarding the Westside Fire Recovery Project.
111.02 - Collaboration, Meetings	#18852-32	15) Public meetings were not as informative as they should have been, using an "open-house" format versus a thorough presentation of alternative actions and a description of management objectives clearly stated by "Line-officers". This format did not create an atmosphere of informative education, clear description of purpose, nor a venue where public input would be best informed and respected.	Thank you for your comment regarding the Westside Fire Recovery Project. Please refer to the response to comment number 6425-1.

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111.02 - Collaboration, Meetings	#18918-7	I object that "project specific meetings" or "field trips" were not scheduled prior to scoping. When a project has such a major impact on listed species which federal land management agencies are supposed to be protecting, one should give extra time rather than reduced time for field trips and comment periods	Thank you for your comment regarding the Westside Fire Recovery Project. Please refer to the response to comment number 6425-1.
111.03 - Comment Period	#18852-1	It is difficult to feel fully informed and adequately express the totality of my concerns and hopes for the "Westside Fire Recovery Project" ("Westside Recovery"), this is in large part due to the enormous scale of the project area and also to the rapidity in which this project is being planned and implemented.	Procedural question. The Forest Service has provided notifications and public involvement opportunities to encourage public understanding of the project and comments. See Chapter 1 of the EIS for public involvement efforts. The Forest Service hosted several open houses in order The Forest Service developed an EIS in accordance with the National Environmental Policy Act 40 CFR 1500-8 and all applicable federal and state laws and regulations. From the initiation of the project through release of the final EIS the Forest consistently engaged the public, local officials, federally recognized tribes, state, local and federal regulatory agencies, and local organizations. The draft EIS and supporting documents were released for public review during the comment period. There is no requirement for surveys to be completed at the time of public comment.
111.03 - Comment Period	#18918-7	I object that "project specific meetings" or "field trips" were not scheduled prior to scoping. When a project has such a major impact on listed species which federal land management agencies are supposed to be protecting, one should give extra time rather than reduced time for field trips and comment periods	There is no requirement to schedule meetings prior to scoping. The Forest Service notified the public by email, news releases, and the website and other means of all public meeting opportunities.
111.04 - ESD, in favor	#12368-1	Please adopt the Emergency Situation Determination in this regard.	The Emergency Situation Determination was granted by the Chief of the Forest Service for this project (reference). See response to comment number 17501-2.
111.04 - ESD, in favor	#17287-1	I am a resident of Siskiyou County and I reside on the Klamath River. I was in the midst of the Wildfires of 2014. I am writing to give my support for the Westside Fire Recovery Project. I would like to see as much harvesting of the burned trees as possible. I do support the emergency efforts that need to be done immediately. Please do not wait until the wood is unusable and the fire risk in our area increases.	See response to number 12368-1.
111.04 - ESD, in favor	#18941-2	Our communities and local National Forest are at risk. Please issue an Emergency Situation Determination for the Westside Fire Recovery Project without delay. Without that prompt determination, the tactics of delay we have repeatedly witnessed around efforts to restore these lands will succeed and ultimately set the course for irreparable damage.	See response to number 12368-1. See response to comment number 17501-2.
111.04 - ESD, in favor	#19019-1	Dear Forest Supervisor Grantham, I am writing to express my support the Westside Fire Recovery Project on the Klamath National Forest. To ensure this project is successful, I urge you to issue an Emergency Situation Determination (ESD) as soon as possible. An ESD is critical to allowing both the Forest Service and our communities to successfully salvage burned timber, reduce safety hazards, and increase the likelihood and speed of reforestation. If the ESD is not issued, the timing delay will significantly diminish the value of the burned timber, compromising the recovery process. The area in question burned so severely that it is just unbelivable that anyone would argue against efforts to help restore lost habitats. Many of the same folks currently protesting this project are responsible for delaying past green timber sales that certainly would have limited the expanse of this wild fire event by reducing overstocked stands and providing opportunities to safely combat the wildfire more directly. I am concerned that if you don't issue this request, communities near the Klamath National Forest will witness inactivity in response to such large landscape wide damage. There would be no local employment or forest products generated and the losses to the communtity would be exacerbated. It would also deny communities the opportunity to raise much-needed revenue for critical local services. Our communities and local National Forest are at risk. Please issue an Emergency Situation Determination for the Westside Fire Recovery Project without delay. Sincerely, Henry T. James	Position statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 17501-1. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-2.

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111.06 - ESD, against	#13535-1	1. A long-sighted, long-term plan be implemented - not a quick sale for clearcut salvage which is very likely to *increase* the fire danger to the region. 2. Proper procedure should be followed in forming this plan. The democratic process is in place for a reason, and should not be shorted regardless of increased sale value. On both points, long-sighted, well formed plans beat short-sighted ones any day. To this end, I strongly disagree with premise #2 of this project, "The project will seek to obtain the *maximum economic value from burned timber* by offering a sale while the wood is still marketable." I have no objection to timber sale while the assets are still valuable - but, according to several recent studies, to "maximize" the economic value is to automatically handicap long-term fire control. This is *not* a plan for the long term.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Clear-cutting is not proposed in this project. See Chapter 2 of the EIS for a description of proposed actions. Procedural statement, the agency has followed required procedures in accordance with National Environmental Policy Act regulations at 40 CFR 1500-8. The purpose and need as stated is described in Chapter 1 of the EIS. The project is addressing the need of reducing fire risk on the landscape. Both short and long term effects of the project have been disclosed in Chapter 3 of the EIS. See Chapter 3 of the EIS under fuels for a discussion of how the project will impact fuels.
111.06 - ESD, against	#17460-11	A request seeking an Emergency Situation Determination (ESD) pursuant to 36 CFR 218.21 has been made for the Westside Project. The case for an emergency situation declaration has not been convincingly made: 1. Road hazard treatment and fuels treatments in the WUis fulfill the need for worker and public safety and access, and firefighters performing fire suppression for community protection. 2. A project this large and complex needs to be a good project, not just an expedient one, and that requires adequate time for the public to participate and, if necessary, raise administrative challenges to issues the project has failed to properly account for. 3. Outside ofroadside hazard areas and the WUis, this is is a misguided attempt to try and design and justify a "fire-resistant forested ecosystem," within an ecosystem that, according to the DEIS documents and studies, has historically depended on fire for its health and regeneration: the impacts to current and nearfuture habitat are many, and not sufficiently mitigated by "project design features" as claimed. 4. Roadside salvage and ongoing fuels treatment satisfies the need to be economically viable and benefit local communities. 5. Part of the reasoning published in the DEIS for an ESD is "avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration." Yet, since salvage logging in the LSRs cannot be a driving factor for management in the LSRs, any ESD, if granted, should specifically exempt salvage proposals within the LSRs.	See response to comment number 17501-2. In response to specific comments, 1) an emergency situation determination is needed for roadside hazard treatments through contract; 2) this project has followed National Environmental Policy Act other required regulations, including scoping and comment periods and consultation, which have shaped this project and informed the decision-maker; many changes have been made in response to public comments and consultations; 3) the agency recognizes that fire is plays an important role in the ecosystem of the Klamath province, as described in the fuels section of Chapter 3 of the EIS. Effects to habitat are disclosed in Chapter 3 of the EIS under fish and wildlife sections. Project design features, in Chapter 2 of the EIS, have been developed and are incorporated into project design to mitigate resource impacts and to meet Forest Plan standards and guidelines and other law, regulation, and policy. 4) position statement, not supported by rationale; the project is designed to meet all components of the purpose and need, as described in Chapter 1 of the EIS. See Chapter 3 under economics for a discussion of economic impacts 5) see Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves and how the actions proposed in Chapter 2 of the EIS meet Forest Plan standards and guidelines for Late-Successional Reserve.
111.06 - ESD, against	#17501-2	There is no real reason for an Emergency Situation Determination for this project and I urge you not to ask for such a determination. There is no emergency here. Wildfire is a natural occurrence, and if nothing is done than the forest will recover naturally on its own, just as burned forests in fire-adapted ecosystems have done for millennia. Studies have shown that burned snags in wildfires can stay viable for commercial logging for a number of years post-burn, so there is no need to rush the timber to the mill without doing the legally required environmental review that is normally undertaken in such a project. To declare an Emergency Situation Determination may fast-track the logs to the mill and please the timber industry, but you may also be fast-tracking an end to natural landscapes and fire-effected landscapes. The science is clear: fire-adapted ecosystems need fire. Why then would you want to log and destroy the very thing that makes the forests of the KNF so biodiverse and healthy?	Position statement, not supported by rationale or science. See the supporting documentation with the submittal of the emergency situation determination. The commenter mentions "the science" but doesn't provide any specific science or scientific points for agency review. See Chapter 2 of the EIS for a description of the proposed actions of the project and Chapter 3 for a discussion of effects. On May 13, 2015, the Forest received from the Chief of the Forest Service an Emergency Situation Determination pursuant to 36 CFR 218.21, which was determined to be necessary in order to achieve relief from hazards threatening human health and safety; mitigation of threats to natural resources on National Forest System or adjacent lands; avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration. See Chapter 1 of the EIS and the project record, including the request and approval documentation, for more details about the emergency situation determination. See response to comment number 17501-2.

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111.06 - ESD, against	#18934-14	The use of a greatly expedited project timeline reliant on the use of CEQ Alternative Arrangements and an HFRA Emergency Situation Determination (ESD) for a project of this scope and scale makes it difficult for the public to comprehensively review and provide meaningful input. Further, it has virtually eliminated prospects for genuine collaboration between the Klamath National Forest and interested parties. Given that CEQ's alternative arrangements (40 CFR § 1506.11) are limited "to actions necessary to control the immediate impacts of the emergency" while "other actions remain subject to NEPA review" and that an ESD may be applied to portions of a project rather than its entirety, a genuine collaborative approach could have been taken by the Klamath National Forest in developing a true fire recovery project aimed at setting the forest up for fire resiliency and a return to a more natural fire regime while actions needed to control immediate impacts of the wildfires could still be implemented more expeditiously (i.e., roadside hazard tree removal). Fast-tracking the project at the expense of diverse and varied collaborative input undermines tenuous community trust with the Forest Service and perpetuates the unproductive paradigm of pitting polarized interests against one another rather than productively working within areas of mutual agreement. This fast-track all-or-nothing approach creates contention and virtually guarantees litigation. There is a significant risk that all components of the Westside project will be hung up in court and potentially set aside in legal rulings. A better approach would be to work collaboratively in a reasonable timeframe to accomplish genuine fire recovery actions while also producing salvage timber volume in a manner agreeable to a wide range of stakeholders while avoiding unnecessary contention.	We appreciate the concern held by the commenter that pursuit of Alternative Arrangements and the emergency situation determination may limit the chances for the public to participate and comment on the Westside Project. As we have discussed many times in the course of this project, fire-killed timber deteriorates and loses value quickly, and our ability to accomplish these projects diminishes rapidly the longer the National Environmental Policy Act process takes to accomplish. Alternative Arrangements and the emergency situation determination are provisions in the regulations that can be used to speed up the National Environmental Policy Act process when these types of needs arise. To make up for any lost opportunity that the public may have had to comment on that compressed timeline we undertook an unprecedented series of scoping meetings and open houses in affected communities before the publication of the draft EIS. These meetings included presentations of draft proposals that were very specific and fostered many energetic discussions with those who supported the project, those who opposed it and those who just wanted more information. Once the draft EIS was published, we revisited those same communities to provide information about the project and receive public comments on the draft EIS. In addition, we held meetings in Redding and Arcata, California and in Medford, Oregon to reach communities of interest who lived outside of the area impacted by the fires. We also used the internet to post draft documents for public review in advance of publication to extend the time available to review comments although that is not the normal practice of the Forest Service. Even though we were granted a shorter 30 day comment period by CEQ on the draft, we extended that back to the normal 45 day comment period as result of concerns raised by the public about their ability to provide meaningful project input. Throughout this project, we have attempted to strike a balance between moving expeditiously to achieve important time-delimited project purposes with seeking public input and engagement. We also note that many other publics, particularly those in communities closely affected by the 2014 fires supported the Alternative Arrangements and the emergency situation determination in order to move the project forward to implementation, who were perfectly satisfied with the information presented, and appreciated the accelerated timelines in the hope the Westside Fire Recovery Project can be implemented in a timely manner. See response to comments number 17501-2 and number 18918-3 . See also the supporting documentation with the submittal of the emergency situation determination and Alternative arrangements in Chapter 1 of the EIS.
111.06 - ESD, against	#18934-9	Emergency Situation Determination Our organizations strongly oppose the granting of an ESD for this project. The emergency of lost economic value should not trump sound management of burned areas that take into account applicable social and ecological objectives from these treatments. Given the amount of deviation from our historic fire return intervals, the lack of fire on this landscape over the past century, and persistent drought, we can expect large campaign fires such as those in 2014 to become the new normal and not an emergency. The real emergency is there has never been so little fire in the Western Klamath Mountains since the last Ice Age. We should not be focusing our efforts on maximizing the economic value from burned timber, but should instead be focusing all available resources on establishing a series of strategic fuelbreaks through manual and mechanical treatments, followed by large scale prescribed burns that bring good fire back to the fire deficit landscapes before the next wildfire. More substantial cost savings will be realized through reduced expenditures on fire suppression in the future with this treatment model.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Comment is not supported by rationale or science. The emergency situation determination is not solely based on commodity value but is also based on hazards to human health and safety. Commodity value is needed in this project in order to accomplish the restoration objectives including those that are mentioned in this comment (fuelbreaks and prescribed fire treatments). An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-1 and 2. See the supporting documentation with the submittal of the emergency situation determination. The commenter mentions "the science" but doesn't provide any specific science or scientific points for agency review. See Chapter 2 of the EIS for a description of the proposed actions of the project. Note that the project proposes strategic fuel breaks and prescribed underburning and that the project, including roadside hazard treatments and salvage harvest, are largely proposed for the purposes of reducing future fire risk and promoting and retaining habitat. See Chapter 3 for a discussion of effects. Fire suppression is outside the scope of this project's analysis.
111.06 - ESD, against	#19075-1	I also disagree with USFS in thinking that this is an "emergency situation". No need to rush this through.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 17501-1. An Emergency Situation Determination was issued by the Chief of the Forest Service for this project. See response to comment number 17501-2.
111.06 - ESD, against	#34-1	I urge you to withdraw the biologically catastrophic "Westside" timber sale and the "Emergency Determination" giving it special privilege against scrutiny, on lands affected last summer by the Beaver, Whites, and Happy Camp fires. This logging project ignores what the Forest Service should have learned from a number of studies, including those conducted by its own agency scientists, concerning post-fire forest regeneration and the deleterious effects of post-fire salvage logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Chief of the Forest Service has approved an emergency situation determination consistent with regulations at 36 CFR 218.The statements of the commenter are unsupported by science or rationale and warrant no further response. See response to comment number 17501-2 about the emergency situation determination. It is a position statement that the project is biologically catastrophic, as the commenter noted; no rationale or science was provided to support this statement. The commenter mentions "studies" in general terms, but doesn't specifically provide any studies for agency consideration. The Forest Service considered best available science, as referenced throughout the EIS and supporting documents.

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111.06 - ESD, against	#34-4	Moreover, If the Klamath logs these trees, it would condone and facilitate the persistent hopes of certain economic factions for periodic influxes of large-diameter timber, which will remain until the Forest Service commits to stop logging these largest trees. By proposing to log these trees, the FS is implicitly endorsing a model of ecosystem management that will lead only to greater social conflict and tension with the emerging science of fire ecology. This will certainly not be the last fire to occur in the Klamath's roadless forests, inside or outside its old-growth and roadless jewels. In addition, the market for wood and pulp is currently low, and many recent FS sales have been under-priced due to the attendance of only one or a few bidders. This FS contribution of subsidized, supply-side timber is profoundly unhelpful to a country that should be seeking greater efficiency and conservation of our wood and fiber resources, rather than wasting these resources at artificially low prices. As a former resident of southwest Oregon, I wish the Forest Service accept fire as a normal component of nutrient cycling and succession, and I continue to do so, starting with its response to the 2014 fire season. Please withdraw the this absurd and scientifically vacuous proposal to fast-track the "Westside" timber sale, and grossly misnamed "Emergency Determination." Instead, listen to your own ecologists, and let these stands regenerate naturally, as they have for millennia before any meddling or "salvage logging" by humans. Thank you for your attention to this issue.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Statements not supported by sound rationale or science. We acknowledge the role of fire as a natural part of the ecosystem; however, the scale and severity of the 2014 fires warrant treatments to address the purpose and need of this project, including the improvement of watersheds and wildlife habitat. See Chapter 2 of the EIS for the actions proposed, including mitigations for resource protection. Some statements are outside the scope of this project (e.g. how fires were previously addressed or may be addressed in the future). The Forest Service has considered market conditions during the development of this project. The agency agrees that fire plays a natural role in the ecosystem; this project actually proposes some prescribed underburning, as described in Chapter 2 of the EIS. See response to comment number 17501-2 about the emergency situation determination. The project has been designed to meet the purpose and need, as described in Chapter 1 of the EIS. The Forest Service considered best available science, as referenced throughout the EIS and supporting documents. The Chief of the Forest Service has approved an emergency situation determination in accordance with 36 CFR 218.
112.01 - Funding, General	#17343-1	This was what RAC was all about all the money do fire safety and we need to clean up this mess before it starts again.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. How other programs are funded and operated are outside the scope of this project.
112.01 - Funding, General	#18849-5	With each passing day, economic value is lost from hazard and salvage timber, meaning the private sector will lose interest in participation and necessary work will be solely dependent upon the difficult and unlikely allocation of taxpayer funds.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service understands that value is being lost, but is responsible for meeting National Environmental Policy Act and other regulatory requirements prior to implementation. How project implementation is funded is outside the scope of the project. See Chapter 1 for the purpose and need of the project, which includes project viability.
112.01 - Funding, General	#18852-23	5) Restoration and fuels reduction funding has not been committed (USFS personal communication, Happy Camp open-house meeting), the project is primarily designed for commodity production purposes.	The project was designed to meet the purpose and need, including restoration and fuels reduction work. Implementation funding is outside the scope of analysis in this EIS. See response to comment number 18878-16 about project funding.
112.01 - Funding, General	#18852-42	25) Restoration and related maintenance associated with this project should be budgeted within a 5-20 year time frame. Forest fuels thinning and prescribed fire should be emphasized over this period to complete the intent of the project (forest restoration, fire resiliency, job creation, fire-fighter and forest worker safety). 26) Noxious weed surveys, monitoring and eradication should be funded for the duration of project effects (5-20 years).	See response to comment number 18878-16 about project funding for implementation.
112.01 - Funding, General	#18852-44	28) Road maintenance must be budgeted for multiple "out" years following project implementation. The cost of maintenance and road system upgrades resulting from increased industrial and commercial traffic should be fully funded for 5-10 years following implementation. A lack of long term road maintenance funding commitment is a key indication of poor follow through on stated objectives.	See response to comment number 18878-16 about project funding for implementation.

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112.01 - Funding, General	#18878-16	DEIS: There is a need for a project that is economically viable, meeting project objectives and benefiting our local communities (Pg. 10). Capturing the marketability of the fire-killed trees and hazard trees provides the agency a viable means of fully implementing the project and funding restoration, including reforestation for future wildlife habitat and the improvement of watershed conditions for fish habitat. Otherwise, the Forest Service will need to use appropriated dollars to remove only the snags and hazard trees most critical for public and worker safety and access. Much of the proposed project will not happen if appropriated dollars are the only funding mechanism. Alternatives Considered but Eliminated from Detailed Study (Pg. 102) There is a need for the project to include receipts from treatments to be economically viable and help pay for fuel treatments. Strategic fuels treatments are proposed in all action alternatives, and salvage logging helps treat fuels on the acres on which it is implemented. Comment: In Appendix A of the Socio-Economic Report it is stated that only 32.6 percent of the total post salvage treatments will be realized from the projected timber receipts. This should be analyzed as to the effectiveness of proposed objectives. The reliance on congressional appropriations to accomplish post salvage treatments which would provide long term employment beyond the 1-2 year short term salvage efforts should not be "buried" in an appendix of a 467 page document. It has been our past 4 of 22 experience salvage projects fail to implement the fuels reduction portion on projects much smaller than the Refined Proposed Action. If restoration of roads, landings, and salvage units is not guaranteed from timber receipts and must be supplemented by federal appropriations and grants, then we have great concern that the forest will be left in worse condition after the salvage logging occurs.	This is an important comment because it questions whether the proposed work can actually be accomplished. The comment notes that "much of the proposed project will not happen if appropriated dollars are the only funding mechanism" and if slash disposal work is not completed, a "concern that the forest will be left in worse condition after the salvage logging occurs." The implication here is that doing the logging without doing the follow-up slash work will result in exacerbating fuel loads and fire risk rather than decreasing them. We agree that salvage logging without treating activity fuels would make on-the-ground fuel conditions worse and would not meet project objectives. All of the action Alternatives include treatment of activity fuels (Chapter 3 - Fuels). The comment cites a figure of 32.6% of post-fire slash and reforestation costs that would be covered by funds generated from the sale of fire-killed trees. That figure was calculated by dividing the total projected receipts by the projected costs of implementation. The presumption is that all of the receipts can be used for post-project work. For the purposes of economic modeling and to avoid overestimating the restoration funding available for the project, and thus the economic impacts of these activities, this analysis assumed that only funds collected from timber sales would be available to fund restoration service contracts. Timber sale revenues were estimated by Forest timber staff based on values for fire-damaged timber determined by the California Board of Equalization for timber yield tax purposes, as shown in EIS Chapter 3. This is the most conservative approach we could take to forecast economic benefits. This was done to avoid challenges that economic benefits were overstated. While our analysis is based just on timber receipts to model a conservative approach, those funds should not be viewed as the limiting factor to accomplish work, or the only source of funds that will be available. There are two questions in this comment that need to be addressed: The first question is how much revenue is the sale of fire-killed trees likely to generate (some would call this business planning). The second question is whether there is a reasonable plan for funding the work needed if timber sale receipts are not available or adequate. In order to understand the possible revenue balance sheet, we did a standard economic analysis using IMPLAN, a state-of-the-art economic analysis tool. Like most national forests, the Forest collects revenues from timber sales to pay for reforestation and other forest management activities. The highest priority is selling the fire-killed timber from the proposed salvage units and roadside hazard areas so that maximum value for the timber is recovered and available for slash disposal and reforestation. Once salvage logging and roadside hazard work is completed, activity fuels must be treated and then salvage units must be planted. We view the slash treatment and reforestation as mandatory parts of the salvage operations. Timber sale receipts and collections can be used to fund all or part of this work depending on the amount of money received. The amount of those dollars available will not be known until the timber sales are completed. The values shown in the economic analysis are a reasonable estimate. Any of the slash disposal and reforestation work that cannot be accomplished with timber sale receipts will be accomplished with appropriated or other funds. To the extent that federal appropriations or grant monies are forthcoming for restoring the project area, the economic effects of project restoration activities would exceed those estimated in this analysis (Socio-economic section of Chapter 3 of the final EIS). The second question whether the necessary work would get accomplished if the receipts from timber sales do not pay for it. For catastrophic wildfires, such as the 2014 fires in the project area, national forests usually require additional funding based on Congressional appropriations to fund fire recovery activities. Grant monies for fuel reductions in the WUI are also a possible source of funding. One of the most important questions when seeking additional funding for a project is whether there is a signed decision document. The Record of Decision for this EIS would fulfill that requirement, and allow the forest to immediately move to implementation with any funds received. Work proposed happens at different stages of the project and will take up to eight years to complete. Assuming that reforestation is paid for by the collection of Knutson Vandenburg (KV) funds from timber sale receipts, slash disposal costs would range from $200 acre for broadcast burning with a helicopter to $1,000/acre for handpiling. If we assume an average cost of $500 to $600/ acre for all treatments, that comes out to about $2.9 to $3.5 million dollars for slash disposal for Alternative 3 Modified. That is above the Forest's average base budget for this type of work; however, the Klamath has been successfully competing for additional funding that would cover this amount of slash disposal. In 2015, the Forest received $3 million dollars in additional fuels funding. The Forest expects to continue at that level through implementation of the salvage phase of the Westside Fire Recovery Project. Typically that work is completed within 1-2 years after logging is completed. Because so much of the proposed salvage is in large, contiguous blocks, we anticipate that work can be efficiently completed with lower unit costs. Completion of these activities is a priority for the Forest. Our regional and national headquarters are aware of these potential needs. WUI fuel treatments, site preparation and planting units in burned plantations, fuel breaks and underburning are not so time constrained as slash disposal and planting in areas that are salvage logged and can be accomplished over a period 2-8 years as funding becomes available. Underburning as proposed would occur 5-8 years in the future because tree and brush killed in the 2014 Westside Fires needs to fall to the forest floor before a low intensity fire would carry in these areas. Completion of this EIS makes it possible to request appropriated funding to accomplish

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			this work. If we consider the cost of doing necessary work without timber sale receipts, the real cost of no action becomes apparent. The Forest estimates that it would take $9 million dollars to accomplish roadside hazard abatement and cleanup alone if that work cannot be accomplished with a timber sale contract.
112.01 - Funding, General	#18878-76	The Karuk Tribe believes any funds or receipts derived from any salvage should be utilized for restoration actions which enhance the ability for fire to once again play a natural role on the landscape and to reverse other current and past management decisions which continue to negatively impact culturally significant resources.	. Any timber sale receipts will go towards restoration actions to extent allowed by law and regulation.Consultation with the Karuk Tribe is ongoing.
112.01 - Funding, General	#18878-81	The Karuk Tribe has consistently advocated for strategic hazardous fuel treatments. The Karuk Tribe also firmly believes this is a proactive approach to reducing astronomical fire suppression cost while providing for truly local workforce employment. Unfortunately, we have encountered time and time again a lack of project funding for implementation on part of the USPS. It appears all effort and expense is garnered for the salvage portion of projects while the fuel treatments languish for years in a never ending loop of the USPS not having funding, personnel or burn windows to accomplish the fuels treatment. We find it increasingly difficult to support any salvage proposal when we know from past experience the most critical aspect of returning fire to its proper role is left out at the end of the day.	. See Chapter 1 of the EIS for a description of consultation with the Karuk Tribe. See Chapter 2 of the EIS under Alternatives considered through consultation for a discussion of how the Karuk Alternative has been considered and incorporated into project design. See maps in the Appendix that compare the Karuk Alternative to modified Alternative 3 (preferred Alternative of the final EIS). See response to comment number 18878-16 about project funding for implementation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.

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112.02 - Staffing	#18852-12	There is a legitimate question of the professional capacity within the Klamath NF organization to implement this project in accordance with the National Forest Management Act, National Environmental Policy Act, Endangered Species Act, Clean Water Act, Northwest Forest Plan, Klamath National Forest Land Management Plan (et.al.) requirements. Staffing at our local ranger station (Happy Camp / Oak Knoll Ranger District) has been diminishing incrementally over the last decade or two. We do not have a district ecologist, wildlife biologist, soil scientist, geologist, entomologist, nor even a dedicated transportation "road system" supervisor. Our technician grade staff have been often left vacant (botany, wildlife, recreation, archeology, brushing crew) and it appears we do not even have a trails or wilderness ranger staff funded for this coming field season (2015). The professional capacity to implement this project and provide the necessary oversight must be questioned.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Implementation staffing is outside the scope of analysis in this EIS. The project has been developed to meet law, regulation, and policy, including but not limited to the laws referenced.
112.02 - Staffing	#18852-22	4) Insufficient USFS human resource professional capability is available for proper planning, implementation and oversight.	Implementation staffing is outside the scope of analysis in this EIS.
120.01 - Purpose and Need	#13-1	The FS's preferred alternative does not meet the purpose and need, it does not promote forest and watershed "recovery" but instead would substantially INCREASE the risks from future fires. This is so because the FS preferred alternative includes 2,640 acres of helicopter logging (DEIS page 31). Studies and experience on the ground both clearly indicate that helicopter logging leaves behind "jackpots" of highly flammable logging slash. Timber sale economics make it impossible to deal with these fuel jackpots. The same could be true for ground based systems. Furthermore, the project would reestablish highly flammable tree plantations which will result in greater risks to forest and watershed values - and greater risks for future firefighters - for many years to come. Finally, most of the stands you've identified for "salvage" logging are older stands where the natural wildfire under-burned thus improving them. If you salvage log you will take the best green trees and destroy the work the fire did to create healthy older forests.	In response to consultation and public comment, the Forest Supervisor Patricia Grantham has adjusted her preferred Alternative to be a modified Alternative 3, as presented in the final EIS. The Purpose and Need for this project states that "There is a need for restored and fire-resilient forested ecosystems." (EIS, Purpose and Need Section). In the draft EIS, Table 2-32 compares the Alternatives in relation to the purpose and need. See a similar table at the end of Chapter 2 of the final EIS related to purpose and need and alternative comparison. Quotes from the draft EIS related to Alternative 2 are as follows. While the proposed helicopter logging would leave a greater accumulation of surface fuels post-harvest (EIS, Vegetation Section, Alternative 2, Direct and Indirect Effects), the treatments as a whole would still meet the objectives for fire hazard and resistance to control (draft EIS, Table 3-4). Salvage harvest would occur on about 4% of the National Forest System land within the project area (draft EIS, Vegetation Section, Alternative 2, Direct and Indirect Effect) and are only proposed for areas that experienced moderate to high severity vegetation mortality (units with greater than 50% fire killed trees)(EIS, Vegetation Section, Affected Environment). See Chapter 3 of the EIS for effects analysis related to fuels for modified Alternative 3. Also see response to comment number 5873-14.See response to comment number 12346-55 about green trees.
120.01 - Purpose and Need	#14-3	Alternative 1 – No Action This alternative will not meet the purpose and need since no recovery will occur. This alternative will actually create conditions for long-term adverse effects as the untreated landscapes will once again be consumed by catastrophic wildfire as down fuels accumulate, over the next 10 - 15 years, from all of the untreated material. This has been the case on all of the past wildfire areas that have not been treated. Eventually, this area will burn again creating environmental effects greater than those from first fire. We don't believe this is what the public wants and is not in the best interest of taxpayer owned public lands.	The commenter is correct that Alternative 1 would not meet the purpose and need (draft EIS, Table 2-32. Effects to Fire and Fuels from Alternative 1 are disclosed in the EIS, Fire and Fuels section). Position statement; see response to comment number 16695-4.
120.01 - Purpose and Need	#17280-1	However, in this case I believe the project as proposed (alternative 2) has a number of very significant problems and will not meet the stated purpose (from the DEIS summary p. iii),: "There is a need for restored and fire-resilient forested ecosystems".	The commenter accurately quoted the purpose and need from Chapter 1 of the draft EIS. Positon statement; see response to Comment number 16695-4. All of the Action Alternatives (2-5) meet the Purpose and Need to some degree as displayed in the draft EIS, Table 2-32. The Forest Service has developed this project within the sidebars of required law, regulation, and policy. Thank you for your comment on the Westside Fire Recovery Project.

Code	Comment Number	Comment Text	Response
120.01 - Purpose and Need	#18857-2	Purpose and Need for Action: The stated "Purpose and need for action" appears to be economic rather than ecologically based. I understand that you must manage the forest for various competing interests. As someone who has derived the bulk of my livelihood as a forest products producer and/or consumer I have concerns about this stated need for action. I spoke at the meeting with your staff regarding bidding qualifications to participate in the sale of the proposed project and it was clear that the qualifications due to bonding capacity and performance capacity in general are unattainable for the local small forester and timber business owner to truly participate in a way that directly benefits them. To be clear, I personally don't have interest in bidding on this project or its units. My concern is that the Forest Service is painting the false picture that somehow the economic benefits of this project are designed to be beneficial to the local communities economically. I'm not sure how that is possible when the treatment required can only be undertaken by large out of area corporations? The stated purpose of "a project that is economically viable…and benefiting our local communities" should come with some baseline criteria. If the desired result of the forest "recovery" is truly as you have stated please undergo some sort of formal review and/or sidebar development with the community as it pertains to economic recovery and community benefit. For instance, I propose the following questions be answered yes to truly satisfy the stated need: * Are the majority of project bid winners residing in the community? * Do the bid winners pay taxes in the local community? * Are the bid winning companies required to hire local labor? * Is the majority of the resulting harvest available for purchase within the bioregion? * Are the bonding requirements low enough to allow for local and regional business to participate? * Does the project support the local economy as it now functions? * Does the project support and strengthen other local and regional economic activities including Tourism? * Are there restrictions on log exports? I'm sure the community would willingly add to this list. Without a framework to manage the true benefit to the community, the desired results are really just talking points to divide the factions of the community that are pro salvage vs. pro environment. This has worked for the Forest Service in the past, but these issues are far more nuanced than currently being described in the various alternatives. The community and the forest stakeholders, including the Timber Industry really deserve more from the Forest Service in this regard.	The commenter has expressed a general comment, opinion, or position statement. Comments that state a position for or against the project are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. The full purpose and need for action is disclosed in Chapter 1 of the EIS. As described, there are three parts of the purpose and need, including ecological, economic, and social/safety needs for action. Contract development and awards for implementation are outside the scope of the analysis for this EIS; however, it is likely that the project will be split into multiple sales, which could address some of your concerns related to bonding or the feasibility of implementation within required time frames of contract(s). The comment regarding economic benefits and the local community is a position statement, not supported by scientific rationale. In terms of benefits to the local communities wildfire protection is addressed in the fire and fuels section of Chapter 3 of the EIS; benefits to safety and to the economic returns to Siskiyou County are addressed in the social and economic section of Chapter 3 of the EIS .As shown in Table 3-26, Alternative 2 would provide the greatest number of jobs as well as the most amount of revenue from timber sales and to the county.
120.01 - Purpose and Need	#18883-2	The Purpose and Need for action on pages 5 and 6 of the DEIS states: • The purpose and need of the project is to address the following: • There is a need for worker and public safety and access. • There is a need for safe conditions for firefighters performing fire suppression for community protection. • There is a need for a project that is economically viable, meeting project objectives and benefiting our local communities. • There is a need for restored and fire-resilient forested ecosystems. The potential for dead trees to fall on people driving vehicles on public paved or unpaved roads is infinitesimal. The Forest Service and Caltrans will remove any trees that fall on these roadways. Wind, rain and snow will cause dead trees to fall down gradually over a period of many years. Providing “safety” for people who work or visit in forested lands cannot justify the need for the project. What is a purpose and need for the project is taking measures to make the forest ecosystem resilient and sustainable. This should be the single greatest purpose of the project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The full purpose and need of the project, as referenced by the commenter, is described in Chapter 1 of the EIS. As described, the purpose and need of the project has multiple components, including ecological and forest health needs. All of the action Alternatives must meet the Purpose and Need for this project, there is no hierarchy unless otherwise described by the responsible official under rationale in the record of decision. The agency and its responsible official have discretion to determine the purpose and need of a given project. As trees continue to decay and fall, the likelihood of potential injuries or death to the public and forest workers would increase (EIS, Purpose and Need and Recreation Sections), especially in areas where people are know to travel or recreate.
120.01 - Purpose and Need	#19-1	None of the five analyzed alternatives actually meet all four of the listed purpose and need for the project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. All of the Action Alternatives (2-5) meet the Purpose and Need to some degree as displayed in the draft EIS, Table 2-32. The Forest Service has developed this project within the sidebars of required law, regulation, and policy.

Code	Comment Number	Comment Text	Response
121.01 - Alts. Not Analyzed In Detail	#12346-53	The Council on Environmental Quality (CEQ) regulations that implement NEPA "define the circumstances under which multiple related actions must be covered by a single EIS." Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985). The Ninth Circuit has determined that, while agencies should be given "considerable discretion" in defining the scope of an environmental analysis, an agency is required to consider more than one action in a single EIS if they are part of a single proposal or are 'connected actions,' 'cumulative actions,' or 'similar actions.' Native Ecosystem Council v. Dombeck, 304 F.3d 886, 893-4 (9th Cir. 2002); 40 C.F.R §1508.25(a)(1). The combined effects salvage logging to facilitate future fire suppression, and the impacts of that fire suppression, must be analyzed together in a single NEPA document. Actions are connected when they "cannot or will not proceed unless other actions are taken previously or simultaneously" or when they are "interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R §1508.25(a)(1)(ii, iii). Where one project will not proceed but for the completion of another, it is a connected action and NEPA mandates that both actions be analyzed in the same document. Thomas, 753 at 759. The public has pointed out that the scoping notice and DEIS for this project repeatedly indicate that part of the purpose and need for the project (and alleged outcome of project activities) is the increased ability to suppress wildfire in the planning area. Indeed, the agency repeatedly frames the environmental analysis in terms of the impacts of alternatives on fire behavior and fire suppression and dismisses the No Action Alternative as not conducive to connected fire suppression objectives and actions. Given that one purpose of the project is to facilitate additional fire suppression the agency has a duty under NEPA to disclose the connected and cumulative impacts of fire suppression that implementation of the project is designed to facilitate. Attached to our scoping comments was a 2004 article from Conservation Biology entitled Impacts of Fire-Suppression Activities on Natural Communities by Backer et al. The abstract of that paper reads as follows:	The size, intensity, and location of future wildfire events or related agency emergency suppression efforts are an unknown event that is too speculative for the agency to consider in terms of either connected actions or actions considered for cumulative effects. The Fire and Fuels section of the EIS does describe the cumulative effects from current and future known projects and also discloses the general effects to future fire resiliency and fire suppression effectiveness (EIS, Chapter 3, Fire and Fuels Section). Connected actions are considered as part of the proposed actions; see Chapter 2 of the final EIS by alternative. See the Appendix of the final EIS for a description of Alternatives considered but eliminated from detailed study.
121.01 - Alts. Not Analyzed In Detail	#19076-11	The DEIS does not compare the other alternatives to the Karuk Alternative, submitted in March.	As described in the EIS, the Karuk Tribe Alternative was received by the Forest Service at at 4:30 pm, the day before printing (EIS, Alternatives Considered in Detail Section). A detailed response to the suggestions provided by the Tribe has been included in Chapter 2 of the final EIS under Alternatives considered through consultation. Many components of the Karuk Alternatives have been incorporated into the modified Alternative 3 (final EIS preferred Alternative), as described.

Code	Comment Number	Comment Text	Response
121.01 - Alts. Not Analyzed In Detail	#5873-171	Consider the recommendations of the Society for Conservation Biology The Society for Conservation Biology in 2006 prepared a white paper summarizing the scientific approach to forest management after fire. This report was later peer-reviewed and published in Frontiers in Ecology and Environment 2006; 4(9): 481-487. Forest Management After Wildfire Forest landscapes that have been affected by a major natural disturbance—such as a severe wildfire or windstorm event—are commonly viewed as devastated and biologically impoverished. Such perspectives are usually far from ecological reality. Overall species diversity measured as number of species—at least of higher plants and vertebrates—is often highest following a natural stand-replacement disturbance and before re-development of closed-canopy forest. Important reasons for this include an abundance of biological legacies, such as living organisms and dead tree structures, the migration and establishment of additional organisms adapted to the disturbed, early-successional environment, and temporary release of other plants on the site from dominance by trees. Currently, natural, early-successional forest habitat—naturally disturbed areas with a full array of legacies (i.e., not subject to post-fire logging) and experiencing natural recovery processes (i.e., not seeded or planted)—are among the scarcest habitat condition in some regions, such as the Pacific Northwest.	We agree with the importance of early seral plant communities and the benefits described, however we do not agree that early seral plant communities are scarce on the Klamath National Forest. While the concern expressed for early seral plant communities may be applicable in the context of the Pacific Northwest at a regional scale, the commenter provides no evidence that the Westside Fire Recovery Project area or the west side of the Klamath National Forest has, or will have a shortage of early seral plant communities. Monitoring of the Northwest Forest Plan shows that since the inception of the Plan in 1994, over 200,000 acres of northern spotted owl nesting / roosting habitat has been converted to early seral habitat by stand replacement fire (Appendix E, figure 1) in the Klamath Province of northern California; over 150,000 of those acres are in reserves. In the Westside Fire Recovery Project Area, about 52,000 acres burned with moderate to high severity where more than 50% of the trees present were killed (EIS Chapter 2). Over 100,000 acres burned with low or very low intensity where mortality occurred, but was less than 50%. Considerable secondary mortality in fire damaged trees has occurred in areas that were less than 100% mortality since the fire because of drought stress and insect attack, contributing to a patchy mosaic in areas that did not experience stand-replacement fire. Alternative 3 Modified incorporated this concern in the selection of units for salvage and planting; many smaller salvage units were dropped from consideration to maintain mosaic habitats, as were several hundred acres of isolated site prep and plant units. Risk reduction salvage harvest is proposed on about 5,760 acres, with site preparation and planting proposed on an additional 7,130 acres in Alternative 3 Modified. Combining salvage units and site prep and plant units, a total of about 12,900 acres (25%) of the 52,000 acres of moderate to high intensity burn would be replanted; about 39,000 acres (75%) of the areas where most of the trees were killed would remain untreated and would go unimpeded through the long early seral plant community described by the commenter. This includes smaller mosaic burned areas, and all high mortality burn patches that are less than 20 acres in size. This pattern where no salvage is proposed is more typical of the small patch size of northern California forests described by Wills et al. (1994) and others than the larger patches proposed for salvage harvest and replanting. Leaving these small patches untreated maximizes the heterogeneity that benefits northern spotted owls described by Franklin (2002). Areas that would not be planted also include multiple large patches ranging in size from a few hundred acres to well in excess of 1000 acres of fire-killed older trees in the Grider Creek Inventoried Roadless Area. While not a project objective, this does provide early seral plant communities at multiple scales. Appendix E provides an assessment of the fire area within the Late-Successional Reserve land allocation. Within the Late-Successional Reserves, about 28,700 acres had moderate - high severity fire of which about 3,870 acres are proposed for salvage in Alternative 3 modified. This represents about 5% of the area within the Late-Successional Reserve fire perimeter and about 13% of the high severity burn in the Late-Successional Reserve. Site preparation and planting is proposed on about 3,475 acres of the moderate - high severity burn in the Late-Successional Reserve. Combining salvage and site prep and plant units, about 7,345 acres, or 26% of the moderate to high severity burn in the Late-Successional Reserve would be reforested; about 74% would go through the long early seral plant succession described by the commenter. Even in Alternative 2, the most aggressive salvage Alternative, about 14,500 acres (6,630 salvage, 7,860 site prep and plant) or 28% of 52,000 acres of moderate-high severity burn would be replanted; over 70% of the moderate-high severity burn area would proceed unimpeded through the long early seral plant community phase described by the commenter. Given the frequent, low severity fire regime of the Klamath (See Chapter 1; also Appendix E) it is unlikely that the very large high mortality patch sizes created by the Westside fires in 2014 were typical of the Klamath. It is more likely that the fire history of the Klamath produced a patchy mosaic stand structure (Wills et al. 1994). About 65% of the Westside Fire Areas were very low or low intensity burns that have this mosaic structure. Several thousand acres of high severity burn in small patches (less than 10 acres) are also not included in any salvage proposal as directed by the standards and guidelines for salvage in Late Successional Reserves. Thus, the small patch size texture stand mortality more typical of the Klamath has been retained in all alternatives.An important point that the comment fails to consider is that even areas that are site-prepped and planted will also go through an early seral plant community phase, although that phase in planted areas will be shorter than in unplanted areas by several decades. The comment also fails to consider that the 2014 Westside fires were only a part of the recent large stand replacement fire history on the Klamath National Forest (See Figure 1 Appendix 1). The adjacent Stanza Fire (2000-check date) and the 2008 Panther Fire (2008 - check date) provide tens of thousands of acres of early seral habitat that has not been planted or otherwise treated. From this, we conclude there is no shortage of early seral plant communities on the west side of the Klamath National Forest. See response to comment number 12346-55.The project does include specific project design features to retain legacy trees and snags (EIS, Chapter 2, Project Design Features Wildlife 11 and 12) and no salvage is proposed within wilderness, backcountry, research natural areas, designated or recommended wild rivers, inventoried Roadless Areas, or Riparian Reserves associated with stream channels or high ranked northern spotted owl cores (EIS, Chapter 2, Alternative 2 description).

Code	Comment Number	Comment Text	Response
121.01 - Alts. Not Analyzed In Detail	#5873-172	Key Findings: • Research by both ecologists and foresters provides evidence that areas affected by large-scale natural disturbances often recover naturally. Post-burn landscapes have substantial capacity for natural recovery. Reestablishment of closed forest following stand-replacement fire characteristically occurs at widely varying rates, providing temporary, but ecologically important and now rare early-successional habitat for a variety of native species and key ecological processes. • Post-fire logging does not contribute to ecological recovery; rather it negatively impacts recovery processes, with the intensity of such impacts depending upon the nature of the logging activity. Post-fire logging in naturally-disturbed forest landscapes generally has no direct ecological benefits and many potential negative impacts from an ecological standpoint. Trees that survive the fire for even a short period of time are critical as seed sources and as habitat that will sustain many elements of biodiversity both above and below ground. The dead wood, including large snags and logs, is second only to live trees in overall ecological importance. Removal of these structural legacies— living and dead—is inconsistent with our scientific understanding of natural disturbance regimes and short- and long-term recovery processes. • Post-fire logging destroys much of whatever natural tree regeneration is occurring on a burned site. This is a fundamental concern since these tree seedlings are derived from local seed sources, which are most likely the best adapted to the site. Furthermore, environmental variables, such as moisture and temperature conditions, are major selective factors in determining which natural tree seedlings survive, which favors genotypes more tolerant of environmental stresses than are nursery- or greenhouse-grown seedlings. • Evidence from empirical studies is that post-fire logging typically generates significant short- to mid-term increases in fine and medium fuels. In some cases this may result in increased reburn potential rather than a decreased reburn potential, as is often claimed. In any case, from an ecological perspective large wood is of demonstrated importance in ecological recovery; removing this wood in an attempt to influence the behavior of a potential reburn event has little scientific support. • In forests subjected to severe fire and post-fire logging, streams and other aquatic ecosystems will take longer to return to historic conditions or may switch to a different (and often less desirable) state altogether. Following a severe fire the biggest impacts on aquatic ecosystems are often increased sedimentation caused by runoff from roads. High sediment loads from roads may continue for years, greatly increasing the time for recovery. • Post-fire seeding of non-native plants generally damages natural ecological values, such as reducing the recovery of native plant cover and biodiversity, including tree regeneration. Non-native plants typically compete with native species, reducing both native plant diversity and cover. Reductions in natural tree regeneration as a result of seeding of non-native plants have also been reported in numerous studies. • Post-fire seeding of non-native plants is often ineffective at reducing soil erosion. Aerial seeding of grasses (primarily non-native) is common on federal lands following moderate- to high-severity fire to reduce postfire erosion. The effectiveness of seeding in reducing erosion is mixed. Grass seeding generally does not mitigate erosion during the first winter following fire, when seeded grasses are not yet well established. Seeding may slow erosion during the second year following fire but is rarely effective during intense storms. • There is no scientific or operational linkage between reforestation and post-fire logging; potential ecological impacts of reforestation are varied and may be either positive or negative depending upon the specifics of activity, site conditions, and management objectives. On the other hand, ecological impacts of post-fire logging appear to be consistently negative. Salvage and reforestation are often presented as though they are interdependent activities, which they are not from either a scientific or operational perspective. From a scientific perspective, policy and practice should consider each activity separately. As noted above, post-fire logging is a consistently negative practice from the standpoint of ecological recovery. Natural tree regeneration is ecologically most appropriate, but intentional reforestation could also be designed to provide significant ecological benefits in some cases. • Accelerated reestablishment of extensive closed forest conditions after fire is usually not an appropriate objective on sites managed with a major ecological focus. Wildfires have been viewed historically as events that destroy valuable standing forest and create undesirable expanses of deforested (i.e., unproductive) landscape. Reestablishment of fully stocked stands of commercially important tree species on burned sites has been a fundamental forest management objective on most private and public forestlands; hence the historic commitment to	This comment provides general literature citations that are not specific to the effects of the proposed Westside Fire recovery Project. Literature citations or opinions that assert an impact may happen are not the same as a site specific analysis that demonstrates probable impacts. We do agree that without follow-up activity fuel treatment, salvage logging would increase fire risk and intensity because it would convert smaller diameter limbs and tops to surface fuels that readily carry fire (Thompson et al. 2007). All of the activity fuels would be treated in any of the Alternatives. In an often cited study of reburns in the Biscuit Fire in southwest Oregon, Thompson et al (2007) concluded that: “reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved.” That is precisely the objective of the salvage units in the Westside Fire Recovery Project, and the reason that leaving all of the dead wood now present on the landscape would not meet the Project objectives. Reforestation objectives on the Westside Fire Recovery project are not a closed canopy forest. We agree that extensive uniform planting would not create the heterogeneity that we seek to reestablish on the landscape; trees will not be planted uniformly as the comment suggests. The reforestation stocking objective after planting in the Westside Fire Recovery Project is a stand of 75 to 225 variably spaced young trees with treated, discontinuous activity fuels, not densely stocked regularly spaced plantations that form continuous fuel beds. Stand density would vary with slope position and aspect with lower stocking on upper slopes and south and west aspects and higher stocking on north and east aspects that would form a closed canopy on lower slopes. Hardwoods would be included in the target stocking levels so the number of conifers would be less where hardwoods occur. Most reforestation units in the Westside Fire Recovery would be planted at lower densities as most of the units are on upper slopes. We also anticipate there would losses from future fires that would further reduce stand density. Our long term objective is 30-50 large, variably spaced, fire resilient trees per acre with openings as described by Taylor and Skinner (1996). Legacy structures are being retained wherever they occur as are green trees. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. The final EIS and supporting documents incorporate best available science. See also comment response to 12346-55.

Code	Comment Number	Comment Text	Response
		intensive reforestation. However, timber production is no longer the primary objective on many federal lands, where the focus on provision of biodiversity and ecosystem services equals or exceeds wood production objectives. The ecological importance of biological legacies and of uncommon, structurally complex early-successional stands argues against actions to achieve rapid and complete reforestation except where the primary goal is wood production. In addition, it is also inappropriate to re-establish fully stocked stands on sites characterized by low severity fire—the same sites where managers are trying to restore fuel loadings to their historical range of variability. • Where timber production, other societal management goals, or special ecological needs are the focus, planting or seeding some native trees and other plants using local seed sources may be appropriate. Ecological assessments of the post-burn area and considerations of management objectives should be used to determine appropriate activity. Special ecological circumstances might include a need to restore an uncommon plant species or habitat for a threatened or endangered species. Innovative practices, such as low or variable density planting, will likely be more appropriate ecologically than traditional practices that involve dense tree plantations of one or a few commercial species. Dense uniform conifer plantations are always inappropriate on sites characterized by low-severity fire unless the intent is intensive management of such sites for wood production. Society for Conservation Biology Scientific Panel on Fire in Western U.S. Forests Reed F. Noss (editor), Jerry F. Franklin, William Baker, Tania Schoennagel, and Peter B. Moyle. Ecological Science Relevant to Management Policies for Fire-prone Forests of the Western United States. February 24, 2006. http://www.conservationbiology.org/sections/namerica/FireWhitepaper.pdf See also the published version, Reed F. Noss (editor), Jerry F. Franklin, William L. Baker, Tania Schoennagel, and Peter B. Moyle. 2006. Ecology and Management of Fire-prone Forests of the Western United States. Society for Conservation Biology Scientific Panel on Fire in Western U.S. Forests. August 2006. http://www.conbio.org/images/content_policy/2006-8_SCB_NA_Statement_Wildland_Fire.pdf	
121.01 - Alts. Not Analyzed In Detail	#5873-85	Please consider at least one non-commercial, restoration-only alternative that invests in restoration and recovery of the fire area by, for instance, eliminating livestock grazing, emphasizing native species recovery, not building any new roads, stabilizing soils disturbed by the fire suppression effort, decommissioning unneeded roads.	The Westside Fire Recovery Project is intended to promote recovery in areas burned during the 2014 Beaver, Happy Camp Complex, and Whites fires. All of the actions proposed are intended to restore the landscape (EIS, Chapter 1 and 2). Eliminating livestock grazing is beyond the scope of the Project. Native species recovery is best accomplished by controlling non-native invasive species and protecting existing meadow ecosystems. Both actions are proposed See Chapter 3-Botany. Only fire-adapted native species would be used in reforestation. Burned Area Emergency Action work stabilized areas disturbed by fire suppression actions. The project does not build any new permanent roads. The project does use old temporary roads that have been previously constructed. These will be put to bed when use is completed (see Chapter 2 - Project Design Features for watershed). There will be no net increase in road density from the Project. Legacy sites that adversely affect water quality are also proposed for treatment (See Chapter 3 - Water Quality and also Waiver Application to the North Coast Regional Water Quality Control Board). Grazing permits are outside the scope of this project; see the grazing report for details. The area that are least likely to meet the conditions described in the Forest Plan are the areas where no treatments are proposed. Also see response to comment number 12346-55. Also see response to comment number 12364-1.
121.01 - Alts. Not Analyzed In Detail	#5873-86	Also, consider an alternative modeled on the recommendations of the Beschta report. Specifically: • prohibit post-fire logging AND roadbuilding on all sensitive sites, including: severely burned areas (areas with litter destruction), on erosive soils, on fragile soils, in roadless/unroaded areas, in riparian areas, on steep slopes, and any site where accelerated erosion is possible. We would add: Late-Successional and Riparian Reserves, and protective land allocations or designations including Botanical and Scenic River Areas; • protect all live trees; • protect all old snags over 150 years old; • protect all large snags over 20 inches dbh; • protect at least 50% of each size class of dead trees less than 20 inches dbh. See Beschta RL, Frissell CA, Gresswell R, Hauer R, Karr JR, Minshall GW, Perry DA, and Rhodes JJ. 1995. Wildfire and Salvage Logging: recommendations for ecologically sound post-fire salvage logging and other post-fire treatments on Federal lands in the West. Corvallis, OR: Oregon State University. Available at: http://www.fire-ecology.org/science/Beschta_Report.pdf.	The Beschata Report is addressed in Table 2-36 of the draft EIS. The Beschta Report was not specific to the conditions of the Klamath National Forest or the Westside Recovery Project. Implementing the recommendations of the Beschta Report would not contribute to the project goal of restoring resilient fire adapted ecosystems typical of the Klamath Province. See response to 12346-55.

Code	Comment Number	Comment Text	Response
121.05 - Range of Alternatives	#12355-2	I've looked at the Karuk Tribe alternative for this project. I like their ideas on fuel breaks but there is no way we can just leave all the dead and dying burned trees out in the forest as they propose. Those burned trees needs to be removed in order to reduce dangerous fuels that will accumulate over time and make bigger and more dangerous fires in the future. We have to act now to get this work done by selling the burned trees - there's no way that the federal government (tax payers!) can afford to PAY to have them removed after they are rotten and worthless. After their value is gone, the Forest Service will just be leaving a time bomb for future generations in our communities. Why is that a good idea when we can get work done now and make conditions better? Please get this project done as quickly as possible. Please do as much salvage harvest as you can in order to reduce fuels in all areas where the fire burned. Please remove danger trees from along our roads so that the public can use the roads and firefighters can get to future fires safely. Please remove fuels as much as you can around private property and utility lines and other needed infrastructure. Please plant areas to help them recover from the devastation they've been through. In our lifetimes, we will never get our forests back to where they were before the 2014 fires. We can help start them on the right path to recovery for our kids and grandkids with the Westside Fire Recovery Project.	See Chapter 2 for a description of actions proposed by Alternative. A detailed response to the suggestions provided by the Tribe has been included in Chapter 2 of the final EIS under Alternatives considered through consultation. Many components of the Karuk Alternatives have been incorporated into the modified Alternative 3 (final EIS preferred Alternative), as described. The final EIS preferred Alternative includes fuels reduction, fuel break treatments, and wildland urban interface treatments; see Chapter 2 of the final EIS.
121.05 - Range of Alternatives	#12471-1	Clear cutting is often bad for forests because it means that when the forest grows back, the trees will all be of mostly the same age, hence equally susceptible to blights such as the mountain pine back beetle. Forests often do best by having both a diverse mix of tree species as well as age. Selling environmental treasures simply for corporate profit short-changes and robs the public. However, if the proposed logging following an environmental impact study would benefit the environment, I would not be opposed to it.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed; see Chapter 2 of the EIS for a description of proposed actions. The project proposes salvage logging following a wildfire. Green trees that exist in salvage units would be left according to the marking guidelines (EIS, Chapter 2, Alternatives Considered in Detail, Alternative 2; Chapter 3, Vegetation Section). Reforestation prescriptions would vary by unit and be specific to each unit based on historical composition (EIS, Chapter 2, Alternative 2, Reforestation and Release section). The project would provide a benefit to the environment by reducing the amount of time needed to restore the site to a sustainable coniferous forest (EIS, Chapter 3, Vegetation, Alternative 2, Direct and Indirect Effects section).
121.05 - Range of Alternatives	#17482-4	Need to log burned areas, and replant the areas. In doing so would help infestation of bugs. In to live trees, especially in low water years. Help stop soils erosion of burned areas. Need to replant hot burn areas because of natural seeds are gone. Open up areas to fire wood cutting to help remove dead timber. Active log all areas to cut fuels down in future. Replant logged areas to have future forest and a healthy forest. Make the forest a reusable resource that is used for all uses including grazing. Help future fuels and healthier grasses and forests. Bring back a healthy economy and forest and watershed, including wildlife and fisheries.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of actions by Alternative. Grazing is outside the scope of the project. The final EIS preferred Alternative includes salvage harvest, planting, and fuels reduction. The Action Alternatives propose various levels of salvage and re-planting (EIS, Alternatives Considered in Detail) and all would include the opportunity for firewood cutting of non-merchantable trees felled during roadside hazard treatments (EIS, Recreation Section). In addition, all of the Alternatives include project design features and Best Management Practices which would minimize erosion from project activities and provide for a healthy watershed. Modified Alternative 3 is the final EIS preferred Alternative. Effects to the economy and watershed are described in Chapter 3 of the EIS under those sections.

Code	Comment Number	Comment Text	Response
121.05 - Range of Alternatives	#18894-1	EPA supports the use of best management practices to effectively protect water quality. We understand that the Forest Service is working with the State Water Quality Resources Control Board to implement mitigation measures to reduce adverse impacts to watersheds in the project area such as sedimentation and temperature variation. The EPA commends the Forest Service for limiting operations in areas containing species of concern. We recommend that the Final Environmental Impact Statement fully commit to protecting intact critical habitat for species of concern such as the northern spotted owl, coho salmon, eagles and pacific fisher. While salvage of dead trees could destroy some potential habitat, we understand that the Forest Service anticipates that the vast amount of remaining unlogged charred and/or dead trees will be enough to sustain the surviving wildlife species dependent pn ~p~t-fire environments. We recommend that the FEI5 include the results of consultation ~i~tl~ the ~Ji{itè~ States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration if appropriate. We recommend that the FEIS include a closure and restoration plan for the proposed temporary roads and landings when the project is completed. EPA appreciates that the Forest Service cites and uses recommendations in the 2014 Council on Environmental Quality Draft Greenhouse Gas guidance in the DEIS, and we believe it was helpful to include an estimate of greenhouse gas emissions. We also note that estimates of carbon storage were not provided, based on a conclusion that carbon storage "is not well quantified or thoroughly understood, especially at the project level." While a calculation of carbon storage may not be relevant in this particular fire recovery project, we recommend that the Final EIS provide additional information as to why carbon storage was not calculated, recognizing that the Forest Service has several tools and calculators that can estimate carbon storage. Finally, we also recommend that the FEIS include, in addition to estimates of average global temperature increases, estimates from the US Global Change Research Program for average temperature increases in the U.S.	Project specific Project Design Features (EIS, Project Design Features Sections) and Best Management Practices (EIS, Appendix D) have been included in this project. The EIS includes an Alternative that was developed in consultation with the U.S. Fish and Wildlife Service. Project Design Features will be implemented to aid in successful closure and rehabilitation of temporary roads and landings. Specific project design project design features include watershed-20 (proper stock piling of material), watershed-21 (proper spoiling of material), watershed-22 (closure, blocking, and soil cover of temporary roads), and watershed-23 (erosion control and rehabilitation of landings) will be implemented with any project action Alternative. Any project action Alternative requires enrollment in the North Coast Regional Water Quality Control Board's waiver of waste discharge program. Conditions of this enrollment include a legacy sediment site inventory and treatment plan as well as adherence to the Water Board Monitoring and Reporting Program. This program requires assessment and reporting of the implementation and effectiveness of project Best Management Practices. The specific watershed project design project design features outlined above are examples of these Best Management Practices. Additional information has been added to Chapter 3 of the EIS under climate change to clarify why carbon storage was not calculated. Estimates of average temperature increases in the US have also been added.
121.07 - Blended Alternative Suggestions	#10329-1	The Forest Service needs to be a good steward of the land, joining with fire ecologists, impacted communities and local tribes to focus on restoration and fire safety. Please do not push divisive controversial clear-cut logging proposals on steep slopes in key watersheds. Fire is an inevitable and natural occurrence in this area and it is wrong to exploit wildfire to give permission to fast-track controversial illegal logging. These forests belong to all Americans and the Northwest Forest Plan becomes meaningless if reserves are not protected from impulsive decisions. Klamath National Forest timber planners should not be above the law. Please follow the Northwest Forest Plan. Please focus logging along major access roads and protect the most important and vulnerable recovering areas.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#12293-2	I am appalled that the Klamath National Forest has proposed clearcut logging of "late-successional" old-growth reserves and geological riparian reserves in the Westside Salvage Project. Fire is natural and inevitable in this area. Wildfire prevention is not why lumber companies want to do this illegal logging. They are trying to wring private profit out of protected forests that belong to all Americans. If reserves are only protected until lumber companies decide to log them, the Northwest Forest Plan is meaningless -- and the officials charged with carrying it out are useless. I trust you are better than that. I trust you will listen to fire ecologists, local tribes and impacted communities and focus your efforts on restoration and fire safety. I trust you will stop any and all clearcut logging proposals on steep slopes of these key watersheds and in critical wildlife habitat areas. Follow the Northwest Forest Plan. Focus logging along major access roads only. Protect the most important and vulnerable recovering areas: -- the late-successional old growth and the geological reserves.	Thank you for your comments not the Westside Fire Recovery Project. Clearcut logging is: an even-aged management silvicultural system applied to green forest stands for the purpose of regenerating a new age class. Trees are selected and removed in groups up to 40 acres in size followed by artificial and/or natural regeneration. Salvage logging is: the removal of dead trees after a natural event, for example after a wildfire, in order to remove hazards to public safety, capture the economic value of burned trees, and/or remove excessive fuel accumulation. Dead trees (or snags) exceeding those needed by other resources are removed. Although, some salvaged areas may appear similar to clearcuts but the difference is that salvaged trees were killed and their size and location were determined by the natural event. Salvage is generally followed by artificial and/or natural regeneration. Salvage harvest is a fuels reduction activity that will over time help protect the remaining adjacent late successional habitat and promote that late successional character by accelerating the regeneration to a forested stand that will eventually regain those "old growth" characteristics. The Westside Fire Recovery Project includes a fuels reduction effort where the timber sale is the tool to achieve those fuels reduction goals.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#12347-1	We live in Scott Bar, California, at the eastern boundary of the Happy Camp Complex Fire. Alternative #2 is the best of those alternatives offered in the draft EIS. The fire killed vast numbers of trees, and we need as much salvage logging as possible to reduce the threat of future wildfires. Our community has been devastated by these recent fires. If salvage logging is not done, then in 10-15 years when the brush and small trees have grown up and the fire killed trees start to fall, the next fire that comes through here will be truly catastrophic. We also desperately need to have clearing on USFS public lands near our community. We have invested much local effort in clearing private lands to reduce the threat of wildfire, and when public lands remain overgrown they serve as a conduit to bring wildfire right into the heart of our community. Please help us by implementing alternative #2, and adding extra salvage logging in the burned area, and more wildfire fuels reduction on public lands in and around our community. Thank you.	Thank you for your comments on the Westside Fire Recovery Project. As outlined in Chapter 1, Purpose of and Need for the Action, of the EIS, the Project aims to protect worker and public safety and access, provide safe conditions for firefighters performing fire suppression for community protection, and restore the areas to a fire-resilient forested ecosystem.
121.07 - Blended Alternative Suggestions	#12350-1	I respectfully recommend: * Re-planting impacted whitebark pine (with disease-resistant stock available from USFS Dorena). * No salvage logging or planting units within Inventoried Roadless Areas, including the Grider, Tom Martin, Russian, Snoozer, Kelsey, or Johnson Roadless Areas. * No salvage and no tree planting units in Late-Succesional Reserves. * No salvage units in Riparian Reserves. * No salvage in Critical Habitat for NSO. * No salvage logging in designated or recommended Wild and Scenic River segments. * No salvage units in the Grider Creek drainage to protect roadless values, watershed values, scenic values - such as the Pacific Crest Trail (PCT) and connectivity between the Marble Mountains Wilderness and the adjacent LSRs. * No salvage in endemic or rare conifer stands and adjacent available habitat. This would include foxtail pine (Pinus balfouriana), Baker's cypress (Cupressus bakeri), and Brewer spruce (Picea breweriana) to allow for natural regeneration. * No new roads, either permanent or temporary. Minimize tree planting to highest severity frontcountry sites. * No salvage logging should take place in partially burned stands that sustained minimal (less than 70%) mortality. Undamaged or partially fire damaged stands provide disproportionately important roles in ecological recovery and refugia for the survival of particular biota. * No salvage logging in high elevation sites above 6,000', including mountain hemlock (Tsuga mertensiana), red fir (Abies magnifica), and white fir (Abies concolor) plant communities. * Retain the largest live trees and snags in all salvage units. Consider the retention of snags in aggregates with scattered large snags in between the aggregates. Consider retaining groupings of snags around existing live trees.	Thank you for your suggestions for the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter makes suggestions; however, the commenter fails to provide evidence or reasons for the suggestions made. We considered best available science during the development of this proposal plus the ideas and suggestions of many interested groups and individual. Some of the suggestions are being proposed to varying degrees by different alternatives. A variety of tree species are proposed for planting; planting is proposed is some Roadless Areas, salvage and tree planting are proposed in Late Successional Reserves; no salvage harvest is proposed in hydrologic Riparian Reserves; salvage harvest is proposed in NSO Critical Habitat; no salvage logging is proposed in Wild River corridors; salvage harvest is proposed in Grider Creek; project design features are in place for protected plant species; See Chapter 2 of the EIS for a description of what is being proposed, including project design features to mitigate for resource impacts. See response to comment number 12346-55. See Chapter 2 for Alternatives considered but eliminated from detailed study and the reason for it. Also alternative 5 only proposed salvage harvest in matrix (areas not considered to be Late Successional Reserves, Riparian Reserves, or Inventoried Roadless Area, for example); see the effects of Alternative 5, as compared to the other action alternatives.
121.07 - Blended Alternative Suggestions	#12364-3	There is a better way. Please drop the riparian logging (research says the boles of trees provide significant water cooling shade), drop the road construction and leave high risk decommissioned roads decommissioned. Instead implement the Westside Partnership approach which stresses community protection and preparing strategic ridges for the next fire.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No salvage harvest of hydrologic Riparian Reserves are proposed; see Chapter 2 for a description of proposed actions. The project results in discountable negative effects to stream shade (Chapter 3 under hydrology section) for all action Alternatives as a result of watershed project design features for shade for roadside hazard, temp road and landing, and fuels treatments in Chapter 2 of the final EIS. Also see response to comment number 12364-1. The project emphasizes and incorporates fuel management zones, ridgetop fuel break, and other treatments for community protection. Salvage harvest also serves to reduce the amount and continuity of fuels. See fuels analysis in Chapter 3 of the final EIS.
121.07 - Blended Alternative Suggestions	#12364-5	Instead act to restore fire as an essential component of Klamath Forest ecosystems by implementing the Western Klamath Partnerships approach.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#14307-1	Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 12467-4.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#17281-1	Logging along existing, properly maintained road systems. No new road building, nor opening decommissioned roads to facilitate logging. Proper restoration of logged areas, including: Piling and burning Proper replanting of site-appropriate species (white/tan oak and madrone on south-facing slopes, widely spaced mixed conifers (sugar pine, incense cedar, port-orford cedar, ponderosa pine, douglas-fir on north slopes) or no replanting at all. 200-foot buffers along all stream channels, including intermittent and ephemeral stream channels No use of pesticides, herbicides, fungicides, or any chemical agent intended to kill or maim flora or fauna Increased prescribed burning in the fall to increase fire resiliency and fire return intervals to mimic historic practices Dedicated oversight to ensure these practices are implemented. I have been a dedicated volunteer to the Klamath National Forest for the past 8 years, assisting the Happy Camp Ranger District and Karuk Tribe annually to perform needed assessments of summer steelhead, spring Chinook, and pacific lamprey surveys in tributaries all throughout the Westside Fire Recovery Project area. I have stake in the management of the Klamath National Forest as an American citizen and have a deep appreciation and love for the landscape and all the beings that inhabit the skies, slopes, and waters of the Klamath River and its tributaries. I believe that the Karuk Tribe and Mid-Klamath Watershed Council have been doing excellent work to create partnerships with local, regional, and national stakeholders to ensure maximum productivity and fire resiliency to all aspects of the Karuk Tribe's Aboriginal Territory, managed as the Klamath National Forest, and I would like to see the Karuk Tribe's proposed alternative selected as the preferred alternative. Feel free to contact me if you have any questions. Thank you for your time and your work.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
121.07 - Blended Alternative Suggestions	#17313-3	However, we feel that the criteria for eliminating temporary roads in Alt. 4 is unnecessarily conservative. We urge a site specific assessment of each temporary road. We support temporary road actions in cases where the road would have low environmental cost and would facilitate fuels treatments strategically important for community fire protection. In such cases, we support temporary road actions regardless of the overall condition of the 7th field watersheds, key versus non-key watersheds, or LSR versus General Forest Management Areas. We consider low environmental cost to be roads with no stream crossings or stability problems, or new construction without significant cut and fill (generally flat ground to slopes of 10% or less).	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#17313-7	We would like to see the additions of some fuelbreak treatments where gaps have been perhaps unintentionally omitted from Alt. 2. These areas would include gaps between roads 16N04 and 16N39, and between milepost 3 and 4 on road 45N19 in Lower East Fork Elk Creek (between sections 30 and 31).	. Additional fuel breaks have been incorporated from the Karuk Alternative into the new preferred alternative, Modified Alternative 3. See Chapter 2 for a discussion of how the Karuk Alternative was considered and incorporated and for a description of the preferred alternative.
121.07 - Blended Alternative Suggestions	#17313-8	We think that none of the Forest Service alternatives adequately treat the mid-slope burned area between Frying Pan Ridge and Grider Ridge. There are large burned areas with no treatment proposed. There are treatment opportunities along road systems identified in the 2014 Happy Camp Community Wildfire Protection Plan that could be used for control features for a wildfire or prescribed fire in this area. We favor broadcast burning or underburning as a fuels reduction treatment for both natural and activity fuels and as a site preparation method, and would like to see it included as a tool and implemented as often as practical. We generally support no salvage in Riparian Reserves unless there is site specific information that shows a low environmental cost and important benefits from fuels treatments.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 for a description of the proposed actions. Fuels reduction treatments, including underburning are proposed. No salvage in proposed in hydrologic Riparian Reserves; however, fuels treatments are proposed where appropriate.
121.07 - Blended Alternative Suggestions	#17315-1	Please log the Klamath wisely with a light hand. No big roadside equipment etc. that will desecrate and harm the landscape. We can do better. Preservation of the resource comes first.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter provides no rationale in support of these statements. See Chapter 2 of the final EIS for a description of proposed actions and Chapter 3 for a discussion of effects. Treatments are designed to meet the purpose and need of the project per Chapter 1 of the final EIS and to be consistent with law, regulation, and policy.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#17325-1	As proposed, the Westside project entails too much impact against salmon runs, water quality, old growth forests, and roadless areas that have been proposed as additions to the Marble Mountain Wilderness. Too much logging and too many new or rebuilt roads are in the proposal. We are especially opposed to elements of the project that would damage resource values on the Klamath, Scott and North Fork Salmon wild and scenic rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek that have been recommended by the Forest Service for Wild & Scenic Rivers protection. We are opposed to any logging or mechanical entry within roadless areas, including those proposed in Senator Boxer's bills in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas. We are glad to see that the Karuk Tribe has proposed an alternative that will better protect rivers, salmon habitat, old growth forests, proposed W&SR rivers and roadless areas. We favor the Karuk alternative because it uses natural forest regeneration, provides for community safety through fire-adapted activities, and is based on current scientific findings about post-fire recovery. Please designate the Karuk Tribe alternative as your preferred alternative for the Westside Fire Recovery Project. Above all, please protect the irreplaceable values of salmon habitat, proposed wilderness additions, and roadless areas.	See Chapter 2 of the EIS for a description of treatments; no salvage harvest in Roadless Areas is proposed, only roadside hazard (salvage logging) where roads intersect Roadless Areas. Project design features are in place to mitigate impacts to scenery--see Chapter 2 of the final EIS. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. See Chapter 3 for the effects by resource area.
121.07 - Blended Alternative Suggestions	#17366-1	The Forest Service proposal may well be the largest logging operation ever proposed on the Klamath National Forest in northwest California. They claim that they need to "salvage" timber burned in last year's wildfires, but the proposed project threatens water quality in several existing and proposed Wild & Scenic Rivers and may harm fish habitat and the threatened coho salmon, as well as old growth forests home to the Northern spotted owl. The level of logging and road building proposed is simply too much. While some removal of hazard trees along public roads and strategic fuels treatments are needed to protect local communities, I am concerned that the Forest Service plan overall will continue to perpetuate the agency's century-old exclusion of fire and plantation forestry. I am particularly concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection. In addition, I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas.	Thank you for your comments on the Westside Fire Recovery Project. Information regarding Wild and Scenic Rivers can be located within the Wild and Scenic Rivers Resource Report available on the Project website. Position statement. See response to Comment number 16695-4
121.07 - Blended Alternative Suggestions	#17384-1	Protecting rivers from pollution and over-use has always been the most effective means of ensuring diversity and productivity in our environment. It is especially important during this time of drought. Wise use is more effective than a technological fix later.	Thank you for your comment on the Westside Fire Recovery Project. The purpose and need in Chapter 1 of the EIS includes improvements to watershed. Chapter 2 includes a description of effects, including project design features to mitigate for watershed protection and the treatment of legacy sites for the improvement of watershed conditions. See Chapter 3 of the EIS for a discussion of effects.
121.07 - Blended Alternative Suggestions	#17387-1	I am writing to express my concerns about the proposed Westside Recovery Project. When deciding on a plan of action, please prioritize ecological benefit above economic incentive. While some tree removal may be beneficial to ensure roadway safety and to maintain strategic fire breaks, the ecological health of the burned areas would be best supportive by little or no tree removal. Large snags and downed logs provide habitat and biomass that will seed the natural regeneration of burned areas. Especially the large snags in Late-Succesional Reserves (LSR's) should be left intact. We should not replace burned LSR's with high-density single species plantations. These plantations do little to encourage ecological health or fire safety. There are many such areas already in our region in need of thinning for tree health and fuels reduction. I strongly feel that the Forest Supervisors should focus funds and logging activates on these overcrowded historic plantations instead of harvesting from burned LSR's. Please do not cut corners to push through a recovery plan that has not been fully explored for environmental impacts. Allowing expedited logging of burned areas will only set a precedent in forest management to encourage the catastrophic burning of large areas in order to create an economic product. That type of strategy would be short-sighted, dangerous, and a waste of our natural resources.	Thank you for your comments on the Westside Fire Recovery Project. Information regarding Late-Successional Reserve's can be located in the Wildlife Resources Report located on the Project website.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#17387-3	Retention of large snags and logs are critical parts of the natural recovery processes and none of this wood legacy can be demonstrated as being in excess to ecological needs on moist forest sites; indeed, all of the scientific evidence is to the contrary. Removal of medium and fine fuels, but not large snags and logs, may be ecologically justifiable on sites characterized by PAGs with Fire Regimes I and II. Issues associated with fire suppression could be addressed by creating snag-free corridors or narrow FMZs. Some limited tree planting may be justified to provide seed sources for tree species otherwise likely to be absent or under-represented but the plantings should be carried out in low numbers and at variable density. Establishment of large areas of plantations, even at low density is inappropriate within the LSRs or on sites characterized by Fire Regimes I and II. Finally, current knowledge regarding the ecology and recovery of the NSO should be considered during revision of the DEIS. "	We acknowledge that snags and large wood are important components on the landscape throughout analysis (Chapter 3 of the final EIS). We have incorporated mitigations for the retention of legacy components, including snags and large woody debris, as described in wildlife and watershed project design features in Chapter 2 of the final EIS. The project proposes fuel management zones and snag free corridors to break-up the amount and continuity of fuels, as described in Chapter 2 of the final EIS. Planting is proposed where appropriate in Late Successional Reserves to facilitate regeneration; it is proposed within the sidebar of specific criteria, as described in Chapter 2 of the EIS. T The commenter fails to provide any clear evidence, opposing the planting proposed in this project. See the beginning of Chapter 3 for a discussion of opposing points of view. Also see responses to comments numbers 5873-72,17111-1, 17280-3, and 17280-2
121.07 - Blended Alternative Suggestions	#17460-5	The environmental issues affecting fisheries and wildlife, addressed separately in Alternative 3, 4, and 5, should be combined into a new alternative. The March 16, 2015 letter from the Council on Environmental Quality states "The preferred alternative that is being developed for the final EIS will draw components from the alternatives that were developed after public scoping. .. " An environmentally sound and comprehensive alternative must combine those aspects used to mitigate he specific concerns addressed by Alternatives 3, 4, and 5. To be clear, it should include the "no salvage logging" aspect in the Beaver Fire area to maintain wildlife connectivity, especially considering the salvage logging being done on private lands adjacent to public lands that will affect fisher habitat and overall connectivity. Combining these aspects provides for greater protections for fisheries and wildlife habitat than Alternative 3, 4, or 5 provides alone.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#17478-3	please consider ecologic health along with economic health. this is national forest for the use and protection of many interest groups. a balanced alternative could give recognition to profit makers and conservationists.	The purpose and need of the project includes restoration, as described in Chapter 1 of the final EIS. Best available science has been used during the design and analysis of the project, as described throughout the final EIS and supporting documents.
121.07 - Blended Alternative Suggestions	#17481-37	The project uses a varied approach to essential fuels reduction, including salvage, hand release, mastication, livestock grazing, reforestation, and underburning. In my opinion the planned actions are not aggressive enough, but adequate given the legal and political barriers and also restrictive timelines. Changes in ESA, NEPA, adjustments to LSR, and designated road less areas are imperative to allow professionals to manage the forest in an effective and efficient manner. Constant loud, uninformed, biased, non-local litigations have long delayed or restricted similar restoration actions in the region. I'm sure it's well known and understood that to delay further only compounds an already proven catastrophic situation. It is my hope that good science, history, and professional management can salvage and restore the lands of my grandfathers. Implementing this project is a good start.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#17488-2	On roadside hazard the 60% likelihood of mortality in next 5 years - criteria was used in Salmon Salvage. I am very concerned about the # of large, green legacy trees that were removed. These large legacy trees have huge wildlife and cultural value on the land. Removing them if there is a chance that they will survive is relatively criminal. It makes more sense to be precautionary with the legacy trees. If we leave there trees and come back in five years and find that there was high mortality putting in a roadside hazard CE down the road is easy. The wood in these areas will stay merchantable for many more years so there wouldn't be an economic loss. Why not have a 90% likelihood of mortality on trees over 45" in diameter. These trees are irreplaceable, especially in LSR's and we should err on the side of keeping these trees if there is a possibility of their survival.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The treatments of the Salmon Salvage project are outside the scope of the analysis, except where considered in terms of cumulative effects in Chapter 3 of the final EIS. For this project, the removal of green legacy trees is not proposed with roadside hazard treatments. In Alternative 2 Modified, marking guidelines for roadside hazard treatments were adjusted to respond to public comment and adjusted based on consultation with USDI Fish and Wildlife Service. Acres associated with roadside hazard treatments are listed in Table 2 2 and Appendix F. Alternative 2 Modified adjusts the percentage of mortality for fire-injured trees as follows: all trees less than 45 inches in diameter that were burned in the 2014 fires along Forest System roads within the project area will be considered for removal if they are dead or have a 60 percent or greater chance of dying within three to five years; and trees burned in the 2014 fires, that are greater than 45 inches in diameter, will be considered for removal only if they are dead or have a 90 percent or greater chance of dying within three to five years as defined by Report #RO-11-01 “Marking Guidelines for Fire-Injured Trees in California” (Smith & Cluck, 2011). See Chapter 1 for a discussion of changes between draft and final EIS. See Chapter 2 for a description of proposed actions. The commenter's statement about merchantability is erroneous with no supportive evidence presented. See the emergency situation determination submittal for a discussion of merchantability and Chapter 3 of the final EIS under vegetation and economics.
121.07 - Blended Alternative Suggestions	#17499-7	I support selective thinning of small diameter roadside fire-killed hazard trees. I also very strongly support a comprehensive forest management approach of year-round selective thinning and seasonal prescribed burning. I do not support the construction of new roads or reopening of decommissioned roads. I also feel that it is very important that adequate time must be given for complete and comprehensive environmental impact assessments and I do not believe that expediting the recovery plan will allow for such. I have heard it stated that the stands of burned trees are a fire hazard and that their only possible future fate is to be logged or to be burned again. However, I do not believe that these areas necessarily pose an increased fire threat, as evidenced by the fact that the Happy Camp/Frying Pan fire finally went out when it hit upon the footprint of the Panther Fire, especially if they are properly managed with selective small diameter thinning and prescribed burning. I believe that the value of the trees as they stand in supporting the life and health of the forest ecosystem is still extremely high. The decomposition of woody debris is a huge contributor to ecosystem sustainability; what has lived and grown there supports the generation of new life as it deceases and decomposes. Additionally, life in the burned area of the forest is not just in a state of potential regeneration, but active and alive today. I am currently assisting with surveys of the Northern Spotted Owl in the areas covered by the Westside Recovery Project. I have spent many hours this spring hiking through and observing the wildlife habitat in these areas and I have personally located and fed a mouse to a Northern Spotted Owl in an area that had been severely and devastatingly burned. Please allow plenty of time for the completion of environmental impact reports and remove trees selectively, with an emphasis of removal near existing roads and at a large distance from all riparian areas. I am concerned that prioritizing human use by expediting the plan for removal sets the future health of our forests on a dangerous path. Not only because of the potential environmental impact of salvage logging on the area already burned, but also because a precedent is set wherein wildfire becomes the bridge to eventual profit and is therefore, in some ways, encouraged. I watched the fire move across the mountainsides last summer as I sat on my back porch, I drove by it everyday between home and work. I do not support complete suppression of wildfire, but I believe that the occurrence and severity of wildfire can and should be limited by year round thinning and seasonal prescribed burning efforts and I do not believe that wildfire should be encouraged and managed based on an imperative to allow salvage logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Roadside thinning is proposed under fuels treatments for fuel management zones in Chapter 2 of the EIS. Forest or program management and the Panther Fire Salvage Project is beyond the scope of this project; however, the comment has been acknowledged.

Code	Comment Number	Comment Text	Response
121.07 - Blended Alternative Suggestions	#17910-10	If this is the case, the very least that should be done is: ? a strictly written and enforced contract that mandates that ONLY currently DEAD trees under 20" DBH be salvaged ? the work should only take place in the WUI, that is, within ¼ mile of private property or to protect infrastructure. If nothing else, the work should be split into two phases to occur over two years, with the first phase to take place only within ¼ mile of private property or adjacent to infrastucture. ? specify that if the logger hits a live tree, he is billed for the cost of the tree he hit rather than rewarded (in past salvage logging we have witnessed the practice of " "doubling up" which resulted in twice the volume being removed than was specified in the EA, as well as considerable profit for the logger at taxpayer expense.) ? cleanup of slash immediately after logging with a maximum of less than 3' of slash left on the ground anywhere in the unit(s). ? provisions be included for the ongoing maintenance of slash. ? immediate decommissioning of all temporary roads after logging occurs. ? water monitoring of all perennial and intermittent streams before and after logging activity so as to increase our knowledge of the effects of salvage logging. ? make public the science used to determine that this project will aid, rather than hinder, the recovery of the burned area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Most treatments, including salvage harvest, are proposed to strategically reduce fire risk. See Chapter 2 of the final EIS for a description of fuels treatments. Many of the suggestions made by the commenter have been incorporated into project design.
121.07 - Blended Alternative Suggestions	#18852-19	1) The project area is too large to be considered under one planning document. 2) The project planning time frame from fire event to implementation is too short to allow for detailed site specific and ecological consideration.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The size of the project area is the discretion of the Responsible Official. There is no limit to the size of a project area. Design and analysis of this project has been site-specific and consistent with law, regulation, and policy.
121.07 - Blended Alternative Suggestions	#18852-20	Finally, this project once again appears to pit "environmentalists" against those more interested in resource extraction or proponents of continued fire suppression and management. A more thoughtful plan would have allowed a greater ability to create shared values, such as those created through the Western Klamath Restoration Partnership collaboration.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#18852-33	16) There is a concern that the Klamath National Forests intensive focus on the "Westside Recovery" project is distracting from overarching goals of the entire forest landscape and that this is reducing and re-directing key resources from protecting and managing lands outside of the fire perimeter.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.07 - Blended Alternative Suggestions	#18852-37	20) The separation of Alternative 3 (wildlife focus) and Alternative 4 (water quality & fisheries focus) creates competing management plans where shared values should be prioritized. This produces the appearance that one resource value (i.e. wildlife) will be emphasized if Alternative 3 is selected at the expense of watershed and fisheries values (Alternative 5). Ecological process values should have been consolidated into a cohesive alternative, this including other biologically rich components of the ecosystem, i.e. plants, insects, fungi, soil fertility, etc..	The Alternatives were developed in response to issues from scoping. Both were developed for the improvement of watershed and wildlife conditions and were developed to be consistent with the Forest Plan and other law, regulation and policy. Both Alternatives are consistent with the purpose and need to varying degrees. The new preferred Alternative for the final EIS is actually a modification of Alternative 3 with some components of Alternative 4, which was developed in response to public comments and consultation with the Karuk Tribe and regulatory agencies. The new preferred Alternative also incorporates components of the Karuk Alternative and Alternative 5 (for fuels treatments near private in the Beaver Fire area). See Chapter 3 for a discussion of effects by resource area and Alternative.
121.07 - Blended Alternative Suggestions	#18857-21	If you must move forward with this project please consider removing the following units entirely: Unit #506, 508, 510, 511, 535, Section 30 McGuffy Creek Unit, and all of Grider Creek Watershed Units. The site conditions including habitat, slope, soil type, unique location, documented species and diversity, type of fire that occurred in these areas all demand further review and removal from the treatment plan.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.07 - Blended Alternative Suggestions	#18874-3	Maplesden Ranch located on Buckhorn Ridge in T.46N, I OW, Section 2 2. Concerning Roadside Fuels and Wildland Urban Interface Treatments in the SWV4 of the SWV4 of Section 2, T.46N, R. I OW, MD: - Roadside Fuels Treatment is shown in Alternative 5 along Cherry Maple Road adjoining the Maplesden Ranch on the southwest comer: We would like this hazardous fuels treatment added to the preferred alternative. This fuels treatment would reduce fire intensity of future fires, and provide a safer work area and fire access for fire crews in the future. Cherry Maple Road (through the Ranch) was used extensively by fire-going personnel and equipment during the Beaver fire.	We acknowledge that the treatments in this area would help reduce future fire hazard and provide a safer work environment with safer access. For this reason, selected fuel treatments from Alternative 5 have been incorporated into Modified Alternative 3 (the new preferred Alternative), as part of the Final EIS.
121.07 - Blended Alternative Suggestions	#3-2	I am writing to express my approval of Alternative number Two, with the following comments. I am not in favor of the current Forest Service policy related to fire-safing of areas by removal of all softwood trees up to 9 inches and all hardwood trees up to 7 inches. Removal of these hardwood trees, some of which might have taken 50 years or more to reach this size, impacts severely the food sources for deer, squirrels, birds, and other wildland creatures. Further, the hardwoods represent a far lesser fire hazard than the conifers.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to response to comment number 12355-2.
121.07 - Blended Alternative Suggestions	#3-3	I am also disappointed with the Forest Service decision to refrain from harvest the severely burned trees in the Wilderness areas. I would prefer that select harvesting of these trees be done with the intent to replant some of these areas to assist nature in repairing these spots faster. I would also like to see more replanting done in Forest areas outside of the Wilderness areas, using the Forest Service plan of avoiding "Plantation style" replanting by trying to mimic nature better.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Some areas are being replanted; see Chapter 2 of the EIS for a description of proposed actions.
121.07 - Blended Alternative Suggestions	#4-3	Expand treatment adjacent to private property o Rainbow Mine – west and north boundaries o Finley Camp – Westside adjacent o Mouth of Hickey Gulch – both sides of N.F. Salmon River eastward o Uncle Sam Mine – west ridgetop between White's and Eddy's Gulch o Taylor Hole	Alternative 3 Modified proposes additional hazardous fuels treatment proposed by the Karuk Alternative and to address WUI needs adjacent to private property. In Modified Alternative 3, approximately 55 acres of treatment in the Rainbow Mine area are proposed.
121.07 - Blended Alternative Suggestions	#6425-2	It is unacceptable to exploit the recent fires in order to fast-track logging for economic gain when the market is flooded with timber. Remove the burnt timber only if its actually dead and not just the big trees and don't leave a big mess like up the Little North Fork. No more single specie plantations! Use a mosaic approach of multiple species and stages of growth to get back to historical conditions! No more fuels loading! No more clear cuts! Be good stewards of the land. No more forest plans that aren't based on the health of the forest and safety of the forest communities. Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves.	For clarification, the definition of a clear-cut logging is: an even-aged management silvicultural system applied to green forest stands for the purpose of regenerating a new age class. Trees are selected and removed in groups up to 40 acres in size followed by artificial and/or natural regeneration. The definition of salvage logging is: the removal of dead trees after a natural event, for example after a wildfire, in order to remove hazards to public safety, capture the economic value of burned trees, and/or remove excessive fuel accumulation. Dead trees (or snags) exceeding those needed by other resources are removed. Although, some salvaged areas may appear similar to clearcuts but the difference is that salvaged trees were killed and their size and location were determined by the natural event. Salvage is generally followed by artificial and/or natural regeneration. Salvage harvest is a fuels reduction activity that will over time help protect the remaining adjacent late successional habitat and promote that late successional character by accelerating the regeneration to a forested stand that will eventually regain those "old growth" characteristics. The Westside Fire Recovery Project includes a fuels reduction effort where the timber sale is the tool to achieve those fuels reduction and restoration objectives. Information about effects to wildlife species can be found in the wildlife section of Chapter 3 of the final EIS.
121.07 - Blended Alternative Suggestions	#9-1	Sierra Pacific Industries is in favor of Alternative 2 for the Westside Fire Recovery Project. Maximizing the amount of acres treated is the best from both an environmental and a socioeconomic standpoint. Salvage harvest and roadside hazard treatments within 250 feet of either side of the road are good steps towards achieving forest restoration goals while also ensuring public safety. One suggestions that will help maximize your efforts is to raise the minimum diameter limit to 20 inches DBH. Small diameter trees slow production and increase production costs, which will ultimately reduce the number of acres that receive treatment. Additionally, due to the large scale of this fire and the number of acres that will not experience harvest, there is no logical reason to save snags in treatment areas. The abundance of snags that will be left throughout the area will be so large that it is not sensible to retain any extra. This is an extremely large project requiring large amounts of funding and time. Reducing the amount of restrictions imposed on this project will help its success.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.08 - Alt 2 Plus	#12365-1	I support the project. I feel the document could be strengthened considerably with added scientific information on future fire effects without dead standing tree removal. Leonard DeBano who first studied non-wettable soil formation was a colleague of mine. The impacts of the processes he described along with others more recently analyzed on the effects of high severity fire could justify the proposed action much more strongly. This is unusually steep topography and that will foster sediment in runoff from those affected areas.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.08 - Alt 2 Plus	#17328-1	The undersigned request the following be a condition of the Westside Fire Recovery Project. Restrict the use of Engine Brakes (Jake Brakes) on NFTS Road, in the Happy Camp/ Oak Knoll Ranger District, from Eat of the Doggett Creek Corral to Highway 96. Thank you for your consideration.	See project design features in Chapter 2 of the EIS; this suggestion has been incorporated.
121.08 - Alt 2 Plus	#17329-3	It is highly likely some groups and individuals will challenge this project. I ask that it not influence your decision to truly restore as many acres of the burned areas as possible. I want to go on record of support for your efforts on rapidly restoring some of the acres burned in these catastrophic wildfires.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.08 - Alt 2 Plus	#18879-6	Alternative 2 fails to provide any treatment for a large portion of the Happy Camp WUI in the area between Grider Ridge/Horse Creek and Frying Pan Ridge. There are some treatments planned along the upper slopes of Frying Pan Ridge, along China Grade Road,and along the upper slopes of Grider Ridge. However, this leaves a large area laced with dead fuel with no treatment plan in the Horse Creek/Frying Pan Creek/Ottley Gulch/Woods Creek area. This is difficult terrain to treat and it is difficult to suppress wildfire in this area. No treatment pretty well guarantees that future wildfires here are going to become a big problem and be a threat to both the Happy Camp community and the Seiad Valley community. The KNF needs to address this situation promptly.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.08 - Alt 2 Plus	#18939-2	The project uses a varied approach to essential fuels reduction, including salvage, hand release, mastication, livestock grazing, reforestation, and underburning. In my opinion the planned actions are not aggressive enough, but adequate, given the legal and political barriers and restrictive timelines. Changes in ESA, NEPA, adjustments to LSR, and designated road less areas are imperative to allow professionals to manage the forest in an effective and efficient manner. Constant loud, uninformed, biased, non-local litigations have long delayed or restricted similar restoration actions in the region. I'm sure it's well known and understood that to delay further only compounds a catastrophic situation. It is my hope that good science, history, and professional management can salvage and restore the lands of my grandfathers. Implementing this project is a good start.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Changes in law and regulation are outside the scope of this project.
121.08 - Alt 2 Plus	#18939-3	Recommendations * Expand treatment adjacent to private property o Rainbow Mine - west and north boundaries o Finley Camp - Westside adjacent o Mouth of Hickey Gulch - both sides of N.F. Salmon River eastward o Uncle Sam Mine - west ridgetop between White's and Eddy's Gulch o Taylor Hole	Alternative 3 Modified proposes additional hazardous fuels treatment proposed by the Karuk Alternative and to address WUI needs adjacent to private property. In Modified Alternative 3, approximately 55 acres of treatment in the Rainbow Mine area are proposed.
121.08 - Alt 2 Plus	#18939-4	* Wilderness o Trails maintenance and hazards o Erosion control - burned trails o Trailhead and campsite hazards o Livestock grazing as a fuel reduction and meadow retention tool * Salvage o Longer term contracts - to salvage timber that dies after sale is marked o Adjust DBH and top size of timber as wood quality deteriorates - industry indicates that sales would be more attractive o Y.U.M. and treat units for fuel reduction * Reforestation o Wider spacing for planned reentry and maintenance o Leave some areas unplanted o Vary conifers and hardwoods with respect to original species	The timber sale contract has a “percent sound” specification that can be used to adjust utilization as wood deteriorates. Yarding Unmerchantable Material (YUM Yarding) is far too expensive to use for site preparation, and it creates landing piles that exceed storage space. It is more efficient, and provides more soil nutrients, to broadcast burn salvage units, or come back in with a hand piling contract to dispose of slash. Our reforestation prescriptions are more widely, and variably spaced than in the past, and they include retention of hardwoods and the use of native species. We will also be leaving many areas unplanted. The timber sale contracts will be as short as we can reasonably make them because of the need to remove timber before it deteriorates. Hazard Trees associated with trails within the project area will be addressed separately from this project as part of routine trail maintenance. Trail-side hazard trees will be prioritized and treated based on risk level including probability of tree failure and probability of a target. Selective treatment of hazard trees along trails allows for protection of scenery and the recreation setting. Erosion control is part of project design for proposed actions; see chapter 2 watershed project design features.

Code	Comment Number	Comment Text	Response
121.0801 - Salvage Harvest	#12355-1	am writing to support the Westside Fire Recovery Project. This project was created to respond to the community and public threats and damage caused by the 2014 wildfires. During the months of July, August and September 2014, communities around these fires lived through 29 community evacuations notices and advisories. We don't want to do this again! We don't want our kids and grandkids to have to do it in the future either! By treating the hazardous conditions created by the 2014 fires - by harvesting the burned trees and removing the heavy fuels that will feed the next fire WHEN it comes (not !.E) - we can help protect our lives and homes and communities and forests and wildlife and fish into the future. I support harvesting as many of the burned trees as you can. Isupport creating fuel breaks on ridge lines to help control and limit fires in the future. I support doing dead and danger tree removal along our road system. We have to keep our roads open and safe, especia lly so fire fighters can quick ly and safely access the forest to put future fires out. We need to plant trees in fire burned areas so our forests and watersheds can become healthy again.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many of the suggestions of the commenter have been incorporated into the project design. We recognize and acknowledge the hardships that fire can have on our local communities. We intend for this project to do important fuels reduction and restoration work, as proposed.
121.0801 - Salvage Harvest	#12362-1	I am in favor of your salvage efforts. I would like you to state in all your communications how little you are salvaging of the total fire area. More needs to be done, but as it is the general public doesn't understand how few acres will be affected. The enviro's will state over and over again that you are clear cutting the whole forest, and this needs to be countered with facts	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The final EIS is responsive to your comments in that it provides context for the amount of salvage harvest proposed within the broader project area and areas affected by the fires. See Chapter 2 of the EIS, specifically the pie charts for each Alternative.
121.0801 - Salvage Harvest	#17329-1	This letter is in support of the Klamath National Forest's attempt at recovering a portion of the catastrophic fires that occurred last summer. Thank you for your successful efforts to save time by shortening the comment period. Time is of the essence if this project is to be awarded and accomplished in time to recover the most value possible for the public. I would like to see Alternative 2 selected as the Alternative for implementation as it appears to meet the intended purpose and need for the project, however, I urge you to consider economics and the amount of land base considered for treatment. It seems logical that all of the land burned last summer needs some kind of treatment, however, available resources and time frames are understood. It was noticed that Alternative 2 proposed to not treat any of the Beaver Fire. I'm interested to know why that area is not going to be treated especially considering the amount of private property that is adjacent to burned forest land.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0801 - Salvage Harvest	#17329-2	The draft EIS is proposing to only treat approximately 5% of the total burned area. The selected alternative should treat as many acres as possible on all of the fire areas considered. I want to express the importance of selecting an economical alternative. The selected alternative needs to be implementable if true recovery of these acres is expected. As you know, that can only occur if the project is economically viable. I believe the majority of the taxpayers and county residents would rather see a quick response to the restoration efforts on these fires by producing an economically feasible project that will produce some revenue.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge the importance of having an economically viable project with economic benefits to the community, as described in the purpose and need in Chapter 1 of the final EIS.
121.0801 - Salvage Harvest	#17358-1	I'm for the largest amount of logging. You are wasting precious time with extending the comment period. Start logging!	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We are working as quickly as possible towards a decision and implementation.
121.0801 - Salvage Harvest	#17481-2	After analysis of all the alternatives we feel that Alternative #2, the Preferred Alternative while not being all we would hope for will give this project the best chance for success. We urge the Forest Service to move forward with this alternative, making use of the suggestions we have offered, and using all of the authorities offered in the recent Farm Bill and Healthy Forest Restoration Act. We would like to see far more salvage harvest than 4% but recognize the existing constraints.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.0801 - Salvage Harvest	#17481-28	Alternative 2: Of the 5 Alternatives this Alternative does the best job of addressing the recovery needs of the burned area. There are certain aspects of the Alternative that cause me concern (These are outlined below in dislikes) but I could live with the alternative as presented. One of the strong points in this alternative is the liberal use of existing road beds to facilitate salvage logging and other recovery activities. These facilities provide valuable access with minimal environmental effects. Another strong point of this Alternative is It has the greatest level of social/economic benefit due to the salvage logging activities, the reforestation activities, and the fuel treatment activities. Plus it will bring in the highest level of timber receipts that can be reinvested in the burn area. The social/economic effects will be felt both locally and regionally. Dislikes - Number 1 dislike is the very low level of salvage activity in the burn area north of Happy Camp, between Elk Creek and Grider Ridge. Much of this area is in the WUI as shown in the All Lands CWPP for Happy Camp completed in the late summer 2014. I believe that given the WUI situation that the salvage effort should be designed to remove every bit of material that is physically/financially possible. I believe that adhering to the 10 acre patch limitation inside the WUI but outside the Late Successional Reserve (LSR) is getting in the way of doing what needs to be done to reduce hazardous fuel in the WUI. I also believe that any salvage logging done in the WUI needs to be accompanied with appropriate fuel treatment. This would include that logging done as a roadside hazard measure. I believe this principle needs to be applied to all the WUI situations for each community in the three fire areas. Number 2 dislike is the apparent lack of mitigation measures to address cleanup needs along the Pacific Crest Trail. There appears to be considerable activity adjacent to the Trail low in Grider Creek which I believe is appropriate to the circumstances but follow-up measures to mitigate the appearance of the disturbances needs to be an integral part of the project and some interpretive signing needs to be included to explain the need for the actions and the objectives being sought. Plus some signing along the trail outside areas of salvage/reforestation to explain fire effects and the need for hazard tree felling and other measures driven by the human use and presence along the trail. Number 3 dislike is the lack of treatment of activity fuel resulting from roadside hazard tree removal. These fuels need to be treated to prevent build-up of problem fuel concentrations along and adjacent to roads since roads are often the anchor points to arrest the spread of wildfire. Solving a hazard problem and creating a fuel problem is not good management!! The design is conservative in the sense it follows the current LMP/PNFP standards and guides along with the recovery plans for T&E species. Following the letter of some of the standards and guides is debatable given the local conditions and circumstances but the balance being sought is to apply them in such a manner that prolonged or successful court challenges are unlikely. This is a judgment call by the ID Team and Decision Maker and my hope is they push the line as far as possible to benefit the fire area without losing the entire effort to the delays of court proceedings.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. In response to ongoing consultation and public comments, the preferred Alternative for the final EIS is modified Alternative 3; see Chapter 2 for a description.
121.0801 - Salvage Harvest	#17483-4	I am writing to show my support for Alternative 2. I would also support any additional logging and rehab in the burn areas. I am currently having Crawford log my property inside the burn area and also in the non burn area to thin my over-dense property. My neighbor Luke Wilson at 24905 Scott River Road has had his property logged. The Forest Service has access through his property to Forest land above Luke's place which may be able to be logged. It is currently not included in any of the plans. It may be worth checking out.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0801 - Salvage Harvest	#17486-2	I am writing to let you know I support all salvage and sale of dead trees that can occur through the Westside Fire Recovery Project: We have lost such a huge amount of our forest to the catastrophic fires of 2014: This project will only scratch the surface of what really needs to get done in our lovely forest - This Project is only the beginning of what must be done! Please go forward with knowledge that most all residents support your efforts to get this done!	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.0801 - Salvage Harvest	#18901-1	As a resident and fire chief with in the effected burn area, I would like to state that I am for the proposal of the USDA selling what salvage they can, as quickly as can be expedited. This is a very time sensitive issue. We need to manage all aspects of our I-Zone community. A lot if resident property owners have been cleaning their land after the fire. And are preparing for the next possible fire. We would like to see active management with in the USFS. Not just prescribed burn management but, mastication and Timco management also. This is our community, our home, we love the beauty and history with in our forest area but we also should not neglect the forest floor. Rehabilitation will not only provide money but allow for new habitat.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0801 - Salvage Harvest	#19-9	Alternative 2: Some areas within the fires will benefit from the proposed management action. Areas treated with the proposed measures outlined in Alternative 2 will be restored/rehabilitated much fasted than if Alternative 1 was selected. Unfortunately, many areas will not receive treatment under this alternative and over 40,000 acres of salvageable forest stands that were burned with high severity will likely re-burn, and or remain in brush fields for decades or possibly longer. Despite the fact that this alternative does not cover significant portions of the burned area, or meets the purpose and need of the project, this alternative does treat the most acres of all the alternatives listed. Therefore, Timber Products Company would like to go on record of supporting this alternative.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0801 - Salvage Harvest	#35-1	I urge you to consider the most cost effective and ecologically efficient alternative possible for the Westside project. The sooner the forest heals from the damaging effects of fire, including the removal of dead trees, the healthier the forest will become in providing valuable habitat for wildlife and fisheries. The Draft Environmental Impact Statement proposes Salvage Logging which I believe is necessary and ecologically important to hasten the natural state. I encourage the management of the Klamath Forest to also thin the forest to reduce the amount of water being diverted by the trees at the expense of our watersheds. Your original master management plan called for a forest that has less board feet than currently exists. This not only increases the fuel available for a catastrophic fire, as was experienced, but it also decreases the amount of water captured in the streams and rivers. In a drought, as we are currently experiencing, this exhausts are watersheds. There are additional reasons why it is important to Salvage Log this fire-damaged landscape, they are: *Post-fire landscapes are ripe for the spread of pests and disease; *Post-fire landscapes provide a greater risk of another catastrophic fire to re-engulf the region and destroy the entire forest. The sooner the forest can return to a natural, healthy growing state the greater the benefit for the watershed and all living beings that inhabit and recreate in it. *Consider the economic benefit that would result from Salvage Logging to the immediate and surrounding communities. This economic benefit also includes the increase in the tax base of the area to help pay for needed public services: roads, public safety, schools, and health departments.	General statement. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge the importance of the proposed treatments in order to meet the stated purpose and need statements of Chapter 1 of the EIS. See Chapter 3 for a discussion of socio-economic effects.
121.0803 - Site Prep Plant	#18900-1	Dear Supervisor Grantham, Regarding the Westside Fire Recovery Project, I'm writing in support of Alternative 2, with any additional replanting possible. I have read many pros and cons and respect the opinions of all stakeholders, but at some point action is needed and we just have to decide something and go forward. The town of Scott Bar is older than the National Forest and deserves consideration of their safety. They should not have to endure dead trees and flooding on their roads when it could be prevented. The wildlife will return no matter if anything is done. Thank you very much, Kathy Herrera	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0804 - Fuel Burn	#17313-1	The HCFSC supports the level and types of treatments proposed in Alternative 2 with the exception that we would eliminate some of the road actions as proposed in Alternative 4. Additionally we would add fuels treatments we feel are important for the Happy Camp community and support some of the concepts/actions proposed in the Karuk Alternative.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.0806 - Fuel Rx Other	#17481-40	Alternative 2: Weakness of this alternative is in addressing the WUI.Public safety concern should be a priority.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This Alternative and the preferred Alternative include roadside hazard and other treatments to address safety and WUI treatments, as described in Chapter 2 of the final EIS. Both of these needs are described in the purpose and need statement in Chapter 1 of the final EIS, as we recognize the importance of these treatments.
121.0806 - Fuel Rx Other	#18901-1	As a resident and fire chief with in the effected burn area, I would like to state that I am for the proposal of the USDA selling what salvage they can, as quickly as can be expedited. This is a very time sensitive issue. We need to manage all aspects of our I-Zone community. A lot if resident property owners have been cleaning their land after the fire. And are preparing for the next possible fire. We would like to see active management with in the USFS. Not just prescribed burn management but, mastication and Timco management also. This is our community, our home, we love the beauty and history with in our forest area but we also should not neglect the forest floor. Rehabilitation will not only provide money but allow for new habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.0901 - Salvage Harvest	#14307-1	Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late-successional and geological reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 12467-4.
121.0904 - Fuel Burn	#3-4	Lastly, I am not particularly in favor of major amounts of Prescribed Burning, as promoted by the Karuk Tribe. Too many times these burns exceed the planned areas, with many of them becoming uncontrolled burns. In these drought years, prescribed burns are just too dangerous. I saw enough fire last summer in our area to last me the rest of my life.	We recognize the inherent risk of prescribed underburning but have proposed some because of the resource and fuels reduction benefits of the treatments. Prior to prescribed underburning, the Forest follows a prescribed burn plan and considers many variables including fuel moisture levels and weather when determining the appropriate time for such treatments. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
121.0906 - Fuel Rx Other	#12356-1	With one condition, we are in support of Alternative #2 of the Westside Fire Recovery Project. As a condition of the project, please add the following: Restrict use of Engine Brakes (Jake Brakes) on NFTS Road 12, in the Happy Camp/ Oak Knoll Ranger District, from East of the Doggett Creek Corral to Highway 96. This is a very short section of Road 12 and the noise disturbance effects 18 homes in the vicinity.	Project Design Feature (Roads-1) has been added to the project design in response to this comment; see Chapter 2 of the final EIS.
121.0907 - Temp Rds	#17313-2	Under Alternative 4, we support the concept to reduce reopening or construction of temporary roads where those actions would result in a significant impact relative to the benefit of fuels reduction.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#11365-1	Prior to all the restrictions on logging we had forests relatively cleaned of underbrush and fire storm creating material. Dead trees need to be salvaged and sensibly managed forests will grow back with the renewable resource God created and planned for it to be.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#12352-1	While I didn't see any one alternative that fit my preference I do see a combination that would be beneficial to everyone. I was also glad to see a lot of helicopter logging which, while being more expensive, is also less intrusive on our ecosystem. I see our National Forest land surrounding Happy Camp becoming a mass of snags/dead timber due to one reason or another, I have also seen stand after stand of bug killed timber in Colorado and would really hate to see that happen in our forest when it is preventable. I think it is imperative to remove the burned timber and restore or replant where needed and to provide fuels reduction efforts on the intact timberlands to prevent future fires. Most of Alternative 2 and parts of the Karuk Tribe alternative are the two that most appealed to me.	Thank you for your comments on the Westside Fire Recovery Project. The preferred Alternative (modified Alternative 3) for the final EIS incorporates portions of Alternative 2 and the Karuk Alternative; see Chapter 2 for a review of the Karuk Alternative for this project.
121.10 - Alt 2 as is	#12353-1	I am in support of the U.S. forest Service salvage and reforestation plans for the 2014 fires that burned Over 200,000 acres of our forests here in Siskiyou County.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#12358-1	I feel that your recommended approach given in Alternative 2 is by far the preferred approach in order to achieve a fully recovered forest in the shortest overall time period. The do-nothing approach outlined in Alternative 1, while useful for comparison purposes should not be considered as an action alternative because of the many negative medium to long-term consequences inherent with that approach. While Alternative 3 through 5 address important special needs, the loss in benefit to the overall forest health exceeds any benefit achieves. It is recognized that impact of the fire on native fish and wildlife, while significant for certain species, will, in many cases, constitute a displacement rather than a death knell. The faster and more thorough the forest recovery, the better for all concerned.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#12360-1	I am in agreement that Alternative #2 is the correct Preferred Alternative. Please move forward with the project as soon as possible. Restrain from adding additional requirements to the individual projects that would make them not economically feasible. With all of the work that has and will go into this project it needs to be successful. There is a limited period of time to remove merchantable timber from the project area. You need to move quickly.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#14-7	The two remaining alternatives are Alternative 2 (Proposed Action and Preferred Alternative) and Alternative 4 (Reduced impact to watershed, including federally-listed Coho Salmon) have similar treatments. The primary difference between the alternatives are the acres proposed for salvage, acres proposed for reforestation, and miles of temporary roads proposed for use. Alternative 2 proposes to salvage 900 more acres, reforest an additional 900 acres, and use 10 additional miles of temporary roads. Considering the small percentage of acres being treated within the fire areas (less that 5%) the environmental effects between these two alternatives are negligible. With that being the case we see no reason why Alternative 2 should not be selected over Alternative 4. It treats more acres with no significant difference in environmental effects (See Table 2-34).	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#14-8	Purpose and Need Alternative 1 Alternative 2 Alternative 3 Alternative 4 Alternative 5 Karuk Alternative 1 Not met Similar to other alternatives except worker safety by snag removal is better by 900 acres. Worker safety through snag removal is less effective by 1,000 acres Worker safety through snag removal is less effective by 900 acres Worker safety through snag removal is less effective by 9,400 acres – Not met Not met 2 Not met Met Met, but 1,000 acres fewer large fuels removed Met, but 900 acres fewer large fuels removed Not met Not met 3 Not met Highest income and jobs created 8.7 million $ less income than Alternative 2 and 169 fewer jobs created 8 million $ less income than Alternative 2 and 162 fewer jobs created Not met Not met 4 Not met Best meets purpose and need for acres salvaged, regenerated, fuels reduction 1,000 acres less salvage, reforestation, and fuels reduction Similar to Alternative 3 Not met Not met Alternative 2 best meets the purpose and need statements for the project. It more fully meets all of the statements than any of the other Alternatives. This is another justification why Alternative 2 should be selected.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the EIS under the socio-economic section for a comparison evaluation by Alternative. See the end of Chapter 2 of the EIS for comparison table of Alternatives by purpose and need component.
121.10 - Alt 2 as is	#14-9	The proposed action in the Draft EIS is proposing to treat approximately 4% of the total Forest Service burned area with salvage harvesting (a slightly higher percentage when other activities are included). All of the other Alternatives propose to treat even fewer acres. The selected alternative should treat as many acres as possible on all of the fire areas considered, including the Beaver Fire. Upon reviewing how the various alternatives meet the purpose and need and lack of differences in environmental effects we believe Alternative 2 is the only feasible Alternative for implementation. It is apparent that treating only 4% of the burned area does not come close to a complete fire recovery effort given the amount of acreage burned and the large acreage of high mortality. We also understand the regulatory restrictions you are dealing with and time frame issues with NEPA, undertaking an EIS, and required consultation and coordination with other government agencies and groups. Also, the time frame needed in order to adequately implement in a timely manner is a key consideration. We would like to have seen more of the high severity burned areas treated but understand the above restrictions. We will support the selection of Alternative 2. It hopefully is better than nothing. We believe the majority of the taxpayers and county residents would rather see a quick response to the restoration efforts on these fires by producing an economically feasible project that will produce some revenue. Most of the taxpayers and local citizens would prefer to see as many acres treated as possible within the framework of regulatory restrictions and short times frames required to	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Action Alternatives were designed to be consistent with law, regulation, and policy. We acknowledge the timeline considerations in terms of timber value; for this reason, the Forest Service requested an emergency situation determination. Consultation with the Karuk Tribe and regulatory agencies is ongoing.

Code	Comment Number	Comment Text	Response
		accomplish some level of restoration.	
121.10 - Alt 2 as is	#17112-1	As a senior studying Forest Management and Ecology, I have obtained knowledge and experience in both the technical requirements of forest operations and the silvicultural facets of forest regeneration and development. From my background, it is clear that this DEIS addresses the complexity of issues surrounding the proposed management actions in an informed and encompassing manner, and is based upon sound ecological principles. The DEIS analyzes the Forest Service's proposal to restore fire resilient forests while improving safety in and access to these areas. The report suggests five alternatives addressing a variety of concerns regarding salvage logging, endangered species habitat, and effects on riparian areas. I support the proposed Alternative 2 because it addresses concerns about species habitat fragmentation and connectivity and the effects of salvage logging and site preparation in ecologically sensitive riparian areas. My review of the DEIS addresses some concerns in specificity of detail regarding the potential effects of Alternative 2 on species viability, vegetation, and channel morphology.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17289-1	This letter is in support of the Westside Fire Recovery Project. The 2014 wildfires were devastating for us all. Now, we need to recover and prepare for the future. The burned trees should be harvested as soon as possible, the roads, and firebreaks cleared and new trees planted. I'm sure that these and other related items are on your future plans for our beautiful Klamath National Forest. You are doing a good job!	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17290-1	I am writing to support Alternative 2, because it is the action which will better promote forest health and safety.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17355-1	I'm writing to support your choice of Alternative 2 in the DEIS for this project in order to recover the most timber possible that was burned in the catastrophic wildfires of last summer. I applaud your efforts to clean up our public land while there is still some merchantable value left that will help defray the costs of managing this damaged forest. The sooner it is cleaned up and replanted, the sooner the environment will produce clean water and healthy habitat for all creatures. Economic value in the timber sales you are producing is key to their success. As you know, if there isn't an economic value then the sales will not be purchased, thus the work will not get done. Please make these sales economically feasible to support their implementation.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service recognizes the need to make the project economically viable; see Chapter 1 of the final EIS for the purpose and need statements and Chapter 3 for a discussion of social-economic effects.

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121.10 - Alt 2 as is	#17357-1	We must get this dead timber out before it gets bugs in it and is no good for lumber. We don't understand why they think all the animals and fish in this area like the forest in this condition. There will be no forest, just brush areas that will burn even hotter next time if they get their way. Yes, we are retired loggers and know more about the forest than they ever will. Everything is not learned from a college book! We must keep the forest clean so it will not burn this hot ever again. Again, please do not let these "overly aggressive and radical" environmentalists beat you down and make you change your decision to get this fire ravaged forest logged	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17377-1	I feel that the timber harvest sales should be allowed to proceed from the fires, and I leave it to you and the other professionals how much to harvest, when to do it, how to do it, and how to replant. I know that your staff is highly trained, and has only the best of intentions for our forest lands over the long haul. I hope you can convince those who do not want timber harvesting to happen, to be amenable to your preferred alternative. Having lived here for 30 years now, I see that forestry is a long process. Fire is part of our summer here and will be easier to manage if you have adequate dollars for fuels reduction.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17489-1	In reference to the Westside Fire Recovery Project, I, after review of the maps, figures, and comments of the Forest Planning treatment alternatives, am very complimentary of the quick response that your teams have given to the health and rehabilitation of the fire affected areas outlined in Draft EIS. The salvage removal of dead trees will generate much needed revenue and assist in stimulating restoration and reforestation, reducing very hot burns due to dry heavy fuel levels. The value of the timber will be significantly recovered by an early harvest. I believe that removing a responsible proportion of the dead wood and sending it to mills to create jobs and net revenue for restoration projects will support and improve the economy and ecological health of the affected areas. Our National Parks which have been subject to the devastation of wildfire that were left to nature to regenerate on their own are now overgrown with shrubs and grasses, but few trees (Yosemite, case in point). It's a window as to what will continue to happen if removal of fire-killed timber and reforestation are not allowed. Being able to harvest, replant and control the merchantable areas will speed the health and productivity of these areas, and improve recovery of habitat for wildlife versus waiting years and years for it to heal itself. There are tens of thousands of acres of National Forest lands that are left untouched from wildfires, so it is unreasonable to stipulate that every acre of burned land should not be harvested. It is encouraging to see the desire of the Forest Service to rehabilitate the burned areas instead of leaving it to nature to waste valuable renewable resources and scarring thousands of acres of our National Forests. Careful and professional planned removal of fire-killed timber will provide for adequate dead wood to support wildlife habitat. As fires become more common and intense, it is necessary that we take preventative and recovery measures to reduce heavy fuel levels that result in catastrophic fires. We know from past experience heavy fuels left from wildfires increase the intensity of successive fires destroying all living conifers and wildlife habitat. Removal of excess levels of dead trees throughout the many miles of public roads will improve public safety and support fire prevention, as well as improving the chance of survival for a young forest. The requirements of your current stream protection rules are very and sometimes excessively protective of streams, which is essential to ensure some of your proposed treatments ecological benefits. In your preferred Alternative 2 you appear to be protecting the resources that need to and are required to be protected by laws and regulations concerning threatened and endangered species. The economic benefit created by select logging of fire-killed timber will increase the success of any future reforestation projects and help in the continued support of our wildlife. It appears that the drafted plans to improve the health of the forest and wildlife habitat, mitigate soil and water damage have been carefully thought out and should work out to everyone's' best interest.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#17494-3	proposed alternative is the only Alternative that should be chosen for implementation. This alternative best meets the purpose and need for the proposed project as identified in the draft EIS. Completing salvage harvesting along with site preparation and replanting will benefit our communities long term while supporting local businesses. All efforts to improve safety for workers and recreational users will be beneficial while restoring the fire burned area. Please considers treating as many acres as possible through alternative 2. Thanks for the opportunity	Statement of support for alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
		to comment on this project.	
121.10 - Alt 2 as is	#17509-1	Murphy Company supports Alternative 2 (preferred alternative) as it best meets the purpose and need of the project. We believe that Alternative 2 strikes the best balance of treatments with general salvage, roadside hazard treatments, hazardous fuel treatments, and reforestation. We are pleased that reforestation will take place on much of the salvage operated areas, as this will accelerate the growth of a new healthy forest on the site.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18-1	The Rotary Club of Yreka supports the draft EIS for the Westside Fire Recovery Project. In 2014, our primary fundraiser, the Siskiyou Century had to be cancelled due to the smoke from the fires. This fundraiser typically raises $10,000 for our club. These dollars go back to our community in the form of scholarships and community projects. There have been many years in the history of the ride that we have been negatively affected by the smoke. Any efforts to mitigate this type of disaster in the future have our support. Our fellow club, the Rotary Club of Montague also had to cancel the Balloon Fire as a result of the fires.	Statement of support for Alternative 2. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18747-1	Add my approval of Alternative 2 since it embraces all aspects of creating treated areas alongside roads and private property.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18849-1	It is all but universally agreed that the forest health conditions on the KNF are extremely poor and in desperate need of restoration. Alternative 2 of the Westside Fire Recovery Project (the Preferred Alternative) reflects the best that the KNF can accomplish in that direction given time and procedural constraints. Any treatment reductions or complications to the Preferred Alternative, which includes salvage harvest on 4% of the burned area, simply perpetuate the major contributory factor to catastrophic wildfire on the KNF: the failure to apply well-proven, active management to existing stand conditions.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18849-6	The SFHC supports the Preferred Alternative. Given the urgency with which post-fire triage and recovery must proceed, we support this project moving forward. We urge every possible expeditious option for implementing the Preferred Alternative, including exercise of authorities consistent with the National Environmental Policy Act that can be used to make sure this project is implemented early in the summer of 2015.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18853-1	Support Alternative Two.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18853-2	We urge that the United States Forest Service approve "Alternative 2": (Refined Proposed Action)	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18859-1	I would like to voice my support for the US Forest Service, Klamath National Forest in the implementation of their Preferred Alternative, Alternative 2, in the Westside Fire Recovery Project. While I would personally like to see more being done in terms of recovery, I understand this is a modest first step and one that will hopefully maximize the potential of implementation.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#18859-13	I fully support the Preferred Alternative. Given the urgency with which post-fire triage and recovery must proceed, I support this project moving forward. I urge every possible expeditious option for implementing the Preferred Alternative, including exercise of authorities consistent with the National Environmental Policy Act that can be used to make sure this project is implemented early in the summer of 2015.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18859-8	It is all but universally agreed that the forest health conditions on the KNF are extremely poor and in desperate need of restoration. Alternative 2 of the Westside Fire Recovery Project (the Preferred Alternative) reflects the best that the KNF can accomplish in that direction given time and procedural constraints. Any treatment reductions or complications to the Preferred Alternative simply perpetuates the major contributory factor to catastrophic wildfire on the KNF: the failure to apply well-proven, active management to existing stand conditions.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18871-1	The Siskiyou Unit of the California Department of Forestry and Fire Protection (CAL FIRE) is in support of your Westside Fire Recovery Project which will entail approximately 10,000 acres timber salvage and 20,000 acres of hazard fuel reduction within portions of the areas impacted by the Whites, Beaver and Happy Camp Complex fires. The proposed project will directly reduce fire danger by removing hazard fuels and improve firefighter safety by maintaining adequate access for emergency vehicles and facilitate safe public egress during emergency evacuations. I support this proposed project and believe its implementation will benefit the citizens of Siskiyou County.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18875-1	We have reviewed the proposed Action and fully support full implementation of Alternative 2. Implementation will help our local communities with needed jobs and reduce the risk of future catastrophic wildfires in and around our communities. At the same time the project more than adequately addresses the needs of ecosystem functions through retention of snags, green trees, riparian buffers and LOP's for northern spotted owls. Again, we fully support the full implementation of Alternative 2.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 12346-55.
121.10 - Alt 2 as is	#18877-1	Please put me down as vigorously supporting alternative 2 on the DEIS for this project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18879-1	Of the alternatives analyzed in detail in the DEIS Alternative 2 is the best by a wide margin. Alternative 2 best meets the four principle objectives of the project. Given the overall size and nature of the burned area in the 3 fire areas, the activity proposed in Alternative 2 is a very conservative response. The negative environmental effects from activities in Alternative 2 are small incremental increases to the major negative effects from the fires. The constraints imposed by the KNF Land Management Plan, The Pacific Northwest Forest Plan, The T&E Recovery Plans and the Inventoried Roadless Areas severely limit treatment options. Within these confines Alternative 2 strikes the best balance of environmental benefits and environmental costs of treatment	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#18879-2	Alternative 2 makes the greatest use of salvage logging. Salvage logging as designed in Alternative 2 is a very effective form of fuel treatment. It physically removes large amounts of fuel that otherwise will persist on site for many decades and contribute to high intensity future fires. The post salvage treatments in harvest units involve treatment of logging slash and site preparation for planting and planting of conifer seedlings. This sequence of actions meets all four project objectives by reducing fuels through removal or on site treatment, promoting ecosystem sustainability, obtaining maximum economic value, and reducing safety hazardous. The negative effects on watershed and wildlife from the disturbances associated with salvage and reforestation are minor additions to the effects already imposed on these areas by the wildfire. The project planners have excised lots of caution in order to minimize the negative effects from the salvage/reforestation activity. The positive environmental effects of the salvage sequence are high. The future fire hazards from excessive fuel loading are sharply reduced, the treated areas will have a more balanced plant community of conifers, hardwoods, and shrubs, and the overall quality and sustainability of wildlife habitat will serve a wide range of species over a long period of time. The salvage/reforestation sequence also has strong local and regional economic and social benefits through direct and indirect employment, local tax revenues for schools and roads, and revenues returned to the KNF for investment into the recovery effort.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18879-3	Alternative 2 has the highest level of hazardous fuel treatment outside the salvage harvest units. These treatments are very important steps in reducing the levels of hazardous fuel buildup from the fires. Left untreated,these fuels will contribute to higher resistance to control and higher intensities in future fires. Dollars invested now in these treatments will likely substantially reduce the cash costs and environmental costs of future fires. These treatments are particularly important in the Wildland-Urban Interface (WUI) areas identified in the various Community Wildfire Protection Plans (CWPP). Wildfires within or adjacent to the WUI are very costly in terms of cash,social costs and environmental costs. Treatment investments now are likely to have substantial benefits in the future through reduced occurrence of destructive, out-of control fires.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18879-4	Alternative 2 has the greatest number of acres treated for site preparation and reforestation. The site preparation step will treat the buildup of dead fuels in the areas treated and planting of conifer seedlings will insure and accelerate the development of post fire stands of vegetation with a mix of hardwood and conifer trees along with shrubs and other plants. Stands of this nature offer the widest range of wildlife habitat benefits and promote ecosystem diversity in the forest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18879-5	Alternative 2 makes the most extensive use of the existing road system on the Forest. While opening roads that have not been used for some time involves a certain amount of disturbance, the negative effects of this activity is very small. The newly opened road beds and the minor amount of newly constructed temporary spurs are carefully chosen to minimize disturbance and negative watershed effects. The benefits gained in acres of fuel treatment/salvage logging I site prep/ and planting are substantial. This is a good balance - low cost/high payoff.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18893-1	Family Water Alliance is 501c3 non profit located in Maxwell California. We are also the Sacramento Valley Fish Screen Program and have a 20 year history of protecting fish in the Sacramento Valley. Fish depend on a health water shed to complete their life cycle. The West Side Fire Recovery Project will protect fish populations by ensuring that excess biomass is removed from the recent fire boundaries. Projects like this will allow fire to be reintroduced to these overstocked forests. Catastrophic wild fire is the biggest threat to the health of our forests. A healthy forest protects the watersheds that we depend on for water. Family Water Alliance supports the West Side Fire Recover Project. I have included a picture of the Lower McCloud after a large rain event. This watershed had no logging and notice the sediment coming from the creek. We cannot continue to ignore the impacts of fire on the landscape.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#18897-1	I support the implementation of the Westside Fire Recovery Project as outlined in Alternative 2. The scoping and public review process have helped build a balanced approach to Fire Recovery following the catastrophic fires of 2014. As a local resident, frequent wilderness user, and natural resource professional, I appreciate the non-commercial values inherent in these public lands. However, the commercial values available to local industries through logging operations, wood cutting, fuels reduction, and recreation help support my family. I believe both commercial and non-commercial values can be met as outlined in Alternative 2. The system has lost balance with natural processes. We (the forest ecosystem and the people who rely on it) are all exploring and redefining what it means to be "fire-adapted". Historically, the local forest was adapted to frequent fire intervals that did not result in wide spread catastrophic fire. Historically, people could expect frequent lightning caused fire to maintain the quality of the forest and potentially threaten communities. No one knows the "right" answer, but neither the forest nor the community are "adapted" to respond to catastrophic fires. The severe burn sites may have crossed an ecological threshold and may not recover without intervention. The treatments proposed provide an efficient method for safe removal of hazard trees and fuel reduction while also gaining economic benefits where opportunity exists from a small proportion of the burn area. The NWFP governs land use and is the guiding document for Forest decisions. The Forest has an obligation to address the five major goals in the plan (consider human and economic dimensions; protect long term health of resources; focus on scientific evidence; produce timber sales; and ensure federal agencies work together). The DEIS adequately addresses all the environmental impacts and helps inform the decision for Alterative 2 as the preferred alternative. A few comments for improvement: 1. Improve methods of communicating road closures to the public; post notices in advance 2. In addition to identified roadside locations, consider using wood cutters for salvage and road site cleanup if commercial value is lost 3. Include some small scale contracts suitable for local industry; large jobs = large bonds that are outside the capacity of local loggers 4. Provide summary report that compares proposed outcomes from selected alternative in DEIS with what actually happens 5. Establish monitoring plan now to measure outcomes described in DEIS Please DO NOT delay in the harvest of salvage timber. If the comments highlight some items of dispute, please find some way to move forward with the harvest component.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18915-1	While I wish the Forest had looked harder at stand and forest conditions and given more serious consideration to restoring the forest to a more resilient condition, I support the preferred alternative, Alternative 2, of the DEIS. It is critical that the Forest 1) reduce forest fuels, 2) recover the value of the burned timber to the extent possible, and 3) restore the burned area to forested conditions as soon as possible.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18915-2	REDUCE FOREST FUELS. As we have seen in recent years, and especially in 2014, fuel levels on western forests are at extreme levels that threaten the ability of those lands to remain forested and provide the multiple benefits that society expects from their public lands. Additionally, with the increasing severity of wildfires there is an increase in levels of atmospheric pollutants including CO, CO2, methane, and particulates among others. These burned forests are not only having a negative effect on the atmosphere and on local communities, but they are losing their ability to store carbon and act as carbon sinks. As the National Forest System addresses climate change and the interactions of the National Forests and the climate, it is critical that public lands do not become net emitters of carbon, which is where we are currently headed. Therefore, all post-fire project and all forest management projects need to work to reduce fuel loads and reduce the potential severity of the wildfires that will come as part of the natural processes of our western forests.	Procedural. The project does proposed to reduce fuel loading and fire risk, as described in chapter 2 of the final EIS. See Chapter 3 for a discussion of effect to fuels by Alternative. Also see Chapter 3 for a discussion of climate change as it relates to this project.
121.10 - Alt 2 as is	#18919-1	The purpose of this letter is to strongly support the Westside Fire Recovery Project planned by the Klamath National Forest (KNF). While this recovery project will only provide revenues for about four percent of the fire-ravaged timber in Siskiyou County in the impacted area, this is an essential plan that promotes economic recovery and fire safety in Siskiyou County.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#18919-2	The poor economy here, largely due to the decline of the timber industry, has resulted in higher crime rates and some of the worst drug abuse, alcohol abuse, child abuse, elder abuse, and domestic abuse rates in California. The economy leads to lower productivity, lower tax rates, abject poverty and invariably, destroyed lives and higher crime, especially drug and alcohol-related offenses. Projects like the Westside Fire Recovery Plan should help a county like Siskiyou recover from the impacts of these fires and at the same time enhance access and safety of our visitors and many forest users. I urge you to approve this vital project. I am convinced that this project serves the best interests of all Siskiyou County residents, service providers, and the citizens we serve. Thank you for your consideration. Should you have any questions, please contact me at (530) 842-8300.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#18939-1	I support the Westside Fire Recovery Project (Alternative 2) and the attempts at improving the health and safety of the relevant forests, their residents, and workers. As a resident of Sawyers Bar on the Salmon River of Siskiyou County, CA, a Shasta Nation tribal member, a Salmon River Volunteer Fire and Rescue member, a retired timber faller, a commercial sixth generation packer and guide, hunter, fisherman, former Forest Service firefighter, supporter of watershed management, and a member of both the citizens and county supervisors collaboration groups I feel the need to comment.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#19073-1	Upon reviewing how the various alternatives meet the purpose and need I believe Alternative 2 which is the proposed alternative is the only Alternative that should be chosen for implementation.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#19073-7	The two remaining alternatives are Alternative 2 (Proposed Action and Preferred Alternative) and Alternative 4 (Reduced impact to watershed, including federally-listed Coho Salmon) has similar treatments. The primary difference between the alternatives are the acres proposed for salvage, acres proposed for reforestation, and miles of temporary roads proposed for use. Alternative 2 proposes to salvage 900 more acres, reforest an additional 900 acres, and use 10 additional miles of temporary roads. Considering the small percentage of acres being treated within the fire areas (less that 5%) the environmental effects between these two alternatives are negligible. With that being the case we see no reason why Alternative 2 should not be selected over Alternative 4. It treats more acres with no significant difference in environmental effects (See Table 2-34 in attachment). Alternative 2 best meets the purpose and need statements for the project. It more fully meets all of the statements than any of the other Alternatives. This is another justification why Alternative 2 should be selected.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#19073-8	In closing I want to emphasize that the Alternative you chose to implement will have a great bearing on our communities wellbeing both now and in the future. It will also have very large impacts on the success of businesses in the area, both ours as well as those businesses that will be positively impacted by the work provided by your selection of Alternative 2. I also am a strong believer in the values to recreation and tourism that a healthy well-managed forest provides and I believe that the selection of Alternative 2 will help provide both of those treasured values in the future.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge your comments. The effects of action Alternatives on the social and economic environment are provided in Chapter 3 of the EIS and will be considered as factors in making the decision of which Alternative to implement.
121.10 - Alt 2 as is	#19112-1	Dear Patty and Wendy - Please accept the following comments for the Westside Fire Recovery Project DEIS. We support Alternative 2, Proposed Action as crafted. Fuels reduction including fire salvage will help to moderate future fire episodes in the burn areas. Both small and heavy fuels need to be removed to reduce future fire effects and restore some level of forest health and balance. Fire is good in general, but not in areas of heavy dead fuel loadings during dry conditions. The emphasis on public and fire personnel safety including roadside hazard reduction is good and very beneficial.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#19154-1	I support Alternative 2! I think Alternative 2 is the right step toward fire resilient ecosystem and utilize the dead dying trees. I get sad seeing nice timber rot. It seems like a right balance to harvest after a fire. I would think that wood products are a good carbon sink, they won't rot for a while longer than in the woods, and in the spirit of Gifford Pinchot and John Muir harvesting, replanting after a fire is a good choice.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.10 - Alt 2 as is	#19154-4	In regards to restoring the forest to be fire resilient, I know in our region there's not supposed to be a lot of large woody debris. Seems that your Alternative 2 addresses that.	Thank you for your comment on the Westside Fire Recovery Project. We agree and acknowledge the fire return history of the Klamath Bioregion and how that juxtaposes coarse woody debris requirements. The project meets or exceeds requirements for woody debris, as directed in the Forest Plan.
121.10 - Alt 2 as is	#19157-1	Iencourage you to salvage harvest as many acres of burned timber as possible. Iendorse the Alternative 2 as the preferred Alternative.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#24-1	I, we, would prefer Alternative 2 for Project Boundary A, B, & C Draft EIS.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#26-1	Thank you again for presenting this issue to the Yreka Rotary last week. I found your discussion and slide show easy to follow and informative. My comments with regard to the Westside Fire Recovery Project are in support of what is called "Alternative 2 (Refined Proposed Actions)' in the handout you provided. I do have some concerns over the proposed fuel breaks and treatments within 1/4 mile of private property structures unless that is referring to federal lands within 1/4 mile of those structures. I believe that was the intent but if it is including private lands as well, I would want to know how that would be implemented for the sake of private land owners. Overall, I believe you have the right project objectives and seem to be addressing the concerns of stakeholders affected by the fires. I wish you and your department great success in this important endeavor	Thank you for your comments on the Westside Fire Recovery Project. For clarification, fuel breaks within 1/4 mile of private property would be constructed on Federal land.
121.10 - Alt 2 as is	#27-1	I wanted to take the time to let you know how proud I am of you, Patti, and our Klamath National Forest. As you explained in Yreka Rotary today, you have 4 objectives and I am here to tell you that you are focused and spot on. They all seem time sensitive but the one that stands out the most is to salvage that burned timber before it becomes worthless. It will benefit all of the schools in our county as well as the college. Since you are asking for the public's opinion I would suggest that the next priority should be to abate hazardous fuels that exist close to homes and communities. I would suppose that the other two will fill in to priorities as funds and time permits. I did try to do this online but my computer kept telling me that your site will steal my passwords and bank card information. Yea, well, the government nearly owns most of my net worth in taxes yet to be collected. The Klamath National Forest Service has s great workload ahead of them this summer and I feel assured that our Forest Supervisor will make good decisions as caretakers of our land. Keep up the good work Patti	Statement of Support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. As outlined in Chapter 1 of the EIS, the goals of the Project include (1) a need for worker and public safety and access, (2) a need for safe conditions for firefighters performing fire suppression for community protection, (3) a need for a project that is economically viable, meeting project objectives and benefiting our local communities, and (4) a need for a restored and fire-resilient forested ecosystem.
121.10 - Alt 2 as is	#28-1	I am writing to support the Westside Fire Recovery Project. This project was created to respond to the community and public threats and damage caused by the 2014 wildfires. During the months of July, August and September 2014, communities around these fires lived through 29 community evacuations notices and advisories. We don't want to do this again! We don't want our kids and grandkids to have to do it in the future either! By treating the hazardous conditions created by the 2014 fires - by harvestinf the burned trees and removing the heavy fuels that will feed the next fire WHEN it comes (not IF) - we can help protect our lives and homes and communities and forests and wildlife and fish into the future. I support harvesting as many of the burned trees as you can. I support creating fuel breaks on ridge lines to help control and limit fires in the future. I support doing dead and danger tree removal along our road system. We have to keep our roads open and safe, especially so fire fighters can quickly and safely access the forest to put future fires out. We need to plant trees in fire burned areas so out forests and watersheds can become healthy again.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#28-4	Please do as much salvage harvest as you can in order to reduce fuels in all areas where the fire burned. Please remove danger trees from along our roads so that the public can use the roads and firefighters can get to future fires safely. Please remove fuels as much as you can around private property and utility lines and other needed infrastructure. Please plant areas to help them recover from the devastations they've been through. In our lifetimes, we will never get our forests back to where they were before the 2014 fires. We can helps start them on the right path to recovery for our kids and grandkids with the Westside Fire Recovery Project.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.10 - Alt 2 as is	#36-1	I support the alternative with the largest amount of salvage logging and replanting, because it's the right thing to do.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#38-1	I'm in favor of the most salvage logging that we can do. It's the right thing to do and replant trees kin for kind.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#4-1	I support the Westside Fire Recovery Project (Alternative 2) and the attempts at improving the health and safety of the relevant forests, their residents, and workers. As a resident of Sawyers Bar on the Salmon River of Siskiyou County, CA, a Shasta Nation tribal member, a Salmon River Volunteer Fire and Rescue member, a retired timber faller, a commercial sixth generation packer and guide, hunter, fisherman, former Forest Service firefighter, supporter of watershed management, and a member of both the citizens and county supervisors steering groups I feel the need to comment.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#6097-1	Please salvage every log you can!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.10 - Alt 2 as is	#8-1	I do strongly believe that we need this project done. As a local firefighter I know that with all the dead trees and the debris from the fires just laying around will dry out quickly and can cause an even worse fire than last year. We need to get rid of these fuels and quickly. As a resident just driving around and seeing all the burnt timber standing and laying around is not a good sight. The debris needs to be cleaned up to bring our forest back to it beauty.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.11 - Alt 3 plus	#17481-29	Alternative 3: Likes/Dislikes - I like the aspects of this Alternative that involve recovery activities identical to Alternative 2. I dislike the aspects of this Alternative that reduce recovery activities for the perceived benefits to Spotted Owls ,etc. I believe the reduction in salvage logging activity will reduce the long term habitat while gaining a very limited short term benefit of lower disturbance levels.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.1101 - Salvage Harvest	#12367-1	I am in full support of Alternative 2. With the addition of site preparation, planting and grass seeding. Maintain all fire lines and contingency lines for future use by cleaning all burnable debris. All merchantable timber should be sold, whether via timber sales or fire wood sales. Water-bars should be constructed as per Forest Service regulations as required on logging skid trails, these will also aid in wildlife connectivity. The planting of appropriate native grass species will aid in providing both forage for wild and domestic animals as well as increase erosion control. Healthy standing trees should be preserved while native species are replanted for shaded fuel breaks and restocking. Roads should be brought back up to appropriate class standards for use by all forest users as dictated in the KNF Travel Management Plan. Silt fences, straw waddles or other erosion control devices should be implemented to prevent excessive erosion while the land is healing and re-stabilizing. In full plantation areas, open strips should be left to serve as pre-attack fire lines to be used during future wild fires or prescribed burns. They should be treated the same as existing fire and contingency lines. Burned areas should be monitored closely. As short term surviving timber dies it should be put up for sale and logged. Grazing is also an important tool to help control brush and minimize ladder fuels. Grass seeding is a must as many seed banks were obliterated in scorched areas. Without the regrowth of native plants, the forest will be overrun by invasive and noxious plants.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.13 - Alt 3 as is	#17460-3	Retention of habitat for wildlife connectivity, particularly the Pacific fisher; while this concern is mitigated in Alternative 3, it is subsequently discarded in Alternatives 4 and 5.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.1507 - Temp Rds	#3679-3	I appreciate that there will be no new roads. I also question the need for opening up the temporary roads on old road beds. True, these are short segments, but if they have already been "put to bed", does this really need to be done? Can't the work be accomplished without re-opening these roads? I believe this is addressed in Alternate 4. Also in Alternative 4, I am in favor of treating the sensitive watersheds individually to reduce watershed disturbance. It makes sense to not lump together all watersheds as they are not all the same	The commenter is correct that these concerns are addressed in Alternative 4. The preferred Alternative for the final EIS is the modified Alternative 3 which incorporates some components of Alternative 4 into it. This Alternative was developed in response to public comments and consultation efforts.
121.16 - Alt 4 as is	#17285-1	I am concerned about the assumption that widespread salvage logging and replanting is an ecologically sustainable practice. Plantations become extremely flammable as the trees grow and create an increased fire hazard over the long term, which makes the situation worse than no action; I don't favor replanting. It is a waste of time, money and resources. Let the forest recover on its own. Reopening closed and decommissioned roads seems like a really bad idea; those roads were decommissioned for a reason, and reopening them and then re-decommissioning them can't be cost effective or ecologically sound. I also believe that no action should be taken in roadless areas, and that salvage should be confined to areas along roads, on strategic ridges and near communities. Overall, I believe the Karuk Alternative best reflects my point of view. Of the alternatives presented by the Forest Service, I would prefer Alternative 4.	See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See Chapter 2 for a description of proposed actions; salvage harvest is proposed in a limited area of the overall project area. Alternative 4 of the EIS was designed to consider and analysis reduced road actions; some components of alternative 4 have been incorporated into the new preferred alternative (modified alternative 3). Also see response to comment number 12364-1. The only treatments in Roadless Areas include limited, strategic fuels treatments and a limited amount of Roadside hazard treatments (where roads intersect Roadless Areas and there are fire damaged trees that put the road system in danger). In the new preferred alternative, salvage harvest is restricted to a limited amount of areas for fire risk reduction; ridgetop treatments for fuels reduction are emphasized.
121.16 - Alt 4 as is	#17460-4	I also support the steps taken in Alternative 4 to protect the watershed, particularly eliminating any new or temporary roads and their associated salvage and/or plant and release units.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.16 - Alt 4 as is	#18850-2	As a tax payer I am in favor of proposal # 4	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.1701 - Salvage Harvest	#18869-1	Alternative #5 with increased salvage logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.18 - Alt 5 minus	#18912-6	You might ask how I think the proposal and alternatives could be changed to accommodate these concerns? I think that many of these watersheds, particularly those within the Late Successional Heritage Preserves, need to be left unlogged, or very selectively cut, with emphasis on road safety and decommissioning and fuels reductions. Water drafting's effects in each watershed should be studied before assigned a "one size fits all" rule for how it should be managed, and a biologist should be on site whenever stream crossings and roads are being re-commissioned, water is being drafted or trees are being cut anywhere near the riparian buffer, to ensure that the loggers are carful of these regulations. I think that monitoring is needed in these watersheds to be logged and control watersheds that were burnt but left unlogged in subsequent years, to document the effects of salvage logging. I hope that an equal amount of reopened roads and built roads are decommissioned as mitigation. I also think that salvage logging and water drafting in the Scott River and other thermally limiting sites should be suspended completely.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
121.19 - Alt 5 as is	#12349-4	I am also concerned that the KNF has proposed substantial amounts of salvage logging and planting within Late-Succesional Reserves (LSRs), lands designated for the development and preservation of late seral stage forests and species dependent on forests with those characteristics. If the fires had not burned through the LSRs, these lands would generally be off-limits to logging. Wildfires, even those as extensive and severe as the fires that occurred this past summer, should not be used as a justification to harvest timber within LSRs. Because trees within LSRs would generally not be harvested, the KNF would not lose monetary value that would have otherwise been gained through timber harvests by leaving fire-killed trees on the landscapes. Thus, I urge the KNF to adopt alternative 5 within the DEIS instead of the preferred alternative 2. While not perfect, I think alternative 5 is the best of the five primary alternatives considered in the DEIS, particularly because it excludes almost all salvage logging within LSRs.	See Chapter 1 of the EIS for a discussion about salvage in Late Successional Reserves. The purpose and need for the Westside Fire Recovery project includes ecologic and economic factors as stated in Chapter 1 of the final EIS. With or without fire, it was not intent of the Forest Plan to restrict logging in Late Successional Reserves. Within Late Successional Reserves, the treatments proposed in Chapter 2 of the EIS are consistent with management direction in the Forest Plan for Late Successional Reserves. Also see the Appendix of the final EIS that describes the treatments in Late Successional Reserves, as submitted to the multi-agency Regional Ecosystem Office (who reviewed this proposal and concurred with its consistency with the Forest Plan). Alternative 5 was considered in detail; effects are described throughout Chapter 3 of the final EIS. (This is a position statement; see response to comment number 16695-4.)
121.19 - Alt 5 as is	#12349-5	Two other justifications put forth for the project are the needs for worker and public safety and access, and the need for safe conditions for firefighters performing fire suppression for community protection. I found these justifications more compelling, and think it is a good idea to removal hazardous snags along roadways and around infrastructure. I also like the emphasis on fuels reduction and prescribed fire to help communities within the KNF become fire-safe and to create a more fire-resilient landscape, another reason why alternative 5 appears to be the best alternative. However, these activities should only target brush, downed wood, and small-diameter trees. Salvage logging of large trees is an unnecessary and inappropriate method of fuels reduction.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the final EIS for proposed actions. Strategic fuels treatments along roadways and near wildland urban interfaces include targeting brush and small diameter trees. Additionally, roadside hazard treatments is proposed, as described in Chapter 2 of the final EIS.
121.19 - Alt 5 as is	#16957-3	I am in support of Alternative 5, and the suggestions given from the Karuk tribe. Alternative 5 is the most feasible because it calls for a limited quantity of salvage logging, and a maximization of fuel treatments using prescribed fire. I want the forest service to quantify and compare the revenue created from salvage logging, compared to the costs of suppressing fire in the proposed plantations over the long term. Furthermore, I want local peoples to be involved with the fuel treatments, and restoration efforts. I want the forest service to implement a plan that utilizes traditional ecological knowledge, and the use of local social capital to keep funding dollars in the local economy. An investment in managing healthy ecosystems with the use of small scale logging in conjunction with the return of tribal burning to the klamath mountains is a wise decisions to govern forest management in this areas. An investment in timber plantations and fire suppression is socially unjust and is not a valuable investment of taxpayer money.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service involves the local public through the National Environmental Policy Act processes and other fuels and fire prevention programs that are outside the scope of this project, including but not limited to the Rural Advisory Committee program and associated projects for treatments on private land. Modified Alternative 3 is the preferred Alternative in the final EIS and incorporates suggestions from the Karuk Alternative and Alternative 5 into it.
121.19 - Alt 5 as is	#18850-3	with # 5 as my second choice	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.19 - Alt 5 as is	#18874-5	Salvage Harvest & Fuel Breaks: In general, we are in favor of incorporating Alternative 5 into the final EIS. We support salvage harvest on all Forest Service lands primarily managed for timber, particularly where adjoining private lands within the Beaver Fire area. We also support creation of ridgeline and roadside fuel breaks. The 2014 Westside fires have created an opportunity that should be used to put fuel breaks in place to assist with fire control in the future.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.20 - Karuk plus	#17496-6	I would support many of the concepts and rational of the Karuk Tribe Alternative with amendments made to minimize the biological and societal impacts. The approach should focus on utilizing the large fire footprint of the 2014 fires to facilitate the restoration of fire through prescribed fire and wildland fire use. The approach should also focus on community protection and the avoidance of practices such as salvage logging, tree planting, and the conversion of natural forest habitats into plantation stands that, in turn, increase fire hazards, impact watershed health, fisheries, and wildlife habitat. The agency should consider a more practical and scientifically justifiable approach to community wildfire protection on the Klamath River. This would include identifying areas adjacent to communities that did not burn in the 2014 fires and implementing prescribed fire and fuel reduction treatments between the community at risk and the 2014 fire footprint. This will maintain appropriate fuel conditions and plant communities. This will allow for very safe and effective prescribed fire treatments that will greatly benefit community protection and fire resiliency. Projects could also target key areas adjacent to communities that did burn in 2014 for future prescribed fire treatments. The agency could also focus efforts on managing strategic ridgelines within the fire area with prescribed fire to prepare for the inevitable future wildfire event and allow for more effect containment and control. This approach will stimulate the local economy, maintain important ecological values, encourage fire resiliency, and provide for improved firefighter safety during the next wildfire event-all goals of the Westside Fire Recovery Project. The Klamath River is a landscape shaped by fire; we must adapt to that reality and manage federal lands for fire safety rather than short-term profits and unsustainable, reckless timber production. The 2014 Fires and post-fire management I believe the discussion of post-fire management in the aftermath of the three large Klamath National Forest (KNF) fires of 2014 - Happy Camp, Whites, and Beaver - should focus on true fire recovery and restoration, rather than salvage logging and plantation management. Both salvage logging and plantation management have been shown to increase fuel loads and fire severity, decrease ecosystem resilience and heterogeneity and hinder ecosystem recovery after widespread disturbance. Interestingly, the 2014 fires burned mostly in characteristic fashion and contributed to ecosystem resilience and heterogeneity while reducing fuel loads and, if managed correctly, future fire severity. The fires of 2014, by and large, require very little "restoration" or facilitated "recovery" on national forest lands, as these fires were natural events with effects that are well within the range of variability. In fact, these fires actually represent restoration or recovery of fire processes and plant communities on a landscape scale; they were, in essence fuel reduction and forest restoration. These fires represent the restoration of fire as a process that, in turn, maintains fire-adapted plant communities and ecosystems. The management of the post-fire landscape should focus on the maintenance of biodiversity, the protection of communities and the restoration of fire and fire-adapted ecosystems. Emphasis should also be placed on mitigating the impacts of active fire suppression and restoring sites impacted during suppression operations. It is my opinion that no post-fire logging operations are desirable from an ecological standpoint. It is also not scientifically justified to claim salvage logging assists ecological recovery and reduces the severity of future fires. This premise is simply false and should be abandoned. The objective of post-fire management should be to manage the landscape in a way that facilitates a natural fire regime and allows for the use of both wildland fire for resource benefit as well as the safe and appropriate use of prescribed fire as a future management tool. The questions to ask are: How do we promote natural fire regimes, fire recovery and fire-adapted ecosystems? How do we manage in a way that allows wildland fire use and prescribed fire to be utilized to manage fuels? What steps are necessary? How do we prepare for the next fire? What treatments will increase resilience and provide strategic opportunities to control fires and moderate fire severity adjacent to communities?	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.2004 - Fuel Burn	#17481-39	Karuk Alternative: Discuss replanting and fire as management tool. While fire is recommended by the Tribe, it does not discuss timing and frequency.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Most of the areas recommended for wildland fire use in the Karuk Alternative are in areas that experienced high severity fires in the 2014 Westside Fires. Underburning these areas will not be effective until surface fuels become more continuous in these areas. That won't occur for another 12-15 years, so those actions are not ripe for implementation at this time, or in the life of this EIS. Fire as a management tool is allowed in the Klamath's Forest Plan.

Code	Comment Number	Comment Text	Response
121.22 - Karuk as is	#12351-3	A shift away from commodity production toward native traditional fire resilient landscapes is needed now before precious public funds are wasted on well intentioned, but futile rationalized actions, that will all go up in smoke in future years. I support the inclusion of the Karuk Tribe's Alternative in the Westside Fire Recovery Project, and am willing to work with you to make it a meaningful and timely addition to the Draft EIS.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#12363-1	I urge you to please consider the Karuk Alternative to the Westside Fire Recovery Project.	See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#13-4	The Karuk Tribe's alternative represents real "recovery" because it would not increase the amount of logging slash and highly flammable tree plantations which would fuel a future fire and increase future fire intensity for many years to come. By concentrating on community protection, key forest travel routes and strategic ridges which would become shaded fuelbreaks, the Karuk Alternative offers greater community protection and a path to allowing fire to play a more natural role on KNF lands. For these reasons, the Karuk Alternative represents real recovery. Please adopt and implement it!	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#13-6	But please decide not to prioritize economic value recovery over community protection and healthy forests. Choose the Karuk Alternative as the best path to true "recovery".	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17280-4	I don't know enough about fire to comment on what is really needed, but I believe the Karuk Tribe's idea of returning fire to it's natural position in the landscape, while providing for protection of private property and ridgetop fuelbreaks to allow for control if needed, makes sense. Therefore, I think the best alternative if your priority really is to care for the land would be the Karuk alternative. Fire is a part of this landscape, and "controlling" it is a big part of what got us into this situation. Allow the land to heal itself.	We agree that fire needs to be returned to its natural role on the landscape. That is one of the objectives of the Westside Fire Recovery Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17282-3	I support the alternative proposed by the Karuk Tribe, which will protect rivers and water quality, threatened salmon, old growth forests and wildlife, existing and proposed Wild & Scenic Rivers, and roadless areas. The Tribe's proposal encourages natural forest regeneration, increases community safety through fire adaptation, and uses the best available science and traditional ecological knowledge. Please adopt the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
121.22 - Karuk as is	#17285-1	I am concerned about the assumption that widespread salvage logging and replanting is an ecologically sustainable practice. Plantations become extremely flammable as the trees grow and create an increased fire hazard over the long term, which makes the situation worse than no action; I don't favor replanting. It is a waste of time, money and resources. Let the forest recover on its own. Reopening closed and decommissioned roads seems like a really bad idea; those roads were decommissioned for a reason, and reopening them and then re-decommissioning them can't be cost effective or ecologically sound. I also believe that no action should be taken in roadless areas, and that salvage should be confined to areas along roads, on strategic ridges and near communities. Overall, I believe the Karuk Alternative best reflects my point of view. Of the alternatives presented by the Forest Service, I would prefer Alternative 4.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Also see the Appendix A of the final EIS (maps) for a comparison map. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
121.22 - Karuk as is	#17295-1	Current proposal to log the Klamath Forest is UNACCEPTABLE. I know the area in question intimately and the damage proposed would be irreparable to both land and river. I support the compromise made by the Karuk tribe.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17305-1	NOT return to the old clear-cut, tree farm approach to forest management. The Karuk alternative understands the many values contained in our national forests that go far beyond timber. Please consider their proposal. Remember that the National Forests belong to ALL of us. Fish, animals, and a variety of plants are of great value and should be protected whenever possible. It's time for the Forest Service to start managing the WHOLE forest, not just the trees. As a former commercial and current sport fisherman, I ask you to protect the watersheds and values as embodied in the Karuk proposal for the Westside Fire Recovery Project #45579.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. There is no intent in the Westside Fire Recovery to return to dense plantation forestry. Our goal is to reestablish a fire resilient ecosystesm where fire can play its natural role. See EIS Chapter 3, Responsible Opposing Views and Agency Response. Also see the Appendix A of the final EIS (maps) for a comparison map. No clearcutting is proposed; see Chapter 2 for a description of the proposed actions. Effects to resources is discussed throughout Chapter 3 of the EIS.
121.22 - Karuk as is	#17313-6	Karuk Alternative. We like the way the fuel breaks proposed in the Karuk alternative would compartmentalize the landscape into firesheds and encourage inclusion of those fuel treatments where it is practical and feasible to do so on-the-ground. We agree that it would be prudent to have the added fire protection treatments adjacent to private property. We like the underburning proposed in the Happy Camp WUI, especially within the area above China Grade Road from Elk Creek to China Creek.	Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17326-1	I think that the Karuk Indian proposal for the Kalmuth River is a better solution to the problem of removing dead timber. We do not need industrial type logging in this area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17363-6	drove past the active fire region on Highway 101 several times last summer and was worried at the time that it would end with a large logging giveaway. I'm saddened to know that my concern was warranted. I am particularly concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection. In addition, I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas. I support the alternative proposed by the Karuk Tribe, which will protect rivers and water quality, threatened salmon, old growth forests and wildlife, existing and proposed Wild & Scenic Rivers, and roadless areas. The Tribe's proposal encourages natural forest regeneration, increases community safety through fire adaptation, and uses the best available science and traditional ecological knowledge. Please adopt the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project. Also, please avoid activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. See Chapter 3 of the EIS for a disclosure of effects by resource area and Alternative. No salvage harvest is proposed in Roadless Areas; however roadside hazard treatments (logging along roadways that intersect Roadless Areas) is proposed, as described in Chapter 1 and 2 of the EIS.
121.22 - Karuk as is	#17368-2	The Karuk Indian Tribe is proposing an alternative to the project that focuses on restoring natural fire regimes and protecting local communities and cultural resources. The Karuk proposal will: *Ensure long term protection for rivers, water quality, endangered salmon, and roadless areas. *Increase safety for local communities through fire adaptation. *Encourage natural regeneration of forests. *Use the best available science and traditional ecological knowledge. *Avoid building of new roads or reopening of decommissioned roads. *Avoid intensive industrial logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
121.22 - Karuk as is	#17385-2	I support the proposal put forth by the Karuk Tribe. The Tribe's plan encourages natural forest regeneration, increases community safety through fire adaptation, and uses the best available science as well as traditional ecological knowledge. Please adopt the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project. The KNF should avoid activities that could harm existing and proposed Wild & Scenic Rivers, water quality and salmon, and roadless areas that provide refuge for wildlife.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17396-3	Please go with the Karuk Tribe's recommendations	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17397-1	The current proposed plan sounds more like harvesting than removal of wood after a fire. Please work with the plan filed by the Karuk tribe. It's more respectful of the environment and in the end will save resources, some of them to be harvested, for future generations.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17398-1	Please support the Karuk Indian Tribe's proposed alternative that will better manage for future wildfires, protect watersheds with threatened salmon, and restore old growth forests.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17401-6	I write in strong support for the alternative proposed by the Karuk Tribe. Their proposal, with its emphasis on natural forest regeneration and community safety through fire adaptation, reflects a stewardship approach that will protect rivers and water quality, threatened salmon, old growth forests and wildlife, existing and proposed Wild & Scenic Rivers, and roadless areas. The Karuk Tribe proposal draws upon the best available science and traditional ecological knowledge -- an ecosystem management approach that is now recognized as central to insuring ecosystem resilience, and thus is key to climate change adaptation.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17402-1	I agree with Friends of the River and the Karuks in opposing the Forest Service plan and in supporting the Karuk's plan.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.

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121.22 - Karuk as is	#17409-5	I am writing to urge you to not adopt the Westside Fire Recovery Project due to its potential negative impacts on water quality, fisheries, endangered species such as the spotted owl, Wild and Scenic rivers in the area, and proposed Wilderness Areas, roadless areas, and proposed Wild and Scenic rivers. In addition, I am appalled that a so-called "recovery" project would include the logging of old-growth trees-----the extensive logging and clear-cutting of old-growth trees with the subsequent "plantation" reforestation would seem to be one of the main reasons we have such critical wildfire problems today. Clearcutting and logging in general require the building of roads and extensive disruption of the surface in the logged areas, resulting in increased erosion and subsequent increased siltation in watersheds utilized by anadromous fishes for spawning. I believe protection for Wild and Scenic Rivers, roadless areas, and Wilderness Areas is vital to the health of the ecosystem------continued intrusion and disruptions will only degrade the health of the ecosystem. I urge you to support the proposal advanced by the Karuk Tribe, a far less damaging plan that is based on the best available science and protects the natural qualities of the area. The Karuk Tribe plan is designed to do the least damage to the environment while at the same time achieving the goals of safety and fire protection for the residents of the area. Please adopt the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project, keeping in mind to avoid any activities that would degrade Wild and Scenic Rivers, possible proposed Wild and Scenic Rivers, Wilderness Areas, proposed Wilderness Area additions, and roadless areas. All of these areas need our continued vigilance and protection for the value they provide for wildlife and recreation.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map. See Chapter 2 for a description of proposed actions; Clearcutting is a term that The Westside Fire Recovery proposes to salvage dead and dying trees to reduce the risk of future high severity fire.and there are wildlife project design features to retain legacy components, including large dead snags. The project is designed to improve watershed conditions; see the purpose and need statement in Chapter 1 of the EIS and the legacy site treatments proposed in Chapter 2. See Chapter 3 for a discussion of effects by resource areas and Alternative. No salvage logging is proposed in Wilderness areas. In Roadless Areas, only fuels treatments, planting and roadside hazard treatments are proposed---no salvage harvest is proposed. Project design features for scenery and wild and scenic rivers are included in Chapter 2; see Chapter 3 of the EIS for effects.
121.22 - Karuk as is	#17427-3	I am extremely concerned about the proposed Westside Fire Recovery Project, and am flabbergasted that our national forest protection agency would consider extensive clearcut, monoculture plantation and fire suppression strategies at this date in time, when these practices have proven disastrous for some decades now. If this agency is unwilling to learn from past mistakes, then the resultant mudslides and human, biologic and environmental devastation will be on your collective head. Though my family is not native to this continent, we have spent considerable vacation time in the beautiful Klamath watershed, and are aware that you have a thoughtful, reasoned and time-tested alternative in the Kurok Tribe's proposal. For all our sake, do the right thing.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17437-1	The level of logging and road building proposed is simply too much. I support instead the alternative proposed by the Karuk Tribe.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17440-1	I would feel a lot more comfortable if the plan were scaled back to followed more of what the local Native Tribes have put forth.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17441-1	Although the letter below is clearly "cut and paste" it represents my sentiments completely, and I endorse and support every point it makes. Please understand that my inability to write as clear and concisely does not mean I don't mean or care, very deeply, about this issue. This watershed matters, not just to me, but to the world as a whole, and I urge you to take seriously the need for wise stewardship of the the land that the Karuk proposal represents. Thanks.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17442-1	I am very concerned that the currently proposed Westside Fire recovery project keeps repeating the mistakes of the past which led to massive wildfire. I support the Karuk tribe alternative, which takes a different, better, science based approach to managing the forest and coping with wild fire.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.

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121.22 - Karuk as is	#17448-3	The Forest Service should know better than anyone what this type of logging will do the watershed the wildlife and the river. Please listen to the local Indians and cut back this project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17450-4	However, I know the Service is determined to proceed and therefore would support the Karuk Alternative. The Karuks and other local Native Americans have lived in this environment for millennia and know how to care for it.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17457-1	I support the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17460-13	Additionally, I support the efforts of the Karuk Tribe to restore prescriptive fire, as proposed in Alternative G. While the Forest Service provided me with detailed more detailed maps of Alternative G on request, they did not make them available on the web site hosting the Westside Recovery documents, despite several requests to do so. The public should have had access to those maps to evaluate and comment on.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17464-1	The Western Klamath Restoration Partnership (WKRP) has intimate knowledge of the land where the Westside Fire Recovery Project will take place. They know how our natural resources in the area will be affected by the project better than the vast majority of people. Have you considered the Karuk Alternative?	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17465-1	As lovers of the out-or-doors, campers, hikers, and birders, my husband and I are VERY upset over your proposed Westside Fire Recovery Project of logging for the Klamath National Forest! We feel that your plans would be extremely disruptive for the plants and animals that call this forest home! Your methods of logging, including building extra roads and working on steep hillsides, are completely unnecessary, damaging to the ecosystem involved, and ruinous for the scenic value of this beautiful area! The work that you are suggesting would not be protective of the local watersheds and would seriously threaten the local fish, especially the salmon! We strongly support, instead, the Kanuk Indian Tribe's proposed alternative plan that we feel focuses on restoration after the previous fires and protection of the watersheds, the local plants and animals, and the native cultural resources that have been there for thousands of years. Their alternative plan does NOT threaten the Wild and Scenic Rivers in the area, nor does it ruin other local rivers that should have this designation in the future! It is far more important to save the ecosystem than it is to log a few thousand board feet of timber. The jobs that your plan creates will be soon gone, but the damage to the Klamath National Forest will remain for decades afterwards! We believe that the Kanuk Indian Tribe's proposed alternative plan for the Klamath National Forest is the correct and proper plan for sustainable reforestation, restoring the forest after last year's fires, and protecting the land and rivers for the myriads of creatures and plants that live there. Their plan does NOT add additional, unnecessary roads to the forest and keeps logging to a manageable minimum, while it will encourage the natural regeneration of the forest. Additionally, their plan gives important long-term protection to the watersheds, salmon and other fish, and keeps the roadless areas as they are now! Please reconsider your plan and adopt the more ecologically sound plan put forth by the Kanuk Indian Tribe!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.. Also see the Appendix A of the final EIS (maps) for a comparison map.

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121.22 - Karuk as is	#17466-4	I support the alternative proposed by the Karuk Tribe, which will protect rivers and water quality, threatened salmon, old growth forests and wildlife, existing and proposed Wild & Scenic Rivers, and roadless areas. The Tribe's proposal encourages natural forest regeneration, increases community safety through fire adaptation, and uses the best available science and traditional ecological knowledge. Please adopt the Karuk Tribe proposal as the preferred alternative for the Westside Fire Recovery Project. Also, please avoid activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17474-1	Please do not go forward with this destructive logging proposal. It would be devastating to the ecology of the area. The plan the Karuk Indian Tribe has developed would preserve the area on a long term basis and would be far preferable. Please be responsible.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17501-5	Please closely analyze and consider the Karuk alternative. The Karuk people should have the first say in land management on their ancestral homelands. To do otherwise is disrespectful to the tribe and to their historical connection to the landscape they have managed for thousands of years. They were here first and they should have a say in this project.	Consultatin with the Karuk Tribe has been ongoing and will continue. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#17508-1	I support the alternative proposal put forward by the Karuk Indian Tribe.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18848-1	I urge you to support the Kurok Tribes' proposal for recovery from the Westside Fire. Their proposal is aimed at protecting the river and water quality,threatened salmon habitat,old growth forest and wildlife.It also respects existing and future proposed Wild and Scenic Rivers and roadless areas. The Karuks' proposal encourages natural forest regeneration through fire adaptation and is based on the best available science as well as traditional ecological knowledge which has served their community for hundreds of years.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18852-4	Furthermore, I appreciate the ancestral territory and rights of the Karuk Tribe, and would wish that their input and concerns be more fully considered in Klamath National Forest land management. It is pertinent and interesting that the Karuk Tribe's considerations are only attached as an addendum to the Draft Environmental Impact Statement (DEIS).	We have been consulting with the Karuk Tribe and consultation is ongoing in order to consider their input and concerns. The Karuk Alternative wasn't provided to the Forest Service until the evening before publication of the draft EIS. For the EIS, see Chapter 2 of the EIS for a description of how the Karuk Alternative has been considered and incorporated into this project.
121.22 - Karuk as is	#18857-3	Consideration and addition of the Karuk Alternative represents a beginning point for projects of this scope. Thank you for including the Karuk Preferred Alternative as they are obvious stakeholders and stewards within our bioregion.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18858-6	And the alternatives it provides are unimaginative variations on a single theme. The Karuk Tribe has included the only true "alternative" to the plan, and it warrants your attention.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.

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121.22 - Karuk as is	#18878-19	Chapter 2 Alternatives, Including the Refined Proposed Action Comment: The only alternative we can support at this time is the Karuk Alternative. None of the other alternatives will proactively provide opportunities to allow for fire to play a natural and historical role on the landscape, implement Karuk Management direction, protect cultural resources, provide for community and fire fighter safety, and at the same time have some economic return.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18878-3	Specific projects such as the Westside Fire Recovery and also for future proposed projects need to be adapted to promote and enhance our fire adapted landscape. To address this we submitted the "Karuk Alternative" which is based on the firm belief that returning fire to its proper place and role on the landscape is imperative. We expect to see the management vision of the Karuk Alternative integrated into the Final Environmental Impact Statement (FEIS) and implementation actions to adequately protect and enhance cultural resources.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18878-38	Alternative 1 Direct Effects and Indirect Effects The Karuk Tribe advocates the use of the Karuk Alternative in an attempt to pursue management actions which will allow for fire to be used as a management tool to return the landscape to a natural fire regime. However, while we are not advocating for Alternative 1, in this section it seems once again the author is not giving the average reviewer a complete picture and portraying this alternative in as negative terms as possible.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18913-2	We understand that a certain amount of salvage logging is required to mitigate costs and impacts from catastrophic wildfire, but we support a scaled-back approach as proposed by the Karuk Indian Tribe's proposed alternative, which better manages for future wildfires, protects watersheds with threatened salmon, and restores old growth forests.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18918-12	I like these aspects of the proposed Karuk alternative. The best available science, not timber industry junk science, should guide the management of KNF. Traditional ecological wisdom from key Karuk tribal members is also key to integrate into an approach for true restoration and protection. They have a preferable approach to fire recovery called natural generation - this was practiced for thousands of years before Europeans came on the scene to liquidate natural and cultural resources.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. See Chapter 2 of the final EIS for a discussion of how the Karuk Alternative has been considered and incorporated into the project. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#18921-2	The indians have an alternative proposal. It has a lighter imprint on the land and river. Go with that proposal.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18922-1	I am writing to support the Karuk tribe's alternate proposal in regards to the Westside Fire Recovery Project. The Karuk view is more sustainable and broadly beneficial. It provides for better water quality, fewer miles of roads, diversity of natural forest recovery, and better protection of endangered salmon. I encourage you to take advantage of this opportunity to develop and explore more integrated and sustainable forest management solutions that incorporate natural fire regimes and preserve cultural, aesthetic, and recreational resources, along with limited commercial uses. Thank you.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.

Code	Comment Number	Comment Text	Response
121.22 - Karuk as is	#18925-1	Klamath National Forest Supervisor, I am writing in support of the Karuk alternative to the Westside Fire Recovery Project. The plantation-fire-suppression paradigm that the preferred alternative reflects does not pass for ecosystem management in the klamath mountains and is not acceptable. I am a forestry operations student at Humboldt State University and work during the summer as a forestry technician. I have been using the Klamath National Forest for backpacking since I was a kid and consider myself a stakeholder in this project. Lindsey Holm	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#18926-2	The Karuk Alternative or Alternative # 6 Is the Best Alternative as it is Closest to Meeting the Projects' Purpose and Need! The Karuk Tribe of California has an alternative included in the DEIS., entitled the Karuk Alternative or Alternative # 6. The Karuk Alternative should be used as it focuses on the protection of life and by making it a priority to capture the key ingress and egress routes for residents, managers and the pubic. The treatments being proposed in the Karuk Alternative add a significant amount of protection to the private landowners where people live, as compared to the other action alternatives (# 2, # 3, # 4, and # 5). The fuel breaks proposed in the Karuk alternative would compartmentalize the landscape into firesheds and encourage inclusion of those fuel treatments where it is practical and feasible to do so on-the-ground. It would be prudent to have the added fire protection treatments adjacent to private property.! ! The Karuk Tribe's alternative does not propose increase the amount of logging slash and highly flammable tree plantations which would fuel a future fire and increase future fire intensity for many years to come. This condition would threaten worker safety and access and create unsafer conditions for firefighters performing fire suppression for community protection. The Karuk Alternative offers greater community protection and a path to allowing fire to play a more natural role across the landscape as a quicker method to attain a fire-resilient forested ecosystem. This alternative accomplishes these goals through the recovery of the burned areas by concentrating on community protection, key forest travel routes and strategic ridges which would become shaded fuelbreaks. There is more risk reduction in the future fires to human life, property and resources in Alternative # 6 or the Karuk Alternative. This alternative seems to be economically viable, and meets the project objectives adding a benefit to our local communities. The Karuk Alternative is best alternative to meet the purpose and needs offered in the DEIS! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#18926-35	Any actions taken by the United States Forest Service in regards to the Westside Recovery Project should use the Karuk Alternative as the centerpiece so that protection of lives (individuals and firefighters), property (private, public, or tribal), and resources (forests and watersheds) now and into the future.! ! The Karuk alternative focuses on creating fuel breaks on ridge lines to help control future fires . It also addresses dead and danger tree removal along our key roads. We have to keep our roads open and safe for residents and landowners, businesses, and others. We need the emergency access and escape routes so fire fighters can quickly and safely access the forest to manage the fires. We do not need to plant conifer trees in the fire burned areas because the majority would succumb to drought in prepared landscapes or burn again. This may be the only way so out that these severely burned forests and watersheds can become healthy again.! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#18926-42	The Karuk Alternative (which is displayed in the DEIS) would provide greater community protection and emergency ingress and egress routes while making it possible for natural wildfire to play a more natural role in the forest.! ! In reviewing the alternatives, I recommend that you make the Karuk Alternative as the preferred alternative or make the Karuk Alternative the central part of any preferred alternative. If funding is needed to pay for the treatments outlined in this alternative then revenues from forest products can be generated for these purposes but the forest products would be taken to expand upon the priority treatments, in prioritized order to protect: life, property and resources.! ! I incorporate by reference the comment letter as an addendum and all scientific papers submitted for the DEIS that was provided to you on April 27, 2015 from Kimberly Baker on behalf of Klamath Forest Alliance, EPIC-the Environmental Protection Information Center, the Klamath Siskiyou Wildlands Center, S.A.F.E. Safe Alternatives for our Forest Environment, Northcoast Environmental Center, Siskiyou Land Conservancy and the Redwood Chapter of the Sierra Club. ! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. . Consultation with the Karuk Tribe is ongoing. Scoping and comment letters are incorporated into the project record. See response to comment number 18878-16 about project funding for implementation.

Code	Comment Number	Comment Text	Response
121.22 - Karuk as is	#18927-4	We recommend adoption of an alternative similar to the one proposed by the Karuk Tribe, with its focus on natural forest regeneration, increasing community safety through fire adaptation, and use of the best available science and traditional ecological knowledge. In addition, this alternative should clearly avoid any mechanical intrusion in roadless areas and within existing and recommended Wild and Scenic River corridors. The alternative should also avoid logging in old growth forest reserves and riparian reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#18934-18	In an effort to provide an alternative that addressed the work of the WKRP, the Karuk Tribe collaborated with the Salmon River Restoration Council (SRRC), Mid Klamath Watershed Council (MKWC), environmental groups, and other local entities to develop the Karuk Alternative. MKWC and SRRC urge you to consider choosing the Karuk Alternative as the preferred alternative in the Final Environmental Impact Statement (FEIS) for the following reasons: 1) The Karuk Alternative, with a few possible modifications, has a high likelihood of avoiding litigation completely. This would get us out of the paradigm of the past two decades since the Salvage Logging Rider and Northwest Forest Plan set the stage for the pendulum to swing back and forth from an all or nothing approach to fire and fuels projects on Federal lands. The all or nothing approach precludes development of a sustainable workforce, sustainable outputs to mills, thus eliminating the opportunity to have a sustainable local economy based on forest management. Additionally this approach breeds distrust and thus inhibits landscape level planning and implementation needed for restoring resilient fire regimes, such as a series of fuelbreaks that will allow us more fire management options in the future. In the Westside Fire Recovery Project the Forest Service is seeking to use a loophole in the law to expedite salvage logging projects before the judicial process can play out by enacting an Emergency Situation Determination. This may allow short term increases in harvest quantities, but will ultimately perpetuate future regulations and scrutiny of the agency. Ultimately, our mountain communities and the land will suffer from gridlock, lack of a shared vision, and lack of ability to work together. The Karuk Alternative is a balanced approach that meets to core needs of a diverse array of stakeholders, allows for important work to be accomplished on the ground, and will allow for trust to develop between key parties over time. 2) The Karuk Alternative puts community safety first while simultaneously allowing for the reestablishment of resilient fire regimes and addressing fuel loading in high severity burn areas. It does this by establishing a series of fuelbreaks around communities and along strategic roads and ridges that will allow for reintroduction of prescribed fire in a safe and timely manner to manage high severity burned areas in the Wildland Urban Interface (WUI). The fuelbreaks proposed in the Karuk Alternative will better protect communities from wildfires than any other alternative. This Alternative also includes fuels reduction work around communities that was overlooked in the other alternatives. 3) The Karuk Alternative proposes only planting conifers in high severity burn areas to mimic the patterns of late seral conifers by species across the landscape, with manual fuel reduction in these sites to allow for prescribed fire use in the next decade. In some areas, planting should be delayed for 5-15 years to allow for 1-2 initial entries with prescribed fire to reduce fuel loading. This strategy will most effectively expedite the creation of diverse, fire resilient forests in these high severity areas by retaining large woody debris while creating a mosaic vegetation pattern that are formed under a more frequent, natural fire regime. 4) The Karuk Alternative does not propose any new road construction, nor does it propose to open decommissioned roads, and it minimizes the amount of salvage logging on disturbed soils to the amount needed to establish a series of landscape level fuelbreaks. This will better protect the fisheries resources in both the short term and over time by allowing for reintroduction of fire to manage high severity areas and fuels in the WUI, rather than intensive logging practices. New road construction and the opening of decommissioned roads, especially on sensitive soils like those in Grider Creek, Walker Creek, and Whites Gulch will negatively impact the fishery, increase the likelihood of litigation. 5) The Karuk Alternative is not driven by timber outputs, but instead focuses on the cost savings from reduced fire suppression expenditures over time. By creating fuelbreaks around communities and implementing strategic prescribed burns in the WUI, wildfires burning late in the fire season can be allowed to burn and achieve resource benefits while reducing fire suppression costs. The Karuk Alternative still provides a significant portion of merchantable	Strategic fuelbreaks are an integral part of the Westside Fire Recovery Project. There is considerable overlap with the Karuk Alternative and the Westside Project. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.Also see the Appendix A of the final EIS (maps) for a comparison map. Also see response to comment number 12364-1 and See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised. .

Code	Comment Number	Comment Text	Response
		timber for area mills (roughly 35% of the preferred alternative), while minimizing the impacts of these harvest activities by concentrating them along key access routes and ridgetop fuelbreaks. Over $450 million has been spent on fire suppression in the Western Klamath Mountains in the past decade. The strategies developed through the WKRP and demonstrated by the Karuk Alternative can reduce these expenditures by 50-90% over the next 10-20 years if implemented at large enough scales.	
121.22 - Karuk as is	#18934-19	6) The Karuk Alternative is the only alternative that allows for prescribed fire to be utilized in the next 5-10 years to restore historic fire regimes in burned areas within the WUI. This progressive approach will address concerns from Dr. Jerry Franklin and others that salvage logging in Late-Succesional Reserves will degrade habitat for spotted owls and threatened coho salmon, while addressing fire threats to adjacent communities, and helping to tip the balance towards fire resilient landscapes and away from the fire suppression paradigm that has created the conditions we are suffering from now. For all of these reasons, we sincerely request that you consider fully implementing the Karuk Alternative with the minor modifications requisite in such a large, complex project. Patty, as you near retirement, you have the choice to put the forest on the path to restoration of our fire resilient forests, or double down on the status quo of full fire suppression and legal wranglings into the foreseeable future. Our communities have endured enough and need your leadership to achieve the shared values we identified through the WKRP process, including: * Sustainable local economies * Cultural and community vitality - includes food security and balanced human-fire relationship * Fire-adapted communities * Restored fire regimes * Resilient, biodiverse forests, plants, animals, fish * Healthy river system	See Chapter 2 of the EIS for a discussion of how the Karuk Alternative has been considered and incorporated in the project. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#18934-4	We believe the Karuk Alternative more adequately addresses the Purpose and Need for this project than the current preferred alternative (Alternative 2). Worker and public safety are addressed in both the Karuk Alternative and the preferred alternative through treatments along critical access and egress routes. The Karuk Alternative includes additional fuels reduction around communities and outlying neighborhoods affected the the 2014 wildfires, better protecting these communities from future wildfires. Safe conditions for firefighters is better provided by the Karuk Alternative, which calls for implementation of prescribed fire around communities during appropriate burn windows. The preferred alternative would wait until wildfires burn through these areas. With fewer contiguous fuelbreaks around communities, firefighters would be exposed to more risk protecting communities from wildfires if the preferred alternative was chosen, additionally the resulting fire suppression activities for the protection of communities would cost more Economic viability of this project is not attainable even if the preferred alternative was fully implemented. There simply isn't the funding available from commercial harvest to pay for needed fuels reduction treatments. Much larger cost savings (by orders of magnitude) will be realized by treatment strategies like those proposed through the WKRP and the Karuk Alternative that mitigate the future costs of wildfire suppression. Additionally, getting out the cut for one salvage sale while sacrificing opportunities for collaboration and building trust will, in the long run, hurt our local economies and communities. The Karuk Alternative, through building trust amongst diverse interests, will promote future economic stability through sustainable outputs of resources from public lands. Large scale salvage logging in Late-Succesional Reserves (LSR's) has been scientifically shown in multiple research papers (Dr. Jerry Franklin's comments on Westside included here by reference) to impede the development of late successional fire resilient forests.	See Chapter 2 of the EIS for a discussion of how the Karuk Alternative has been considered and incorporated in the project. Consultation with the Karuk Tribe is ongoing. See response to comment number 18878-16 about project funding for implementation.
121.22 - Karuk as is	#18937-3	Klamath Riverkeeper supports the generalities proposed in the proactive Karuk Alternative included in the DEIS because it prioritizes healthy fisheries, fire-safe communities, sustained economic growth, natural forest regeneration and increased fire resilience in our shared forest resource contained within the Klamath National Forest (KNF).	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe is ongoing.

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121.22 - Karuk as is	#19076-10	The Karuk Tribe's proposal encourages natural forest regeneration, increases community safety through fire adaptation and uses the best available science and ttaditioo.al ecological knowledge.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe is ongoing.
121.22 - Karuk as is	#19078-2	I also wish to state that the Karuk Alternative is the only alternative I would consider supporting	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#19154-5	What little I know about the Karuk Alternative they suggested more or more focus on ridge top fuel breaks that seems good too.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map.
121.22 - Karuk as is	#19156-1	Please give serious consideration to adopt the Karuk Tribes recommendations of a more natural and alternative method of management. With the present state of the planet, we need to do everything to bring in a more balanced approach and protect our forests now.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a review of the Karuk Alternative and how it's been incorporated into the new preferred Alternative. Also see the Appendix A of the final EIS (maps) for a comparison map. Consultation with the Karuk Tribe has been ongoing.
121.22 - Karuk as is	#3680-1	I would like to express my support for the alternative submitted by the Karuk Tribe (see Appendix G). I am a resident of Humboldt County and user of public lands in this region. Thank you for your consideration of this comment.	Position statement; see response to Comment number 16695-4. See Chapter 2 of the final EIS for a discussion of how the Karuk Alternative was considered and incorporated into the project.
121.23 - No Action Alternative	#10336-1	Clearcutting should be only an absolutely last resort. In the case of the Klamath National Forest, it would be the worst possible option. Erosion would result when we need rebirth. Please nurture our national forests, and the animals that live in them, instead of destroying them.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#17359-4	Please withdraw the "Westside" timber sale, and the egregiously misnamed "Emergency Determination" sanctioning it. Instead, require the employees of the Forest Service to listen to its own ecologists, and let these stands regenerate naturally, as they have for millennia before any meddling or "salvage logging" by humans. Thank you for your attention to this issue.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 1 of the EIS for a discussion of the emergency situation determination, which was approved by the Chief. It's available on the project's website and in the project record. See the beginning of Chapter 3 for a discussion of responsible opposing points of view.
121.23 - No Action Alternative	#17386-1	I am 100% opposed to this.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#17450-3	Accordingly, I see no benefit and huge downsides to the proposed massive logging operation. I favor Alternative 1: No action. Nature has been doing a great job of taking care of things for eons without the Forest Service's "help".	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.23 - No Action Alternative	#17472-1	The Klamath is a unique and beautiful place and should not be viewed as a commodity! Since the Klamath watershed and forests are still recovering from all the intensive logging in the past, please consider letting the forest heal on its own! I visit the Klamath and the Smith Rivers every year. These are exceptional recreation areas and should be treated with respect and care instead of clear cutting and degrading the streams and surroundings for logs that probably won't even be milled in America! Why aren't we preserving these beautiful habitats for future generations instead of raping and pillaging the land for a few dollars? The precious salmon and watersheds will not benefit from this project! Please value the natural resources of this place! Let mother nature heal herself.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed. See the purpose and need statement in Chapter 1 of the EIS; one of the purposes of the project is the improvement of watershed conditions. Project design features for the mitigation of watershed effects are described in Chapter 2 of the EIS along with a description of legacy site treatments for the improvement of watershed conditions. See Chapter 3 of the EIS for a disclosure of effects by resource area and Alternative.
121.23 - No Action Alternative	#17496-1	I would like to begin by first asking that the Westside Fire Recovery Project DEIS be rescinded due to inadequate NEPA analysis of many relevant issues, the scale of the project precluding detailed analysis and oversight, and the extreme biological impacts of the proposed logging project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#17496-3	The Westside Fire Recovery Project is a misnomer that invokes government doublespeak and grossly misrepresents project outcomes, objectives and results. The project serves to recover only one thing: timber volume to the private timber industry. Let us remember it is public land and many public values are threatened. The project, as currently proposed, is not based in the best available science, nor will it restore fire- adapted forest conditions, reduce fuel loads long-term, or promote a more characteristic fire regime. The project has one overarching motive: economic recovery (i.e. the logging of timber in management designations that would otherwise not be available for clearcut logging or the logging of large old trees, snags, and important biological legacies). When reviewing the agency proposal it is very clear that much of the logging proposed would negatively impact LSR forest, special interest areas, recommended and designated Wild and Scenic Rivers, key watersheds, scenic vistas, national recreational treasures such as the Pacific Crest Trail, and biodiversity in one of the most diverse national forests in the country. In fact, roughly half of the proposed salvage logging would take place in LSR forest and 85% of the planning area is LSR forest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised for a discussion of impacts in LSRs. See Also Appendix E.
121.23 - No Action Alternative	#17496-5	The project also proposes such heavy and widespread logging that the economic benefit of salvage logging will be minimized and diluted as the market is flooded with cheap salvage material, diminishing the price of timber in the region and creating a glut of material that will only serve to reduce the economic impact of the sale, while maximizing the environmental and societal impact. Simply put, the very scale of the project will heavily impact biological and social values, while reducing regional timber values. The KNF will be effectively maximizing impacts while minimizing returns. In that regard the project does not meet the purpose and need of maximizing economic values, nor is the project consistent with land management designations and directives for the Klamath National Forest (KNF). For these and many other reasons the Westside Fire Recovery Project Draft EIS should be rescinded and the KNF should take a more restorative, moderate approach that will sustain the region's ecology and the region's economy. To be forced into one or the other situation, is not reflective of the real options available to this region, nor does it serve the public interest or sustain the regional economy long-term. The boom and bust cycle of irresponsible resource extraction has already heavily impacted this beautiful and vibrant region, to reinitiate and reinforce this cycle will only lead to an ultimate collapse of the rural economy and will severely impact the region's ability to attract recreational visitors and a more diverse economy. For these reasons, among many others, the project should be canceled as it is currently planned. None of the alternatives presented in the DEIS will make the forests or communities of the Klamath River more fire-resilient. A new approach emphasizing prescribed fire, community protection, and the maintenance of the region's many important biological values should be initiated.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#17501-7	The KNF should have included scientific documentation to accompany the No Action Alternative, just as it has for the other alternatives listed for the Westside Project. Without an adequate comparison the public is unable to fully comment on the No Action Alternative. There are very good reasons to pick the No Action Alternative and that reasoning should be as fully developed and analyzed as the other alternatives in the DEIS.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.23 - No Action Alternative	#17939-2	Along with the severe small-scale local habitat/ vulnerable species concerns, I do feel that the No Action Alternative is best	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The decision must balance the effects to resources with meeting the purpose and need of the project. Alternative 1 (no action) is included in this decision process.
121.23 - No Action Alternative	#17955-1	PROTECT the wild lands and rivers around the Marble Mountains, DON'T log them! Set an example and allow this unique area to heal from wildfire.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#18726-1	I am writing to voice my disapproval of the proposed Westside Project. Fire is a natural part of this ecosystem, and should not be used as an excuse to log protected areas such as the Late-Succesional Reserves and Riparian Reserves. Guidelines in the Northwest Forest Plan for post fire logging within Late-Succesional Reserves state that "All standing live trees should be retained and management should focus on retaining snags that are likely to persist until late successional conditions have developed and the new stand is again producing large snags." This plan does not meet these requirements. The proposal to log live trees in the Late-Succesional Reserves is illegal.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to 12346-55; green trees will be retained.
121.23 - No Action Alternative	#18845-1	Please do not approve the massive logging project on the Klamath River. It will destroy the watershed	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#18857-1	My hope is that you will be swayed in favor of honoring ecological process(alternative 1) over the treatments prescribed by remaining alternatives. This model, of honoring ecological processes, represents a proactive and progressive approach that would truly produce the results you desire in a way that wouldn't pit the community against itself in this dysfunctional and reactive "Emergency" state we are now confronting.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#18857-20	Please consider Alternative 1.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#18898-2	Please cancel the Westside Project	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#18907-10	8. No helicopter logging should be allowed because these areas are intrinsically steep and the disturbance of fallers and workers cutting trees and the movement of logs on the ground will accelerate erosion over the already high erosion that is occurring due to fire-loss of ground cover.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See soils effects in Chapter 3 of the final EIS; helicopter logging results in less soil disturbance and associated erosion compared to ground harvest methods.

Code	Comment Number	Comment Text	Response
121.23 - No Action Alternative	#18907-18	No activity of any kind should occur in Inventoried Roadless Areas. This includes roads across roadless areas to access other areas where equipment or people will do work.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No salvage harvest (logging) is proposed within Roadless Areas; however, roadside hazard treatments (logging of fire-damaged trees that present a hazard to roadways that intersect Roadless Areas) are proposed as is strategic fuels treatments. See Chapter 2 of the EIS for details.
121.23 - No Action Alternative	#18923-1	I am against this logging plan in the guise of ``fire recovery" on the Klamath and its headwaters. It will damage the river quality and the fishing. I spent weeks every summer on the Klamath during my youth and ran a kayak school on it briefly. This plan sounds ruinous . Do not push it forward	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#19074-1	Alternative #1 is the right thing to do. Let nature heal itself and we can learn more about the natural process in doing so. This would be the testing ground to see how future sites and situations should be handled when there are large burn sites.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The No Action does not meet the stated purpose and need. The No Action is included in analysis in order to have a baseline for the comparison of effects between the no action and action Alternatives.
121.23 - No Action Alternative	#19075-5	I am opposed to this salvage logging proposal	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#19155-1	Please cancel the Westside Project and continue to observe due diligence in protecting and preserving the Wild and Scenic River corridors. Salvage logging is detrimental to H20 quality, salmon, soils and wildlife habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project is consistent with Wild and Scenic River corridor direction. The purpose and need of the project includes improving watershed and wildlife habitat. See Chapter 3 of the EIS for effects by resource area and Alternative.
121.23 - No Action Alternative	#20-7	Please join with fire ecologists, impacted communities and local tribes to focus on restoration and fire safety instead of pushing divisive and controversial clearcut logging proposals on steep slopes in key watersheds and in critical wildlife habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#21-5	Siskiyou Land Conservancy is a non-profit conservation organization dedicated to protecting wildlife habitat and biodiversity in the counties of Mendocino, Humboldt, Del Norte, Trinity and Siskiyou. We are aware of, and will vigorously oppose, the Forest's plan to log in burned areas under the proposed Westside Salvage Project	General statement
121.23 - No Action Alternative	#21-6	Please withdraw the proposed Westside Salvage Project	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#31-1	I hope the Forest Service will retract its plans to clearcut in the Klamath. No one's interests are served by it except the timber industry and the Forest Service's allegiance ought to be to what's best for the forest. Fires are far less danger to this precious resource than logging is	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed.

Code	Comment Number	Comment Text	Response
121.23 - No Action Alternative	#6570-1	I'm writing because I'm deeply concerned that your "Westside Fire Recovery Project" in the Klamath National Forest is actually a plan to clearcut old-growth trees. This is unacceptable. Doing so would undermine natural post-fire recovery in these late-successional reserves and degrade precious salmon habitat. As you know, fire is a natural occurrence in this area. Post-fire logging is counter to natural recovery and the objectives for which these reserved land allocations have been made. Economic use of timber is also not a valid purpose for logging on reserved lands. For all these reasons, I urge you to stop exploiting wildfire to fast-track controversial clearcut logging and allow this naturally burned habitat to support real recovery -- the recovery of the forest's at-risk species, including coho salmon, northern spotted owl and Pacific fisher. Please implement the Northwest Forest Plan and withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.23 - No Action Alternative	#7794-2	Attending seminars by Karuk scientist Frank Lake and others, we now know that the future which will sustain and protect forests in perpetuity, is the sophisticated way in which indigenous peoples promoted biodiverse landscapes in forested lands, such as the Klamath River basin. These practices did not require the highly damaging roadbuilding which denies amphibia genetic/reproductive connection. The dense roads called for will seriously fragment the habitats involved, and WILL cause future poaching problems, as well as removal of local habitats, especially if the drought continues. Please do NOT further remove shade, canopy, or understory structure through logging and roading. Local indigenous, again, properly use the small woody debris, reducing fire danger, while logging eith adds to it, or requires too-heavy removal of important carbon/organic material/mineral storage - things the forest needs in the present fast climatic change. Destroying anadromous fish spawning areas will result, and the industrial activity will certainly diminish necessary water quality for salmonid and other fish and ecosystem organisms, whether amphibians, insect larvae that use water and are part of diets of many organisms. This massive destruction for the profit of the logging company is merely wrong. As you know, fire is a natural occurrence in this area. Post-fire logging reduces natural old dead trees, disallowing their important place while standing as well as after falling in intact forests. Along with Northern Spotted Owls, many other organisms REQUIRE the complexity which results from this aspect of forest succession. Without the complexity of materials, fauna cannot persist in an area. Removal of the large trees results in habitat fragmentation which would not otherwise occur for any period, and thus is a significant cause of the trend toward extinction brought on by the logging and roading removal of nesting and resting places. Economic use of timber is NOT a valid purpose for logging on reserved lands. There is a strong consensus among scientists that post-fire logging is detrimental to species persistence, recovery, succession. Please follow the science and abandon the destructive and previously institutionalized practices which are causing species endangerment, loss of biological diversity, and has promoted increased introductions of alien species. For all these reasons, I urge you to stop exploiting wildfire to clearcut, and allow this naturally burned habitat to return to normal regimes. Please withdraw the proposal to clearcut any acreage of burned forest in the burned area, now, and in the future. Clearcut cannot continue if forests are to regenerate in ways that retain biodiversity, and the salvage logging policy must end now.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter fails to provide clear description or evidence about how the analysis in the draft EIS can be improved in terms of disclosure of effects. See the beginning of Chapter 3 for a discussion of responsible opposing points of view; effects are disclosed throughout Chapter 3. The final EIS and supporting documents incorporate best available science. The commenter is encouraged to read Chapter 2 of the final EIS for a description of what is proposed; no clear-cutting is proposed in this project. Alternative 4 was developed in response to concerns regarding watershed disturbance and impacts to water quality and aquatic resources. It proposes the least amount of temporary road construction. For the final EIS, the preferred Alternative is the modified Alternative 3 which incorporates components of Alternative 4; see Chapter 2.
121.24 - Against Alt 2	#10052-1	Please, most of the major forests and rainforests, not to mention animal species lost, around the world are in danger of being lost forever due to logging and illegal logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This comment is not supported by rationale and logging around the world is outside the scope of this project. Actions proposed in this project are not illegal but are consistent with applicable law, regulation, and policy.
121.24 - Against Alt 2	#10197-1	Protecting wildlands, wildlife, and watersheds is the priority in the care of forests, not logging. Our priorities seem to be very confused these days. Some things cannot be "fixed" or "put back", and the wildlife and trees in these forests are in that category	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This comment is not supported by rationale. This project is consistent with the goals of the Forest Plan.

Code	Comment Number	Comment Text	Response
121.24 - Against Alt 2	#12346-1	Post-fire logging is almost always inappropriate from an ecological standpoint (Lindenmayer et al. 2004, Lindenmayer and Noss 2006), perhaps especially after highseverity fire. Trees that survive the fire for even a short period of time are critical as seed sources and as habitat that will sustain many elements of biodiversity both aboveand below-ground. Removal of structural legacies-living and dead-is inconsistent with scientific understanding of natural disturbance regimes and short- and long-term recovery processes on sites characterized by high-severity fire regimes. Removal of any material is a potential detriment, but removal of mature living trees and the largest and most decay-resistant snags and logs produces the greatest negative impact on recovery processes, slowing the recovery of ecosystem function and characteristic biodiversity. This is without reference to negative effects of the logging process itself, such as impacts of roads on soils and streams." from: Noss, R.F., J.F. Franklin, T. Schoennagel, W.L. Baker and P.B. Moyle 2006. Ecology and Management of Fire-prone Forests of the Western United States. Policy Paper, Society for Conservation Biology Scientific Panel on Fire in Western U.S. Forests.	This comment notes potential adverse impacts of post-fire salvage logging citing Lindenmayer et al. (2004) and Lindenmayer and Noss (2006). These papers provide general discussions of potential impacts of post - fire salvage however neither paper is specific to the fire regime of the Klamath Province, or the objectives of the West Side Fire Recovery Project. The purpose and need for the Westside Fire Recovery project includes public and worker safety and restoration of fire resilient ecosystems. Lindenmayer et.al. (2008) also notes that “ecological values are only one of the criteria that society uses in making forest management decisions. Noss et al 2006 is a general literature review of a complicated topic that does not consider much of the recent literature relevant and specific to the Klamath Province concerning fuels and fuel accumulation. As written, the comment does not accurately describe the proposed salvage harvest in the Westside Recovery Project. We agree that removal mature living trees and structural legacies has a negative impact on recovery processes. The Westside Fire Recovery Project does not propose to remove mature living trees or structural legacies, living or dead. The Westside Fire Recovery Project seeks to protect and enhance late successional forest habitats by reducing the probability of future stand replacement fire by reducing fuels and accelerating the development late successional stand conditions by reforesting burned areas. Retention of all of the trees killed by the 2014 Westside Fires would create fuel loading that would actually increase the risk of future high severity fire that would consume snags and down logs and delay development of late successional stand conditions. See EIS Chapter 3, Responsible Opposing Views and Agency’s Responses and Appendix E.
121.24 - Against Alt 2	#12972-1	You are on very thin ice here. Isn't is your job to protect our wilderness? What you are proposing for the fire remediation in the Klamath National Forest sounds more like laying waste on very many levels. Please reconsider. Our wild places are very valuable and irreplaceable. We need to treat them gently.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. he commenter provides no rationale in support of these statements. No treatments are proposed in Wilderness; this is stated in Chapter 1 of the final EIS. Also see Chapter 2 for a description of the proposed actions.
121.24 - Against Alt 2	#13597-1	Withdraw Proposal for Harmful Post-fire Logging	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#14904-1	A National Forest is something special, hence the label "National Forest". These are forests that are meant to be protected and appreciated. In fact, there are laws in place to prevent visitors from taking a piece of that land, whether it be rocks or picking flowers, the National Forest system has a set of rules to ensure that the park stays protected. Up until now, I have had great faith and appreciation for the services you have provided. It is your rules that have been put into place that ensure that there is still nature left for our children and children's children to enjoy. In fact, I believe that it is nature, it is this Earth, this planet, that has sustained the human species, along with all other species around us, for this long. Without our planet and the nature around us, there is no life. While the Earth sustains us, we do very little as individuals to reciprocate the favor. While humans are busy with consumerism, the Earth is suffering. Our species is poisoning our rivers, lakes, and oceans with oil spills, radiation leaks, and garbage and plastic litter that is directly from mass consumerism. Our air is so dirty in some countries you can literally see a layer of filth and smog that choke each sunset and starry night. Today, it's difficult to find a forest that has gone untouched by man. Now, it's happening in our own backyard. That's just too close to home. In this day and age, if any positive change is going to come, if nature is to be preserved for our future generations to enjoy, each of us has to start making changes in our lives and do our part. We also need to start thinking about ourselves as global citizens, one huge community of individuals who all inhabit the same rock in the Milky Way. As a Californian, I am proud to live amongst open-minded, caring and active neighbors. Our state is a positive example for other states and individuals who want to make a change. This was the main reason I chose to live in California. Today we are offered a choice. We can partake in society's consumerism and money motivated pressure, or we can take a step forward into a better future for us all. I'm asking you to greatly consider your role as a Forest Service, and remember that the weight behind this decision is great. It is decisions like this that will literally affect our planet's, and ultimately our species', future. It is up to you to do the right thing.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.24 - Against Alt 2	#15037-1	Do you think people are going to get thirsty in California soon? Your proposed clear cut will likely ensure that they are, sooner rather than later. This sale, this action, is unthinkable, downright thoughtless in fact. Please, for the sake of every living thing down slope or downstream, stop this timber sale.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter to of the final EIS for a description of proposed actions; no clear-cutting is proposed. Effects to wildlife and aquatic species from the project and Alternatives are disclosed in Chapter 3 of the EIS. See response to 3-4.
121.24 - Against Alt 2	#15216-1	please do your job with integrity rather than accept bribes from predatory commercial interests which is the only plausible reason why you would allow the loggers in, as is obvious to everyone who is watching you as you decide which way to go regarding the protected reserves. Thanks in advance.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#15561-1	In what way exactly does clearcutting protect a forest from fire? The proposal to clearcut stands of old growth forest for fire prevention is Orwellian to say the least. The only thing being 'salvaged' in the proposed plan is the bottom line of the logging corporations who are clearly sitting in the drivers seat on this one. Please stick to the very explicit rules governing forest management in the Northwest Forest Plan and deny this 'salvage' plan its permit.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clearcutting is proposed; see Chapter 2 for a description of the proposed actions.
121.24 - Against Alt 2	#16695-1	I urge you to withdraw the proposal to use an "Emergency Determination" to sanction the massive and biologically devastating "Westside" timber sale on lands affected this summer by the Beaver, Whites, and Happy Camp fires.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#16864-1	Please stand with conservation groups, native tribes, watershed councils and fire ecologists to oppose the Forest Service rush to log at any cost. Please follow your own rules that protect important wildlands, wildlife and watersheds.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#16915-1	Please protect the Klamath national forest - clear-cutting is not good for salmon, or for anyone else. Please protect old-growth reserves.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed; see Chapter 2 for proposed actions.
121.24 - Against Alt 2	#16954-1	Yeah, guys, ease up on that logging. We need to leave some of those old trees standing. My opinion.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#17223-1	Clear-cutting forest is not a way to restore it ecologically. Please follow your own precedents and put an end to the madness.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed; see Chapter 2 for proposed actions.
121.24 - Against Alt 2	#17295-1	Current proposal to log the Klamath Forest is UNACCEPTABLE. I know the area in question intimately and the damage proposed would be irreparable to both land and river. I support the compromise made by the Karuk tribe.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.24 - Against Alt 2	#17307-2	Why are we always fighting the Forest Service over and over with the same problems but just a different Forest? What is the plan for the lumber products and will the roads be eliminated and what harm is predicted for the fish that I come to this area each year to fish and release my catch.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Any temporary roads opened for treatment will be closed and hydrologically stabilized following treatments. See Chapter 3 of the final EIS for effects hydrology and fish effects from the proposed actions.
121.24 - Against Alt 2	#17318-1	I am expressing my opinion that the Klamath river logging proposal be disallowed because of the ill effects such salvage logging may have on the river system.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the EIS under hydrology and fish/aquatic resources for a discussion of effects.
121.24 - Against Alt 2	#17320-1	No Logging! Enough destruction of the life blood of this earth. Use alternative methods as the ruin of the land is not the answer. Decaying trees provides essential nutrients to our environment, wildlife, plant life and human life alike. Leave our wild lands alone. There is much to be said about these type of logging projects but not enough room for texting on this issue	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the EIS for a discussion of effects by resource area.
121.24 - Against Alt 2	#17354-1	am shocked as well as outraged by what you are proposing in the Westside Draft Environmental Impact Statement. Salvage logging is highly controversial and is detrimental to water quality, salmon, soils and wildlife habitat. These steep and highly unstable hillsides have already been negatively impacted by last year's fire. What you are proposing would be devastating to the visual quality of six Wild and Scenic River corridors and beyond. The project would also be detrimental to our struggling salmon runs and would remove critical habitat for imperiled species. The globally significant watersheds of the Klamath National Forest provide vital public trust resources and astounding biological diversity. Complex forest ecosystems following a fire have higher than monetary value! Please cancel the Westside project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Project design features for soils, fish, watershed, and scenery are incorporated into the project design; see Chapter 2 of the EIS. See Chapter 3 of the EIS for a disclosure of effects by Alternative. See the beginning of Chapter 3 for responses to responsible opposing viewpoints. We recognize and acknowledge the importance of the Klamath bioregion and its watersheds and biological diversity and feel that this project helps to improve conditions for watersheds and habitat in the long term by improving the speed at which forests regenerate to provide habitat for late-successional species and addressing future fire risk. See the purpose and need statements in Chapter 1 of the final EIS.
121.24 - Against Alt 2	#17363-4	I am very concerned about the Project's potential impact on water quality and threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild & Scenic Rivers, and roadless areas (some of which have been proposed in legislation as additions to the Marble Mountain Wilderness).	See Chapter 3 of the EIS for a disclosure of effects by resource area and Alternative.
121.24 - Against Alt 2	#17379-1	Please, refrain from logging the proposed old growth redwoods and Douglass fir in said location. As a former member of the California department of firefighters, I don't believe that 2000 year old trees need removed, logged or any human intervention. You and I know that this is wrong, so again, please just leave the forest alone. Thank you.	See Chapter 2 of the EIS for a description of proposed actions; no old-growth redwoods are found within the project area. The only trees proposed for salvage harvest are those that are fire-damaged with a high probability of mortality.
121.24 - Against Alt 2	#17401-5	I write to offer comment on the Westside Fire Recovery Project Draft Environmental Impact Statement (DEIS). I have reviewed this document, and I write to express my concern over the potential impacts to biocultural diversity, especially the immense potential that salvage logging and the related infrastructure needed to accomplish these goals will create synergistic assaults on water quality and the salmonoid life that healthy rivers support, on old growth forests and the Northern spotted owl. The plan, with its excursion into roadless areas and activities in steep terrain near and adjacent to existing and proposed Wild & Scenic Rivers, constitutes a cumulative assault on an ecosystem that is already under duress due to so many years of drought. Firescapes present immense opportunity; plans to reap profit wile reducing future fire threat have been impetus for National Forest management for decades. However, given the fragility of our forests in this time of change in climatic norms, this plan reflects a dated notion of priority in determining and weighing relative positive and negative impact. A watershed approach that truly prioritizes biocultural health over short-term economic concerns is needed to insure fire prevention efforts are in balance with watershed and ecosystem recovery needs. This means a coupled bio/social management plan that emphasizes healthy rivers, minimizes disturbance and movement of sediment and related impact on riverine habitat, and prioritizes	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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		cultural flows (managing human activity in ways that support and sustain the culturally diverse ways of life.	
121.24 - Against Alt 2	#17419-2	I am writing in regards to the largest logging operation ever proposed on the Klamath National Forest in northwest California. Intended to "salvage" timber burned in last year's wildfires, the proposed project threatens water quality in several existing and proposed Wild & Scenic Rivers and may harm fish habitat and the threatened coho salmon, as well as old growth forests home to the Northern spotted owl. This area is very special to me. This project will substantially down grade it. I hope you will stop this project before it damages this beautiful area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#17460-2	I have several concerns with Alternative 2 (the alternative being promoted by the forest service). In addition to those highlighted by Professor Franklin, the first is the effect on Northern Spotted Owls, which are likely to be adversely affected, according to the USFS Wildlife Biological Assessment, dated April 16, 2015.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See the beginning of Chapter 3 for a discussion of responsible opposing points of view, including those of Dr. Franklin.
121.24 - Against Alt 2	#17485-1	As owner of a rafting company on the Klamath and Scott Rivers as well as a land owner on both rivers, I STRONGLY oppose the Westside Fire recovery project as currently proposed. My bachelors degree and masters degree are both in Ecology and the current proposal falls incredibly short of being ecologically sound. My business (and in my opinion many of the legitimate long term business in the area) rely on the improving fishery and natural beauty of the area. It is incredibly shortsighted to put in hundreds of miles of new roads and remove the nutrients needed for the future forest. Have we not learned by now that fire is natural. The entire premise of 'salvage' is flawed. If it is logging fine, but those burnt trees and roadless areas are certainly providing a service.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#17493-2	I am putting my trust in you to protect our precious water and land. I have studied the very harmful effects of salvage logging on fragile environments, squashing new growth and killing more animals. Please, please don't allow salvage logging on California lands. We need more time to comment, please. The erosion this will cause is extreme and we need high quality water, especially in the drought.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#18878-2	The Karuk Tribe supports some level of post-fire landscape treatment through salvage. However, the Alternative 2 Refined Proposed Action in the Draft Environmental Impact Statement (DEIS) is unacceptable and contrary to the Karuk Tribe's management vision, which is to protect and enhance culturally significant resources' management needs.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.24 - Against Alt 2	#18878-38	Alternative 1 Direct Effects and Indirect Effects The Karuk Tribe advocates the use of the Karuk Alternative in an attempt to pursue management actions which will allow for fire to be used as a management tool to return the landscape to a natural fire regime. However, while we are not advocating for Alternative 1, in this section it seems once again the author is not giving the average reviewer a complete picture and portraying this alternative in as negative terms as possible.	Many elements of the Karuk Alternative overlap with the Westside Fire Recovery Project. See Chapter 2 of the EIS for a discussion of how the Karuk Alternative was considered and incorporated into the project.
121.24 - Against Alt 2	#18878-72	The Karuk Tribe supports some level of post-fire landscape treatment through salvage. However, the rationale, restoration objectives, and implementation of past and the proposed salvage are unacceptable and contrary to the Karuk Tribe's management vision. To protect and enhance culturally significant resources management needs to be adapted to promote a fire adapted landscape.	Consultation with the Karuk Tribe is ongoing. See Chapter 2 of the EIS for a discussion of how the Karuk Alternative was considered and incorporated into the project.
121.24 - Against Alt 2	#18883-3	Alternative 2 is the proposed action. It appears to take the most extreme position on removal of trees and is the most adverse action to erosion, sediment production, protection of spotted owl and fisher habitat, habitat connectivity, and legacy components (i.e. old growth trees) and late-successional reserves. A new alternative should be developed and analyzed that incorporates the concepts listed herein.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#18921-1	I do not support the large scale logging operation proposed for the Klamath watershed. The additional roads would cause bad run-off of dirt into the river, silting over salmon spawning areas.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#18923-1	I am against this logging plan in the guise of ``fire recovery'' on the Klamath and its headwaters. It will damage the river quality and the fishing. I spent weeks every summer on the Klamath during my youth and ran a kayak school on it briefly. This plan sounds ruinous . Do not push it forward	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#18925-1	Klamath National Forest Supervisor, I am writing in support of the Karuk alternative to the Westside Fire Recovery Project. The plantation-fire-suppression paradigm that the preferred alternative reflects does not pass for ecosystem management in the klamath mountains and is not acceptable. I am a forestry operations student at Humboldt State University and work during the summer as a forestry technician. I have been using the Klamath National Forest for backpacking since I was a kid and consider myself a stakeholder in this project. Lindsey Holm	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#18926-41	The Westside Fire Recovery Project would destroy the Caroline Creek eagle nest area and would harm imperiled native wildlife, endemic species, wild salmon, water quality Wild and Scenic Rivers, Visual Quality Objectives, soils, geology, botany, cultural resources and vital biological legacies. Fuels treatments may never be funded and would endanger river communities.! ! Most of the impacts are to Late-Succesional Reserves and to Riparian Reserves, Visual Quality Objective areas and Critical Habitat for the increasingly threatened Northern spotted owl and Coho salmon. The KNF cannot legally elect to span snag retention guidelines to average over one hundred acres when it is clear that snag retention is meant for a per acre basis nor can it assume that moderate severity burn areas no longer support habitat for native plant and animal species.! ! The Westside DEIS is contrary to the recovery of threatened species listed under the Endangered Species Act. The project violates the Clean Water Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Northwest Forest Plan and the Klamath National Forest Land Resource Management Plan and is contrary to the recommendations of multiple watershed analysis and Late Successional Reserve Analysis.! ! The project also violates the National Environmental Policy Act by failing to take a hard look at cumulative effects, failing to use plain language, failing to consider the difference between moderate and high severity fire, fails to consider visual impacts from the Wild and Scenic North Fork Salmon River, fails to consider geologically unstable areas as Riparian Reserves, fails to honestly consider climate change, fails to consider public trust resources such as clean water, carbon storage, wildlife and recreation as an economical value, fails to adequately consider the	This comment reflects the opinion of the commenter, not the content of the EIS. The comment provides no information specific to the environmental consequences of the Westside Fire Recovery Project other than the commenter's opinion, and all of the issues noted in the comment were addressed. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. With respect to Caroline Creek, the decommissioned section of Forest Road 46N62 (also referred to as the "Caroline Creek Road") will remain closed. Sections of decommissioned road associated with dropped salvage units were also dropped. These roads include decommissioned sections of 45N56YA, 46N42Y, and 46N78, which will remain closed. See Chapter 3 of the final EIS for a disclosure of effects by resource area and Alternative. Also see response to comment number 12364-1. All Alternatives are consistent with the requirements of the Klamath Forest Plan for protection of eagles (EIS Chapter 3, Wildlife). Alternative 3 modified contains additional reductions in salvage harvest in this area in response to consultation with the U. S. Fish and Wildlife Service. Snag retention both outside and within salvage harvest units is proposed along with the retention of legacy components, as described in the wildlife project design features in Chapter 2 of the final EIS. See EIS Chapter 3, Wildlife, Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised, Appendix E, and comment 5873-72. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
		ecological costs.! !	
121.24 - Against Alt 2	#18934-5	The preferred alternative proposes more salvage logging on steep, unstable slopes in LSR's with a history of debris flows and impacts to coho salmon streams. This will not achieve the stated goal in the purpose and need, "…for restored and fire-resilient forested ecosystems." Additionally, the re-planting of conifers and obligate fire suppression for the foreseeable future in these logged areas, preclude the restoration of these areas through fire which is the only tool that can achieve these goals at the scale needed.	The commenter is referring to the preferred Alternative from the draft EIS (alternative 2). The new preferred Alternative is modified Alternative 3 in the final EIS, which was developed in response to public comments and continued consultation with the Karuk Tribe and regulatory agencies. Planting does not preclude fuels treatments; in some places, both are proposed in this project. See Chapter 2 for a description of the proposed actions by Alternative and see Chapter 3 for a disclosure of effects by resource area and alternative.
121.24 - Against Alt 2	#37-1	I am strongly opposed to any plans that include post-fire salvage logging. I support letting burned areas recover through natural processes.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#6000-1	As a previous employee Fisheries Biologist on Orleans District (1989 to 1994), I find this exploitation of wilderness and roadless Marble Mountains both despicable and expected. Your lack of funding to care for the logged and abused national lands is not to be born on the backs of our precious resources. Fire happens as a natural cycle of regeneration. Let the land heal without further human alteration and harvest intervening. Those burned trees are providing nature with the shade and minerals to create a successive regeneration. Leave the fire burned land alone. As an owner of these national lands I continue to object to any alterations of wilderness, harvesting trees means roads and increased sedimentation - a double whammy for the aquatic life. Please spend my money thinning and reducing fuels where you have legal access, Start with National lands closest to human dwellings and end with managed road improvement or road deconstruction. Stay away from the Marbles! These are both sacred and irreplaceable microclimates and botanically sensitive mountains. Go harvest fuels from the lands you are already allowed to manage and start managing them properly.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No salvage harvest is proposed in Wilderness or Roadless Areas and fuels reduction is proposed as part of this project; see Chapter 2 of the EIS for a description of the proposed actions.
121.24 - Against Alt 2	#6146-1	P.S. Please, this is not an environmentally sound solution and given all the strain and the rapid degradation of this water shed due to fires and drought and various other insults, we must NOT pile on another man-made event. PLEASE do not allow this to happen.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
121.24 - Against Alt 2	#6277-1	Numerous reasons to abandon salvage logging as a management tool exist, as scientific review of the practice largely shows deleterious effects. Great differences in post-fire and post-logging effects occur on flora and fauna in our Pacific forests. While western forests and species, especially these of Northern CA and Southern OR, are fire adapted, salvage logging has been proven to inhibit species diversity, and logging appears to change the microbial patterns of soils, inhibiting proper forest succession. Radeloff, Volker C., David J. Mladenoff, and Mark S. Boyce, in "Effects of interacting disturbances on landscape patterns: budworm defoliation and salvage logging." Ecological Applications 10, no. 1 (2000): 233-247, have this to say: "[L]ogging differs from fire, for instance, in its effects on soil nutrients (Weber 1987), carabid assemblages (Beaudry et al. 1997), and surface vegetation (Whittle et al. 1997). " (Radeloff et al. 2000) Salvage logging is highly unscientific, and destroys far more of our public landforests, than any economic advantage can mitigate. For a strong critical overview of the practice, see: McGaughey, Jothan Kelvyn. "MECHANISMS OF POLICY CHANGE: AN ANAYSIS OF SALVAGE LOGGING ON FEDERAL LANDS INCLUDING A CASE STUDY OF THE BISCUIT FIRE SALVAGE SALES " PhD diss., The Evergreen State College, 2011.	We recognize that the effects of fire and salvage logging are not the same as noted in the cited papers. We agree that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current LSR land allocation (EIS Chapter 3 – Fuels). Not all of the project objectives are ecological in nature. The intended purpose of salvage of fire-killed trees is to reduce the amount and continuity of fuels that would be created when those trees break or fall to the ground and become surface fuel. These actions compliment proposed fuel reduction and strategic fuel management zones as part of a landscape scale strategy to reduce the size and severity of future fires (Thompson et al, 2007). Reducing the size and severity of future fires serves to reduce risk to watersheds and wildlife habitat from high severity events like the 2014 Westside fires and improves the likelihood of firefighting success. Our goal is to reestablish the high frequency - low severity fire regime that characterized the Klamath Province so that fire could play its natural role on the landscape. Salvage logging would remove the heavy fuels that would contribute to future high severity fires and move the forest toward that objective in the areas where it occurs Salvage harvest would occur on about four percent of the project area. Within the four percent of the project area that is within a harvest unit, forest plan standards and guideline for coarse woody debris, which are intended to maintain soil fertility and biodiversity must be met. The commenter suggests that salvage logging should be abandoned as a management tool. We recognize that the effects of fire and salvage logging are not the same. Soil organic matter has been used to analyze impacts the impacts of the project on overall soil productivity due to changes in microbial communities. Where the soil organic matter indicator is not met, microbial communities have the potential to be impacted. Impacts to soil microbes and soil nutrients have been analyzed using the soil organic matter indicator. Impacts to soil cover have been analyzed using the soil stability indicator. Impacts of the project on soils are discussed in the soils section in chapter 3 of the final EIS. See the watershed project design features in chapter 2 of the final EIS for project design developed to minimize impacts to soils.
121.24 - Against Alt 2	#6400-1	Fire "leftovers" are a critical part of an ecosystem and critically important to recreating the top soil and duff layers destroyed by a fire. Dead trees and brush help replenish the nutrients needed to regrow a forest system. I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed.
121.24 - Against Alt 2	#6501-1	Dear Forest Service--this may look like a form letter you've already received from many people, but I agree with everything in it and couldn't have said it better myself. PLEASE do the right thing to protect this land from further degradation. More details: , I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed.
121.24 - Against Alt 2	#6508-1	I have seen the results of poor planning and excessive timber cutting throughout the region. My observations are based on experience, not theory and financial objectives. I am shocked by the extreme clearcut logging of "late-successional" old-growth reserves and geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed.
121.24 - Against Alt 2	#6545-1	Below is the form letter. I have read it and fully support the content in this letter. I am a Geologist and have worked to evaluate road related erosion (e.g. following the Biscuit Fire) and conducted numerous TMDL sediment budgets in northern California. Based upon my informed views of land management in forests of the Klamath region, I support the following letter.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.24 - Against Alt 2	#6678-1	I'm writing because I'm deeply concerned that your "Westside Fire Recovery Project" in the Klamath National Forest is actually a plan to clearcut old-growth trees. This is unacceptable. Doing so would undermine natural post-fire recovery in these late-successional reserves and degrade precious salmon habitat. As you know, fire is a natural occurrence in this area. Post-fire logging is counter to natural recovery and the objectives for which these reserved land allocations have been made. Economic use of timber is also not a valid purpose for logging on reserved lands. For all these reasons, I urge you to stop exploiting wildfire to fast-track controversial clearcut logging and allow this naturally burned habitat to support real recovery -- the recovery of the forest's at-risk species, including coho salmon, northern spotted owl and Pacific fisher. Please implement the Northwest Forest Plan and withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project. Selective sustained logging of dead dying and diseased trees via low impact persons on the ground with chain saws, using helicopters to lift out the few select trees, harvesting trees of different ages, so that the age of the remaining trees in the forest covers the full spectrum from young to ancient (ancient trees should NOT be harvested) and mandatory replanting of 1:1 or 2:1 are necessary standards to be implemented for healthy forests and all of the life, including us, who are dependent on healthy thriving forests.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment 12414-1 and 6924-1. The Forest Service reviewed the article and acknowledges the role of fire in the ecosystems and the beneficial effects of fire. See Chapter 2 of the EIS for a description of proposed actions of this project. See the affected environment section of Chapter 3 for a description of the post-fire condition by resource. See Chapter 3 of the EIS for effects of the proposed actions on resources by resource area. See the beginning of Chapter 3 for a discussion of responsible opposing points of view.
121.24 - Against Alt 2	#6772-1	As a former backcountry ranger and Redcard-holding firefighter for the National Park Service, I have seen first hand what fire can do and the erosion that takes place afterwards ; I beg you NOT to clearcut in burned acreage! It would be a disaster that would alter these habitats forever, and NOT for the better of the creatures and species trying to recover there!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed.
121.24 - Against Alt 2	#6853-1	irst of all, fire is a natural occurrence in this area. This post-fire logging plan runs counter to natural recovery; not incidentally, it also makes a mockery of the objectives for which these reserved land allocations have been made. Finally, economic use of timber is absolutely NOT a valid purpose for logging on reserved lands. The Westside project is nothing more that an exploitation of wildfire as a means of fast-tracking controversial clear-cut logging. We urge the Forest Service to follow its own rules in the Northwest Forest Plan. Allow this naturally-burned habitat to support real recovery: that of the forest's at-risk species, including coho salmon, northern spotted owl and Pacific fisher. To reiterate: our recommendation is that you withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project. Implement the Northwest Forest Plan. We trust you will give our comments your most serious and thoughtful consideration.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS; no clear-cutting is proposed. The Forest Service acknowledges that fire is a natural occurrence in the area. In fact, the treatments proposed are to reduce fire risk to late successional habitat and other strategic areas for the protect of the remaining habitat not already removed by fire. See Chapter 1 of the EIS for the purpose and need statements for this project, which include watershed and wildlife habitat improvement. The project is designed to be consistent with the Forest Plan, which incorporates the Northwest Forest Plan. See Chapter 1 for a discussion of salvage in Late Successional Reserves and see the beginning of Chapter 3 of the EIS for a discussion of responsible opposing points of view.
121.24 - Against Alt 2	#6880-1	As you know, fire is a natural occurrence in this area. Post-fire logging is counter to natural recovery!! Forest fire in natural and works into a health ecological balance to this natural environment!! Logging will disrupt and damage the sensitive ecology that is health after forest fires!!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS; no clear-cutting is proposed. The Forest Service acknowledges that fire is a natural occurrence in the area. In fact, the treatments proposed are to reduce fire risk to late successional habitat and other strategic areas for the protect of the remaining habitat not already removed by fire. See Chapter 1 of the EIS for the purpose and need statements for this project, which include watershed and wildlife habitat improvement. The project is designed to be consistent with the Forest Plan, which incorporates the Northwest Forest Plan. See Chapter 1 for a discussion of salvage in Late Successional Reserves and see the beginning of Chapter 3 of the EIS for a discussion of responsible opposing points of view.
121.24 - Against Alt 2	#6880-2	Post-fire logging is detrimental to the objectives for which these reserved land allocations have been made. Economic use of timber is also not a valid purpose for logging on reserved lands. For all these reasons, I urge you to stop exploiting wildfire to fast-track controversial clearcut logging and allow this naturally burned habitat to support real recovery -- the recovery of the forest's at-risk species, including coho salmon, northern spotted owl and Pacific fisher.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS; no clear-cutting is proposed. The Forest Service acknowledges that fire is a natural occurrence in the area. In fact, the treatments proposed are to reduce fire risk to late successional habitat and other strategic areas for the protect of the remaining habitat not already removed by fire. See Chapter 1 of the EIS for the purpose and need statements for this project, which include watershed and wildlife habitat improvement. The project is designed to be consistent with the Forest Plan, which incorporates the Northwest Forest Plan. See Chapter 1 for a discussion of salvage in Late Successional Reserves and see the beginning of Chapter 3 of the EIS for a discussion of responsible opposing

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			points of view.
121.24 - Against Alt 2	#7028-1	Salvage is a euphemism for fake excuse. I have seen many many trees, especially the old ones keep growing after a fire. We all have. You're not fooling anyone here. The rarity of old forests, with all the various events they experience make them invaluable. To destroy this special ecosystem is unconscionable.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#7270-1	After living through two months of being on evacuation advisory last summer/fall, I really don't want to live through months of watching trees being driven down my road that were cut unnecessarily.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#7636-1	We're trashing our planet and destroying the habitats of those who live in these sensitive areas. This misuse of our natural resources, with its accompanying abuse of free-living animals, must stop.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#7643-1	The 'good ol' boy' lumber lobby is acting stupidly once again, trying to make profit from the only environment we have that produces oxygen so we can actually breathe. Fie on them, the unreasonable and perpetually destructive logging industry deserves to be disbanded.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#7850-1	A post wildfire location is not a big clear-cut. It's the stage for a miracle of nature to restore itself when humans keep their feet, saws and machinery off of it.. Please, keep everyone out of the Klamath burn and let it stabilize again with new growth on it's own..	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of treatments; no clear-cutting is proposed.
121.24 - Against Alt 2	#8002-1	Please leave Nature to do its natural thing. Man is too intrusive on the lands for many reasons all over the globe. Humanity must give our "home" much more respect. Governments and corporations need to put their foot down about many things and be more conservative.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#8094-1	I'm asking you to scrap the "Westside Fire Recovery Project" in the Klamath National Forest. This project does not appear to contribute to forest recovery	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#8152-1	This is "Un-Lawful". This is a Violation odf the Supreme "Laws of Nature", as described in "America's Declaration of\Independence". These words are True, because, at least in-part, doing so would undermine natural post-fire recovery in these late-successional reserves, and such would degrade precious salmon habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project is consistent with law, regulation and policy.

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121.24 - Against Alt 2	#8196-1	Furthermore, old growth trees are more valuable for their superior ability to sequester carbon from the atmosphere than for their board feet value. Every old growth tree cut down is another nail in the coffin of global warming.	No green old growth trees are proposed for harvest. See Chapter 2 of the EIS for a description of proposed actions; the project includes post-fire salvage harvest which is limited to the removal of dead, fire damaged trees. See Chapter 3 of the EIS under climate change for a discussion of carbon sequestration by Alternative. Also see Chapter 2 under wildlife project design features; the project is designed to retain legacy components, including appropriate large snags.
121.24 - Against Alt 2	#8507-1	Having lived in and studies Northwest forests for forty years, my experience shows me that leaving surviving old growth in a burned area is the best, most efficient and most economical way to insure propogation of a new stand.	This is not inconsistent with the project; see Chapter 2 of the EIS for a description of the proposed actions.
121.24 - Against Alt 2	#8527-1	I live very near the Klamath National Forest and have enjoyed its beauty on many backpacking trips. In no way should anyone be allowed to log that region especially clearcutting old growth trees. We've had enough of that in our region. No one I know supports this!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of the proposed actions; no clear-cutting is proposed.
121.24 - Against Alt 2	#8557-1	I learned in High School that forests need to be left alone to recover naturally after a fire. I seriously doubt that has changed, unless you're a logging company that wants to benefit and profit from a disaster.	General comment not supported by rationale. This project incorporates best available science. See the beginning of Chapter 3 for a discussion of responsible opposing points of view.
121.24 - Against Alt 2	#8581-1	Forests must be managed in a way that protects endangered species, preserves clean water and allows the natural ecosystem to heal itself from fire as it has done for millennia and is spelled out in the Northwest Forest Plan.	General statement. The project is designed to protect resources consistent with the endangered species act and clean water act along with the Forest Plan, which incorporates direction from the Northwest Forest Plan.
121.24 - Against Alt 2	#8886-1	California forests belong to the public and provide environmental services for the public's benefit. They provide habitat and watershed. No private interest should be able to rob us of the environmental services that our forests provide.	General comment. The project is designed to protect habitat and watershed; see Chapter 2 of the EIS for a description of proposed actions, including project design features.
121.24 - Against Alt 2	#9310-1	I ash the Forest Service to protect important wild lands, wildlife, and the watersheds that all Americans depend upon. Clear cutting old-growth reserves in key salmon strongholds makes no sense. Some logging is appropriate where it would do the least harm but clear cutting on forest slopes only leads to landslides and unstable slopes.	Position statement; see response to Comment number 16695-4. See Chapter 2 of the EIS for a description of proposed actions and project design features; no clear-cutting is proposed and protection measures are designed to protect wildlife habitat and watershed conditions. Further, the purpose and need of the project includes the improvement of watershed and wildlife conditions. This includes legacy site treatments and treatments proposed within Late Successional Reserves. See the geology section of Chapter 3 for a discussion of unstable slopes.
121.24 - Against Alt 2	#9454-1	What may happen with excessive logging is sad, pathetic and ignorant. There is science and common sense behind the system of perpetual growth.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The final EIS and supporting documents consider best available science.
121.24 - Against Alt 2	#9689-1	Is this a joke or are you people really that uneducated? California is in the worst drought position in history and you are considering allowing the massacre of thousands of TREES??? Let's get clear on this - trees are probably the only thing saving your state, since you are not willing to ban fracking, bottled water depletion of resources or any restrictions on the REAL users/wasters of this valuable resource. I To allow the cutting of these trees at this time is beyond foolhardy, it is inconceivably insane.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.24 - Against Alt 2	#9797-1	I am a senior in high school. Whatever you do, my generation has to spend our time fixing it. Please, PLEASE do what is good for the earth, for the plants and the people. THIS IS NOT OKAY. I am teary-eyed with the thought. This area is supposed to be protected. Please do not do this. You have the power.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the final EIS for a description of proposed actions and Chapter 3 for a disclosure of potential effects.
121.24 - Against Alt 2	#9935-1	As we've already seen in Washington State logging and in Southern California for housing development in recent years, as well as smaller-scale examples of logging on the Pacific Coast, deforestation causes great harms to both people and wildlife habitat, as well as to our climate. Cutting down forests to prevent them from burning is idotic and reflective of the timber industry's greed, regardless of the harms that will result for generations to come. I urge more intelligent, long-term vision. No more unsustainable logging in our states fragile ecosystems.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.24 - Against Alt 2	#9977-1	Cutting down these trees will not really make a difference, will it? What is underlying cause of the fires in the first place? Try focusing on that aspect as well as respecting natural cycles (if any cutting should be done, how about near places that humans live to protect them?). Please stop.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.25 - Against Alt 3	#14-4	Alternative 3 - Spotted owl and fisher habitat, habitat connectivity, and legacy component issue Alternative. Fewer acres are proposed for treatment with only 3% being proposed for salvage harvest. Recovery of burned lands is negligible. The biggest issue is no treatment proposed within the Beaver Fire area. The Beaver Fire contained the highest amount of Matrix acreage affected by high severity of all the fires that burned last summer. Private land adjacent to the Forest ownership has been salvage and will soon be reforested. That should not preclude the Forest from attempting to recover some its land ownership as well. Without doing some work within the burn area, especially adjacent to private property, you will just be setting up a future fire with negative effects to private ownership. We don't believe this is in the best interest of those private landowners. We strongly believe recovery efforts should be made on the Matrix land base within the Beaver Fire area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.25 - Against Alt 3	#18879-10	Alternative 3, 4,5, and Karuk all reduce the salvage/fuel reduction/reforestation treatment acres. Part of that reduction occurs near the community of Seiad Valley within their WUI zone. Even Alternative 2 falls somewhat short in this regard, but the other alternatives fall way short. This is not responsible management because it significantly elevates the future level of hazard for Seiad and also for Happy Camp.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.25 - Against Alt 3	#18879-13	None of the alternatives to the proposed action do a credible job of describing the long term consequences of the various reductions in activity levels. In Alternative 3, saving heavily damaged timber stands laced with dead fuel seems very short sighted. Those stands are almost sure to be lost inthe next fire and may well contribute to larger future loses because of the heat and intensity they will generate. Treatment now is a better option. The same principle applies to Alternative 4. A reduction in disturbance level now with a small payoff in watershed effects will likely lead to higher intensity future fires with many times more watershed impacts. Treatment now is a better option.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.25 - Against Alt 3	#18879-9	Alternatives 3, 4, 5, and the Karuk Alternative do not achieve the more optimal balance of benefits versus costs when compared to Alternative 2. Each of these alternatives reduces the levels of reforestation, salvage logging,fuel treatment, and road use in an effort to lighten the effect on wildlife or watershed. While this is a noble objective, what is not well recognized is that the long term consequences of less treatment now is a future with more acres of destructive, high intensity wildfire and fewer acres of diverse forest with a desirable mix of conifer, hardwood, and shrub vegetation. The forest that will be sustained in alternatives 3, 4, 5, and Karuk will be more dominated by large, mature brush fields than the forest resulting from Alternative 2. High proportions of large, mature brush fields reduce the overall quality of wildlife habitat on the forest and reduce many of the environmental, social,and economic values present in a forest with a good balance of conifer, hardwood, and shrub/herbaceous vegetation.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.25 - Against Alt 3	#19073-10	Alternative 3 - Spotted owl and fisher habitat, habitat connectivity, and legacy component issue Alternative. Fewer acres are proposed for treatment with only 3% being proposed for salvage harvest. Recovery of burned lands is negligible. The biggest issue is no treatment proposed within the Beaver Fire area. The Beaver Fire contained the highest amount of Matrix acreage affected by high severity of all the fires that burned last summer. Private land adjacent to the Forest ownership has been salvage and will soon be reforested. That should not preclude the Forest from attempting to recover some its land ownership as well. Without doing some work within the bum area, especially adjacent to private property, you will just be setting up a future fire with negative effects to private ownership. We don't believe this is in the best interest of those private landowners. I strongly believe recovery efforts should be made on the Matrix land base within the Beaver Fire area.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.25 - Against Alt 3	#19-12	Alternative 3: This alternative clearly does not meet the stated purpose and need. The most notable issue with this alternative is that is removes any salvage logging and associated site preparation, planting and release treatments within the Beaver Fire. This alternative would have the net effect of severely endangering private lands that are encompassed within the fire area and directly adjacent to USFS lands. As private land owners responsibly salvage and replant their lands, they will be at high risk of losing their reforestation investment due to the likelihood of adjacent USFS lands re-burning and moving onto their private lands. The selection of this alternative would be completely irresponsible not only for the lack of rehabilitation on USFS lands, but also for the danger the USFS lands will have to adjacent private land owners for many years to come.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.26 - Against Alt 4	#19-13	Alternative 4: This alternative further limits the scope of the project by reducing the acres that will be treated by not allowing the use of certain existing roads. More specifically, non-system roads, (existing roads that are not in the USFS road system database) cannot be utilized unless they are located on ridgetops, and not hydrologically connected to the drainage network. Additionally, in Key Watersheds, any use of these roads can't be longer than 250 feet. Also, maintenance level 1 roads cannot be utilized if a stream crossing needs to be reconstructed. This alternative reduces that acres available for restoration by 900 acres compared to alternative 2. In addition to this reduction, this alternative makes the assumption that existing non-system roads will be in better condition if left alone, not utilized for this project, and not maintained. The roads in question for this alternative are not new roads and therefore there is no new net impact to watersheds if they are utilized. In fact, roads that are not maintained typically have the most potential for watershed damage. Failures that end up causing mass wasting and deleterious effect to coho salmon arise from lack of maintenance and proper drainage. Selection of this alternative would likely do the opposite of the stated objective.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.27 - Against Alt 5	#14-5	Alternative 5 - Disagreements about the effects of salvage logging and site preparation on Late-Succesional Reserves, riparian reserves, and inventoried roadless areas by removing all units that overlap these management areas. This alternative does nothing to recover any of the burned area. There is very little being done to recover forested stands lost in the wildlfire, very little in terms of creating worker and public safety, and nothing to insure forests will once again thrive in the impacted areas. The salvage treatments account of 1% of the burned areas. It is a public travesty to not treat 99% of an area that suffered the worst catastrophic event ever seen on the Klamath National Forest. The untreated areas will burn again. Additional green forests will be consumed in the next catastrophic event as the untreated fuels accumulate and once again burst into flames. That is exactly what happened in many of the areas in last summer's fires. Untreated areas from past fires created conditions that consumed thousands of acres of living forests. All this alternative will do is prevent living forests to re-occupy large acreages of the burned areas in the future. In a many cases it will be a minimum of 300 years before mature forests would once again occupy these sites. In some cases forested stands may never re-occupy these sites. We don't believe that is what a majority of the public wants. They want to see green forests that provide recreational opportunities, wildlife habitats for all species, clean and healthy watersheds, visually pleasing landscapes, and commodity removal opportunities. Doing nothing within these burned areas will not allow any of these things to happen for centuries. This Alternative also drastically reduces that amount of reforestation planned. That would be a very big mistake. Relying on natural regeneration is not the best approach. First of all the probability of natural regeneration is very low in those areas that have thousands of contiguous acres of high mortality. There are not enough seed trees around to provide for rapid conifer re-establishment. Secondly, species establishment through natural regeneration may not promote the desired species for many of these sites. Artificial regeneration can insure the right species composition and allow for rapid conifer re-establishment on those areas that are treated.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.27 - Against Alt 5	#17481-31	Alternative 5: Likes/Dislikes - I dislike this Alternative because it limits the land base available for recovery activities with no significant environmental/economic gain	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.27 - Against Alt 5	#18879-12	Alternative 5 restricts salvage and reforestation activities to the LMP Matrix lands which severely reduces the acres treated compared to Alternative 2. This approach is a glaring example of management driven by administrative definition rather than the needs on the ground. There is no biological foundation for this alternative though it does illustrate a weakness in the current LMP land classifications and management direction.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.27 - Against Alt 5	#19073-11	Alternative 5 - Disagreements about the effects of salvage logging and site preparation on Late-Succesional Reserves, riparian reserves, and inventoried roadless areas by removing all units that overlap these management areas. This alternative does nothing to recover any of the burned area. There is very little being done to recover forested stands lost in the wildfire, very little in terms of creating worker and public safety, and nothing to insure forests will once again thrive in the impacted areas. The salvage treatments account of 1% of the burned areas. It is a public travesty to not treat 99% of an area that suffered the worst catastrophic event ever seen on the Klamath National Forest. The untreated areas will bum again. Additional green forests will be consumed in the next catastrophic event as the untreated fuels accumulate and once again burst into flames. That is exactly what happened in many of the areas in last summer's fires. Untreated areas from past fires created conditions that consumed thousands of acres of living forests. All this alternative will do is to prevent living forests from re-occupying large acreages of the burned areas in the future. In a many cases it will be a minimum of 300 years before mature forests would once again occupy these sites. In some cases forested stands may never re-occupy these sites. I don't believe that is what a majority of the public wants. They want to see green forests that provide recreational opportunities, wildlife habitats for all species, clean and healthy watersheds, visually pleasing landscapes, and commodity removal opportunities. Doing nothing within these burned areas will not allow any of these things to happen for centuries. This Alternative also drastically reduces that amount of reforestation planned. That would be a very big mistake. Relying on natural regeneration is not the best approach. First of all the probability of natural regeneration is very low in those areas that have thousands of contiguous acres of high mortality. There are not enough seed trees around to provide for rapid conifer re establishment. Secondly, species establishment through natural regeneration may not promote the desired species for many of these sites. Artificial regeneration can insure the right species composition and allow for rapid conifer re-establishment on those areas that are treated.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.27 - Against Alt 5	#19-14	Alternative 5: This alternative does not meet the stated purpose and need. This alternative is similar to alternative 1 except for the hazardous fuels treatments that are increased within the Beaver Fire area. The main difference between this alternative and the proposed alternative: this alternative removes any salvage logging that would take place in Late-Succesional Reserves (LSR's). Removing these areas from the project simply because they are within the LSR land allocation is simply ridiculous. The acres that are within LSR and proposed for salvage logging in alternative 2 are burned to the same degree (high intensity, essentially 100% kill) as the acres burned in the matrix allocation and proposed for salvage treatment. Areas that are mapped as LSR but have succumbed to high intensity stand replacement type fire are in actuality no longer late seral stands, and management decisions should not be made based on them.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.28 - Against Karuk Alt	#14-6	Karuk Tribe Alternative – Very little narrative is included in the alternative displayed in the Draft EIS. There are some maps. Visual analysis of the maps indicates very little recovery emphasis on the interior portions of the burned areas. The only treatments appear to be concentrated around private lands, the river corridor, and some hazard tree removal on some road systems. That would lead one to believe that thousands of acres of high mortality burned areas would be left for mother nature to take care of. Most of that would involve future catastrophic wildfires within those untreated areas. As stated for Alternative 5, it would be centuries before forested stands would once again occupy these acres, if at all. This alternative also requests that no artificial regeneration occur. Once again this will limit many of the burned areas from being established with conifers or the presence of desired conifer species. The fires from last season contained a much higher level of high mortality burn. This level is extremely higher than that found in natural fires or past wildfires. This makes the likelihood of natural regeneration less likely. As stated in the other alternative discussions, we believe most of the taxpayers, whose land this is, would prefer to see forested stands created in the quickest time frame possible. Our discussion about time frames of conifer re-establishment, future catastrophic events in untreated areas are identical to those stated for Alternative 5. The Tribe Alternative also promotes the idea of restoring many of the areas by reintroducing natural fires through prescribed burning. A realistic approach needs to be taken as too how much prescribed burning can actually be accomplished on a yearly basis. Some groups and individuals appear to have an unrealistic view of how much can actually be accomplished. With current burn restrictions, weather conditions, smoke issues, the amount of actual acreage that can feasibly be accomplished is far less than acreage proposed in any Alternative that promotes the re-introduction of fire as the primary recovery effort. Also, we question the feasibility of actually being able to re-introduce prescribed burning with so much fuel that will be created in the untreated areas. Tremendous levels of fuel loading will occur in those high/moderate burn severity areas as the trees begin to fall to the ground (10 - 15 years). One also needs to consider the effects of burning to natural regeneration that may get established. This would also set back the recovery period to future conifer stands.	The Karuk Alternative was provided to the agency the night before publication of the EIS. For the final EIS, see the how the alternative was considered in Chapter 2 and see the comparison tables and maps of the Karuk Alternative with that of the preferred Alternative (modified Alternative 3). See response to 3-4. Consultation with the Karuk Tribe is ongoing.
121.28 - Against Karuk Alt	#18879-10	Alternative 3, 4,5, and Karuk all reduce the salvage/fuel reduction/reforestation treatment acres. Part of that reduction occurs near the community of Seiad Valley within their WUI zone. Even Alternative 2 falls somewhat short in this regard, but the other alternatives fall way short. This is not responsible management because it significantly elevates the future level of hazard for Seiad and also for Happy Camp.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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121.28 - Against Karuk Alt	#19073-12	Karuk Tribe Alternative -Very little narrative is included in the alternative displayed in the Draft EIS. There are some maps. Visual analysis of the maps indicates very little recovery emphasis on the interior portions of the burned areas. The only treatments appear to be concentrated around private lands, the river corridor, and some hazard tree removal on some road systems. That would lead one to believe that thousands of acres of high mortality burned areas would be left for future fires and insects to manage. As stated for Alternative 5, it would be centuries before forested stands would once again occupy these acres, if at all. This alternative also requests that no artificial regeneration occur. Once again this will limit many of the burned areas from being established with conifers or the presence of desired conifer species. The fires from last season contained a much higher level of high mortality bum. This level is extremely higher than that found in natural fires or past wildfires. This makes the likelihood of natural regeneration less likely. As stated in the other alternative discussions, we believe most of the taxpayers, whose land this is, would prefer to see forested stands created in the quickest time frame possible. Our discussion about time frames of conifer re-establishment, future catastrophic events in untreated areas are identical to those stated for Alternative 5. The Tribe Alternative also promotes the idea of restoring many of the areas by reintroducing natural fires through prescribed burning. A realistic approach needs to be taken as too how much prescribed burning can actually be accomplished on a yearly basis. Some groups and individuals appear to have an unrealistic view of how much can actually be accomplished. With current bum restrictions, weather conditions, smoke issues, the amount of actual acreage that can feasibly be accomplished is far less than acreage proposed in any Alternative that promotes the re introduction of fire as the primary recovery effort. Also, we question the feasibility of actually being able to re-introduce prescribed burning with so much fuel that will be created in the untreated areas. Tremendous levels of fuel loading will occur in those high/moderate bum severity areas as the trees begin to fall to the ground (10 - 15 years). One also needs to consider the effects of burning to natural regeneration that may get established . This would also set back the recovery period to future conifer stands.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for how the Karuk Alternative was considered and incorporated into this project.
121.28 - Against Karuk Alt	#28-2	I've looked at the Karuk Tribe alternative for this project. I like their ideas on fuel breaks but there is no way we can just leave all the dead and dying burned trees out in the forest as they propose. Those burned trees need to be removes in order to reduce dangerous fuels that will accumulate over time and make bigger and more dangerous fires in the future.	See Chapter 2 of the EIS for a discussion of how the Karuk Alternative has been considered and incorporated into the project.
121.29 - Against No Action	#17286-1	As a Happy Camp resident for at least 30 years, and married to a man who has lived here for almost 60 years, I would like to say my husband and I fully support your efforts to log and clean up fire damaged areas from the massive 2014 fires in the Klamath National Forest. I hope you stand fast on this issue, even though you will be getting lots of heat to cease your salvage logging and cleanup efforts. You have the support of many folks who live in this area regarding this project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.29 - Against No Action	#18602-1	Please follow-thru on this post-fire harvest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.29 - Against No Action	#18861-1	I support this project and applaud the Klamath NF scientists for their efforts to protect aquatic resources, especially salmon and water quality, while actively managing the forest. After reading the project documentation, I found that objections to this project based on issues of "clear cutting" and loss of biodiversity to be inaccurate. Critics of this project do not understand the issues of fire fighter safety and management for long term goals. Action is needed. I support the Klamath NF staff's development of actions that protect fire fighters during future wildfires by addressing the fuels risks now.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
121.29 - Against No Action	#19073-9	Alternative 1 - No Action This alternative will not meet the purpose and need since no recovery will occur. This alternative will actually create conditions for long-term adverse effects as the untreated landscapes will once again be consumed by catastrophic wildfire as down fuels accumulate, over the next 10 - 20 years, from all of the untreated material. This has been the case on all of the past wildfire areas that have not been treated. Eventually, this area will bum again creating environmental effects greater than those from first fire. We don't believe this is what the public wants and is not in the best interest of taxpayer owned public lands.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge that the No Action does not meet the stated purpose and need. The No Action is included in analysis in order to have a baseline for the comparison of effects between the no action and action Alternatives.

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121.29 - Against No Action	#19-10	Alternative 1: Does nothing to the areas impacted by the 2014 fires. None of the four purpose and need items will be met. Burned areas and the roads within will be very dangerous for workers of the public to enter. The establishment of a new forest will be very slow, extensive brush fields will develop; wildlife habitat will stay in early seral stage within the high intensity burn areas for decades, many areas will likely re-burn numerous times as excessive ground fuels builds up from decaying, crumbling snags.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge that Alternative 1 does not meet the stated purpose and need of the project.
122.01 - Cumulative Effects Analysis	#17111-17	This significant information regardi ng NSO, as well as impacts of the Barred Owl, needs to be acknowledged and considered in the final EIS. Specific consideration needs to be given to the impacts of: (I) salvage on development of the debris-rich Jate-successional conditions characteristic of forested NSO (and prey) habitat; and (2) establishment of conifer plantations on the amount and distribution of shrub-dominated early successional habitat in which the woodrat resides.	Brush and hardwoods are likely to regenerate in the long term if no salvage and reforestation is done because of the high fire return interval and heavy fuels left on the landscape. That habitat type does not meet the needs of northern spotted owl. See effects analysis for northern spotted owl in Chapter 3 of the final EIS.
122.01 - Cumulative Effects Analysis	#17500-2	We must consider the cumulative impact on fish and wildlife, soil erosion, water quality, etc.	Cumulative effects have been considered. See Chapter 3 of the final EIS by resource area and Alternative for a discussion of potential cumulative effects.
122.01 - Cumulative Effects Analysis	#18878-21	DEIS: Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time. Past activities contributed to the existing condition and are considered in the affected environment. (Pg. 107) Comment: We believe the DEIS is in error by not analyzing and disclosing the cumulative effects of the 2014 Fire suppression activities.	The commenter's quote is from the draft EIS and appears to be accurate. The conditions resulting from the fires are considered under the affected environment section by resource area throughout Chapter 3 of the final EIS. IT just isn't discussed as a cumulative effect, as it doesn't meet the definition.
122.01 - Cumulative Effects Analysis	#18883-11	The Draft EIS did not consider project impacts from adjacent lands, public or private, on overall forest health. Cumulative impacts must be considered. Appendix C, “Actions Considered for Cumulative Effects,” does not provide any analysis of the inter-relationships between the Appendix C projects and Alternative 2 feature impacts. If the objective of the proposed action is to provide a resilient and sustainable forest, the proposed and ongoing projects within and around the fire areas need to be analyzed.	This comment is inaccurate. The analysis for this project did consider actions on adjacent private lands; see the Appendix of both the draft EIS and final EIS for a description of actions considered for cumulative effects. See cumulative effects sections by resource area and Alternative throughout Chapter 3 of the EIS for the cumulative effects analysis (of the proposed action when added to other actions).
122.01 - Cumulative Effects Analysis	#18907-13	11. The Draft EIS did not consider project impacts from adjacent lands, public or private, on overall forest health. Cumulative impacts must be considered. Appendix C, "Actions Considered for Cumulative Effects," does not provide any analysis of the inter-relationships between the Appendix C projects and Alternative 2 feature impacts. If the objective of the proposed action is to provide a resilient and sustainable forest, the proposed and ongoing projects within and around the fire areas need to be analyzed.	This comment is inaccurate. The analysis for this project did consider actions on adjacent private lands; see the Appendix of both the draft EIS and final EIS for a description of actions considered for cumulative effects. See cumulative effects sections by resource area and Alternative throughout Chapter 3 of the EIS for the cumulative effects analysis (of the proposed action when added to other actions).

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122.01 - Cumulative Effects Analysis	#18931-1	Geographic Area Affected (DEIS Ch. 1, pg1) Comment: The DEIS only evaluates vegetation, precipitation, and other natural conditions. Since Webster defines Geography not only as "The descriptive science dealing with the surface of the earth, its division into continents and countries and the climate,, plants, animals, natural resources," but also, the "inhabitants and industries of the various divisions." (Webster's New World Dictionary of the American Language, Pg. 605) Therefore, the DEIS must evaluate human-caused conditions on the landscape. Regarding Affected Environment and Environmental Consequences (Ch. 3, DEIS, pgs. 107-8) "This analysis relies on current environmental conditions as a proxy for impacts of past actions. This is because existing conditions reflect the aggregate impact of all prior human actions and natural events that have affected the environment and might contribute to cumulative effects." Comment: Excluding any prior human-caused impacts on the forestry landscape is entirely inadequate in identifying and managing the affects of natural and man-made impacts, thus negating analysis of current or future human-caused impacts on the forest from this project. This circumvents the very intent of cumulative impacts analysis: to identify the natural and man-made causes which together create cumulative impacts over time. The whole point of NEPA is to identify the causes of the problem that needs to be addressed by the "proposed action" and to analyze the causes and effects of those actions in order to "foster and promote a harmonious relationship between man and his environment." For example, according to Forest Service Chief Peterson, 1982, (National Geographic, Sept. 1982, picture above): "Until the 1950s our role was largely custodial….Because private forests filled most of our timber needs, demands on national forests were minimal. By then commercial stands had become mostly stumps and saplings, and industry looked to national forests for supply. That's when the timber a question began to heat up"	Both the draft and final EIS include a discussion of the social-economic effects of the proposed actions. As the draft EIS states in the quoted statement, the EIS doesn't exclude consideration of past actions but considers them in the affected environment. We acknowledge the quote from the National Environmental Policy Act law about fostering and promoting a harmonious relationship between man and the environment; however the commenter is unclear how the Forest Service is inconsistent with this purpose or what adjustment, if any, to the analysis of the proposed actions is necessary. The Forest Service acknowledges the quote from an earlier Chief, but again, the commenter fails to provide any clear evidence or rationale for how the analysis is inadequate as it stands in the EIS.
122.01 - Cumulative Effects Analysis	#19078-1	I wish to express my disapproval of the Westside Timber Sale due to impacts to the Klamath River's key salmon refugia, cumulative impacts to forest and watershed, and violations of the Clean Water Act, the Endangered Species Act, NEPA and California's Porter Cologne law. I incorporate by reference the comments of the Klamath Siskiyou Wildlands Center, the Center for Biological Diversity, the Karuk Tribe and the Environmental Protection Information Center and the Klamath Forest Alliance.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the final EIS for a discussion of how the Karuk Alternative has been considered and incorporated.
122.01 - Cumulative Effects Analysis	#5873-1	This is one of many large salvage logging projects. There is significant new information about the value of complex young forests that develop in the absence of salvage logging and replanting – complex young forests with abundant legacy structure and diverse vegetation composition. The FS needs to prepare a programmatic EIS to consider the cumulative impacts of its salvage logging program.	The Forest Service has considered and incorporated best available science into the final EIS and supporting documents. The commenter fails to provide any scientific evidence to support claims or for Forest Service review. See the beginning of Chapter 3 for responses to responsible opposing points of view. See the Appendix "actions considered for cumulative effects" for the actions considered for cumulative effects analysis. Cumulative effects is analyzed throughout Chapter 3 of the EIS by resource area and Alternative. There is no requirement to prepare a programmatic EIS; the final EIS already provides site-specific, project-level National Environmental Policy Act analysis.
122.01 - Cumulative Effects Analysis	#5873-91	Consider the additive and cumulative effects of salvage logging and associated activities. The agency must consider the additive effects of salvage logging, road construction, log hauling, activity fuel treatment (broadcast burning, pile burning, and mechanical fuel reduction), site preparation, tree planting, OHVs, as well as the cumulative effects of past logging, roads, fire effects, fight fighting, etc. The agency must not adopt the reasoning that the effects of the fire are greater than the effects of the logging and are likely to mask the latter. The Ninth Circuit rejected precisely this type of analysis as faulty and violating NEPA in Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998). http://laws.findlaw.com/9th/9835783.html. The Court held that Despite the lack of data, the Forest Service asserts throughout the EA that the expected level of sediment delivery will be small in comparison to that caused by the fire. Whether the increased erosion from logging and roadbuilding is smaller or larger than that produced by the fire is irrelevant. The proper evaluation should identify the impact of the increased sediment from the logging and roadbuilding on the fisheries habitat in light of the documented increases that have already resulted from the fire. 161 F.3d at 1213 (9th Cir. 1998) (emphasis added). Post-fire landscapes are not a high priority for fuel treatment.	Actions that are part of the proposal do not meet the definition of cumulative effects; however they are described in Chapter 2 and considered under direct and indirect effects throughout Chapter 3 of the final EIS. Events such as wildfires and the suppression of them is not considered in cumulative effects. This is because the nature of natural events and their unpredictability precludes them from being analyzed. For example, although fire is recognized to be common in the area, it is unknown when, how large, how severe the next fire will be. It would be even more impossible to predict the nature of suppression techniques that would be required given the uncertain nature of the future event. Appendix C of the EIS includes a description of the ongoing and future foreseeable actions considered for cumulative effects and this includes other similar actions on federal and private land within the analysis area. The effects of the proposed action when added to the effects of other proposed federal and non-federal ongoing and future foreseeable actions has been considered for cumulative effects analysis. Effects from OHV activity have not been discussed because their use is very low within the proposed treatment area and proposed activities are not likely to increase OHV activity. The soil report for the project analyzes impacts to soil erosion using the soil stability indicator and soil erosion would increase for all action Alternatives compared to the no action Alternative. Past actions are incorporated into the affected environment, as described at the beginning of Chapter 3 of the EIS.

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122.02 - Disclosure of Effects	#12346-5	Page 106 of the DEIS acknowledges that an action alternative that focused on hazardous fuels treatments and roadside logging would "meet one part of the purpose and need for this project (to reduce safety hazards to adjacent landowners, the public and forest workers) by including fuels and roadside hazard treatments." But the Forest Service insists upon conducting unit salvage logging in LSRs in order to "obtain the maximum economic commodity and value from burned timber." Ibid. The agency also mistakenly contends that unit salvage logging will "increase the likelihood and speed by which burned forests are restored." Ibid. The Forest Service is not permitted to justify logging the LSRs in order to "obtain the maximum economic commodity and value" from these old-growth reserves. As is shown throughout these comments, and as established by the peer-reviewed literature submitted during the scoping process, unit salvage logging will inhibit, rather than contribute to, restoration of late-successional forest character. Please note the recent 2013 BLM publication entitled the Analysis of the Management Situation for the Resource Management Plans for Western Oregon states that: The 1995 RMPs do not provide management direction in Riparian Reserves or Late-Successional Reserves to salvage after disturbance for economic reasons. Since recent science seems to indicate that an ecological rationale for post-disturbance timber 3 salvage is weak, an opportunity exists to add an economic objective related to afterdisturbance salvage activities to these reserved land use allocations.	The Westside Fire Recovery Project is intended to reduce long-term fire risk from dead trees created by the 2014 Westside Fires, including the areas in Late Successional Reserves. The units selected have been chosen to create large blocks of treated fuels and to tie into the proposed system of strategic fuel breaks (Chapter 3, Fuels; Appendix E Proposed Activities in Late-Successional Reserves Westside Fire Recovery Project Klamath National Forest). The Forest hopes to recover the maximum value of timber offered and use those funds for additional fuel reduction and reforestation of severely burned areas. (See Response 18878-16) That would be accomplished by offering the timber for sale before substantial deterioration occurs. Fire killed trees have marginal economic value to begin with, and delays in harvest can easily make sales uneconomic. Seeking maximum value means that we wish to sell this material before deterioration reduces its value or makes it unmarketable. That reduces our dependence on appropriated funds to accomplish other necessary work. This “avoids the perception of economic waste” (Forest Ecosystem Management Assessment Team II-18). That is a different objective than trying to maximize overall revenue. There is no intent to maximize the funds recovered simply by designing a large project. The project would be designed differently if that was the case. For example, there would be far less helicopter yarding and more emphasis on harvesting large trees if motivations were simply economic in nature. The question of risk reduction by salvage harvest of dead trees in Late Successional Reserves was anticipated in the development of the Northwest Forest Plan and was addressed in the Northwest Forest Plan ROD. The report of the Forest Ecosystem Management Assessment Team provided the basis for the Northwest Forest Plan. Forest Ecosystem Management Assessment Team considered salvage with three different prescriptions, ranging from Prescription 1 - no salvage, to Prescription 3 - salvage with minimum guidelines. The Northwest Forest Plan ROD adopted Prescription 2, (Forest Ecosystem Management Assessment Team II-18) which provided for limited salvage in Late Successional Reserves. The Forest Ecosystem Management Assessment Team report describes the rationale for Prescription 2 as follows:Valuable trees that are dead can be used for commercial purposes with the attendant employment and economic benefits. …Increased fire danger or risk to insect and disease resulting from large accumulations of dead trees (emphasis added) can be reduced in an economically feasible fashion. Avoided are the perceptions of economic waste if patches of dead trees are not salvaged (Forest Ecosystem Management Assessment Team II-18).The topic of salvage in Late Successional Reserves was addressed in the Northwest Forest Plan ROD. Public comments on the Draft of the Northwest Forest Plan opined that salvage should be restricted only to Adaptive Management Areas. The Secretaries of Agriculture and Interior, the signing officials for the Northwest Forest Plan, noted their logic for allowing salvage in Late Successional Reserves in the Response to Comments: Salvage is not required to be beneficial, but is designed to permit recovery of a timber volume in those instances where catastrophic events clearly kill more trees (resulting in more snags and down logs in the short and long term) than are needed to maintain late successional conditions (Northwest Forest Plan ROD: 66). The ROD for the Northwest Forest Plan provided Guidelines to Reduce Risks of Large-Scale Disturbance (Northwest Forest Plan ROD C-12, 13). The Klamath NF Forest Plan incorporated, and is consistent with, management direction contained in the Northwest Forest Plan. The federal Ninth Circuit Court of Appeals clarified the application of standards and guidelines for salvage in Late-Successional Reserve in a published opinion in ONRC v. Brong (number 05-35063; D.C. numberCV-04-00693-AA) also known as the Timbered Rock decision . The Ninth Circuit Court of Appeals ruled in the Timbered Rock decision that salvage could proceed in certain circumstances in an Late-Successional Reserve, noting:…the Forest Service may consider economic interests in choosing how it will conduct Late-Successional Reserve salvage operations; that it may do so is not only a matter of common sense, but it is also something explicitly contemplated by the Plan. See NFP Standard and Guideline at C-13-C-14 (“[M]management planning for Late Successional Reserves must acknowledge the considerable value of retaining dead and dying trees in the forest as well as the benefits from salvage activities.”). However, the NFP does not permit a salvage project in an Late-Successional Reserve for the purpose of recovering the economic value of timber without at least explaining—in the administrative record—how such action is compatible with the NFP’s direction to protect and enhance late-successional ecosystems (8941-42). The Westside Fire Recovery project protects and enhances late successional ecosystems by reducing the risk of future stand replacement fire and accelerating the development of late successional stand conditions.Because Late Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions (Northwest Forest Plan C-14; Late-Successional Reserve Assessment 1-24). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et al. 2008). Research has also shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Weatherspoon and Skinner, 1995; Omi and Kalabokidis 1991). Forest Vegetation Simulation (FVS) modeling (EIS Chapter 3 Vegetation and Appendix E) shows that reforestation will establish forested conditions more rapidly by treating surface fuels and planting trees than by natural succession. It also shows that where surface fuels have been treated by salvage logging and site preparation, the ensuing stand is more resilient to fire than

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			untreated areas. If surface fuels are treated, the risk of future stand replacement fires would be reduced, increasing the probability that planted conifers can persist into the future. In the FVS model, planted stands where fuels had been reduced began to show late-successional stand conditions typical of the Klamath Province with 40% canopy closure and 18 inch diameter at breast height trees in 70 years compared to over 200 years for untreated stands to reach the same stage. Without planting, trees will slowly become reestablished over a period of 10-50 years in severely burned areas, but the probability of a late-successional coniferous forest becoming established is low because of probable reburns fed by heavy surface fuels from fire-killed trees. It is probable that areas where fuels are not treated will go through several cycles of stand replacement fire until surface fuels have been reduced to the point that a low to moderate fire severity regime has been reestablished. This would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions.The planted trees in areas where fuels have been successfully reduced are expected to provide “islands” of coniferous forest in a sea of brushfields perpetuated by reburns where fuels have not been reduced. This would provide a measure of vegetative diversity that would not otherwise be present on the landscape. These planted stands have a much higher probability of achieving and sustaining the desired late successional stand condition for the Late-Successional Reserve than do unplanted areas as shown in the FVS modeling (Chapter 3 Appendix E, Attachment 1). See also Chapter 3, Responsible Opposing Views and Agency’s Responses.
122.02 - Disclosure of Effects	#18852-34	17) There is a tendency to underestimate the potential effects from this project, which may negatively impact multiple resource values. This is repeatedly stated in the DEIS as "will not affect", other statements refer to insufficient ability to ground-truth all project areas.	The commenter fails to provide any evidence or rationale to support the claims that project effects have been underestimated.
122.02 - Disclosure of Effects	#18852-35	18) Silvicultural prescriptions (i.e. clearcutting, large group selection harvesting etc.) within the fire footprint and project areas by unit are not clearly stated, nor are specific timber volumes quantified by each unit. This omission of volumes and unit specific forest practices conceals many potential resource concerns.	See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting or large group selection is proposed. This is not a "green" timber sale but a salvage harvest and restoration project in response to the effects of the 2014 wildfires. Prescriptions by unit are provided.
122.02 - Disclosure of Effects	#18852-40	23) The management of "unknown" populations of "Threatened, Endangered or Sensitive" species (T.E.S) is not fully acknowledged. Historic surveys are only partially adequate to determine presence or absence, they cannot verifiably determine that unknown populations will not be detrimentally affected by the proposed alternatives (2-5). Therefore language stating that "no affect" from the proposed management does not consider the probability of disturbance to undetected populations of "T.E.S." species.	We are not solely depending on historic surveys for TES species. See the methodology section of Chapter 3 analysis for TES species. Monitoring and surveys are ongoing, as described in Chapter 2 of the EIS and in supporting documents.
122.02 - Disclosure of Effects	#18858-5	As your editorial makes all too clear, you have already decided that the threat of "reburn" is so great as to render other considerations unimportant, and certainly the focus of this DEIS reflects that. You might be right, but this DEIS does not show you to be right. You have to make the case and be fair to opposing views. NEPA requires you to use up-to-date science, to reveal what you know and do not know, to use information that is "of high quality," with "accurate scientific analysis," and requires you to make a decision that is "based on an 3 understanding of environmental consequences." A shorter way of putting this is that, upon reading a NEPA document, a member of the public should not feel like someone is trying to sell them a car. This DEIS is so dismissive of concerns to aquatics and wildlife, and embraces so readily any excuse for logging, that it cannot be regarded to be a fair analysis of either the existing conditions or the environmental consequences.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
122.02 - Disclosure of Effects	#18883-19	The Karuk Tribe alternative in Appendix G deserves a thorough analysis.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
122.02 - Disclosure of Effects	#5873-16	The DEIS fails to take a hard look at the adverse effects of salvage logging, and the diverse benefits of natural forest recovery. A proper NEPA analysis will better inform the decision-maker and help them choose the no action alternative, or develop and consider another alternative that avoids road construction, retains all large trees (except imminent hazard trees in high use areas), or limit salvage logging to the matrix.	The commenter fails to provide any evidence or rationale to support the claims that the EIS fails to take a hard look at the adverse effects of the proposed actions, including salvage harvest (logging). The Forest Service also acknowledge forest recovery processes; see the effects of the no action. Alternative 4 of the EIS was developed to consider reduced road actions. See Chapter 2 under the section "Alternatives considered but eliminated from detailed study" for the avoidance of all road construction and retaining all large trees. Alternative 5 was specifically designed to eliminate salvage harvest from areas outside of "matrix lands"; see Chapter 2. Existing project design features under wildlife protect legacy components, including large trees.
123 - Technical, Editorial	#17481-3	There is a general concern about the plan focusing on geographic area with little detail about the "what and when".	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter fails to provide specific examples of how the analysis is inadequate. The final EIS includes analysis both in terms of what actions result in what effects and whether those effects are short or long term, as defined under methodology for each resource section.
123 - Technical, Editorial	#18883-23	The Scoping Proposal released 10/8/2014 indicates on Table 4 that salvage harvesting would occur in 2618 acres of Inventoried Roadless Areas which is completely inappropriate as these areas may be further protected as part of Wilderness or other roadless use in the future. Page 11 of the same document states: “No salvage harvest is proposed within Wilderness, Backcountry, Research Natural Areas, Recommended Wild Rivers, Inventoried Roadless Areas, or Riparian Reserves”. Why has the Forest Service in the DEIS reversed its previous Scoping Proposal decision against allowing harvesting in Riparian Reserves?	The draft EIS made a clarification that actions are proposed within geologic but not hydrologic Riparian Reserves, as described in the draft and final EIS. Treatments within geologic Riparian Reserves can improve conditions, as described in Chapter 3 of the final EIS (example, under geology section).
123 - Technical, Editorial	#18907-12	10. The maps provided in the Draft EIS are not readable and have poor scale for interpretation. The existing figures should contain a grid that directs the reader to more detailed maps that are readable and that contain stream, town, road and place names that the reader can orient themselves to. Do not use yellow as it is not readable and provide better locations of distances to nearby communities	The Forest provided maps for public project review and involvement compliant with 40 CFR 1506.6(b). Landscape features and roads were provided on the maps. Maps were provided in the back of the draft EIS, which was available on the project's webpage and hard-copy at several locations and by request. 11X17 map booklets by Alternative were also posted online. Also posted were 8.5 X 11 map booklets by Alternative that were 1: 63,360 scale. All electronic maps were provided in .PDF format and were georeferenced (meaning you can search by latitude and longitude), searchable (e.g. by key word search of site locations or roads), capable of being zoomed-in to see details at larger scales, and color blind friendly.
123 - Technical, Editorial	#18907-16	Please show the Pacific Crest Trail (PCT) and other major trails connecting parking areas to the PCT on all maps.	Thank you for your comments on the Westside Fire Recovery Project. Trails, including the Pacific Crest Trail, have been added to maps and will be available on the Project webpage.
130.01 - Monitoring	#18852-38	21) Access to affected lands has been too short for independent review due to fire closures in the fall and seasonal road closures from the winter through the spring. This has reduced the availability for site specific review or the establishment of third party monitoring efforts. Monitoring efforts to establish pre- and post treatment affects have not been performed, this reduces the opportunity for adaptive land management to be implemented.	The Forest Service has made information available for public review in accordance with National Environmental Policy Act regulations at 40 CFR 1500-8. We exceeded requirements of the National Environmental Policy Act in terms of public involvement. See the public involvement section of Chapter 1 for a discussion of the public involvement efforts by the agency. See the monitoring section of Chapter 2 of the final EIS. The interdisciplinary team reviewed and considered post-fire conditions in the development of the proposal and in analyzing its effects. Post treatment effectiveness monitoring will be conducted. Monitoring is being conducted as consistent with the Forest Plan and other legal requirements. Some monitoring is conducted at the project-level while others are conducted at the program level consistent with Chapter 5 of the Forest Plan. There's no requirement for the monitoring mentioned by the commenter.
130.01 - Monitoring	#18852-43	27) Monitoring must be implemented across multiple disciplines, in order to ascertain changes in forest and landscape characteristics, creating scientific base-lines for adaptive and best management practices.	Monitoring is being conducted as consistent with the Forest Plan and other legal requirements. Some monitoring is conducted at the project-level while others are conducted at the program level consistent with Chapter 5 of the Forest Plan. See Chapter 2 of the final EIS for a discussion of the monitoring that will be conducted.
130.02 - Inventories, Mapping, GIS	#18883-10	The maps provided in the Draft EIS are not readable and have poor scale for interpretation. The existing figures should contain a grid that directs the reader to more detailed maps that are readable and that contain stream, town, road and place names that the reader can orient themselves to. Do not use yellow as it is not readable and provide better locations of distances to nearby communities.	The Forest provided maps for public project review and involvement compliant with 40 CFR 1506.6(b). Landscape features and roads were provided on the maps. Maps were provided in the back of the draft EIS, which was available on the project's webpage and hard-copy at several locations and by request. 11X17 map booklets by Alternative were also posted online. Also posted were 8.5 X 11 map booklets by Alternative that were 1: 63,360 scale. All electronic maps were provided in .PDF format and were georeferenced (meaning you can search by latitude and longitude), searchable (e.g. by key word search of site locations or roads), capable of being zoomed-in to see details at larger scales, and color blind friendly. The Forest Service conducted multiple public meetings and provided presentations at other group meetings, as invited. See Chapter 1 of the EIS for details. The intention of the agency is clear in the purpose and need described Chapter 1 of the EIS. Chapter 2 of the EIS describes the proposed actions, including the modified Alternative 3 which has

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			become the preferred.
136.02 - Fuel Treatment, Reduction	#12549-2	I do not believe the Westside project promotes recovery or that it would protect communities- it would actually hinder natural recovery and increase the fire risk.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report provides direct and indirect effects for each Alternative. In addition, the report also provides a section for Fire Behavior Synopsis and Fire Suppression Capabilities. The Fire and Fuels Report, which includes community based fuels treatments aimed at protecting communities, states that action Alternatives reduce fuel loading and fire behavior. The Fire and Fuels report also states "Fuel treatments within the wildland urban interface (WUI) promote safer firefighting actions and public evacuation, should a future large fire occur within the project area. Eliminating high snag densities and treating surface fuels within the WUI has an indirect effect on reducing sources for embers, spotting, and receptive fuel beds. These indirect effects are a benefit in Alternative 2, when compared to Alternative 1, where no action is taken to reduce future available material. Additionally, increased spotting and radiation would make structures more difficult to defend from crown fire, as opposed to surface fire (Cohen & Butler, 1996) (Scott & Reinhardt, 2001). Identified treatments in the WUI modify fire behavior such that fires are anticipated to spread slower, with flame lengths less than four feet, allowing responding resources to take direct action to control fires. These direct actions are effective due to the change in composition and structure of fuels, which promotes low resistance to control when compared to Alternative 1." Fuels treatments for reducing fuels and fire behavior, along with overall fire hazard and risk are similar between all action Alternatives. Natural regeneration effects analysis is described in Chapter 3, Vegetation of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed conifer associations were not sampled in the Shatford et al. study. More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush-dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008). In larger patches where the majority of the trees were killed by the fire, reestablishment of forest cover would rely on natural regeneration and may take decades or longer. For the larger, contiguous areas of high-severity burn, distance from seed sources may further delay natural regeneration. In some cases of high-severity burn, there are no living conifer trees available to provide potential seed for potential natural regeneration for several miles."
136.02 - Fuel Treatment, Reduction	#17111-2	If large fuels are viewed as a critical fire control issue, this could be dealt by creating appropriate Fuel Management Zones or snag-free corridors. In summary, general salvage of large snags and logs is absolutely inconsistent with a goal of assisting recovery of late-successional forest conditions.	We agree that a balance between retaining snags and downed woody material for fire hazard and resource/wildlife value is needed; this is described in Chapter 1 of the EIS. The commenter's suggestion for the use of fuel management zones and snag-free areas for strategic fuel breaks and WUI protection is consistent with project design. See Chapter 2 of the final EIS for a description of proposed actions. Part of the fuels treatment design for the Westside Fire Recovery project includes the creation of strategic fuel management zones for community protection and to break-up the continuity of fuels. Salvage harvest treatments proposed will establish pockets of snag-free areas. Within salvage harvest units and roadside hazard treatments, fuels treatments are proposed as needed to treat activity-generated fuels. The combination of salvage harvest, roadside hazard treatments, and other fuels treatments such as fuel management zones and underburning, will meet project objectives of reducing fire risk and improving future fire protection of local communities. For further information on the effects of fuel management zones and salvage harvest on fuels, see the fuels section in Chapter 3 of the final EIS. Emphasizing fuels treatments over salvage logging was consider as an Alternative but eliminated from detailed analysis, as their is a need for the project to include receipts from treatments to be economically viable to help pay for fuels treatments (see Chapter 2, Alternatives considered but eliminated from detailed study). Without the receipts from salvage the project is not economically viable. The project proposes to retain larges snags and logs as consistent with wildlife and watershed project design features described in Chapter 2 of the final EIS. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. The primary reason that salvage harvest is proposed within the Late-Successional Reserve is to reduce future heavy fuel accumulations that will result from fire-killed trees and thus reduce the risk of future high severity fire that would delay the development of late successional stand conditions. For fire hazard and forest recovery in plantations, see response to 5873-14.

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136.02 - Fuel Treatment, Reduction	#17111-20	Establishment of dense, uniform stands is completely inappropriate in LSRs as well as any PAG identified as fire regime types I and II. We are currently engaged in major programs of variable density thinning in dense plantations in existing LSRs in order to accelerate the development of late-successional structure in these overly dense stands; so, why would we set about creating more acreage of these dense unifom plantations within LSRs? Similarly, establishing uniform stands -even at a relatively low density of 200 trees per acre -on sites characterized by frequent fire is obviously inappropriate; this simply recreates the potential for the next "uncharacteristic" stand replacement fires on these sites!	See response to comment number 17111-5 and 4.
136.02 - Fuel Treatment, Reduction	#17111-5	Establishment of "fully stocked" plantations on sites characterized by Fire Regimes I and II is particularly inappropriate since it simply recreates the potential for the next uncharacterist ic stand replacement fire. This last issue does not appear to have been addressed i n the DEIS.	Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995). The Westside Fire Recovery project is treating slash/fuel loading in plantations. Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang 2008). The reduction of residual fuels will be necessary to prevent future fire events from becoming stand-replacing fires that destroy planted seedlings. Research has shown fuel treatments increase the likelihood of the planted trees surviving future fires (Weatherspoon and Skinner 1995, Omi and Kalabokidis 1991). Heavy residual fuels need to be reduced substantially to help assure sustainability of plantations. Follow-up reforestation surveys will be completed to assure that the reforestation objectives are achieved." and replacing with: "As described in the Fire and Fuels section of Chapter 3 of the EIS, the Proposed Action has the potential to increase fire resiliency by managing both unplanned and planned fire ignitions across the landscape, as compared to Alternative 1. Furthermore, fire suppression effectiveness is improved as future projects implemented adjacent to and within the project area increase the size and scale of treatments proposed under Alternative 2. At the stand scale, post-fire logging reduces surface fuels over the long term, particularly in the large diameter size classes (greater than 3" in diameter), which should increase management options for applying prescribed fire treatments or allowing future wildfires to burn without causing excessive damage to the forest vegetation and soils (Peterson, Dodson, & Harrod, 2014)."] Fuels reduction actions are further described in the Fire and Fuels Report. Chapter 2 Alternatives, Including the Refined Proposed Action, in the EIS details proposed planting prescriptions. Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Overall, species considered for planting in the project area include Douglas-fir, sugar pine, ponderosa pine, incense cedar, white fir, and red fir. A mosaic distribution will be achieved over time due to the spatial variability achieved by micro-site selection for planting. Conifers will not be planted next to green hardwoods; these hardwoods will be included in average spacing. Seedlings will be widely spaced on poorer sites including southerly aspects and/or rocky soils. Trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units. See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised for additional discussion of planting.
136.02 - Fuel Treatment, Reduction	#17349-6	Fuel Treatment - We advocate aggressive treatment of activity fuels and other fire killed fuels in the treatment areas. Past experience on the Forest shows a very strong relationship where untreated fuels equate to high future fire intensity and well treated fuels often result in lower fire intensity. Past experience on the Forest would indicate that salvage alone without follow-up fuel treatment often results in future fires of higher intensities. Also, experience gained during the 1987 fire recovery lead to wide spread use of the helitorch method of ignition because the fuel beds lacked fines and were difficult to ignite. A number of the key players that were at Happy Camp during that period are still in the area and would likely be available to share their thoughts and experience should the Forest so desire.	This comment provides anecdotal information that corroborates the underlying conditions and need for action in proposed salvage areas in the Westside Fire Recovery. We agree that untreated fuels, whether fire killed trees that are not salvaged, or activity fuels (slash) from salvage logging can increase long-term fire risk and severity. The Westside Project proposes treatment of activity fuels as part of all of the action Alternatives (final EIS Chapter 3). Slash removal and maintenance of fuels treatments are important in reducing future fire risk. The Westside Fire Recovery Project proposes fuels reduction and maintenance activities to remove excess fuel loading to reduce fire hazard and increase suppression capability. The effects of treatment of activity fuels by various methods are shown in the model outputs in the Fuels Report. The Fuels Report also clearly shows the long-term effect of fuel accumulation from fire-killed trees if no salvage harvest occurs. Model results in the Fuels Report are consistent with findings reported in Peterson (2014) that showed heavy fuels from fire-killed trees can persist for as much as 40 years, and that significant reductions in fuel loading can be accomplished by salvage logging. Knapp (2015"" states ""consumption of both standing snags and Coarse Woody Debris increases fire-line intensity, contributing to extreme fire behavior and more severe fire effects (Page et al., 2013). With Coarse Woody Debris, Brown et al. (2003) speculated that an optimum quantity for warm and dry ponderosa pine and Douglas fir forest types of the western U.S. that would provide for wildlife, nutrients and other ecological benefits, without contributing to excessive risk of an uncharacteristically severe wildfire, would fall within the range of 11.2 to 44.8 Mg ha-1 (5–20 tons ac-1), with the higher fuel loading acceptable if the Coarse Woody Debris was comprised of larger pieces." These are the target levels for the Westside Fire Recovery Project.

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136.02 - Fuel Treatment, Reduction	#17387-10	Consider past fire history and slope/aspect before re-establishing plantations in matrix. Poor choices for replanting plantations are: where they have burned up in the past; on dry hot south-southwest-facing slopes; and where plantation "investments" will stymy the reintroduction of fire on the landscape by making it an imperative to suppress fires that threaten that investment. Use of diverse planting species mix based on site characteristics. Plant conifers species in close proximity to old growth snags of same species - and greatly reduce fuels (site prep) around these plantings to allow for future fire use that won't burn up the plantings.	Please see response to comment number 17111-5 and 4. Position statement. See response to Comment number 16695-4. The Forest Service was responsive to scoping comments of this nature by clarifying the description of the proposed actions. Chapter 2 of the EIS describes the criteria for site preparation and planting. Considerations do include site history, slope and aspect. Chapter 2 of the EIS "Site Preparation" section also states that "Fuel Loading after site preparation treatments will mimic that of natural stands and increase the ability of units to survive the historic fire frequencies experienced in the project area." Appendices C and D in the Silviculture report address the reforestation prescriptions and stand evaluation process which identifies the areas within the project boundary where optimal reforestation could occur. Specifics regarding precipitation are not addressed, but wider spacing, microsite planting, and release tactics can ameliorate the potential effects of climate change, particularly drier seasons, on stand development. See Chapter 1 of the EIS under changes to the proposed action since scoping. Chapter 2 Alternatives, Including the Refined Proposed Action, in the EIS details proposed planting prescriptions. "Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Overall, species considered for planting in the project area include Douglas-fir, sugar pine, ponderosa pine, incense cedar, white fir, and red fir. A mosaic distribution will be achieved over time due to the spatial variability achieved by micro-site selection for planting. Conifers will not be planted next to green hardwoods; these hardwoods will be included in average spacing. Seedlings will be widely spaced on poorer sites including southerly aspects and/or rocky soils. Trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units." For fire hazard and forest recovery in plantations, see response to comment number 5873-14.
136.02 - Fuel Treatment, Reduction	#17481-22	There should be alternatives besides fire - manual, mechanical, hand release should be included in the whole suite of tools.	Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Westside Fire Recovery project proposes fuel treatments and continued maintenance of existing treatments including hand thinning, mechanical thinning, and mastication in addition to or in place of burning.
136.02 - Fuel Treatment, Reduction	#18850-6	I would like to see the continued cleanup of the brush and debris piles already along the roadway and private land bordering USFS.	Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. The Westside Fire Recovery project proposes fuel treatments and continued maintenance of existing treatments bordering private property and along roadsides within the project area. The maintenance of these treatments will address future escalation of hazard and risk both within and outside the Wildland Urban Interface. Fuel treatments within the Wildland Urban Interface promote safer firefighting actions and public evacuation, should a future large fire occur within the project area.
136.02 - Fuel Treatment, Reduction	#18852-14	I support thinning of fuels around private lands and communities for fire protection as well as to allow for the widespread use of prescriptive fire during optimal burning conditions, and the creation of strategic shaded fuel breaks.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report provides direct and indirect effects for each Alternative. In addition, the report also provides a section for Fire Behavior Synopsis and Fire Suppression Capabilities. The Fire and Fuels Report, which includes community-based fuels treatments aimed at protecting communities, states that action Alternatives will reduce fuel loading and fire behavior.
136.02 - Fuel Treatment, Reduction	#18872-10	A priority of projects around communitys and homes plus identifiying and repairing acces routes in the forest and clearing key ridges and maintaining the most valuable forest assests.	All action Alternatives propose treatments around communities. These treatments would be prioritized to protect communities and homes.
136.02 - Fuel Treatment, Reduction	#18878-24	DEIS: Long-term temporal bounding is for an estimated 40-100 years from project implementation and is based on the maximum time for reduction of surface woody fuels following fire (Peterson, Dodson and Harrod 2014) and computer-generated modeling that showed stand conditions approaching the desired late-successional characteristics. (pg. 110) Comment: It is unclear how the cited study reflects on the "maximum time for reduction of surface woody fuels following fire" of 40-100 year long term temporal bounding.	Long-term temporal bounding includes both the maximum time for reduction of surface woody fuels following fire (40 years, as informed by Peterson, Dodson and Harrod (2014)) as well as the time required to show stand conditions approaching the desired late-successional characteristics (100 years, as informed by computer-generated modeling). The analysis period described in Peterson, Dodson and Harrod (2014) extends from 1970 to 2009, equating to 39 years. The results of the study indicate that the majority of the fuels reduction associated with the removal of biomass, rearrangement of the fuel profile and subsequent decomposition that occurs during and after post-fire logging is achieved during the 39-year study period, as evidenced by the asymptotic trend displayed in the Figure 3 graphs pertaining to logged stands. Thus, the long-term effects of post-fire treatments on fuel loads are largely manifest by year 40, providing the lower bound for the long-term effects analysis. Similarly, Forest Vegetation Simulator model runs of post-treatment stand conditions (completed by Westside Fire Recovery project interdisciplinary team members) indicate that achievement of late successional stand conditions is largely underway by year 100, providing the upper bound for the long-term effects

Code	Comment Number	Comment Text	Response
			analysis.
136.02 - Fuel Treatment, Reduction	#18878-39	Alternative 2 Direct Effects and Indirect Effects Salvage, Site Preparation, Roadside, Hazardous Fuels Treatments DEIS: Alternative 2 implements multiple types of activities to reduce snag densities and surface fuel loading. (Pg. 122) Comment: We continue to disagree in regards to the efficacy of the proposed treatments. In particular, we see no analysis of the effectiveness of the proposed treatments in the light of the project shortfall in timber receipts which would fund only about 30% of post salvage treatment for fuel loading from logging slash, tops etc. So, in reality approximately 70% of the acreage will not be treated, thus elevating surface fuel loading.	Calculations based on timber revenues and landscape restoration costs stated on page 257 of the draft EIS indicate that timber receipts would fund 32.6% of the total restoration cost, which includes treatment of fuels outside the footprint of salvage harvest units, as well as activity fuels generated by salvage harvest. Timber receipts are only one of several funding streams available to accomplish the landscape restoration treatments proposed in the Westside Fire Recovery project. See response to comment number 18878-16 about project funding for implementation.
136.02 - Fuel Treatment, Reduction	#18878-40	DEIS: Ritchie, Knapp and Skinner (2012), evaluated salvaged units following the Cone Fire on the Lassen National Forest. They found that after four years higher levels of surface fuel accumulations occurred in lower intensity salvage plots. The highest surface fuel accumulations occurred in un-salvaged plots four to eight years after the fire. Furthermore, the highest levels of large woody debris were associated with un-salvaged areas. A key finding observed by Ritchie, Knapp and Skinner (2012) found no support for the debate that 10 of22 post-fire salvage logging necessitates subsequent fuel treatment for elevated fuels. Under the proposed action, activity generated slash will be piled and burned reducing surface fuels to levels consistent with low severity fire effects. (Pg. 123) Comment:_ While the Ritchie, Knapp and Skinner (2012) may very well apply to the conditions found at the "Blacks Mountain Experimental Forest (lat. 40°40' N., long. 121°10' W.) lies within portions of T. 33 N., R. 7 E. and T. 33 N. R 8 E., MDM., 64 road kilometers northwest of Susanville, Lassen County, about half of the Forest lies in a gently rolling basin. The remainder extends up the moderate slopes of Blacks Mountain to the north and of Patterson and Cone Mountains to the east. Elevations range from 1700 to 2100 meters (5600 to 6900 feet). "(http:Uwww.fs.fed.us/psw/ef/blacks mountainD. From the description provided above and further information from the webpage of the USPS Blacks Mountain Experimental Forest, it becomes clear that the vegetation (Interior Ponderosa Pine Type), topography, climate and fire regime is vastly different than what can be found in the proposed project area. The following was left out of the Discussion and is critically important in being able to compare and contrast management regime. "The whole tree removal system used in this salvage project minimized the loss of tops and limbs during logging, as indicated by the low levels of fine fuels (1-100 h)." However, for the Refined Proposed Action, the salvage logging project design features do not call for whole tree removal. Additionally, approximately 70% of the post salvage treatments and restoration are dependent upon future unpredictable congressional appropriations and/or grants. The above statement regarding there being "no support for the debate that post-fire salvage logging necessitates subsequent fuel treatment for elevated fuels" is disingenuous. It would also be helpful to see the semantic gymnastics to reconcile the diametrically opposed opinion regarding post salvage fuel treatments between the Vegetation and Fire and Fuels Section of this DEIS.	Fire return intervals in the immediate vicinity of Blacks Mountain Experimental Forest vary from 1-49 years depending on spatial extent analyzed, and seasonality varied from early summer to fall depending on the period of time analyzed (Norman and Taylor 2005). Fire return intervals in the vicinity of the Westside Fire Recovery project vary from 4-89 years depending on forest type, and seasonality varied from early summer to fall (Taylor and Skinner 1998). Although there are notable differences in vegetation, topography and climate between the two sites, there is considerable overlap in the range of fire return intervals and trends in seasonality. This indicates that fire regimes are similar enough to apply findings about post-fire fuel dynamics from Ritchie, Knapp and Skinner (2012) to the Westside Fire Recovery project area (i.e. relatively frequent, low to moderate severity fire characterizes both sites). This comment appears to state that follow-up fuels treatment would be needed in salvage units. We agree that without follow-up activity fuel treatment, salvage logging would increase fire risk and intensity because it would convert smaller diameter limbs and tops to surface fuels that readily carry fire (Thompson et al. 2007). All Alternatives include the treatment of salvage-created slash for this reason. See Chapter 2 of the EIS for the acres proposed for treatment in modified Alternative 3 and the other action Alternatives. Our fuels modeling shows that some level of follow-up slash treatment would be needed in most areas to meet the fuels objectives of 7-10 tons / acre. Whole tree yarding is one form of slash disposal, but it's use is restricted to ground skidding units by feasibility and yarding systems. Whole tree removal will be used in ground-based treatment units where it is appropriate to do so, which should result in the low surface fuel loads described by Ritchie, Knapp and Skinner (2012) on those parts of the landscape. Where whole tree removal is not used, follow up fuels treatments will be necessary to reduce activity fuels. See comment 18878-16 for a discussion of economics and funds available to accomplish necessary follow-up slash treatments.Norman, S.P., Taylor, A.H., 2003. Tropical and north Pacific teleconnections influence fire regimes in pine-dominated forests of north-eastern California, USA. J. Biogeography 30, 1081–1092.Taylor, A. H., Skinner, C. N., 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111, 285-301.
136.02 - Fuel Treatment, Reduction	#18879-14	The Karuk Alternative seems to propose high levels of roadside salvage/fuel treatment plus lots of fuel treatment by hand and by prescribed burning. These measures are good but they are expensive and in timbered areas are not effective in dealing with large diameter dead trees. The Alternative appears to be built around a passive forest management strategy that is likely to produce a future forest dominated be large mature brush fields. This Alternative is not compatible with current direction for National Forest management.	All action Alternatives have been designed to be consistent with the Forest Plan. See Chapter 2 of the final EIS for a breakdown of actions proposed by Alternative, including tables with refined acres (compared to the draft EIS). Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Karuk Alternative is discussed in Chapter 2 of the EIS under Alternatives considered through consultation. In this section, there's a review of the Karuk Alternative, including how it's being considered and how is has been incorporated into the new, preferred Alternative

Code	Comment Number	Comment Text	Response
			(modified Alternative 3) .
136.02 - Fuel Treatment, Reduction	#18879-6	Alternative 2 fails to provide any treatment for a large portion of the Happy Camp WUI in the area between Grider Ridge/Horse Creek and Frying Pan Ridge. There are some treatments planned along the upper slopes of Frying Pan Ridge, along China Grade Road,and along the upper slopes of Grider Ridge. However, this leaves a large area laced with dead fuel with no treatment plan in the Horse Creek/Frying Pan Creek/Ottley Gulch/Woods Creek area. This is difficult terrain to treat and it is difficult to suppress wildfire in this area. No treatment pretty well guarantees that future wildfires here are going to become a big problem and be a threat to both the Happy Camp community and the Seiad Valley community. The KNF needs to address this situation promptly.	Most of the Horse Creek/Fryingpan Creek/Ottley Gulch/Woods Creek area burned at low severity, and may not require the intensive treatment prescriptions allocated to other areas. The largest high severity patch in this area occurs on the upper third of the slope between Ottley Gulch and Fryingpan Creek, and has a combination of salvage, site preparation, fuels management zone, and WUI treatments prescribed to address fuels issues in this area. Additionally, the proposed network of roadside fuels and WUI treatments adjacent to private land in the Happy Camp and Seiad areas should be sufficient to facilitate protection of those communities in the event of future fires. In addition, the Joint Chiefs project is currently or has recently treated in this area within the WUI.
136.02 - Fuel Treatment, Reduction	#18879-7	Alternative 2 appears to apply the "10 acre rule" (no salvage harvest in dead patches smaller than 10 acres) to the areas described in A above. This seems overly restrictive given the treatment needs for the WUI areas, particularly when no LSR areas are involved. Without this constraint a significant amount of dead fuel could be removed. Removal through salvage and treatment of the activity fuels would reduce overall fuel buildup and strengthen the road systems as barriers to the spread of future wildfires and as fuel breaks and control features for prescribed fire.	The Klamath National Forest Land and Resource Management Plan standards and guidelines within the Late-Successional Reserves land allocation do not allow salvage harvest treatments in patch sizes less than ten acres. WUI treatments are described within the Fire and Fuels Report and hazardous fuels treatments are identified to protect communities. The treatments identified for the WUI are not limited by patch size and prescriptions described in the Fire and Fuels report are aimed at reducing the threat to communities in both the short and long-term.
136.02 - Fuel Treatment, Reduction	#18918-19	Page 148 of 338 of the DEIS says, "At the stand scale, post-fire logging reduces surface fuels over the long term, particularly in the large diameter size classes (greater than 3" in diameter), which should increase management options for applying prescribed fire treatments or allowing future wildfires to burn without causing excessive damage to the forest vegetation and soils (Peterson, Dodson, & Harrod, 2014)." I believe this should have read "(greater than 3' in diameter)". Another part of the document emphasized that the slash which follows logging operations is the fire danger. Dry vegetation on the ground can catch fire a lot easier than a partially burned tree (especially if the tree is large, a snag, or if it has survived various fires). Thus, any action alternative offered under the FEIS must specifically address how all the logging slash would be addressed in all action units	The original text of the draft EIS is correct; the large diameter fuels referred to in Peterson, Dodson and Harrod (2014) correspond to the 1000 hour fuel moisture class, which has a threshold diameter of 3 inches. All salvage harvest units include prescriptions for site preparation treatments, which will treat residual logging slash as needed.
136.02 - Fuel Treatment, Reduction	#18926-1	During the months of July, August and September 2014, communities around these fires lived through 29 community evacuations notices and advisories. We don't want to repeat this action and set up a cycle or burning large areas with high intensity . We don't want the kids and their kids to have to do it in the future. The documents should point out that over 65% of the fires burned in a low intensity and these low intensity burned areas can be used in future fire events. These lands should be identified as going back to a more natural fire regime. ! !	The Westside Fire Recovery Project is designed to reduce the intensity of future fires, with the hope of reducing the necessity of evacuations in the future. The draft EIS explicitly shows the percentage of the project area burned (vegetative canopy killed) at each severity in Table 1-2; this information is also readily visible in the fire severity maps on pages 321, 356 and 365 and in photos on pages 417, 418 and 422. Many of these areas will receive fuels reduction treatments (including prescribed burning) designed to maintain and augment the conditions created by low severity fire in 2014, and to increase the likelihood of low severity (rather than high severity) fires in the future).
136.02 - Fuel Treatment, Reduction	#18926-3	Fuel Management Zones or Fuel breaks! Installation of a strategic fuels break system (ridges and roads) to expand treatments to protect life first and second priority places to treat would be to expand the treatments to properties and improvements be it public, private or tribal.!	The fuel management zone, roadside fuels, and wildland urban interface treatments included in all action Alternatives provide the desired fuel break system, based on roads, ridges and private property boundaries and designed to protect life, property and infrastructure.
136.02 - Fuel Treatment, Reduction	#18926-30	Helicopter logging and 'salvage' logging in general would extract the largest trees, leave the small trees creating a deep sea of slash and flammable fuels. The Salmon Salvage timber sale, implemented last year on the KNF is a testament to that. Forest managers are scratching their heads trying to figure out how to deal with all the slash. They are even considering dropping fire from a helicopter to engulf the flammable ground fuels left behind from logging on these steep mountain slopes. Logging in this manner does not create fire safe communities. It puts communities at risk with immeasurable ecological costs. ! !	Numerous techniques are available to treat the activity fuels generated by post-fire logging, of which helitorch ignition is just one. The Salmon Salvage project implementation is not yet complete, and much of the activity fuels currently on the ground will be treated as funding and burn windows become available. The same treatment methods and funding mechanisms will be available to facilitate treatment of logging slash generated during the Westside Fire Recovery project, which should ultimately enhance community protection and reduce future fire severity.

Code	Comment Number	Comment Text	Response
136.02 - Fuel Treatment, Reduction	#18926-5	The second priority treatment should be to protect improvements on private, public , or tribal property, including and the lands adjacent (1.25 miles to .25 miles) to private, tribal, or public lands and parcels with structures and other improvements. Treatment on private and tribal lands with structures or improvements should be emphasized on parcels that are doing fuels reduction and taking actions to be better prepared in the event of the next wildfire or human caused fire which threatens life, property and resources.This fire preparedness work on private or tribal property can be performed by residents, landowners, neighbors, or organized crew(s). Public lands receive public management. ! !	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Westside Fire Recovery project proposes treatments to protect private and public land including tribal land. Contracts currently are being implemented in many of these communities and the Westside Fire Recovery project proposes additional treatments to further protect these communities.
136.02 - Fuel Treatment, Reduction	#18931-3	Regarding Management Direction (DEIS pg 7):"The project is designed to be consistent with all applicable laws Policies and plans, and to consider information in guidance documents such a Watershed Analysis, the National Fire Plan and Forest Fire Management Plan." Comment: The DEIS does not appear to be consistent with guidance from, for example, the KNF Fire Management Plan states: (KNF Fire Management Plan, 2012 Pg. 6, 22-13) "Do not allow management activities to result in fuel accumulations that increase the risk of high intensity fires that did not typically occur on the Forest before wildland fire suppression activities in the early 1900s began. Manage fuel loadings and the use of prescribe fire on the Forest to maintain ecological processes."	The fire management plan does state this, and it is drawn from the Forest Land and Resource Management Plan, p 4-54 (2010). Additional guidance on the meaning of fire risk is provided in Appendix B of the Forest Plan Final EIS, pp. 14-16. In Appendix B, fire risk is defined as the “The probability of a fire occurring per thousand acres per decade”. This definition does not work when relating to the likelihood of high intensity fire, which in Appendix B is more closely modeled using a term called fire hazard, which is defined as the ability of initial attack forces to contain a fire at 90th percentile weather conditions. Though this is not s direct measure of severity, the method for determining initial attack success in Appendix B is flame length. In fire management and fire ecology, flame length is an accepted, established indicator for fire intensity and severity, and is the metric used in common fire modeling algorithms for determining scorch height and tree mortality. Examples of such field-wide accepted modeling programs are Behave Plus (used in the Westside Fire Recovery Fire and Fuels analysis) and the Forest Vegetation Simulator-Fire and Fuels Extension.In the Fire and Fuels report (Chapter 3, Westside Fire recovery final EIS) flame length was used as a metric to determine the resulting potential fire severity for treatment units in the project Alternatives. Additionally, fireline intensity was also modeled, a direct measure of predicted fire intensity that can be related to fire severity given the fuel type present at a given location with that modeled fire intensity. For both of these metrics, the modeling in the Fire and Fuels Report clearly shows that all activities within the Westside Fire Recovery project are predicted to reduce fireline intensity and flame length. Given the accepted link between these metrics and fire severity, there is no evidence that this project will contribute to an increased potential for high severity fire when compared to the current condition and what is predicted if the current condition remains unaltered moving into the future.
136.02 - Fuel Treatment, Reduction	#18935-2	The Forest Service contends that post-fire logging will accomplish fire management objectives by reducing the amount large woody material that may fuel wildfire in the future as dead trees fall to the ground over time. See DEIS at 122 ("The direct effect of salvage harvest is reducing density of snags on the landscape […] and subsequently reducing future accumulations of large diameter surface fuels as trees fall to the forest floor"). It recognizes that salvage logging will immediately augment the density and volume of flammable woody fuels smaller than 3-inches diameter, and admits that surface fuel composition and density primarily influence fire behavior in combination with topography and weather. Id. 122-128. According to the DEIS, increased fire hazard attributable to logging operations in the short-term (<10 years) is offset by post-logging fuel treatments and removal of dead trees that could fall to the ground and then fuel wildfire in the long-term. Id. 119-130. Forest Service advocacy of post-fire logging along these lines clearly overlooks relevant factors, ignores scientific information, and misstates the effect of logging to potential wildfire behavior and attainment of fire management objectives. Specifically, it fails to account for: (1) temporal rates of snag fall and wood decomposition affecting projections of fuel density and fire hazard over time, and (2) persistence of slash fuel on steep slopes where post-logging fuel treatments are not likely to occur in any alternative.	See the beginning of Chapter 3 for a discussion of responsible opposing points of view. Salvage logging does create additional activity fuels that, if untreated, can increase long-term fire risk. The commenter cites several papers alluding to increased fire risk in post fire salvage conditions from untreated logging slash. Those conditions are not anticipated in the Westside Fire Recovery project because treatment of activity fuels is a part of all of the action Alternatives (final EIS Chapter 3). Slash removal and maintenance of fuels treatments are important in reducing future fire risk. The Westside Fire Recovery project has fuels reduction and maintenance activities to remove excess fuel loading to reduce fire hazard and increase suppression capability. The effects of treatment of activity fuels by various methods are shown in the model outputs in the Fuels Report. The Fuels Report also clearly shows the long-tem effect of fuel accumulation from fire-killed trees if no salvage harvest occurs. Model results in the Fuels Report are consistent with findings reported in Peterson (2014) that showed heavy fuels from fire-killed trees can persist for as much as 40 years, and that significant reductions in fuel loading can be accomplished by salvage logging. Knapp (2015) states "consumption of both standing snags and Coarse Woody Debris increases fire-line intensity, contributing to extreme fire behavior and more severe fire effects (Page et al., 2013). With Coarse Woody Debris, Brown et al. (2003) speculated that an optimum quantity for warm and dry ponderosa pine and Douglas-fir forest types of the western U.S. that would provide for wildlife, nutrients and other ecological benefits, without contributing to excessive risk of an uncharacteristically severe wildfire, would fall within the range of 11.2–44.8 Mg ha-1 (5–20 tons ac-1), with the higher fuel loading acceptable if the Coarse Woody Debris was comprised of larger pieces. These are the target levels for the Westside Fire Recovery project. Scientific studies relevant to this issue are disclosed within the Fire and Fuels Report. Snag fall and wood decomposition rates are described in the Fire and Fuels reports and are site specific for this project. Each action Alternative has fuels treatments post-salvage logging. Such treatments are analyzed in the fire and fuels report as they are anticipated to occur. The fire and fuels report addresses snag fall into dead fuel loading and associated fire hazard within Chapter 3 of the EIS. Decomposition rates of the dry forests in the Klamath Mountains is very slow. Fire frequency in the Klamath Mountains was historically the main driver in reducing fuel loading. Slash will be removed post-logging even on steeper slopes.

Code	Comment Number	Comment Text	Response
136.02 - Fuel Treatment, Reduction	#18935-8	Multiples lines of research positively correlate post-fire logging activity with increased fire hazard and severity due to accumulations of untreated slash fuel (Donato et al. 2006, Odion et al. 2004, Thompson et al. 2007, Weatherspoon and Skinner 1995). According to Donato and others (2006: 352), Postfire logging alone was notably incongruent with fuel reduction goals. Fuel reduction treatments (prescribed burning or mechanical removal) are frequently intended following postfire logging […] but resources are often not allocated to complete them. Our study underscores that, after logging, mitigation of short-term fire risk is not possible without subsequent fuel reduction treatments. However, implementing these treatments is also problematic. Mechanical removal is generally precluded by its expense, leaving prescribed burning as the most feasible method. This will result in additional seedling mortality and potentially severe soil impacts due to long duration combustion of logging-generated fuel loads. Therefore, the lowest fire risk strategy may be to leave dead trees standing as long as possible (where they are less available to surface flames), allowing for aerial decay and slow, episodic input to surface fuel loads over decades. Logging-created fuels will render direct attack of a wildfire impossible under weather conditions that commonly prevail in fire season. As a common fire suppression practice, direct attack is not to be attempted when flame lengths exceed four-feet (48-inches) in height. Lost opportunity for direct attack of unplanned ignitions will, in turn, increase the size and cost of the next wildfire in the project area. It also will increase the likelihood of severe soil heating with corresponding losses of productivity (Reinhardt and Ryan 1998). More, logging-created fuels threaten fire worker safety by making wildfires more erratic and difficult to control. That risk is enhanced by the fact that the project area contains scores of road miles that may increase where the likelihood of unplanned ignition from human activity is greatest (DellaSala and Frost 2001). The Forest Service is required to study and disclose potentially significant effects of post-fire logging on public health and safety, including foreseeable wildland fire control efforts. It should disclose post-logging fuel load and fire hazard in the project area at a unit-scale. The EIS should disclose how much slash would remain on the ground after logging is completed, based on site-specific analysis of available canopy fuels that would be relocated to the ground, and the likelihood of post-logging fuel treatment on steep slopes.	See response to comment number 5873-95 for post-fire logging activity and fire hazard/severity. See response to comments number 12346-54 and number 12346-50 for response to future suppression activities. Salvage harvest and associated fuel reduction activities are likely to reduce coarse woody debris to less than 35 tons per acre and therefore severe soil heating is unlikely (Brown, 2003). Salvage logging does create additional activity fuels that, if untreated, can increase long-term fire risk. The commenter cites several papers alluding to increased fire risk in post fire salvage conditions from untreated logging slash. Those conditions are not anticipated in the Westside Project because treatment of activity fuels is a part of all of the action Alternatives (final EIS Chapter 3). Slash removal and maintenance of fuels treatments are important in reducing future fire risk. The Westside Fire Recovery Project has fuels reduction and maintenance activities to remove excess fuel loading to reduce fire hazard and increase suppression capability. The effects of treatment of activity fuels by various methods are shown in the model outputs in the Fuels Report. The Fuels Report also clearly shows the long-tem effect of fuel accumulation from fire-killed trees if no salvage harvest occurs. Model results in the Fuels Report are consistent with findings reported in Peterson (2014) that showed heavy fuels from fire-killed trees can persist for as much as 40 years, and that significant reductions in fuel loading can be accomplished by salvage logging. Knapp (2015" states "consumption of both standing snags and Coarse Woody Debris increases fire-line intensity, contributing to extreme fire behavior and more severe fire effects (Page et al., 2013). With Coarse Woody Debris, Brown et al. (2003) speculated that an optimum quantity for warm and dry ponderosa pine and Douglas fir forest types of the western U.S. that would provide for wildlife, nutrients and other ecological benefits, without contributing to excessive risk of an uncharacteristically severe wildfire, would fall within the range of 11.2–44.8 Mg ha-1 (5–20 tons ac-1), with the higher fuel loading acceptable if the Coarse Woody Debris was comprised of larger pieces." These are the target levels for the Westside Fire Recovery Project. See response to comment number 17910-2.
136.02 - Fuel Treatment, Reduction	#19146-1	I couldn't agree more with the stated objectives, including fuels reduction (I'd love to see much more forest land treated than is proposed in this recovery effort, to reduce fuel by brush removal, thinning and limbing), the removal and thinning of trees along roads, and around homes can't be emphasized enough, and by all means quickly recover what wood can be salvaged before it loses its value (why waste it and have it be fuel for future fires).	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
136.02 - Fuel Treatment, Reduction	#19157-3	In intensely burned Late Successional Areas near ridge tops, roads and locations where future fires can be effectively stopped, salvage logging is extremely important. The gigantic fuel loading of dead timber in these areas will burn again. Salvage the Late Successional Areas now to protect what remains.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
136.03 - Prescribed Burns	#17471-3	From my studies, I have learned that the climate within the USFS is slowly changing to involve and incorporate more collaboration between local community members, NGOs, private property owners and other concerned groups. The USFS should continue this collaborative effort and spend more money supporting and working with tribes such as the Karuk tribe and organizations such as the Mid Klamath Watershed Council to pre-empt large wildfires by actively creating burns that slow the path of wild fires. This type of practice was in place long before the USFS became owners of the forest and prescribed burning has saved many communities and ecosystems. The timber being sold is a product of fire suppression and this sale only encourages more of the same treatment throughout our forests. Fire suppression needs to end and prescribed burns needs to become the new management practice for our forests and our communities.	Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report suggests that fuels treatments would protect communities and decrease fire hazard. The action Alternatives all implement multiple types of activities to reduce snag densities and surface fuel loading, including within the WUI.

Code	Comment Number	Comment Text	Response
136.03 - Prescribed Burns	#18872-2	To address additional safer conditions for fire fighters and community protection, will require fire crews to burn heavily in the fall of the year and follow the moisture with fire to higher elevations in the spring.	Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report suggests that fuels treatments would protect communities and decrease fire hazard. The action Alternatives all implement multiple types of activities to reduce snag densities and surface fuel loading.
136.03 - Prescribed Burns	#18872-4	An aggressive burning program in healthy forests with other restoration efforts that are most likely to see success, and then move to secondary, but no less important areas within the plan	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
136.03 - Prescribed Burns	#18878-44	DEIS: Prescribed fire as a "second-entry" post fire is planned on approximately 11,570 acres. (Pg. 125) Comment: While we wholehearted agree and actively promote prescribed fire, it is unclear where in relation to the proposed salvage units the prescribed fire is to take place. From the maps provided in the DEIS the vast majority is to occur in the Whites Fire Perimeter. Neither the DEIS or the Fire and Fuels Resource Report offers any explanation as to why the Happy Camp Project Area has only 1,888 acres of prescribed fire where we believe it is vital for the protection of life, property, enhancement of cultural resources and protect tribal trust resources. This is especially troublesome as other treatments where fire can be utilized totals approximately 15,448 acres.	We agree that prescribed burning is an important component of the actions proposed in the Westside Fire Recovery project. The relationship of the proposed salvage units to the control burn areas is most easily seen on the map package that accompanies the EIS. One of the reasons that there are not more underburns planned in the Happy Camp Complex is that there are already large areas of underburn projects proposed there from previously approved projects that have not yet been fully implemented. Current and on-going projects, such as Happy Camp Phase II and Thom Sieder Projects propose prescribed fire within the footprint of the Happy Camp Fire area. These provide additional prescribed fire projects in the Happy Camp area not shown in the Westside Fire Recovery Project. The Westside Fire Recovery Project also proposes several actions that would facilitate future prescribed burning in the Happy Camp area including strategic ridgetop fuel breaks, mechanical fuel reduction in WUI areas and roadside hazard tree removal. The prescribed fire projects in the Whites Fire area will not be implemented for several years. Surface fuels will not be sufficient to sustain an effective prescribed fire there for approximately 8 to 12 years.
136.03 - Prescribed Burns	#5919-1	Please do more thining and prescribed burning and stop the huge backburning. We want a more natural forrest not a fir tree plantation. Our economy depends on fishing and travelers, we need diversity on tree plantations. Times have changed!!	With the exception of an incidental tree, no green trees are proposed to be harvested; see response to comment 12346-55. Backburning is a fire suppression activity and is outside the scope of this project. This project proposes prescribed underburning and proposes diverse plantations in terms of species and structure, as suggested by the commenter. See Chapter 2 of the final EIS for a description of proposed action.
141.01 - Introduction, Planting, Seeding	#12349-2	I am concerned that the proposed Westside Fire Recovery Project will negatively impact the ecosystems and species managed by the Klamath National Forest (KNF) and will promote conditions that allow more large, high-severity fires to burn in the future. While reviewing the draft environmental impact statement (DEIS) for the project, I found some aspects of the reasoning behind this project to be flawed. Foremost, KNF argues that salvage logging of fire-killed trees and planting of young conifers in their place will speed the recovery of the burned forest and will reduce the likelihood of future high-intensity burns. This reasoning is flawed because the forest that burned this past summer co-evolved with fire as a natural form of disturbance and is generally well adapted to fire. These forested ecosystems do not need human intervention to recover and persisted in the face of fire prior to the existence of the Forest Service and the KNF. Indeed, these forests need less human intervention to recover. While it is true that the fires of this past summer were exceptional in both extent and severity, these conflagrations were partly a result of the Forest Service's land use practices - specifically logging, planting of high-density, low-diversity confer plantations, and fire suppression. Thus with this project, the KNF is proposing to implement two activities that contributed to these fires in the first place, logging and planting of conifers after logging.	Please see Chapter 1, Purpose of and Need for Action, for a detailed rationale for the Westside Fire Recovery Project. Please also see the Vegetation Report and Fuels Report for detailed analyses of how the project will speed the recovery of the burned areas and will reduce the likelihood of future high severity burns. As the project design features and unit prescriptions show, the proposed salvage logging and reforestation techniques are different from those historically used and have been modified specifically in order to address resource concerns. See response to comment number 6271-1.
141.01 - Introduction, Planting, Seeding	#17111-12	The NSO is a species of special interest and one that almost certainly has been significantly negatively impacted by the 2014 fires. Restoration of suitable habitat for NSO has been used as a justification for intensive salvage and tree planting programs, such as in Alternative #2 of the DEIS. However, there is no scientific evidence to support the hypothesis that either activity will contribute either significantly or positively to a more rapid recovery of NSO habitat or NSO populations than allowing natural recovery processes. In fact, it is certain that salvage will not do so; the potential value of some tree planti ng could be argued.	The restoration aspect of the Westside Fire Recovery Project is not for the sole benefit of spotted owls; rather the purpose and need of the project identifies particular elements that benefit current and future forests which will benefit spotted owls. Our project is designed to target the issue of reducing the risk of large scale high severity fire; this design is directly in line with the Northern Spotted Owl Recovery Plan which identifies one of the primary threats to spotted owls is the loss of habitat to wildfire. Tree planting research has provided information that sometimes appears to be contradicting, but like most research, the substantive enrichment is located in the details. Whether tree planting is helpful towards the regeneration of forested habitat is not a simple answer. Chapter 3 of the EIS provides a detailed response on the topic of tree planting in the sections called “Responsible opposing views and Agency’s to issues raised”.

Code	Comment Number	Comment Text	Response
141.01 - Introduction, Planting, Seeding	#17111-19	Planting may be appropriate within LSRs to establish tree seed sources for specific species and locations. However, planting should not be done following traditional approaches, which are directed to establishing uniformly stocked forest stands over large areas. Extensive, uniform plantings -even at the relatively low density proposed for some areas (200 trees/acre) -will not simulate the spatially heterogeneous pattern of natural seedling establishment.	Please see the response to comment number 17111-4.
141.01 - Introduction, Planting, Seeding	#17111-3	Many of these species require snags, logs, and diverse plant resources; some insect pollinators, for example, require CWD for their larval stages. I would also note that some of the early successional animals, such as wood rats, are important prey species for the Northern Spotted Owl. Naturally disturbed, early successional habitat undergoing slow natural reforestation (without salvage or planting) is currently the rarest of the natural forest developmental stages in the Pacific Northwest - even more so than old-growth forests. Yet, as research at Mount St. Helens has showed, these large, slowly reforesting disturbed areas are major hotspots of regional biodiversity.	Chapter 2 Alternatives, Including the Refined Proposed Action, in the EIS details proposed planting prescriptions. "Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Overall, species considered for planting in the project area include Douglas-fir, sugar pine, ponderosa pine, incense cedar, white fir, and red fir. A mosaic distribution will be achieved over time due to the spatial variability achieved by micro-site selection for planting. Conifers will not be planted next to green hardwoods; these hardwoods will be included in average spacing. Seedlings will be widely spaced on poorer sites including southerly aspects and/or rocky soils. Trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units." See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. See the beginning of Chapter 3 for a discussion of responsible opposing points of view.
141.01 - Introduction, Planting, Seeding	#17111-31	Extensive reforestation by planting is proposed within the LSRs. Slow natural re-establishment of tree cover is common following natural partial and complete stand replacement disturbances in the Pacific Northwest, however. Two recent studies of Douglas-fir forests in Oregon and Washington document that 40 to 60 years was the average time lapse before closed forest canopies developed following wildfire and sometimes it took as much as 100 years (Freund et al. 2014; Tepley et al. 2014). Therefore, fifty years (a number mentioned in the DEIS) is not a Jong time to wait for establishment of forest cover where timber production is not a consideration (such as LSRs) and, in fact, it is apparently the norm for nature. The "delay" in re-establishment of closed forest provides essential habitat for early successional species, including many vertebrate and invertebrate habitat specialists. Species of interest include many lepidoptera (butterflies and moths) and neo-tropical migrant songbirds. One reason for the biological richness of the early successional habitat is the abundant and diverse food sources, including many varieties of nutrient-rich herbage, fruits, seeds, nuts, and pollen and nectar sources, which form the base of numerous complex food webs. A second reason is the abundant snags and logs, which provided shelter, sources of additional food (e.g.,fungi), and critical habitat for both vertebrate and invertebrate animals; for example, many invertebrate pollinators live their larval stages in wood. This is also the habitat favored by dusky-footed woodrats, that important prey of the NSO. Naturally disturbed habitat undergoing natural reforestation is, in fact, the scarcest type of forest habitat in the Pacific Northwest. I am referring here to naturally disturbed areas that have not undergone salvage logging or artificial reforestation (Franklin et al. 2000). Intensively managed forest lands, which are subject to clearcutting, intensive site preparation, and dense tree planting, provide few of the conditions needed by early-successional organisms. Large, slowly reforesting disturbed areas appear to be very important to maintaining regional biodiversity, as demonstrated by the Mount St. Helens National Volcanic Monument. The monument is the most important hotspot for biological diversity in the Washington Cascade Range, with extraordinary representation of almost all categories of animals, including birds, amphibians, small mammals, and medium-sized predators (Dale, Swanson, and Crisafulli 2005	Chapter 2 Alternatives, Including the Refined Proposed Action, in the EIS details proposed planting prescriptions. "Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. The Forest Plan identifies several goals to promote biological diversity throughout the Forest (Forest Plan page 4-6). One of those Forest -wide goals is to "Emphasize the maintenance or improvement of Endangered, Threatened and Sensitive Species Habitat". The Westside Recovery Project will create a more biologically diverse ecosystem by promoting regeneration of the forest and reducing fire risk. Reducing fire risk will protect the remaining northern spotted owl habitat and planting conifer will help restore northern spotted owl nesting/roosting habitat in an Late-Successional Reserve. The Forest is also aware of the importance of early seral vegetation in ecosystems. Although managing for early seral habitat is outside the scope of this project. Post-fire a large percentage of the project area is in early seral stage and it won't be planted with conifer. The 2014 fires burned 184,782 acres on the Klamath National Forest. Within the Westside Recovery Project area approximately 3,850-14,490 acres have proposed conifer planting depending on Alternative selected. In addition areas planted with conifer will be in an early seral successional stage for multiple decades. It will take up to five years for planting to be completed. This will create different age classes of developing conifer stands. Areas planted with conifer will use hand methods, variable spacing and hardwoods will be retained. Trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units. No herbicides will be sprayed within the project area. Estimated survival of conifer seedlings without herbicide application is between 30-50%. The highest density conifer spacing proposed will be 12x12 and this will include spacing off live hardwoods. With a live hardwood present conifers maybe up to 24 feet apart. Three years after planting hand grubbing will occur within a three foot radius of a live conifer seedling. This will leave areas within the treatment unit that contain early seral shrubs, grasses and forbs. Treated and untreated habitats as they develop overtime will provide cover and forage for woodrat which will benefit northern spotted owl.
141.01 - Introduction, Planting, Seeding	#17111-4	Limited planting may be appropriate within the LSRs to establish tree seed sources for specific species and locations but this should not be done using traditional approaches, which are designed to create extensive areas of uniformly stocked forest stands. Uniform tree planting over large areas is inappropriate in LSRs even at low densities. Appropriate plantings in LSRs would be limited in area and spatially heterogeneous. The inappropriateness of creating dense uniform stands is apparent from the fact that since the origin of the NWFP we have undertaken major programs in variable density thinning in existing plantations in LSRs	Chapter 2 Alternatives, Including the Refined Proposed Action, in the EIS details proposed planting prescriptions. "Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Overall, species considered for planting in the project area include Douglas-fir, sugar pine, ponderosa pine, incense cedar, white fir, and red fir. A mosaic distribution will be achieved over time due to the spatial variability achieved by micro-site selection for planting. Conifers will not be planted next to green hardwoods; these hardwoods will be included in average spacing. Seedlings will be widely spaced on poorer sites including southerly aspects and/or rocky soils. Trees will be planted in clusters to achieve groups of conifers throughout the landscape to mimic natural units."
141.01 - Introduction, Planting,	#17349-8	Plantations - It appears that quite a number of existing plantations of various ages were lost in the fires. We advocate that replanting of those lost plantations proceed as rapidly as possible starting in early 2015. Since replanting all of them in 2015 is not practical we advocate priqritizing them by site quality and exposure. In this scenario a high site, north or east exposure	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please see the response to comment number 17111-4 for planting techniques.

Code	Comment Number	Comment Text	Response
Seeding		plantation would be high priority.	
141.01 - Introduction, Planting, Seeding	#17387-11	Plant conifers on a very wide spacing in burned LSRs as seed trees only.	Please see the response to comment number 17111-4.
141.01 - Introduction, Planting, Seeding	#17450-5	Finally and specifically, I am unalterably opposed to any activity in Inventoried Roadless Areas and to plantation style planting of non-local species.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. There will be minimal treatment within Inventoried Roadless Areas, as shown in Table 2-34 of the draft EIS; also see IRA tables in Chapter 2 of the final EIS. Please see the response to comment number 17111-4 for planting techniques. See response to number 17312-2.
141.01 - Introduction, Planting, Seeding	#17481-36	* Reforestation o Wider spacing for planned reentry and maintenance o Leave some areas unplanted o Vary conifers and hardwoods with respect to original species	Please see the response to comment number 17111-4.
141.01 - Introduction, Planting, Seeding	#17481-44	Regarding re-planting, are non-native species that have a higher survival rate considered?	Only native species can be considered for planting as per the National Forest Management Act of 1976
141.01 - Introduction, Planting, Seeding	#18850-7	Also I am in favor of reforestation of any areas possible, including those bordering private property	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
141.01 - Introduction, Planting, Seeding	#18857-15	No tree planting units. Natural regeneration is adequate due to generally small patch size from high severity fire effects. Seed trees are nearly always present and regeneration adequate. Plantation style planting will only increase future fire risk and should be avoided at all costs.	Natural regeneration effects analysis is described in Chapter 3, Vegetation of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed conifer associations were not sampled in the Shatford et al. study. More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush-dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008). In larger patches where the majority of the trees were killed by the fire, reestablishment of forest cover would rely on natural regeneration and may take decades or longer. For the larger, contiguous areas of high-severity burn, distance from seed sources may further delay natural regeneration. In some cases of high-severity burn, there are no living conifer trees available to provide potential seed for potential natural regeneration for several miles." Please see the Fuels Report for analysis of future fire risk.
141.01 - Introduction, Planting, Seeding	#18872-5	tree planting in favorable north slope areas after fire and logging	Please see the response to comment number 17111-4.
141.01 - Introduction, Planting, Seeding	#18874-1	Our comments on subject project pertain mainly to Forest Service land surrounding the Maplesden Ranch located on Buckhorn Ridge in T.46N, I OW, Section 2 within the boundary of the Beaver Fire. 1. Concerning the area north and east of the Ranch, indicated for site prep, plant and release treatment in all of the alternatives of the DEIS: - Reforestation for this area: We suggest this area be planted in species that were on the land prior to it being burned in the 1977 "Buckhorn" fire. The main species in this area at the time of the Buckhorn fire was fir, cedar and some pine. It was reforested after the 1977 fire with predominantly pine which added to the intensity of the Beaver fire adjacent to the Ranch. This should reduce future risk and severity of fire in the area.	Please see the response to comment number 17111-4.

Code	Comment Number	Comment Text	Response
141.01 - Introduction, Planting, Seeding	#18874-2	Maplesden Ranch located on Buckhorn Ridge in T.46N, I OW, Section 2 A portion of the historic Barton Ditch that we maintain is located in the W1/2 of the NE 1/4 of Section 2 within the area proposed for planting. We suggest that pines not be planted within 20' of the center of this ditch, and that fir and cedar be planted in their stead: not closer than 10' on the uphill side of the ditch, and that no trees are planted on the ditch bank on the downhill side. Pines were planted along the upper side of the ditch and on the ditch bank after the 1977 fire. Trees planted on the ditch bank obstructed access to the ditch and long pine needles versus fir needles caused a great increase in maintenance of the ditch over the last 25 years.	Thank you for bringing this to our attention. We have added a new project design feature (Heritage-8) to address this concern.
141.01 - Introduction, Planting, Seeding	#18878-30	DEIS: Acres salvage-harvested and site-prepared will be planted with a variety of coniferous species to ensure diversity, and will be released from competing vegetation within a year or so of being planted. (Pg. 114) Comment: It should be noted/clarified in the Final Environmental Impact Statement "competing vegetation" such as hardwoods will not be targeted during conifer release.	As described in Chapter 2 of the EIS: "Growth of existing hardwoods will be encouraged; hardwoods will be included in the target stocking for units in areas where they exist." This has been clarified in the final EIS; see Chapter 2.
141.01 - Introduction, Planting, Seeding	#18878-33	DEIS: Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Rose and Haase 2005). (Pg 114) Comment: In the Introduction of the cited paper it stated "The objective of this paper is to outline some of the post-fire biological reforestation issues and to describe new projects designed to address these issues." We cannot find any conclusive statement within the cited material which would warrant such a statement.	The citation in the draft EIS was incorrect; the reference is to the Zhang et al., 2008 paper. This has been corrected in the final EIS.
141.01 - Introduction, Planting, Seeding	#18883-12	Site Preparation by mastication does not reduce the amount of fuel on the forest floor but does produce more ground cover for fire. Removal of trees up to 16 inches and greater diameter cannot be justified as Site Preparation for planting of new trees.	The Fire and Fuels Resource Report describes the benefits of and reasons for mastication: "Mastication may be utilized in selected stands to reduce high snag densities in lieu of piling stands. Mastication is essentially the mulching or chipping of wood material. The direct effect of mastication is changing the structure and composition of the fuel bed post fire. With no action taken, surface fuels will increase over time as trees fall. As trees fall over in random patterns, fuels will essentially “crisscross” as they fall with some fuels resting on top of others effectively increasing fuel bed height (Figure 19). Higher surface fuel beds will be subject to wind and preheating of fuels lower in the surface fuel profile; thus, increasing fire behavior potential. Rather than having standing dead material that falls overtime, where mastication is identified as a treatment option under Alternative 2, chipped material will create a compact fuel bed (Figure 20). Material will also be expected to decay faster with masticated material due to its proximity to the ground and being saturated for longer period of time during the winter months." As the excerpt shows, mastication is proposed to reduce snags (i.e., dead trees), not live trees, in order to prepare the site for planting.
141.01 - Introduction, Planting, Seeding	#18883-18	Plantations should not be established or reestablished after the salvage logging. Plantations will simply burn in a future fire, and it will take pesticides and other expensive and polluting resources to maintain them. Natural recovery, while slow, is more certain.	Intensely burned forested areas recover slowly. Heavy fuel loading would increase from fallen snags over time. Following a high severity wildfire, heavy fuel loading predisposes an area to higher intensity and higher severity wildfires in the future. Such fires inhibit forest stand regeneration and result in stand type changes to brush or other non-forested vegetation types. Seed tree locations and timing of conifer seed crops is uncertain. These factors can delay lands from reaching the desired conditions defined in the Forest Plan for many years. Assisted recovery, including reforestation along with natural seeding where available has the potential to restore forest cover more rapidly. See Chapter 3 of the EIS for a discussion of effects for vegetation and fuels. Although young trees (planted or naturally regenerated) are less resilient to fire than larger trees, as the Vegetation Resource Report states: "Within the fire-burned area, approximately 70% of all the existing plantations survived the extreme fire conditions of the 2014 Fires." Chemicals have not been used in plantations on the Forest since the early 1980s. Natural regeneration effects analysis is described in Chapter 3, Vegetation, of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed conifer associations were not sampled in the Shatford et al. study. More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush-dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008). In larger patches where the majority of the trees were killed by the fire, reestablishment of forest cover would rely on natural regeneration and may take decades or longer. For the larger, contiguous areas of high-severity burn, distance from seed sources may further delay natural regeneration. In some cases of high-severity burn, there are no living conifer trees available to provide potential seed for potential natural regeneration for several miles." Planting facilitates regeneration of forested areas; see Chapter 3 under vegetation and fuels for more details.
141.01 - Introduction, Planting,	#18907-14	Site Preparation by mastication does not reduce the amount of fuel on the forest floor but does produce more ground cover for fire. Removal of trees up to 16 inches and greater diameter cannot be justified as Site Preparation for planting of new trees.	See response to 18883-12.

Code	Comment Number	Comment Text	Response
Seeding			
141.01 - Introduction, Planting, Seeding	#18907-15	Reforestation should utilize seedlings grown in a nursery from seeds taken from live trees in adjacent forests. These seedlings will be more adapted to local soil and water conditions and may be more resilient to climate change.	See response to 18883-13.
141.01 - Introduction, Planting, Seeding	#18907-21	Plantations should not be established or reestablished after the salvage logging. Plantations will simply burn in a future fire, and it will take pesticides and other expensive and polluting resources to maintain them. Natural recovery, while slow, is more certain.	See response to comment number 18883-18.
141.01 - Introduction, Planting, Seeding	#18909-25	Another false and unsupported assumption in the DEIS is based on the Rose and Haase study at DEIS page 114: "Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Rose and Haase 2005)." The Rose and Haase paper makes no such claim. The authors from the Nursery Technology Cooperative at the Department of Forest Science at Oregon State University detailed two projects. The first project was designed to compare field performance among 1-year-old stocktypes; the second project (not yet accomplished at the release of this paper in 2005) was designed to investigate the effects of delayed outplanting and vegetation control on subsequent plantation establishment and growth. On page 115 the DEIS states, "Thus, without site preparation and planting, these areas will likely not regenerate conifers satisfactorily for many decades." In response, please note the Shatford et al. 2007 quoted above on page 3 and 4.	The citation to Rose and Hasse (2005) was in error in the draft and has been corrected in the final. We appreciate that being pointed out. The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: ""Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007).""Because Late Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions (Northwest Forest Plan C-14; Late-Successional Reserve Assessment 1-24). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et al. 2008). Research has also shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995; Omi and Kalabokidis 1991). Forest Vegetation Simulation (FVS) modeling (Attachment 1) shows that reforestation will establish forested conditions more rapidly by treating surface fuels and planting trees than by natural succession. It also shows that where surface fuels have been treated by salvage logging and site preparation, the ensuing stand is more resilient to fire than untreated areas. If surface fuels are treated, the risk of future stand replacement fires would be reduced, increasing the probability that planted conifers can persist into the future. In the FVS model, planted stands where fuels had been reduced began to show late-successional stand conditions typical of the Klamath Province with 40% canopy closure and 18 inch diameter at breast height trees in 70 years compared to over 200 years for untreated stands to reach the same stage. We agree that without planting, trees will slowly become reestablished over a period of 10-50 years in severely burned areas, but the probability of a late-successional coniferous forest becoming established in areas where fuels have not been reduced is low because of probable reburns. It is probable that areas where fuels are not treated will go through several cycles of stand replacement fire until surface fuels have been reduced to the point that a low to moderate fire severity regime has been reestablished. This would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions.
141.01 - Introduction, Planting, Seeding	#19092-3	Fast-track salvage logging is a good idea but it does take time to do a quality job. Restoration of burned areas is important. New trees can be planted as dead burned ones are cut but you all should wait a year and do it in a thinning manner, not a one-size fits all method.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. As per the EIS in Chapter 2, Alternatives Considered in Detail: "Based on the issues identified through public comment on the proposed action, the Forest Service developed 14 Alternatives to the proposed action, four of which were designed to achieve the purpose and need and were studied in detail. In addition, the Forest Service is required to analyze a no action Alternative." Please see the response to comment number 17111-4 for more details on planting techniques.
141.01 - Introduction, Planting, Seeding	#19146-2	Regarding reforesting the severely burned areas, please plant a variety of native tree species.	Please see the response to comment number 17111-4 for more details on planting techniques.

Code	Comment Number	Comment Text	Response
141.01 - Introduction, Planting, Seeding	#19154-2	When scalping 5 feet around seedlings, dig up species that sprout. Because I know herbicides are controversial.	Herbicides have not been used on the Klamath since the early 1980s, and are not proposed within the Westside Fire Recovery Project.
141.01 - Introduction, Planting, Seeding	#19154-3	Don't forget plantations so many years later.	The EIS provides for reforestation and plantation treatments through plantation establishment.
141.01 - Introduction, Planting, Seeding	#5-1	With all the parts that have to be balanced for any region, this can be very big to deal with. Live vibrant forest need some dead trees and brush. Small animals use this to live in and other live in the dead trees. Dead plant matter creates dirt. Simple. Small plants / grasses, etc are needed as well as trees. The replanting also has to deal with less water, as it looks like there will be more drought. Balance between what grows there now and what will grow better with out so much water, so there would be a better transition	Chapter 1, Purpose of and Need for Action, provides a detailed rationale for the Westside Resource Recovery Project. [Unresponsive to comment. I suggest: Chapter 1, Purpose and Need for Action, describes how various resource concerns are considered for development of the Alternatives described in Chapter 2. Effects on resources of those Alternatives are further analyzed in Chapter 3. Planting prescriptions are based on historic unit conditions, projected unit composition, and the likelihood of long-term survivability of project units within a fire ecosystem. Please see Chapter 2, Site Preparation, Planting, and Release for more information on planting design.]
141.01 - Introduction, Planting, Seeding	#5873-152	If this project involves artificial planting, avoid dense replanting that creates dense homogeneous plantations. Such areas inhibit biodiversity and also represent dangerous fuel conditions. Please replant in patches and/or at a fairly low density and avoid the need for future thinning and other stand management costs. Let's be patient and allow these stands recover slowly as diverse early seral communities. Diverse early seral plant communities are becoming less common and we should encourage slow and easy regeneration of forest communities. This is consistent with the research being done by Nathan Poage which indicates that many stands developed over much longer time periods than we typically allow under the agricultural model of forest management. David Hibbs' research is also showing that natural regeneration is sufficient to reforest most sites after disturbance. And Jerry Franklin points out that the more diverse forests that develop from natural regeneration are more resilient to climate change. In the 2007 Early Seral Forest Workshop, Jerry Franklin pointed out an important reason to rely on natural regeneration, saying — Naturally-regenerated ESFCs are likely to be more resilient under climate change due to - greater species diversity - tree genotypes selected by nature (i.e., environmental stresses) … Reforestation will usually: o Reduce the duration of ESFCs o Reduce heterogeneity of the process by which closed forest canopy is re-established o Alter genotype of planted species (less selection by environment) o Homogenize composition of forest http://www.reo.gov/ecoshare/ccamp/good_forest_opening/powerpoints/FranklinEarlySuccession.ppt Brown and Kertis studied the seedlings that came up naturally after the Warner Creek fire, and found that "seedling density can vary a lot within a plot. You might have a general density of 50 thousand per hectare, but locally those numbers could be anywhere from 0 to 300 per hectare. These seedlings are numerous, but not laid out in a grid!" http://web.archive.org/web/20050428020846/http://www.brownandbrown.tv/warner-presentation-2002-05-14b.pdf.	Artificial reforestation is proposed in all action Alternatives of the Westside Fire Recovery Project. Please see Chapter 2 for proposed planting prescriptions, and the Vegetation section of Chapter 3 for discussion on natural regeneration. The planting prescriptions proposed for the Westside Recovery Project largely incorporate the recommendations in this comment. Only locally adapted nursery stock would be used. See also Response 5873-171.

Code	Comment Number	Comment Text	Response
141.01 - Introduction, Planting, Seeding	#5873-187	Minimize Replanting in Order to Promote Complex Early Seral There is a growing recognition of the ecological importance of complex early seral habitat which typically exists after a disturbance and before young conifers re-establish dominance. Replanting therefore truncates succession to the detriment of complex early seral habitat. The agency should be willing to accept delayed conifer re-establishment. Slow progress toward conifer dominance is not a failure of forestry, but a benefit to biodiversity. We urge the agency to carefully consider how replanting can be adjusted to minimize and mitigate adverse effects on complex early seral habitat, for instance: • consider relying on natural regeneration; • leave unplanted "skips" within planting areas; • plant in a highly variable, clumpy, gappy pattern; • plant at low density, so that future thinning entries are not needed; • plant diverse species and diverse genetic stock (especially important considering climate change); • minimize soil disturbance and avoid weeds; • retaining complex dead wood structure (retain all snags, leave dead/down wood in patches, leave some fuel piles unburned, etc). This project should be adjusted to reflect the growing recognition of the ecological and social value of complex early seral habitats which are promoted by delayed re-establishment and dominance of conifers after disturbance. Complex early seral habitat, with diverse vegetation, as well as retaining some structure remaining after previous entries, often provides important ecological value to a wide variety of wildlife including big game, birds, insects, small animals, plants and wildflowers, butterflies, etc.	Please see response to comment number 5873-171
141.01 - Introduction, Planting, Seeding	#5873-188	Complex early seral habitats are now relatively uncommon as a result of many decades of timber dominant forestry, with regeneration harvest, fire suppression, salvage logging, and conifer replanting. This project could be made more beneficial to the creation of complex early seral habitat by dropping areas from planting entirely when they have a nice existing complement of diverse vegetation. Please minimize efforts to control competing native vegetation. Another option is to replant at very low densities or in a very clumpy-patchy-gappy pattern to allow existing non-conifer vegetation more time in the sun. Try to avoid homogenizing tree densities. The agency should be willing to accept delayed conifer re-establishment. Slow progress toward conifer dominance is not a failure of forestry, but a boon to biodiversity. To help get your creative juices flowing on this interesting and developing topic please review and consider the following resources: Jerry Franklin - Early seral forest: a diminishing resource? http://www.slideshare.net/ecoshare/jerry-franklin-early-seral-forest-a-diminishing-resource. K. Norman Johnson - Policies to Encourage Diverse, Early Seral Forest in Oregon: What Might We Do? http://www.slideshare.net/ecoshare/k-norman-johnson-policies-to-encourage-diverse-early-seral-forest-in-oregon-what-might-we-do. Exploring What is a 'Good' Forest Opening and is the Future a concern? January 30, 2007. http://ecoshare.info/projects/central-cascade-adaptive-management-partnership/workshops/early-seral-forest-2007/. AND http://www.slideshare.net/ecoshare/presentations. Daniel C. Donato, John L. Campbell &amp Jerry F. Franklin 2011. Multiple successional pathways and precocity in forest development: can some forests be born complex? Journal of Vegetation Science & (2011) http://onlinelibrary.wiley.com/doi/10.1111/j.1654-1103.2011.01362.x/pdf. Churchill, D.J., M.C. Dalhgreen, A.J. Larson, and J.F. Franklin. 2013. The ICO approach to restoring spatial pattern in dry forests: Implementation guide. Version 1.0. Stewardship Forestry, Vashon, Washington, USA.http://www.cfc.umt.edu/ForestEcology/files/ICO_Manager_Guide.pdf and Derek J. Churchill, Andrew J. Larson, Matthew C. Dahlgreen, Jerry F. Franklin, Paul F. Hessburg, and James A. Lutz. 2013. Restoring forest resilience: From reference spatial patterns to silvicultural prescriptions and monitoring. Forest Ecology and Management 291 (2013) 442–457. http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5428873.pdf Plant at low density to extend the early seral community and avoid future stand management costs. Unsalvaged, naturally regenerated, young stands are one of the rarest forest types in the Pacific northwest, and their biodiversity rivals that of old-growth forests. Indeed, naturally developed early-successional forest habitats, with their rich array of snags and logs and nonarborescent vegetation, are probably the scarcest habitat in the current regional [Pacific Northwest] landscape. Lindenmayer, David B. and Jerry F. Franklin. 2002. Conserving Forest Biodiversity: A Comprehensive Multiscale Approach. Island Press. Washington, DC: 69. See also, DellaSala, D.A., J.E. Williams, C. Deacon-Williams, and J.F. Franklin. Beyond smoke and mirrors: a synthesis of fire policy and science. In review - Conservation Biology	Please see response to comment number 5873-152 for information on planting prescriptions and natural regeneration. Treatment in salvage harvest units is limited to moderate to high severity areas (>50% mortality) outside of Riparian Reserves. See Chapter 2 for a complete description of salvage harvest units. See response to comment number 12346-55.

Code	Comment Number	Comment Text	Response
142.01 - Timber Sales (Green)	#12346-55	We note that the proposed salvage logging is in no way limited to dead trees. While the agency is silent as to the number of live green trees to be removed (as opposed to felled) in roadside logging and to facilitate yarding and landing activities, the DEIS (page 102) does indicate that the Forest Service intends to log trees that are in fact still alive. Please note that dying trees assist in post-fire soil stabilization and restoration via needlecast. Page 48 of the Wildlife Biological Evaluation Report indicates that "[a]lthough the project is using a 70% probability of mortality to identify trees for harvest in the treatment units, many of these trees that meet this definition are mixed with trees with lower probability of mortality thus contributing to canopy cover to the extent that these areas still meet the description of NSO habitat." The proposal to log live trees raises the controversial issue of mortality models and marking guidelines for designating "dying" trees. There is an extensive scientific literature on the delayed mortality of fire-damaged conifers on forests of the western United States. (e.g. Martin 1963utl, Bevins 1980 utl, Ryan 1982 utl, 1983, 1998, Peterson 1985 utl, Peterson and Arbaugh 1986 utl, Wyant et al. 1986 utl, Chambers, et al. 1986 utl, Harrington 1987 utl, 1993, Ryan et al. 1988, Ryan and Reinhardt 1988, Ryan and Frandsen 1991, Regelbrugge and Conard 1993, Mutch and Parsons 1998, Saveland and Neuenschander 1990, Flanagan 2001, Borcher and Schreiner 2002, Stephens and Finney 2002, McHugh and Kolb 2003, Thies et al. 2006, Hood and Bentz 2007, Michaletz and Johnson 2007). While none of these studies are acknowledged or addressed in the Westside DEIS, it is clear that the translation of this science into marking guidelines for salvage logging has been and is still the subject of considerable scientific controversy. The agency's proposal to the harvest "dying" fails to disclose the scientific controversy or respond to the best available science. As discussed by Lindenmayer, Noss, and others, (Lindenmayer et al. 2004, Beschta et al. 2004, Lindenmayer and Noss 2006, Noss and Lindenmayer 2006) ecosystems on sites damaged by the passage of fire are in a stressed condition and are the least able to withstand further disturbance. All trees that have a chance of surviving are needed to play critical roles in natural site regeneration. They should be preserved, even if some will later die. They provide site-adapted seed sources for new trees, shade for seedlings that is critical under the xeric conditions of most western forests, and a host of benefits to wildlife. If a few later succumb, they will provide snag habitat useful to wildlife. (Cf. e.g. Hutto 2006.) Furthermore, even dead trees can play an important role in natural site restoration, as outlined by the above authors. A discussion of these considerations was largely absent from the NEPA documentation related to the harvest selection and marking criteria. Attached to these comments is a 2009 peer-reviewed article (Hanson and North 2009) indicating that the Forest Service Region 5 mortality guidelines may significantly overestimate tree mortality to the detriment of ecosystem functions (including flushing) and post-fire recovery. The abstract for that study concludes: With growing debate over the impacts of post-fire salvage logging in conifer forests of the western USA, managers need accurate assessments of tree survival when significant proportions of the crown have been scorched. The accuracy of fire severity measurements will be affected if trees that initially appear to be fire-killed prove to be viable after longer observation. Our goal was to quantify the extent to which three common Sierra Nevada conifer species may 'flush' (produce new foliage in the year following a fire from scorched portions of the crown) and survive after fire, and to identify tree or burn characteristics associated with survival. We found that, among ponderosa pines and Jeffery pines with 100% initial crown scorch (no green foliage following the fire), the majority of trees flushed, and survived. Red fir with high crown scorch (mean=90%) also flushed, and most large trees survived. Our results indicate that, if flushing is not taken into account, fire severity assessments will tend to overestimate mortality and post-fire salvage could remove many large trees that appear dead but are not. Additionally, following the recent Rim Fire in Region 5, the Forest Service elected to retain all live trees exhibiting green needles in order to contribute to post-fire recovery. Please see: http://www.fs.usda.gov/wps/portal/fsinternet/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gDfxMDT8MwRydLA1cj72BTUwMTAwgAykeaxRtBeY4WBv4eHmFYT4GMHkidBvgAI6EdIeDXIvfdrAJuM3388jPTdUvyA2NMMgyUQQAyrgQmg!!/ dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfS000MjZOMDcxT1RVODBJN0o2MTJQRDMwODQ!/?project=43033 While the Forest Service URL above may be confusing and byzantine, the direction of the Stanislaus National Forest was crystal clear: Do Not "Salvage" Log Living Green	This comment states that scientific controversy exists concerning marking guidelines for mortality, and that the Forest Service is overstating risk of mortality and thus marking trees that would otherwise survive. It is not clear from the comment what scientific controversy exists relative to the application of fire-caused mortality predictions. The existence of diverse thought in scientific literature does not equate to scientific controversy nor does a scientific controversy exist because the commenter has a differing opinion than the Agency about a project. A scientific controversy exists when scientific evidence specifically evaluating the environmental effects of the action calls into question the analysis or findings in the EIS. No such evidence is presented in the comment. As to predicting probability of mortality, the Forest Service is using the R5 Forest Health Protection Marking Guidelines for Fire-Injured Trees in California (Smith and Cluck 2007) which is based on peer - reviewed journal articles (some of which are cited in the comment) and General Technical Reports published by the research branch of the Forest Service. This is the standard practice in Region 5. The comment provides several citations about fire damage suggesting these articles conflict with Smith and Cluck. (Martin 1963, Bevins 1980 , Ryan 1982 , 1983, 1998, Peterson 1985 , Peterson and Arbaugh 1986 , Wyant et al. 1986 , Chambers, et al. 1986, Harrington 1987, 1993, Ryan et al. 1988, Ryan and Reinhardt 1988, Ryan and Frandsen 1991, Regelbrugge and Conard 1993, Mutch and Parsons 1998, Saveland and Neuenschander 1990, Flanagan 2001, Borcher and Schreiner 2002, Stephens and Finney 2002, McHugh and Kolb 2003, Thies et al. 2006, Hood and Bentz 2007, Michaletz and Johnson 2007). Several of the documents listed in this comment are referenced by Smith and Cluck (2007) however the commenter failed to explain the scientific controversy with Smith and Cluck (2007) or with the site-specific on-the-ground application of these guidelines on the Westside Fire Recovery Project. Disagreement by the commenter does not constitute scientific controversy but regardless, the Forest Service has made their assumptions and standards clear from the beginning of the project. Along forest roads, dead and fire - damaged trees with a 60% or greater probability of mortality are proposed for removal. After publication of the draft EIS, these rules were modified so that trees over 45 inches in diameter were required to have a 95% probability of mortality. This was done to ensure that legacy trees along road systems were retained. Project design was modified after publication of the draft, in consultation with the Fish and Wildlife Service to eliminate marking of green hazard trees that are not fire-damaged. This was done to reduce potential impacts to northern spotted owl habitat. Within proposed salvage units, the Forest Service is using a 70% probability of mortality as a threshold. No Alternatives in this project propose the removal of green trees, defined as trees with a less than a 70% probability of mortality. All green trees will be retained. The only exceptions are green trees that pose an immediate hazard to roadways or the occasional live trees that need to be removed for cable harvesting. See Chapter 2 of the final EIS for details of what is being proposed. Green tree is also defined in the glossary.The comment alludes to scientific controversy related to removing green trees and suggests the Forest Service is using a 70% probability of mortality threshold to remove green trees that would otherwise survive as part of an aggressive logging program. There is no controversy related to retaining green trees in severely burned areas; we agree that green trees with a reasonable chance of survival should be retained wherever they occur for the reasons noted in the comment. The question is whether trees with a 70% probability of mortality or higher should be marked. It has been the recent experience of the Forest on the Salmon Salvage and the professional judgement of Forest staff with decades of experience on the Forest that most trees with a 70% probability of mortality in the marking guidelines will in fact die, particularly in the drought conditions that have existed in northern California for the past four years. In the Marking Guidelines for Fire-Injured Trees in California (Smith and Cluck 2011), 70% probability of mortality and above is the threshold to use when it is important to prevent taking trees that may live. Proposed risk-reduction salvage units were located in the most severely burned areas where any surviving trees had been exposed to higher intensity fire than those in less severely burned areas. The winter of 2014-2015 was drier and warmer than normal so fire-damaged trees likely experienced more stress than would have normally occurred. Between publication of the draft, and publication of the final EIS, field crews report that extensive additional secondary mortality from drought and insect attack has occurred in all RAVG classes. About 8,500 green trees with a 30% chance of survival or greater (or less than a 70% chance of mortality) in units have been marked for retention. We note the reference to ""flushing"" which is the emergence of new growth in scorched trees. The reference to Hanson and North and the effects of flushing relative to the mortality guidelines would depend on the timing of marking. Retention trees were marked in the late spring 2015, mostly after new growth had started to form. If flushing had occurred, it would have been visible and would have been considered as part of the live crown in the damage assessment. No flushing has been reported by field crews, most likely because the proposed Westside Fire Recovery units are in areas where there was high fire severity and extensive foliage consumption in the crowns of the trees. The cited Hanson/North study did not include Douglas-fir, which is by far the Westside Project's predominate species affected. Also, as cited directly from Hanso and North (2009) from their own study; "Although we found higher survival than Hood et al. (2007), there are several limitations to our design that may influence our results. We had a relatively small sample size from only two locations and sampling was restricted to a narrow subset of trees (e.g. ponderosa and Jeffrey pine with 100% scorch and red fir with 85% or greater scorch). We also did not sample in high-severity crown-fire areas where foliage consumption is high. Future investigations with larger samples in other locations will facilitate more precise estimates of flushing and

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		Trees. The Klamath National Forest has failed to justify their more aggressive logging desires.	survival."" The Westside Proposed Action salvage units were in moderate to high fire severity areas where foliage consumption was generally high, so the findings of Hanson and North may not be applicable. Regardless, as noted above, “flushing” would have been evident at the time the trees were marked. If trees did “flush” after field layout was completed, and in fact appeared to have a reasonable chance of survival, they can be removed from the sale by the Forest Service during implementation. The project does include specific project design features to retain legacy trees and snags (EIS, Chapter 2, Project Design Features Wildlife 11 and 12) and no salvage is proposed within wilderness, backcountry, research natural areas or designated or recommended wild rivers. Within inventoried Roadless Areas and hydrologic Riparian Reserves, only dead and dying roadside hazard trees along roads would cut (EIS, Chapter 2, Alternative 2 description). Within hydrologic Riparian Reserves, only material between 14 and 26 inches in diameter would be removed for the purpose of reducing fuels adjacent to the road. Trees over 26 inches in diameter would be retained on-site. See also comment 12346-1, 12346-48, 5873-64 and 17111-1
142.01 - Timber Sales (Green)	#15601-1	The proposed plan reverts to the bad old days of the 50's and 60's when the overriding goal of the USFS appeared to be "get the cut out" at any and all costs to the forest enviroinment! Most likely many of the USFS planners were not around during those days - but I was and remember clearly the stain on the USFS's environmental record, a stain which I as as USFS employee lived with for over the 15 years of my own career with the USFS.	There is a need to harvest dead or dying trees in order to provide funding for the restoration of future wildlife habitat and improvement of watershed conditions (EIS, Chapter 1, Purpose and Need). Much of the restoration would not happen without this funding source. In addition, the project has included specific project design features and best management practices which will minimize resource impacts to the forest (EIS, Chapter 2, Project Design Features; EIS, Appendix D).
142.01 - Timber Sales (Green)	#18909-100	Tree mortality is a natural process in a forest ecosystem. Diseased, damaged and dead trees are key structural components of late-successional forests. Accordingly, management planning for LSRs must acknowledge the considerable value of retaining dead and dying trees. There are guidelines within the Northwest Forest Plan specifically for post-fire logging within LSRs. All standing live trees should be retained and management should focus on retaining snags that are likely to persist until late successional conditions have developed and the new stand is again producing large snags. The project as proposed is contrary to the protection of the LSR and threatened species. The proposal to log live trees raises the controversial issue of mortality models and marking guidelines for designating "dying" trees and it is illegal in LSRs. There is an extensive scientific literature on the delayed mortality of fire-damaged conifers on western forests. Ecosystems affected by the passage of fire are in a stressed condition and are the least able to withstand further disturbance. All trees that have a chance of surviving are needed to play critical roles in natural site regeneration. They should be preserved, even if some will later die. They provide site-adapted seed sources for new trees, shade for seedlings that is critical under the xeric conditions of most western forests, and a host of benefits to wildlife. If a few later succumb, they will provide snag habitat useful to wildlife.	The Forest Plan provides direction for salvage in Late Successional Reserves (Forest Plan, pp. 4-87 - 4-88) which will be followed in this project (EIS, Chapter 2, Alternative 2 description). The Forest Plan specifically states that "all standing live trees should be retained, including those injured (for example, scorched) but likely to survive." The responsible official has chosen to salvage trees with a 70 percent or greater probability of dying within the next three to five years, as these trees are not "likely to survive" (EIS, Chapter 2, Alternative 2 description). However, the project does include specific project design features to retain legacy trees and snags (EIS, Chapter 2, Project Design Features Wildlife 11 and 12) and no salvage is proposed within wilderness, backcountry, research natural areas, designated or recommended wild rivers, inventoried Roadless Areas, Riparian Reserves associated with stream channels or high ranked northern spotted owl cores, or within designated snag retention areas (EIS, Chapter 2, Alternative 2 description) which also overlap with Late-Successional Reserve areas. See response to 12346-55.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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142.01 - Timber Sales (Green)	#18934-12	Marking Guidelines Klamath National Forest staff has provided conflicting statements on the marking guidelines and methods for this project. During the first open house meeting in Sawyers Bar, forest staff indicated that there would not be individual tree marking and instead the project, due to its scale, would allow for "designation by description." During the second open house in Sawyers Bar, forest staff indicated that there would be individual tree marking for all cut and all leave trees throughout the project. This needs to be clarified and clearly stipulated in the EIS. Individual tree marking is the only appropriate method to use as descriptive designations allow for leeway and judgment calls to be made on-site by those with a profit motive to cut more rather than less as well as discrepancies as to what what was intended. The self-selected massive scale of the Westside project is no excuse for the Forest Service not adequately marking trees. Additionally, we have found that the marking guidelines that were used in the Salmon Salvage Project of 2014 on the Salmon River, which are the same as those proposed in all of the Westside Fire Recovery Project alternatives (other than the Karuk Alternative), are flawed and should not be used for the Westside Fire Recovery Project. We personally visited Salmon Salvage salvage units and roadside hazard units before, during and after the treatment. In a pre-salvage fieldtrip USFS personnel explained the marking guidelines and although they seemed like they may be overly lenient on the side of cutting still green trees, it wasn't until the units were actually treated that we became aware of the profound affect these guidelines would have on the landscape for the foreseeable future. Throughout the Salmon Salvage project we witnessed a shocking number of large, green, legacy trees being cut and hauled out of the units, particularly along roadside hazard treatment areas. Many of these trees, that appeared to have little fire damage, filled two, three and four log loads as they made their way out of Late-Succesional Reserves and some of the last remaining patches of old growth in these fire affected landscapes, to out of state mills where they still have equipment large enough to handle this size of tree. It is a travesty to lose these large, legacy trees from our forests, and especially LSR's, forever, they are irreplaceable and play an extremely important role in fire recovery and ecosystem resiliency. After doing some research, we found that the current guidelines being used greatly over predict the mortality of fire damaged live trees, especially large trees, and are not scientifically supported as they are being implemented. This goes directly against the Westside projects purpose and need. The salvage harvest of large green legacy trees that have a high likelihood of survival will have a dramatic and long lasting impact on the forests being treated. These trees, if left standing will greatly contribute to the recovery of this landscape in many ways, providing natural regeneration from uniquely adapted genetics for the landscape; contributing to a healthy distribution of age and size class variation on the landscape; providing invaluable wildlife habitat; shade and moisture retention for newly regenerating forests; and improved visual and physical qualities for future generations of people to enjoy, to name a few. We strongly urge the adoption of the alternative marking guideline of "no green at the time of harvest," which will more readily achieve the DEIS objective of meeting the, "need for restored and fire-resilient forest ecosystems." These alternative marking guidelines have been used successfully in multiple fire salvage projects, most recently being used on the Rim Fire Restoration Project on the Stanislaus National Forest. The inaccuracies of the proposed marking guidelines were well laid out in Dr. Kennedy Meadows comment letter, included here by reference. If a significant number of these large trees along main roadways do die in 5 years they are large enough that the wood will still be in great condition and they are both accessible and merchantable for a future roadside hazard project through a CE - so nothing would be lost. However, under the current guidelines those critical and irreplaceable, legacy trees and their genetics are guaranteed to be lost forever. These trees are important for habitat, heterogeneity and stand structure and play a very important role in the landscape recovery and resiliency.	Project guidelines originally allowed the removal of green trees along roads as was done in Salmon Salvage whether they were fire damaged or not, so long as the tree Forest Service definition of a “hazard tree”. Project design for the Westside Fire Recovery Project was modified in consultation with the Fish and Wildlife Service after publication of the draft, to eliminate marking of green hazard trees that are not fire-damaged. This was done to reduce potential impacts to northern spotted owl habitat. Along forest roads, dead and fire - damaged trees with a 60% or greater probability of mortality are proposed for removal. After publication of the DEIS and in response to public comment, these rules were modified so that trees over 45 inches in diameter were required to have a 95% probability of mortality before they could be marked. This was done to ensure that legacy trees along road systems were retained. Within proposed salvage units, the Forest Service is using a 70% probability of mortality as a threshold (EIS, Chapter 2, Alternative 2 description). The guidelines in Report #RO-11-01 ""Marking Guidelines for Fire-Injured Trees in California"" (Smith & Cluck, 2011) are stated in Chapter 2 of the EIS under Alternative 2, Salvage Harvest description describe which trees are considered for harvest. The fire-injured tree marking guidelines for the Westside Fire are based on published models from the Hood et al. 2010 study (Hood, Sharon M.; Smith, Sheri L.; Cluck, Daniel R. 2010. Predicting mortality for five California conifers following a wildfire. Forest Ecology and Management. 206: 750-762). These well established guidelines are based on the best available science documenting post-fire conifer mortality in California and their use has contributed to the success of many post-fire salvage and restoration projects. See also comment response #12346-55 about green trees.

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142.01 - Timber Sales (Green)	#19076-6	We question the ability of qualified USFS oversight and monitoring while so much proposed contract work would be done at the same time. And it is not in the interest of the public to add to sediment loads during a time of minimal precipitation, when there is so much Pending work already required to meet 303(d) requirements that should have already been done. Certainly that work should not be dependent on timber sales for funding.	This comment is an opinion of the commenter. Monitoring and oversight of Forest Service contracts is outside the scope of this project. Legacy sediment sites will be scheduled for treatment as a condition of the North Coast Regional Water Quality Control Board waiver of waste discharge requirements (EIS, Chapter 2, Alternative 2 description) and appropriate project design features and best management practices have been developed to minimize impacts to water quality (EIS, Chapter 2, Project Design Features; EIS, Appendix D). In the analysis for water quality, it was found that there was no change to the risk categories for sediment regime alteration due to project activities (EIS, Chapter 3, Water Quality, Alternative 2 Direct and Indirect Effects). Without revenue from salvage funding may not be available to treat these legacy sites. See Chapter 2 of the final EIS under the monitoring section for details about the monitoring to take place.
142.01 - Timber Sales (Green)	#5873-7	The FS should retain all green trees and all large snags because live trees and large snags persist the longest and will contribute the most toward minimizing the “snag gap.” The proposal will remove thousands of live trees with a 30% chance of survival. These survivors are critically valuable in a post-fire landscape. They not only provide rare green tree habitat, but they offer a source of future snags to mitigate the snag gap.	See the salvage in Late-Successional Reserve discussion in Chapter 1 of the final EIS and in the Appendix of the final EIS. Green trees are being retained; see Chapter 2 of the final EIS for a detailed description of what is being proposed. Also see response to comment number 12346-55. Project design features are incorporated into the project for the retention of legacy components; see wildlife project design features in Chapter 2 of the final EIS.
142.02 - Timber Sales (Salvage)	#12346-70	Please note that there is near universal scientific consensus that salvage logging does not leave watersheds and forests in a healthier, more resilient state, and that the timber volume gained via salvage is neither predictable nor sustainable. We urge the Forest Service to take a hard look at the growing body of literature indicating that the post-fire ecosystems have many benefits including providing habitat for listed species that are diminished or eliminated by salvage logging and plantation forestry. The agency's decision to fast-track this planning process and to circumvent a meaningful objection process indicate to us the public's participation and scientific input are unwanted. This proposal to harm recovering post-fire forests serving as spotted owl critical habitat which are designated Late-Succesional Reserves is extremely troubling to our organizations and we urge that the project be abandoned as currently conceived.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#12346-71	While ignoring or discounting the vast body of peer-reviewed studies regarding the significant environmental impacts of salvage logging, the Westside DEIS repeatedly references "Zhang et al. 2008" to support the controversial contention that "reforestation would restore the desired forested environment faster than natural regeneration." Please note that the "desired forested environment" referenced by Zhang et al. consists of industrial forestlands in the Southern Cascade Mountain Range managed by Roseburg Forest Products (with herbicide application and clearcutting) to "provide harvestable yields in about 30 years." (Zhang, page 429). In contrast, the Westside Salvage planning area is located in the Klamath Mountains, like the forest stands studied by Donato et al. Our organizations provided a copy of the Donato study to the agency during project scoping. Yet, curiously, the DEIS largely ignores Donato's findings regarding natural post-fire reforestation in the Klamath Mountains on federal lands. Is the Forest Service proposing to clearcut the existing LSR snag forest, utilize herbicides and manage these stands on 30 year rotations? If not, why is the agency basing its analysis on a reforestation study conducted on private industrial forestlands in the Cascade Mountain Range, rather than one conducted on Forest Service lands regarding the effects of salvage logging on reforestation in the Klamath Mountains? Please respond to the following regarding the Zhang paper: 1) Zhang et al. (2008) did not compare post-fire logging/planting to no-logging/naturalregeneration. They compared post-fire logging and replanting to post-fire logging with no replanting--i.e., after the tractor logging had compacted the soil, removed any natural seed sources, and destroyed any natural regeneration that might have been coming in. Therefore, Zhang et al. (2008) has no relevance to the Westside project. Nor does it have any relevance to carbon stocks after fire, including high-intensity fire, in areas that have not been logged or replanted. 2) Zhang et al. (2008) do not present any quantitative data on plant species, and instead cite to DiTomasso et al. (1997). The DiTomasso et al. (1997) study compared salvagelogged/ replanted/herbicide-treated areas to salvage-logged/replanted/No-herbicide areas. Therefore, once again, the study is inapplicable to the Westside project (wherein the comparison is between salvage logging/replanting/herbicides and nologging/ no-planting/no-herbicides). It is not clear whether the journal (California Agriculture) in which DiTomasso et al. (1997) was published is peer-reviewed, but the study concludes that salvage logging followed by herbicides initially reduces plant species richness relative to salvage logging followed by no herbicides, but that there is	As described in Chapter 3 of the EIS: "Although there is some controversy about whether older trees are more successful in storing carbon than younger trees (Coulson et al. 2015), there is general agreement that forests are an important factor in carbon storage (Fitzsimmons, et al. 2004, US EPA 2013, Pan et al. 2011). Likewise, there is general agreement that less carbon is stored in decaying wood than in wood content in lumber and manufactured wood products (Skog 2008, Finkral and Evans 2008) and that stand-replacing wildfire releases carbon into the atmosphere (Vose et al. 2012). Therefore, activities that accelerate the regeneration of forests (conifer and hardwood) after moderate- to high-severity vegetation burns, that promote the use of dead and dying wood rather than allowing it to decay, and lessen the likelihood of stand-replacing wildfire and insect disturbance would have a beneficial effect on carbon storage." Response to: "Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk" The review of Donato et al 2006 by Newton et al 2006 (M. Newton, S. Fitzgerald, R. R. Rose, P. W. Adams, S. D. Tesch, J. Sessions, T. Atzet, R. F. Powers, C. Skinner) is applicable to Westside Resource Recovery Project EIS reforestation circumstances. As per the findings of Newton et al in the review of Donato et al, they noted the following: “Donato et al. (1) recently concluded that logging 2 to 3 years after wildfire kills natural regeneration and increases fire risk. The research may make a valuable contribution, but the study lacks adequate context and supporting information to be clearly interpreted. Here, we discuss the papers methods and conclusions in the context of relevant management objectives and the forestry knowledge base concerning natural regeneration processes, mortality from logging, and fuel accumulations in southwestern Oregon and northwestern California. Donato et al. (1) made inferences about natural regeneration processes, mortality from logging, and fuel accumulations without presenting key information regarding (i) agency postfire management directives for reforestation or downed wood levels (2), (ii) implications of delays in postfire plan implementation, or (iii) important environmental and disturbance descriptors such as plant associations, fire intensity, seed tree proximity, and weather patterns. Results from their study cannot be readily extrapolated because it was a short-term observational study of site-specific forest operations governed by agency management objectives. Other management plans, operations, or conditions could yield different results (3). In the case of the 2002 Biscuit Fire, logging was postponed for 2 years, allowing more seeds to germinate and increasing seedling exposure to injury during logging (4). Donato et al. cite a lack of scientific data regarding the management of public forests after large fires. However, it should be noted that conifer reforestation (planted and natural) and vegetation ecology have been widely studied in the region. Studies show variable responses with plant association, competing vegetation, local climate, soils, and other factors (5, 6). Hobbs et al. (5) provide a synthesis of 13 years of research in southern Oregon and northern California. Fewer studies have examined reforestation after wildfire, especially over longer periods (4, 7–9), but damage to natural regeneration after delayed salvage logging was reported more than 50 years ago (4, 8)…”See

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		similar plant species richness over time, and possibly somewhat higher plant species 18 diversity in some of the logged/planted/herbicide areas relative to logged/planted/noherbicide. Total vegetative cover was highest in the areas with no herbicides. Again, though, the results of DiTomasso et al. (1997) are irrelevant to the proposed salvage logging project because they do not compare no-logging/no-replanting/no-herbicides to logging/replanting/herbicides. 3) As for carbon, recent data shows that the highest biomass (and carbon) levels are maintained by periodic high-intensity fire, due to the combined biomass of the snags and logs from the previous fire and the vigorous natural tree regeneration spurred by the fire and the nutrient cycling resulting from the fire (See: Keith, H., B.G. Mackey, and D.B. Lindenmayer. 2009. Re-evaluation of forest biomass carbon stocks and lessons from the world's most carbon-dense forests. Proceedings of the National Academy of Sciences 106: 11635-11640). The Keith et al. (2009) study was conducted in fire-adapted forests in Australia, but the authors made clear that their results are applicable to other fire-adapted temperate forests, including western U.S. conifer forests. Vigorous natural conifer regeneration is the rule, not the exception, in high-intensity fire areas of the Klamath- Siskiyou (with no salvage logging, replanting, or herbicide application). See: a) Donato, D.C., J.B. Fontaine, J.L. Campbell, W.D. Robinson, J.B. Kauffman, and B.E. Law. 2006. Post-wildfire logging hinders regeneration and increases fire risk. Science 311: 352; and b) Shatford, J.P.A., D.E. Hibbs, and K.J. Puettmann. 2007. Conifer regeneration after forest fire in the Klamath-Siskiyous: how much, how soon? Journal of Forestry April/May 2007, pp. 139-146.	response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
142.02 - Timber Sales (Salvage)	#12349-8	I'm not opposed to all logging, but the weight of scientific evidence indicates that logging after a wildfire is one of the worst times to log in terms of the effects on both terrestrial and aquatic biota of forested ecosystems. To summarize my thoughts, I think there are some positive aspects to the proposed project, but the large-scale salvage logging that is proposed, particularly within LSR lands, needs to be removed from the project. If the logging proposed in the preferred alternative ends up happening, the KNF will be going back to the ways of putting timber production above all else, including threatened species such as the northern spotted owl and coho salmon. The preferred alternative, as it stands, will not be good for the forest. It will most likely result in conditions that are conducive to additional large, high-intensity fires and will negatively impact imperiled species.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Salvage harvest is proposed on a small percentage of the project area (less than 4 percent overall and even less in Late-Successional Reserve). See Chapter 3 of the EIS for effects to fire and fuels by Alternative. See response to responsible opposing points of view at the beginning of Chapter 3; we acknowledge other scientific opinions but feel there salvage logging in post-fire conditions has important benefits and helps to meet the purpose and need of the project.
142.02 - Timber Sales (Salvage)	#14300-1	The idea of clear cutting burn areas disgusts me because fire is good for the land and new life comes to the forest after the fires destructive wake. Clear cutting and taking everything away just adds to the destruction and takes away the chance for new seed spawn and growth. This is a terrible idea and i don't understand why the forest service would even propose this.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Through project design only dead trees and trees with a 70 percent or greater chance of dying will be removed. In addition, there are project specific design features which prescribe levels of snags and downed wood to leave within harvest units. Therefore, the salvage harvest proposed will not remove all of the trees from the landscape.
142.02 - Timber Sales (Salvage)	#14974-1	Extreme logging shouldn't be done around and in the Klamath National Forest. Clearcutting old-growth reserves in key salmon strongholds will damage fisheries, and destroy the ecosystem. Bears, deer, bird species and many other animals will lose their territories.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter to of the final EIS for a description of proposed actions; no clear-cutting is proposed. Effects to wildlife and aquatic species from the project and Alternatives are disclosed in Chapter 3 of the EIS.
142.02 - Timber Sales (Salvage)	#15138-1	If logs already down have value and do not require new access roads or the use of skid loaders to remove them, then perhaps it is good to do so. But downed trees also provide habitat services, protect soil, enable new growth and protect waterways. Removing masses of biomass hastens degradation in vulnerable areas. Clear cut logging is never justified, and the logging proposed here is an environmental disaster waiting to happen.	Pre-existing down logs and snags will be left in the salvage units unless they need to be removed for safety reasons (EIS, Chapter 2, Project Design Features, Wildlife - 13).

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142.02 - Timber Sales (Salvage)	#15226-1	I am opposed to clear cutting forests of any size and any place. Only sustainable logging should be allowed and only if it can be done without damaging the forest as a whole. Wood is no longer necessary for modern buildings and implements, so society can afford to be picky on how we extract wood from OUR forests.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter to of the final EIS for a description of proposed actions; no clear-cutting is proposed.
142.02 - Timber Sales (Salvage)	#16137-1	It is imperative that you, as guardians of our nation's forests, leave this area alone to regenerate naturally from a fire, like it has done for many millennia without your 'help'. As such, please do not allow any salvage logging to proceed!! No exceptions!!! Stop catering to the whims of the rapacious, unconscionable, and greedy timber companies, who would take the last of our country's forest heritage if they could! Enough is enough!!!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#16872-1	Timber planners on the Klamath National Forest are exploiting last summer's wildfires to push an extreme logging proposal that calls for clearcutting old-growth reserves in key salmon strongholds. Please stand with conservation groups, native tribes, watershed councils and fire ecologists to oppose the Forest Service rush to log at any cost. The backbone of the Northwest Forest Plan is the idea that some special places would be set aside from logging while timber would be produced where logging would do the least harm. The Klamath National Forest is hoping to throw out the rulebook by logging protected reserves to protect old-growth forests and geological reserves that prohibit logging on landslides and unstable slopes. Ask the Forest Service to follow their own rules that protect important wildlands, wildlife and watersheds.	See response to comment number 6271-1.Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17111-22	Salvage will make no positive contribution to the reestablishment of late successional forest habitat or to the early successional ecosystems that provide habitat for NSO prey species, among many others.	See response to comment number 17111-22. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17111-23	Retention of large snags and logs are critical parts of the natural recovery processes and none of this wood legacy can be demonstrated as being in excess to ecological needs on moist forest sites; indeed, all of the scientific evidence is to the contrary. Removal of medium and fine fuels, but not large snags and Jogs, may be ecologically justifiable on sites characterized by PAGs with Fire Regimes I and II.	We recognize the importance of large snags and logs on natural recovery processes. The project is required to meet standards in the Forest Plan for snag retention and coarse woody debris. We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that could persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). See also response to 17111-1, 5873-64 and EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. See also EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised.
142.02 - Timber Sales (Salvage)	#17273-1	Clear-cutting is a terrible way to treat our National forest lands. It hurts. It hurts the plants and the animals and the human soul. Trees help conserve water and thwart drought. Clear-cutting is a horrible way to service our forests. Please don't commit such crimes against nature!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6271-1 and 8435-1; no clear-cutting is proposed (see Chapter 2).

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#17282-2	The level of logging and road building proposed is simply too much. While some removal of hazard trees along public roads and strategic fuels treatments are needed to protect local communities, I am concerned that the current Forest Service plan will continue to perpetuate the agency's century-old exclusion of fire and inclusion of plantation forestry.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17287-1	I am a resident of Siskiyou County and I reside on the Klamath River. I was in the midst of the Wildfires of 2014. I am writing to give my support for the Westside Fire Recovery Project. I would like to see as much harvesting of the burned trees as possible. I do support the emergency efforts that need to be done immediately. Please do not wait until the wood is unusable and the fire risk in our area increases.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17289-1	This letter is in support of the Westside Fire Recovery Project. The 2014 wildfires were devastating for us all. Now, we need to recover and prepare for the future. The burned trees should be harvested as soon as possible, the roads, and firebreaks cleared and new trees planted. I'm sure that these and other related items are on your future plans for our beautiful Klamath National Forest. You are doing a good job!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17349-2	We support and advocate an aggressive approach to treatment of dead fuels created by the fires. We - · envision that this step in the Recovery process involves physical removal of commercial material through the timber sale process. We advocate that where fire intensity resulted in mortality of most or all of the trees, treatment should remove all merchantable material through salvage and be followed by burning of the residual slash and dead material and planting of conifer seedling. We also advocate that where fire intensity resulted in a mix of live and dead trees (a "salt and pepper" condition}, salvage be designed to remove the dead trees so that the area remains stocked with live trees. In these salt and pepper situations follow-up fuel treatment is more complex but is critical to the future management of the residual stand. Some planting of conifer seedlings may be appropriate. It is true that we are biased toward making full use of salvage during the fire recovery effort. However, we do not advocate "salvage-at-any-cost". The objective here is to utilize the salvage step to improve the long term management of the forest. If salvage is somehow detrimental to the long term health and well-being of the forest then it is not an appropriate treatment. It is important when addressing the question of "should we or shouldn't we?" that we keep in mind that the dominate environmental effect on the land comes from the fire and that effect unfortunately is a given. The effects of salvage are commonly a small additional effect to the existing fire effects. The positive effects of salvage commonly involve creating a more fire resistant and fire resilient forest stand due to fuel removal and treatment, creating a forest stand with a significant conifer component {without waiting decades or centuries}, capturing the commercial value of the dead trees, gaining the ability to reinvest the proceeds from the dead timber in the recovery effort,	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Alternative 2 includes salvage harvest, fuels treatment and reforestation. Live trees will be left in all salvage units according to the marking guidelines. See response to 12346-55.
142.02 - Timber Sales (Salvage)	#17349-4	Given our "pro-salvage" bias we advocate that as the Interdisciplinary Team evaluates the multitude of situations in the fires, their mind set is: salvage is an integral step in the recovery process unless there are compelling reasons that make it inappropriate to a particular situation. Achieving an optimal balance is no easy task but we are optimistic the Team will give the effort their very best because this is a hugely important project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#17375-1	Why are you proposing logging of public old growth forests? Ancient forests are not renewable. The concept of sustainable logging does not include permanently annihilating a public trust resource	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We are not logging ancient forests; see Chapter 2 of the EIS for what is being proposed. See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#17396-2	Salvage logging is not supported by scientific data, although it is customary. An excellent study published in Science showed it to cause more harm than good. There are articles that advocate for it, but there are no scientific studies that show that it is beneficial.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter failed to provide evidence that supports that salvage logging is not supported by scientific data. The Forest Service used best available science in the development and analysis of this project, as referenced throughout the final EIS and supporting documents. See response to comment number 6271-1.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#17481-35	* Salvage o Longer term contracts - to salvage timber that dies after sale is marked o Adjust DBH and top size of timber as wood quality deteriorates - industry indicates that sales would be more attractive o Y.U.M. and treat units for fuel reduction	Comment is about implementation contracts and beyond the scope of National Environmental Policy Act analysis.
142.02 - Timber Sales (Salvage)	#17503-1	Please allow only very light salvage logging. After a fire most trees will survive if allowed to come back. Forests are important to fish, wildlife and water. Big trees are not replaceable.	Salvage harvest is only proposed in a small percentage of the burn area (around 4 percent). In addition, live trees will be left in all salvage units according to the marking guidelines. See response to 12346-55.
142.02 - Timber Sales (Salvage)	#17507-1	I support the project objective of meeting the need for "restored and fire-resilient forested ecosystems," as stated in the DEIS. Unfortunately, the use of the S&C guidelines for marking trees for salvage harvest will delay the meeting of this objective by permitting the harvest of green trees that would otherwise have a reasonable probability to live. I urge the adoption of the alternative marking guideline of "no green at the time of harvest," which will more rapidly lead to achieving the Project restoration objective. The marking policy I recommend, "no green at the time of harvest," was used on the McNally restoration project on the Sequoia National Forest and the Warm Fire restoration project on the Kaibab National Forest, and I understand is being proposed for use on the Rim Fire Restoration Project on the Stanislaus National Forest, as well as on many smaller projects.3 (3.Private communication from Dr. Chad Hanson) It was ultimately also used on the Piute Fire restoration project on the Sequoia National Forest. The salvage harvest of green trees that would otherwise live will have a significant adverse environmental impact. If left in place, these trees will contribute appreciably to and accelerate the restoration of healthy natural ecosystems, one objective of the Project. Their contribution will include: providing a more balanced distribution of tree sizes, such as is found in a natural ecosystem, contributing seed for natural regeneration -- seed uniquely adapted genetically to each microsite -- and providing shade and shelter to protect seedlings from lethal desiccation by solar radiation or wind. Mature green trees left on site will also provide shelter, nesting, and foraging habitat for many forms of wildlife, and their seeds will provide essential food for wildlife. The S&C guidelines overpredict the mortality of damaged live trees, and their use as proposed on the Westside Project4 (4.The Westside Project proposed use of the S&C guidelines is without testing for cambial damage. I do not recommend that testing for cambial damage be done, since the methods the Forest Service has used may further stress fire-damaged trees and create pitch that may attract bark beetles, and are subject to error if not done with great care by experienced personnel. However, the S&C data set will not support guidelines that ignore cambial damage, such as the S&C guidelines.) will result in the cutting of substantial numbers of green but damaged trees that would otherwise live. The problem is, in large part, that the procedure used to develop the S&C guidelines from the S&C data set is statistically incorrect. I summarize the arguments leading to this conclusion below and provide additional details in an appendix. For simplicity I limit this discussion to yellow pine (ponderosa and Jeffrey pine) and white fir, and generally to trees of diameter at breast height (dbh) over 20 inches. These are the trees that can make the largest positive contribution to achieving the Project restoration objective if left standing.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Live (or green) trees will be retained; see response to comment number 12346-55.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#17507-2	In conclusion, my contention that the marking guidelines are based on a model that over-predicts mortality for trees over 20" dbh is consistently supported by multiple pieces of evidence: -- Differences between predictions of mortality from the scientific literature and (for yellow pine) the underlying data base itself, as compared to predictions from the guidelines. -- The the over-representation of trees with high levels of cambial damage in the data base, together with the omission of a cambial damage term in the guidelines that would properly take this into account. The guidelines are simply wrong. As a result, the use of these guidelines will result in the harvest of a number of large damaged but green trees that would otherwise live. This will, in turn, substantially set back natural regeneration of the forest, with adverse environmental consequences on both flora and fauna. I recommend the adoption of a guideline of "no green foliage at the time of harvest," as has been used successfully on other similar projects. Other alternatives are suggested in the appendix.	See Response to Comment numbers 17507-1 and 12346-55.
142.02 - Timber Sales (Salvage)	#18147-1	I am against clear cutting. I am for select logging. in this case, with so much fire kill, I would cut the dead and dying, leave as many live trees as possible. this includes other tree species such as oaks, madrones etc. (perhaps shading conifers when first growing up till they out grow the shade.) in short, keep forests as close to they were originally, no clear cuts, no plantation replants.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Live trees will be left in all salvage harvest units. See response to 12346-55.No clear-cutting is proposed. See Chapter 2 of the final EIS for proposed actions.
142.02 - Timber Sales (Salvage)	#18850-1	It's too bad that the USFS can't do more salvage logging, but with the environmental extremist getting their way it makes it difficult for you to do your job.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#18852-11	This DEIS does not truly reflect ecosystem management, and instead over-simplifies and negates the likely impacts that post fire salvage logging will have on our forests, watersheds and fisheries. (Please see the aerial photo of current salvage logging activities on private land within the Beaver fire area, consider this an indication of likely logging activity effects on landscapes and soils within the Westside Recovery project area, this is not an acceptable land management outcome).	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The EIS discloses the impacts from salvage harvest on vegetation, soils, watersheds and aquatic resources. Salvage harvest on private lands are not a good indicator of the outcomes of this project because the objectives of private land salvage are primarily commodity driven while salvage harvest on the National Forest are driven by multiple objectives including restoration of a fire-resilient forest.
142.02 - Timber Sales (Salvage)	#18852-13	I do support judicious salvage harvesting in order to produce some commodity value,	Salvage harvest is proposed in Alternatives 2, 3, 4 and 5. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.02 - Timber Sales (Salvage)	#18852-17	Retention of old-growth and large diameter trees, particularly those with living canopies should be retained for ecological performance values. Contemplating what some are calling the largest timber sale in Klamath National Forest history and one of the largest proposed by the US Forest Service is daunting. It is arguable that this should never have been proposed singly, that the Beaver fire landscape is distinct from the Happy Camp Complex environment which is distinct from the White's fire landscape. It is also unfortunate that a primary stated goal is to capture commodity value "as soon as possible" and that this obviously and inarguably compromises our ability to truly implement best management practices.	Legacy trees and snags will be retained in all salvage harvest units as described in the project design features. While the Purpose and Need does include capturing commodity value in the fire killed trees it does not exempt the project from proper Best Management Practices as required by the Clean Water Act. Appendix D lists the project specific Best Management Practices which will be implemented on this project.
142.02 - Timber Sales (Salvage)	#18852-45	29) Forest landscapes following catastrophic wildfire events, which are subjected to intensive timber harvesting are particularly vulnerable to long term ecological degradation, once impacted these lands will pose serious challenges to greater ecosystem restoration and resiliency for long time frames.	The activities planned in this project are designed to restore a fire-resilient forested ecosystem in the shortest amount of time. Impacts from salvage harvesting have been considered in the EIS.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#18852-50	-"Noss, R.F., J.F. Franklin, T. Schoennagel, W.L. Baker and P.B. Moyle 2006. Ecology and Management of Fire-prone Forests of the Western United States. Policy Paper, Society for Conservation Biology Scientific Panel on Fire in Western U.S. Forests." "Post-fire logging is almost always inappropriate from an ecological standpoint (Lindenmayer et al. 2004, Lindenmayer and Noss 2006), perhaps especially after high- severity fire. Trees that survive the fire for even a short period of time are critical as seed sources and as habitat that will sustain many elements of biodiversity both above- and below-ground. Removal of structural legacies-living and dead-is inconsistent with scientific understanding of natural disturbance regimes and short- and long-term recovery processes on sites characterized by high-severity fire regimes. Removal of any material is a potential detriment, but removal of mature living trees and the largest and most decay- resistant snags and logs produces the greatest negative impact on recovery processes, slowing the recovery of ecosystem function and characteristic biodiversity. This is without reference to negative effects of the logging process itself, such as impacts of roads on soils and streams."	Citation only. See the beginning of Chapter 3 of the final EIS for a discussion of responsible opposing points of view.
142.02 - Timber Sales (Salvage)	#18852-53	Dr. Jerry Franklin, 1/20/04. "Salvage logging of large snags and down boles does not contribute to recovery of latesuccessional forest habitat; in fact, the only activity more antithetical to the recovery process would be removal of surviving green trees from burned sites. Large snags and logs of decay resistant species, such as Douglas-fir and cedars, are critical as early and late successional wildlife habitat as well as for sustaining key ecological processes associated with nutrient, hydrologic, and energy cycles."	Citation only. See the beginning of Chapter 3 of the final EIS for a discussion of responsible opposing points of view.
142.02 - Timber Sales (Salvage)	#18852-8	The plan however does go to great lengths to articulate the dangers of large woody debris, and standing snags which is used as a key driver in overall planning, I believe this to be either ill-informed or utilized as a disingenuous justification for the projects design focused on salvage logging and commodity production.	The purpose and need for the Westside Fire Recovery Project includes fuel reduction, restoration of wildlife habitat and watershed condition, and public safety as major components of ecosystem recovery, in addition to recovering value from deteriorating timber. The EIS discusses the impacts to fuel loading and fire behavior in the fire and fuels section.
142.02 - Timber Sales (Salvage)	#18857-17	No salvage logging should take place in partially burned stands that sustained minimal (less than 70%) mortality. Undamaged or partially fire damaged stands provide disproportionately important roles in ecological recovery and refugia for the survival of particular biota. (Lindenmeyer & Franklin 2008 p.140)	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See the beginning of Chapter 3 of the final EIS for a discussion of responsible opposing points of view. See also response to comment number 12346-55. See Chapter 2 of the final EIS for a description of what is proposed. Trees that burned at a moderate to high severity are almost all dead; see Chapter 3 of the final EIS for more details about what is proposed, why, and its effects.
142.02 - Timber Sales (Salvage)	#18857-22	Included below is a scientific brief written by Timothy Ingalsbee, Ph.D. of the Western Fire Ecology Center that you and your staff may find instructive. Entire text of article included in original attachment.	Citation only.
142.02 - Timber Sales (Salvage)	#18858-1	But there is an enormous body of science that suggests the trade off of the type of logging you propose is by no means beneficial to wildlife or fisheries. Unfortunately, you don't seem to address any of that science in your DEIS. I have included with these comments copies of just a few papers that call into question the theory that, because a fire might "reburn," post-fire logging is actually environmentally beneficial.	See the beginning of Chapter 3 for a discussion of responsible opposing points of view. The final EIS and supporting documents incorporate best available science.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#18878-77	In a recent review, (Lindenmayer, D. B. & R.F. Noss. 2006. Salvage Logging, Ecosystem Processes, and Biodiversity Conservation. Conservation Biology 20(4):949-958) it was indicated that medium- and large-scale salvage logging operations can: * * * * * * * * reduce or eliminate biological legacies such as large trees with cavities and large logs and coarse woody debris; modify or destroy rare post-disturbance wildlife habitats; influence populations of some species and alter community composition; impair natural vegetation recovery; facilitate the colonization of alien and/or invasive species; alter soil properties and nutrient levels and increase erosion; modify hydrological regimes and aquatic ecosystems, and alter patterns of landscape heterogeneity . Broad overarching statements such as, "salvage logging will promote ecosystem sustainability by increasing the likelihood and speed by which burned forested areas are regenerated .... " needs further explanation and justification. Given time, the ecosystem function and sustainability will recover through natural succession and the timely reintroduction of fire as traditionally practiced by the Karuk People. By promoting the "need" for salvage harvest in terms of ecosystem function and sustainability implies wildfires and the subsequent mosaic pattern of disturbance is an unnatural process and detrimental to forest health. Finally, the USPS Region 5--Ecological Restoration Leadership Intent (2011) p.3 states: "Ensure that vegetation and fire management efforts are grounded in concern for biodiversity and ecological processes both before and after disturbances like fire." This statement clearly suggests any post-fire actions should highlight the biodiversity in the early seral landscape and support ecological process (like returning fire) to build resilience in this evolving landscape. The early seral conditions on the landscape are not conditions to rapidly escape, but conditions to support and foster.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. As described in Chapter 1 of the EIS: "There is a need for restored and fire-resilient forested ecosystems. Wildfires provide some benefits to forest ecosystems such as snag and downed wood creation and short-term fuels reduction in areas of low intensity burns. However, intensely burned forested areas may be slow to recover and heavy fuel loading will result from fallen snags. Following a high severity wildfire, heavy fuel loading predisposes an area to higher intensity and higher severity wildfires in the future. Such fires inhibit forest stand regeneration and result in stand type changes to brush or other non-forested vegetation types, delaying these lands from reaching the desired conditions of the Forest Plan or providing for future forested wildlife habitat per Forest Plan goals and direction. High intensity fires also put remaining wildlife habitat at risk of future loss. By reducing fuels created by the 2014 fires and replanting selected areas, the likelihood and speed by which burned, forested areas are restored is increased. This results in a more fire-resilient forested ecosystem for the benefit of wildlife habitat and watershed conditions. Activities to address this need include: •Salvage harvest of fire-killed trees in selected areas to prevent high fuel loads from fire-killed trees in the future.•Fuels reduction by piling and burning fuels, mastication of fuels, and underburning within the wildland urban interface and other strategic areas.•Replanting of burned areas with an appropriate species mix and spacing for the site.•Retention of clumps of snags within treatment areas to ensure that habitat for snag-dependent species is retained.See wildlife project design project design features in Chapter 2 regarding legacy trees.
142.02 - Timber Sales (Salvage)	#18879-11	Alternative 4 reduces road miles and salvage harvest acres in numerous places. It appears some road miles are dropped not because they are high disturbance or high risk but because they happen to fall within a Key watershed or other sensitive classification. Better management would be to only drop those road segments or salvage areas because of factors present on that particular site rather than because of some conceptual reason or land classification definition.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Alternative 4 was developed to respond to concerns regarding watershed impacts and aquatic resources. A number of criteria including site specific knowledge and field visits of the sites was used to identify the most sensitive watersheds.
142.02 - Timber Sales (Salvage)	#18883-20	The Salvage Harvest definition on pages 30 and 31 of the DEIS states: “In determining what individual trees will be harvested, standing dead trees 14 inches in diameter at breast height or greater will be considered…”. Does this mean that all trees dead or alive less than 14 inches in diameter will be left in all treatment areas?	The statement by the comment is incorrect; not all trees less than 14 inches in diameter will be left in treatment areas. Some will be left, others will be cut to facilitate operability in the unit and still others will be masticated, chipped, piled and burned or other means of disposal. Position statement. See response to Comment number 16695-4.
142.02 - Timber Sales (Salvage)	#18883-25	No new roads should be constructed to harvest dead trees. The economic value of the trees will be far less than the cost of the erosion, sedimentation, and long term maintenance or retirement cost of these roads.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No new permanent roads will be constructed for this project. Old temporary roads will be reopened, but they will put to bed and decommissioned after use so that potential erosion is minimized. See Project Design Features for watersheds. There will be no net increase in road density as a result of the project. Alternative 4 has the least amount of temporary road of all Alternatives. Also see response to comment number 12364-1.
142.02 - Timber Sales (Salvage)	#18907-19	No activity of any kind should be allowed in late-seral or old-growth stands and no harvesting of individual trees over 30" diameter at breast height (DBH) should be allowed.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6271-1.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#18909-10	The Peterson study examined eastern dry forest types, much different than those in the project area as noted in the Taylor et al 1998 study, referenced in the DEIS. The Peterson study looked at areas that burned at 95-100% mortality, while the Westside DEIS considers logging areas at 50% mortality. The DEIS does not detail how these important differences affect the assumptions in the DEIS. Peterson et al.: "Our study examined fuel succession patterns by surveying downed woody fuels across a chrono sequence of dry coniferous forest stands that burned with high fire severity (95- 100% overstory tree mortality) within mixed- and high-severity wildfires in eastern Washington and Oregon, USA, between 1970 and 2007. We sampled forests in which ponderosa pine (Pinus ponderosa) and Douglas-fir (Pseudotsuga menziesii) are the dominant early-seral tree species, though such forests may also contain significant components of lodgepole pine (Pinus contorta), western larch (Larix occidentalis), or true firs (Abies grandis, A. concolor, or A. magnifica). These forests historically supported low- and mixed-severity fire regimes with mean fire return intervals often less than 35 years." Taylor et al. 19982 at page 286: "In drier southern Douglas-fir-dominated forests of the Klamath Mountains in northwest California and southwest Oregon, fire regimes appear to be different from those farther north. Fires occur much more frequently, every 13-22 years, and finer scale canopy openings caused by frequent, less severe fires appear to control stand development patterns." 2 Taylor, Allen H., Skinner, Carl N., Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111 (1998) 285-301	We proposed a 70% probability of mortality threshold for salvage harvest; however most of the stands proposed for salvage harvest are 90-100 percent dead because of ongoing secondary mortality and efforts to flag out any areas that had significant numbers of live trees. We agree with the descriptions of the fire regimes in the comment from Taylor and Skinner (1998).. That does not mean that the findings of Peterson et al (2015) are not applicable. Although we are in a fire regime that is historically low to moderate severity, the Westside Fires were by all accounts, a high severity event because of accumulated fuels from fire suppression and untreated fuels created by the 1987 fires. Those are the conditions described in Peterson et al. 2015. See response to comment number 12346-55. See response to comment number 5873-72 about the Klamath province fire regime and snag retention. See also response 5873-170. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. See EIS Chapter 3, responsible opposing views and agency response. See Also: Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95 Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122 Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91 Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada. Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA. Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID. Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.
142.02 - Timber Sales (Salvage)	#18909-22	The DEIS fails to adequately consider the positive aspects of moderately burned fire areas. There is a consensus of scientific opinion that post-fire logging and artificial conifer plantation establishment is one of the most ecologically damaging activities that could occur after mixed-severity fire4. Moderate severity, as defined in the USDA glossary of terms is fire that causes moderate soil heating, occurs where litter is consumed and duff is charred or consumed, but the underlying mineral soil is not visibly altered. As needles fall in burned areas the soil temperature is decreased, which is favorable to germinating seeds. The DEIS fails to mention the importance of mosses and lichens and their contribution to regeneration and the importance of scorched trees which the project proposes for removal. 4 Letter from Scientists on Proposed Postfire Salvage on the Stanislaus National Forest, central Sierra Nevada region, California. January 3, 2014. Letter from Scientists on Proposed Postfire Salvage on the Stanislaus National Forest, central Sierra Nevada region, California. January 3, 2014	The Burned Area Emergency Response report for the 2014 Westside Fires focused on severe soil effects while the EIS also considers severe vegetation effects of the Fires. As described in Chapter 1 of the EIS: "Of the approximately 185,000 acres that burned on the western Klamath National Forest, approximately 27 percent exhibit very high vegetation burn severity effects. Within high severity areas, fuel consumption of duff, conifer and hardwood litter, saplings, and small and large dead material occurred within the ground and surface profile. Full consumption of canopy foliage and small branches within the crown stratum has left standing dead trees that are storing a tremendous amount of biomass available for future surface fuel accumulation. Areas of high severity burns experienced 75 percent or greater vegetation mortality, loss of canopy and understory cover, and loss of duff layers and large woody debris. The stands that burned at high severity ranged in species composition and structure, including shrub/oak stands, single layered conifer plantations, multi-layered mixed conifer stands, and higher elevation stands dominated by true fir. Most trees within high severity burn areas are expected to die in the short term." Survey and Manage vascular plants, bryophytes, lichens and fungi are considered in the Botany and Non-Native Invasive Species section of Chapter 3 of the EIS.

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142.02 - Timber Sales (Salvage)	#18909-26	On page 115 of the DEIS, "Hazard tree removal where it does not overlap with proposed salvage harvest units will decrease fuel loading and, therefore, potential fuels hazard; this will indirectly promote conifer regeneration." This is not supported by the best available science. For instance it is well known that opening forest canopies can increase solar radiation leading to increased brush growth, which increase ground and ladder fuels, in turn increasing fire risk. Also stated on page 115 of the DEIS: "When combined with the direct and indirect effects of the proposed salvage, site preparation, and planting treatments, the end result would be an increase in acres treated for hazardous fuels reduction, an increase in acres of roadside treatments and an increase in acres of planted conifer stands set on a trajectory towards establishing resilience to fire, insects, and disease and towards achieving northern spotted owl dispersal, foraging and nesting/roosting habitat characteristics. The objectives of the proposed project are in concert with those proposed by these overlapping projects which may no longer be implemented within the project area due to changes in conditions." The assumption that conifer plantations would set a trajectory towards establishing resilience to fire, insects, and disease and towards achieving northern spotted owl dispersal, foraging and nesting/roosting habitat characteristics is a broad assumption not based on the best available science, given that the project is contrary to the recovery of the species and would likely negatively affect Northern spotted owls. The proposed project would also remove, downgrade and degrade thousands of acres of Critical Habitat, suitable habitat and negatively affect Activity Centers. Further, it is not clear which NEPA projects will no longer be implemented as this information is not readily available in the DEIS or supporting files. The DEIS fails to consider all of the past, present and reasonably foreseeable national forest timber sales as well as private lands timber harvest plans.	Opening forest canopies can increase solar radiation and increase the growth of brush. However, the fire return intervals also play a role in the ability of a site to establish conifer species. Sites with heavy fuels will have a higher chance of burning and setting back conifer regeneration. Appendix C of the draft EIS lists the projects considered for cumulative effects (including national forest timber sales and private timber harvest plans) and each resource section of Chapter 3 includes a cumulative effects section.
142.02 - Timber Sales (Salvage)	#18909-5	Fire-created snags and logs serve many vital ecological functions and services for forest soils, streams, vegetation, and wildlife.1 Large-diameter snags and logs can also help mitigate conditions that lead to high-intensity fires, and aid post-fire natural recovery processes. Conversely, commercially extracting fire-killed trees via salvage logging causes significant short- and long-term adverse effects on forest ecosystem structures, functions and processes. Considering the wide array of vital ecological services that snags and logs provide, the term "salvage" is appropriate only for logging operations in which the primary management objective is extraction of commodity timber values at the expense of other economic and ecological values, which is not applicable to Late-Succesional Reserves. 1 Lindenmayor, D. B., Foster, D. R., Franklin, J. F., Hunter, M. L, Noss, R. F., Schiegelow, F. A., Perry, D. Salvage	See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#18937-14	I also traveled to the Whites Fire area, just over Etna Summit and very near Sawyers Bar, California. I took this trip after an extended discussion at the KNF Headquarters in Yreka with Mike Hupp, Westside Fire Recovery IDT leader. After Mike and I's and inspirational discussion, I was very disappointed with what I saw. The roadside mark and units poised for clearcut were astounding, even to the untrained eye. I felt I had been misled about the Project's objectives. The large salvage units I observed were on steep slopes and contained many live trees above the North Fork of the Salmon and the South Fork of the Russian Rivers. If these units are cut and roads are opened for hauling, I am very concerned that increased temperatures, additional sediment and road use will have a significant effect on these rivers' salmon habitat and other aquatic habitat.	Salvage harvest units do contain live trees which will be left according to the marking guidelines. There have not been any identified significant effects on salmon or aquatic habitat as a result of this project because specific project design features have been developed to minimize impacts to soils and riparian/aquatic resources.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#19073-2	The proposed action in the Draft EIS is proposing to treat only approximately 4% of the total Forest Service burned area with salvage harvesting (a slightly higher percentage when other activities are included). All of the other Alternatives propose to treat even fewer acres. The selected alternative should treat as many acres as possible on all of the fire areas considered, including the Beaver Fire. It is apparent that treating only 4% of the burned area does not come close to a complete fire recovery effort given the amount of acreage burned and the large acreage of high mortality. I also understand the regulatory restrictions you are dealing with and time frame issues with NEPA, undertaking an EIS, and required consultation and coordination with other government agencies and groups. Also, the time frame needed in order to adequately implement in a timely manner is a key consideration. The timber that will be salvaged and offered for sale will have already started to decay and have active worms working in the sap-wood. It has a limited time, possibly 2 years before the merchantable qualities of this timber will be lost and none recoverable. I would like to have seen more of the high severity burned areas treated but understand the above restrictions. I and my company will support the selection of Alternative 2. It is better than nothing and will help to achieve some measure of rehabilitation and salvage of the values on these burned forests.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The purpose and need for the Westside Fire Recovery Project includes fuel reduction, restoration of wildlife habitat and watershed condition, and public safety as major components of ecosystem recovery, in addition to recovering value from deteriorating timber.
142.02 - Timber Sales (Salvage)	#19073-4	The timeframe for getting a return on your investment and allowing for rapid re-establishment of conifer stands is very short. There is a need to make a rapid decision and begin implementation in early June.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service is focused on getting a decision for implementation as soon as possible.
142.02 - Timber Sales (Salvage)	#19073-5	It is imperative the EIS visibly display and discuss the small amount of burned acres that are actually being proposed for treatment. Approximately 4% of the burned acres are planned for salvage harvesting in Alternative 2. That means 96% will be not treated with salvage operations. This needs to be highlighted in order to show the miniscule effects any salvage operation will have on resource values within the burned areas.	See the treatment maps in Appendix A of the final EIS and see tables and pie charts is Chapter 2 of the final EIS for a description of what is being proposed. Chapter 1 of the EIS quantifies the project area and Table 2-31 compares the project activities by Alternative.
142.02 - Timber Sales (Salvage)	#19092-1	Please allow post-fire logging in areas affected by summer 2015 wildfires. Salvage logging is important because the dead trees attract insects which infect healthy trees.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Salvage harvest is proposed in all action Alternatives; see Chapter 2 of the final EIS for what is being proposed.
142.02 - Timber Sales (Salvage)	#19157-5	Salvage logging should be implemented in low to moderate fire severity areas.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Salvage harvest is only proposed in areas of moderate to high severity vegetation mortality; see Chapter 2 of the final EIS for what is being proposed.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#3678-16	The IDT members know Supervisor Grantham's Purpose & Need statement at page 10 indicating the need to "restore fire-resilient forested ecosystems" is a legitimate need but logging the area will definitely not help achieve the need. A few IDT members know logging is not a "catch-all" activity as is currently used by the USFS to solve all forest problems (real or perceived). Indeed, logging creates many problems and real restoration opportunities. Here's how supervisor Grantham words her Purpose & Need statement at page 11 in the DEIS. The first sentence below is true. The rest was added to justify logging. "Wildfires provide some benefits to forest ecosystems such as snag and downed wood creation and short-term fuels reduction in areas of low intensity burns. However, intensely burned forested areas may be slow to recover and heavy fuel loading will result from fallen snags. Following a high severity wildfire, heavy fuel loading predisposes an area to higher intensity and higher severity wildfires in the future. Such fires inhibit forest stand regeneration and result in stand type changes to brush or other non-forested vegetation types, delaying these lands from reaching the desired conditions of the Forest Plan or providing for future forested wildlife habitat per Forest Plan goals and direction. High intensity fires also put remaining wildlife habitat at risk of future loss. By reducing fuels created by the 2014 fires and replanting selected areas, the likelihood and speed by which burned, forested areas are restored is increased. This results in a more fire-resilient forested ecosystem for the benefit of wildlife habitat and watershed conditions. Activities to address this need include: • Salvage harvest of fire-killed trees in selected areas to prevent high fuel loads from fire-killed trees in the future. • Fuels reduction by piling and burning fuels, mastication of fuels, and underburning within the wildland urban interface and other strategic areas. • Replanting of burned areas with an appropriate species mix and spacing for the site. • Retention of clumps of snags within treatment areas to ensure that habitat for snag-dependent species is retained. " Comment: Once again, best science tells us that the statement "Following a high severity wildfire, heavy fuel loading predisposes an area to higher intensity and higher severity wildfires in the future" is untrue. Excerpts from Final Report, Joint Fire Science Program Project 03-1-4-11 "Initial effects of salvage on fuel loads two and three years after the 2002 fire and the potential for reburns (Donato et al. 2006 Science) showed that: • Salvage logging can produce large quantities of fine and coarse slash fuel from unmerchantable materials—equal to [fine] or 3.5 times [coarse] that present in mature forests on comparable sites. Inherent felling/handling/grading practices result in levels that may decouple with prescribed levels. • Relative to unsalvaged burn areas, this slash may result in higher fire potentials in the event of reburn over short time scales (e.g. several years); effects over longer time scales due to removal of larger material warrant further study. • These results are consistent with those of other ongoing studies on these and other fires (Thompson et al. 2007; McIver and Ottmar 2007); together these studies are substantially broadening and deepening our understanding of postfire fuels management." Final Report, Joint Fire Science Program Project 03-1-4-11 (pages 1 & 2) Project Title: Effects of grass seeding and salvage logging on fuel loads, potential fire behavior, and biological diversity of severely burned low elevation southern Oregon forests Project Location: Siskiyou National Forest, southwestern Oregon Principal Investigators: W. Douglas Robinson, J. Boone Kauffman, Beverly E. Law http://www.firescience.gov/projects/03-1-4-11/project/03-1-4-11_final_report.pdf Excerpts from "Reburn severity in managed and unmanaged vegetation in a large wildfire": "Biscuit Fire severity in the logged and planted areas was 16–61% higher than comparable unmanaged areas depending on the values of the covariates. The particular ecological effects of this difference are unknown; nonetheless, the hypothesis that salvage-logging followed by planting reduces reburn severity is not supported by these data." "Our findings are inconsistent with the hypothesis that this particular postfire management system reduces the risk of high-severity fire in a reburn occurring 15 years after the original fire. The logging component of this system is often considered a fuel-reduction treatment (2, 5–7). However, the large-diameter fuels removed during harvest do not readily carry wildland fire (12, 27). Thus, logging may not reduce available fuels. In fact, harvesting fire-killed trees may increase available surface fuels by transferring unmerchantable material, such as tops, branches, and broken boles to the ground immediately after harvest (3, 8)." 2007, "Reburn severity in managed and unmanaged vegetation in a large wildfire" By Jonathan Thompson & Lisa Ganio, Department of Forest Science, Oregon State University and Thomas Spies, Pacific Northwest Research Station, U.S. Department of Agriculture Forest Service	Direct, indirect, and cumulative effects to wildlife, watershed, soils, and fuels, among other resources, as well as management requirements to minimize adverse effects, are addressed in the EIS, with appropriate references to the scientific literature. The Forest Service acknowledges that there is uncertainty and conflicting science for some of the management actions. However, impacts to forest resources have been analyzed based on the rationale presented. Numerous scientific publications are cited and utilized in the assessment of effects, showing both positive and negative effects.It is acknowledged that salvage harvesting would elevate the amount of surface fuels in the short term before fuels reduction activities (machine and hand piling, broadcast burning, mastication) are accomplished. However, after treatment activities are completed, there would be a significant reduction in large surface fuels which relates to fireline production rates. Fireline production rates are significantly slowed where firelines intersect large down logs. Snags contribute to long range spotting and increased fire size. Numerous snags preclude nighttime firefighting operations, normally the time when fire behavior is at its minimum and significant suppression activities may be conducted. Strategic placement of the treated units would reduce woody fuels which would reduce threats of future wildfire behavior (Peterson, Dodson and Harrod 2014). Suppression forces could enter these areas and take appropriate actions as needed to manage fires to achieve the desired condition. Suppression forces would not be hindered by the high density of snags or high levels of Coarse Woody Debris in the units which would allow immediate and appropriate action to be taken. Suppression actions would not be restricted by fire behavior; thus, direct suppression actions would be possible within treated stands. Without treatment, control of future fires will be difficult and time consuming in areas that have high densities of snags and surface fuels. Within 10 years, treatments are expected to result in future fire behavior that would enable ground crews to use direct attack within those treatment units. See response to comment number 17910-2.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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		http://www.pnas.org/content/104/25/10743.full	
142.02 - Timber Sales (Salvage)	#3678-33	Issue #40---Best Science Clearly Indicates Post-Fire Logging causes Significant, Long-Term Harm to the Natural Resources in the Forest. Providing Short-Term Financial Benefits to the Resource Extraction Corporations is not a Reason to Cause such Environmental Plunder. No human development action in the forest inflicts more long-term ecosystem damage than a post-fire timber sale. Opposing Views Attachment #2 includes statements of more than 400 Ph.D. scientists who are experts in their fields. Their statements describe how scores of natural resources in the forest are damaged and/or destroyed by post-fire logging. As the scientists point out, some of this damage is long-term and so severe the resources will cease to function properly and the landscape will only restore itself after many decades if humans leave it alone. Human actions following any post-fire timber sale will only slow down the natural restoration process.	Direct, indirect, and cumulative effects to wildlife, watershed, soils, and fuels, among other resources, as well as management requirements to minimize adverse effects, are addressed in the EIS, with appropriate references to the scientific literature. The Forest Service acknowledges that there is uncertainty and conflicting science for some of the management actions. However, impacts to forest resources have been analyzed based on the rationale presented. Numerous scientific publications are cited and utilized in the assessment of effects, showing both positive and negative effects.

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#3678-35	Comment: No legitimate science even infers that there might be ecological benefits from removing dead and dying trees from a post-fire landscape. Scores of available science literature describe the ecological destruction that accompanies a post-fire timber sale. Comment: I ask the IDT members to please honestly examine the tradeoffs between providing opportunities for resource extraction corporations to profit financially vs. the long-term ecological damage that post-fire logging will inflict. Spending your yearly timber funding and pleasing your supervisor by meeting their volume expectations must never justify post-fire logging. Indeed, the Federal Courts agree that the Responsible Official must disclose and consider "adverse impacts" when making the final decision that the IDT has failed to do here.	This comment is an opinion of the commenter. Direct, indirect, and cumulative effects to wildlife, watershed, soils, and fuels, among other resources, as well as management requirements to minimize adverse effects, are addressed in the EIS, with appropriate references to the scientific literature.
142.02 - Timber Sales (Salvage)	#5873-154	Although many existing silvicultural systems have been designed to mimic stand-scale natural disturbances, McRae et al. (2001) and Palik et al. (2002) remind us that natural disturbances are inherently different from those of silviculture. One difference, of course, relates to the amount of carbon removed form the site when harvesting a forest. Removals tend to be much greater with harvesting than for fire, for example. Fire tends to create a complex mosaic of forest types and ages on the landscape. Forest harvesting, as commonly practiced, tends to simplify forest composition and structure. Crow, T.R. and A.J. Perera. 2004. Emulating natural landscape disturbance in forest management – an introduction. Landscape Ecology 19: 231-233. http://www.firescience.gov/projects/01-1-3-43/project/01-1-3-43_01_1_3_43_Deliverable_02.pdf	As described in Chapter 3 of the EIS: "Although there is some controversy about whether older trees are more successful in storing carbon than younger trees (Coulson et al. 2015), there is general agreement that forests are an important factor in carbon storage (Fitzsimmons, et al. 2004, US EPA 2013, Pan et al. 2011). Likewise, there is general agreement that less carbon is stored in decaying wood than in wood content in lumber and manufactured wood products (Skog 2008, Finkral and Evans 2008) and that stand-replacing wildfire releases carbon into the atmosphere (Vose et al. 2012). Therefore, activities that accelerate the regeneration of forests (conifer and hardwood) after moderate- to high-severity vegetation burns, that promote the use of dead and dying wood rather than allowing it to decay, and lessen the likelihood of stand-replacing wildfire and insect disturbance would have a beneficial effect on carbon storage."
142.02 - Timber Sales (Salvage)	#5873-156	From a wildlife perspective, stand-replacing fires and timber harvesting both represent major disturbances which significantly alter habitats … Despite their similarities, fire and logging differ in several of the habitat conditions they procure for wildlife. Wildfires, especially when severe, generate large amounts of standing (eventually downed) dead trees including large ones which represent an important habitat and food source for many wildlife species (Drapeau et al. 2002; Pedlar et al. 2002). … [T]he spatial variability of fire severity creates various amounts of green or mixed-severity stands over the burned landscape (e.g., Kafka, Gauthier, and Bergeron 2001; Smyth et al. 2005), which represent important refuge sites for some wildlife species (Norton and Hannon 1997; Tittler and Hannon 2000; Lance and Phinney 2001; Tittler, Hannon, and Norton 2001). Contrarily, clearcut harvesting removes most of the large live trees, leaves few standing deadwood, and retains variable amounts of non-commercial trees and understory vegetation. … All studies directly comparing bird assemblages in burned and harvested stands reported an important divergence in bird assemblages, especially for the first years following disturbance (Hutto 1995; Schulte and Niemi 1998; Hobson and Schieck 1999; Imbeau, Savard, and Gagnon 1999; Schieck and Hobson 2000; Morissette et al. 2002; Simon, Schwab, and Otto 2002). One of the most striking differences lies in the abundance of the snag-associated guild in post-fire stands. … [H]igh snag densities are clearly missing in harvested stands (Schulte and Niemi 1998; Pedlar et al. 2002; Simon, Schwab, and Otto 2002). Concordantly, Imbeau, Savard, and Gagnon (1999) found no resident and cavity-nesting species in recent clearcuts, where little retention (green or dead trees) has been left on site. Similarly, Hobson and Schieck (1999) found very distinct assemblages between burned and harvested forests, a difference that was partly explained by the dominance of several snag-associated species. These major differences in the abundance of snag-associated species are of particular importance considering that several of these have been identified as the most sensitive to the long-term effects of forestry (Imbeau, Mönkkönen, and Desrochers 2001). … The magnitude of the initial divergence and eventual convergence in bird communities between fire and harvesting may greatly depend on the level of residual vegetation (Schieck and Hobson 2000). Schieck and Hobson (2000) found that bird assemblages from larger patches within disturbed stands supported more species from older forests than smaller ones. In contrast, bird communities from smaller patches (within cut blocks vs. burned stands) mainly reflected the surrounding post-disturbance communities, therefore showing the same initial divergence in bird assemblages between post-fire and post-harvest stands reported by Hobson and Schieck (1999). Nonetheless, over time these small patch communities also became more similar to those inhabiting mature fire origin forests and hence converged as succession proceeded (although some differences still persisted up to 60 years after disturbance). … Early after disturbance, most stand-level attributes differ between	The comment provides a number of citations concerning fires and forest ecology but does not show how those are specific to the conditions of the Westside Recovery Project. There are about 52,000 acres of moderate to high severity fire where over half the trees were killed.. The most aggressive harvest proposal (Alternative 2) would harvest about 15 percent of that area. Within harvest units, snag retention standards and coarse woody debris standards must be met. Many hundreds of acres have been deleted from the Proposed Actio to maintain snag habitats. Since over 80% of the high severity burn areas would be retained, we don't believe there will be a shortage of snags. Late Successional Reserve land allocation areas comprise a majority of acres identified for treatment in the Proposed Action. Late-Successional Reserve is not regulated for timber harvest in the Klamath Forest Plan. The purpose and need for the Westside Fire Recovery Project includes fuel reduction, restoration of wildlife habitat and watershed condition, and public safety as major components of ecosystem recovery, in addition to recovering value from deteriorating timber. See Chapter 1 of the EIS for the rationale on why salvage harvest is proposed in Late Successional Reserves. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. Clear-cutting is not proposed; see Chapter 2 of the final EIS. Also see Chapter 2 for a description of project design features for resource mitigation. Green trees will be retained; see response to 12346-55. See Chapter 3 for a discussion of wildlife effects. See also EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised

Code	Comment Number	Comment Text	Response
		harvesting and wildfire. Structurally, young post-fire stands are characterized by more snags and less downed woody debris than young post-harvest stands. … Biodiversity elements significantly differ between burned and logged sites. Early after disturbance, significant differences in understory vascular and non-vascular community composition are commonly reported. Faunal assemblages, be they mammals, invertebrates, or birds, all seem to respond differently initially to harvesting- and wildfire-induced disturbances. … At the stand scale, while most forest attributes are different early after disturbance between burned and logged stands, the majority of these converge a few decades after fire. A few exceptions are to be noted, though. … [W]hile faunal communities do become less different as time passes, late in succession some species present in burned stands are either significantly less abundant or absent in similarly aged logged stands. … Post-fire salvage logging affects ecological processes, biological legacies, and the abundance of species commonly encountered only after fire. Removal of fire-killed trees can affect tree regeneration, understory composition, the abundance and distribution of dead wood, wildlife habitat, and soil properties. … At the landscape scale, the most important difference between fire and harvesting regimes is the distribution of stand age classes. The proportion of stands older than the rotation period (usually 100 yrs) tends toward zero under a fully regulated harvesting regime, while it is around 37% under a fire regime of similar rotation period. This results in a significant loss of over-mature forests in managed landscapes, potentially affecting organisms that are often associated with such stands. NCASI. 2006. Similarities and differences between harvesting- and wildfire-induced disturbances in fire-mediated Canadian landscapes. Technical Bulletin No. 924. Research Triangle Park, N.C.: National Council for Air and Stream Improvement, Inc. http://landscape.zoology.wisc.edu/People/Simard/NCASI924.pdf	
142.02 - Timber Sales (Salvage)	#5873-45	The ICBEMP analysis showed that traditional salvage logging that removes large trees is not compatible with ecosystem management. Can salvage timber sales be compatible with ecosystem-based management? … Our findings suggest that this type of harvesting is not compatible with contemporary ecosystem-based management. Ecosystem-based management would emphasize removing smaller green trees with greater attention to prevention of mortality rather than removal of large dead trees. Quigley, Thomas M., tech. ed. 1996; The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment.) Gen. Tech. Rep. PNW-GTR-382; Page 178.	The Inner Columbia Basin Ecosystem Management Project is a large-scale regional ecosystem assessment project in the upper Columbia River Basin on the east side of the Cascades. As such it is not directly applicable to the Klamath National Forest. Management direction for the Klamath National Forest is found its Land and Resource Management Plan or Forest Plan. As a general principle of forest management, we agree that managing smaller green trees to prevent mortality from fire and insects is preferable to dealing with large dead trees after a stand replacement fire, however we are trying to address the circumstances created by the fires on the Klamath National Forest in 2014. About 52,000 acres of the Forest burned with moderate to high intensity killing most of the trees. Retention of all of the trees killed in the fires would create an unacceptable fuels risk. The Westside Fire Recovery project would salvage a little over 10% of the moderate to high severity burn areas where most of the trees were killed (5,760 acres out of an estimated 52,000 acres). Within Late Successional Reserves, which are managed for large trees, 77% of the stands with mostly dead trees greater than 24 inches would be retained. Lumping green and dead trees together (all burn severities) 90% of the stands greater with trees greater than 24 inches in diameter would be retained (Appendix E, Table 12). In addition, legacy trees (very large old trees) have been marked for retention wherever they occurred. See response to comment12346-55.The Inner Columbia Basin Ecosystem Management Project analysis states: "Salvage—We found that salvage activities could contribute to the achievement of long-term ecological integrity by emphasizing prevention of insect and disease outbreaks rather than focusing on the removal of large recently dead trees. Such an approach would include removing smaller living trees as part of the overall management regime and emphasizing stand structure and composition at the watershed level, rather than managing at the stand level. Low risks to ecological integrity would exist from treating currently roaded areas, where companion efforts might include reducing adverse effects associated with roads. Such approaches can be consistent with attainment of economic objectives for salvage activities."

Code	Comment Number	Comment Text	Response
142.02 - Timber Sales (Salvage)	#6271-1	I appreciate your work in developing the Northwest Forest Plan since it balances the need to protect "late-successional" old-growth reserves and geological riparian reserves, and focusses logging along major access roads. I was dismayed to learn that these well developed policies are to be ignored so that recently burned areas in the KNF can be logged. Such logging on steep unstable slopes will damage the ecological values of the area and go against settled policy in the Northwest Forest Plan. Please follow your plan and stop this irresponsible logging project.	There is salvage harvest proposed within Late-Successional Reserve and Riparian Reserve areas. See Chapter 1 of the EIS for a discussion of why salvage harvest is proposed in these areas and how it is consistent with the Northwest Forest Plan. Effects from salvage harvest on water quality, wildlife, aquatics, vegetation and other resources are disclosed in Chapter 3 of the EIS.
142.02 - Timber Sales (Salvage)	#6924-1	So "late-successional" Old-Growth reserves and geological riparian reserves survived the Wild Fires as nature intended and you use it as an excuse to clear cut!?	See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#7136-1	I am writing in response to the proposed logging in the Westside Salvage Progect. Having been around clearcut logging, I am convinced there is no other reason for it than greed. It is my understanding that it is illegal in these protected forests. I have spent time in other countries where the wildlife and wild landscapes have been categorically destroyed by human hands. Wildfires are destructive, yes, but the biological diversity is still constructive after a fire, whereas landscapes and wildlife become desolate after a clearcut. Please consider what we have to lose, and conversely, what we have to gain by these decisions.	See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#7563-1	I am shaking my head, by the extreme clearcut logging of late successional and old growth reserves as well as geological riparian reserves proposed by the Klamath National Forest in the Westside Salvage Project. I'm hoping it doesn't happen however, Fire is a possible and natural occurrence down the road in this planning area. A great reason why I am including my letter. It is unacceptable allowing this illegal logging of protected forests that belong in the hands of earth loving Americans. The Northwest Forest Plan becomes meaningless if reserves are only protected until timber planners deciding on logging them. This needs immediate change. Also, a program start up of take a tree / plant a tree, must be in place immediately. From the damage already occured on previous deforestations. It takes much time waiting on a tree growing upwards in the direction of adulthood, giving us all their benefits of oxygen, medicines, music and protecting wildlife's home base. Kindly join us now, with fire ecologists, forestry specialists, impacted communities and local tribes focusing on restoration and fire safety instead of what seems like pushing divisive and controversial clearcut logging proposals on steep slopes in key watersheds and critical wildlife habitats. Klamath National Forest timber planners should not be allowed acting above the law. The Forest Service needs meeting of the minds, in betterment with its obligation, practicing being a good steward of the land. Follow the Northwest Forest Plan. Focus logging along major access roads and protect the most important and vulnerable recovering areas: the late successional and geological reserves.	See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#7776-1	Please reconsider the "Westside Fire Recovery Project" in the Klamath National Forest, which is actually a plan to clear cut old-growth trees. A naturally occurring forest fire is part of nature and the forest ecosystem that maintains the balance so necessary for endemic life to thrive. A clear cut may be profitable, but it is not good science and it is definitely not good for our environment or us. Please let nature take its course unhindered.	See response to comment number 6271-1.
142.02 - Timber Sales (Salvage)	#7794-1	As a frequent visitor to KNF, especially its relatively intact areas, and studying ecological and biological issues I have come to understand that the "Westside Fire Recovery Project" in the Klamath National Forest is merely an institutionalized and rather corrupt practice that has done severe damage to indigenous species, and results in improper clearcutting of old-growth trees.	See response to comment number 6271-1.

Code	Comment Number	Comment Text	Response
142.04 - Harvest Methods	#12346-28	In the Grider Creek Key Watershed Forest Service "specialists reviewed heavily impacted areas relative to the proposed units and found that, particularly in Upper Grider Creek 7th field watershed, there is potential for adverse effects related to sediment from salvage harvest due to heavily impacted riparian areas within and downstream of project units 520, 524, 525 and 528." ACSOR at 49. Emphasis added. Please note this information was not carried forward into the aquatic analysis contained in the Westside Salvage Logging DEIS. Page 231 of the DEIS does reveal that "[p]ost fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production." The ACS and the CWA do not permit Forest Service logging actions that will result in a 6 fold increase in sediment production let alone those that will result in a 1,000 fold increase. In contrast to the proposed accelerated erosion from proposed salvage logging activities, were the agency to allow burned stands to recover as nature intended "natural falling of dead needles, branches and eventually tree boles would continue to assist in recovery of soil stability." DEIS at 230. Please note that much of the analysis in the DEIS and ACSOR rely upon the existence of Riparian Reserves to mitigate and reduce sediment production from upland salvage logging activities. Yet the DEIS calls for logging in steep, unstable Geological Riparian Reserves and in moderately and high severity logging units above burned Hydrological Riparian Reserves in which "key riparian functions, including sediment retention capacity and streams shade, are assumed to be lost…"ACSOR page 49. As acknowledged on page 231 of the Westside DEIS, "[n]ewly constructed roads are the largest source of erosion and this is exacerbated in a burned environment because the capacity of the landscape to moderate flow and trap sediment is greatly reduced." Emphasis added.	Fisheries, earth, and water scientists analyzed the effects of project activities and developed Project Design Features to protect riparian and aquatic resources. See Aquatic Conservation Strategy Report, Biological Assessment for Fish, EIS Chapter 3 - Aquatic Resources section, and the Aquatic Resource Report and addendum for the final EIS. If no action is taken, the watersheds with a high risk of temperature regime alterations, without artificial regeneration that is proposed in the action Alternatives, will have an extended duration of elevated risk. Natural regeneration will occur, but in general it will be more than 80 years to get trees with 10 inch diameters at breast height in areas burned with high and moderate severity (draft EIS page 202-203). For landslide risk, the Geology Report states: There is a reduction in the duration of elevated risk due to planting for nine watersheds compared to Alternative 1 [No Action]. The reduction in duration of elevated risk will benefit natural resources and infrastructure in the long-term.
142.04 - Harvest Methods	#12346-68	Comment 4: We asked that BLM provide some flexibility in how fuels would be treated by focusing on the desired goals. The BLM has restricted fuels treatments to handpiling and burning. Contractors could use light weight equipment to treat fuels without detrimentally compacting soils.Response: The commenter has not provided details on methodology or supporting science that would support the claim that machine piling could be done without detrimentallycompacting soils in excess of RMP standards for percent area compacted by current activities. Resource management plans call for limiting compaction in harvested areas in order to minimize soil productivity losses. Therefore, no additional use of mechanical equipment for fuels reduction was proposed, as ground-based logging would compact up to 12 percent of the harvest units. This is particularly important in the Cottonwood planning area as the majority of soils contain high rock content. It was identified that ripping the soils in this areawould bring rocks and cobbles to the surface. The priority was given to minimizing the soil area compacted instead of trying to mitigate the effects. Additionally, the harvest prescription resulting in relatively few trees per acre being cut minimizes the slash, and consequently, also reduces the need for mechanical fuel treatment. Medford BLM Cottonwood Project EA Appendix A, Response to Comments Page 3-2: http://www.blm.gov/or/districts/medford/plans/files/Revised_EA_Final.pdf	The Bureau of Land Management Cottonwood Project is outside the scope of this project's analysis. The Bureau of Land Management Cottonwood Project infers that "relatively few trees per acre are being cut minimizes the slash…". This statement isn't applicable for this project. It is anticipated that areas with salvage harvest and post-activity fuels (slash) will require mechanical site preparation for fuels reduction, as proposed. See Chapter 2 of the final EIS for a description of proposed actions.

Code	Comment Number	Comment Text	Response
142.04 - Harvest Methods	#12354-5	DeMaynadier, Phillip G., and Malcolm L. Hunter J r. "The relationship between forest management and amphibian ecology: a review of the North American literature." Environmental Reviews 3, no. 3-4 (1995): 230-261. Abstract Questions about the compatibility of forest harvesting practices and conservation of biological diversity are largely driven by concerns that habitat quality for many species may be degraded in intensively managed forest landscapes. We review the literature on relationships between common forest harvesting practices and the distribution and abundance of amphibians, a group that has attracted considerable attention in recent years because of their potential ecological importance in forest ecosystems and because of reports of widespread population declines. Clear-cut harvesting generally has negative short-term impacts on local amphibian populations, especially salamanders.. . . However, research on the influence of forest age suggests that the long-term effects of forest harvesting on amphibians are variable, and for many species these effects can be mitigated if regeneration practices leave adequate microhabitat structure intact. In contrast, long-term effects can be significant in forest plantations, which are often associated with intensive site preparations and stand management practices that modify levels of coarse woody debris and other microhabitats. Other forest practices reviewed for their effect on amphibians include prescribed fire, logging roads, and streamside harvesting. We discuss problems commonly encountered in the experimental design and measu rement of forest amphibian populations, including a notable lack of pretreatment data, and outline several aspects of amphibian-forestry relationships in need of further research. Management recommendations relevant to conserving upland and riparian zone amphibian habitat during forest harvesting are offered.	This article referenced by the commenter discusses the impacts of clear-cutting harvest methods on amphibians that are not relevant to this project's analysis. The article also mentions the impacts of site preparation and planting on soils and amphibians if coarse woody debris levels are modified. See Chapter 2 for a discussion of proposed actions. For the salvage harvest proposed by this project, watershed and wildlife project design features have been incorporated for resource protection, including the retention of coarse woody debris; see Chapter 2 of the final EIS for project design features. The project is required to meet the coarse woody debris standard and guideline 6-16, "A renewable supply of large down logs is critical for maintaining populations of fungi, arthropods, bryophytes, and various other organisms that use this habitat structure. Provision of Coarse Woody Debris is also a key standard and guideline for American marten, fisher, 2 amphibians, and 2 species of vascular plants. The objective is to provide Coarse Woody Debris well-distributed across the landscape in a manner which meets the needs of species and provides for ecological functions. Standards and guidelines would provide for appropriate Coarse Woody Debris quantity, quality (such as species, decay stage, and size) and groups of plant associations and stand types, which can be used as a baseline for managers to develop prescriptions for landscape management. An important factor is to provide the Coarse Woody Debris within a forest patch so that the appropriate microclimate for various organisms that use this substrate is available." (See the soils discussion under Chapter 3 of the final EIS for a discussion of effects.)
142.04 - Harvest Methods	#17313-5	For example, the decommissioned portion of 46N62 in lower Walker Creek may have too great of an environmental cost to reopen (allows salvage on units 058, 058-1, 058-3,058-6, 058-7). In comparing the area accessible in Alt. 2 compared to Alt. 4, the treatment area on the west side (Unit 058-3) was reduced in Alt. 4 without that road access. Could more of that area be included as a helicopter unit so that the area adjacent to the private property could still have treatment of the larger fuels if the road is not opened? Could the possibility of heli yarding from the west side of the private be explored? Maybe it is not critical that the entire Unit 058-3 be treated? The Thom-Seider project put a 500-foot fuels reduction buffer around the private properties downslope of Unit 058-3 that if implemented may provide reasonable protection from wildfire. We urge your staff to make a careful assessment of the fire hazard to those properties and alternatives to re-opening the decommissioned portion of 46N62.	The interdisciplinary team did a close review of what treatments units required treatment and what access roads were and were not needed for the proposed treatments. Some components of Alternative 4 have been incorporated into the preferred Alternative for the final EIS, modified Alternative 3; see Chapter 2 for a discussion. For modified Alternative 3, about three miles of new temporary roads will be constructed. This Alternative reduces the mileage of temporary roads on existing roadbeds that will be used for project access to less than five miles. All temporary roads associated with salvage in the Beaver project area were dropped due to dropping the associated salvage units. In the Beaver project area, there are no new temporary roads and no temporary road actions that involve stream crossings. About five miles of temporary roads on re-opened decommissioned roads are proposed for use. The decommissioned section of Forest Road 46N62 (also referred to as the “Caroline Creek Road”) will remain closed. Sections of decommissioned road associated with dropped salvage units were also dropped; these include decommissioned sections of 45N56YA, 46N42Y, and 46N78 which will remain closed. All temporary roads, including those on previously decommissioned roads, will be closed and hydrologically stabilized according the project design features. Also see response to comment number 12364-1.
142.04 - Harvest Methods	#17478-1	as necessary as timber harvest is, remembering viable and proven practices benefits both forest health and business interests. after decades of repeating fire syndrom, the measured impact requires recognition of logging practices and effects	The design of salvage harvest proposed in this project has built upon past practices that have worked when developing the current practices.
142.04 - Harvest Methods	#17481-26	Prescriptions should follow Dr. Malcom North's recommendations to increase mechanical treatment in stands up to 45 % slope. This will pave the way for well-planned prescribed fire. This also should increase pace and scale of recovery.	Watershed Project Design Features for ground-based equipment are described in detail in Chapter 2 of the EIS: "Ground-based harvest equipment will be limited to 35% slopes, except when moving from one bench to another on dormant landslide terrain. In addition, ground-based equipment can travel up to 100 feet on slopes 35 to 45 percent."
142.04 - Harvest Methods	#17502-1	Please do not clear-cut and log Whites Gulch.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.04 - Harvest Methods	#18852-36	19) Generally considered, the use of helicopter and skyline logging systems is more appropriate than ground based methods. The use of mechanical equipment on slopes over 20% is not fully disclosed for the resultant soil and landscape disturbance likely to occur., slopes up to 30%+ are allowed for mechanical disturbance based on general prescriptive determinations. Affects from helicopter and skyline yarding systems are not fully disclosed for resource concerns, but are "anticipated" to have no significant effect. Yarding and logging systems are one of the key drivers of watershed impairment, sediment delivery, mass wasting and soil disturbance, anticipated affects are not fully recognized in this DEIS.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Effects to soils and hydrology are disclosed in the final EIS and supporting documents. Analysis has been improved in response to comments and further interdisciplinary review and discussion.

Code	Comment Number	Comment Text	Response
142.04 - Harvest Methods	#18857-16	No helicopter units. Activity slash left from helicopter units is very difficult to cleanup and will increase fire activity in future fires. Likewise the economics of helicopter logging necessitates the removal of large, old trees and snags.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.04 - Harvest Methods	#18909-107	The Leverkus et al. 201218 study was done in a Mediterranean mountain ecosystem and could have significant insights for consideration. It examines post-fire burned areas and studied the costs of restoration and three different treatment types; Non-intervention (NI), partial cut plus lopping (PCL) and salvage logging (SL). 18 Leverkus, Alexandro B., Puerta-Pinero, Carolina, Ramon Guzman´lvarez, Jose, Navarro, Javier, Castro, Jorge. Post-fire salvage logging increases restoration costs in a Mediterranean mountain ecosystem Springer Science+Business Media B.V. New Forests (2012) 43:601-613 From the Abstract: Initial cost of wood management was greatest in SL and zero in NI. Reforestation cost was highest in NI and lowest in SL, and seedling-mortality rates proved lowest in PCL (43 % vs. 51 % and 52 % in SL and NI, respectively). Considering all the post-fire management operations, salvage logging did not provide particular economic advantages for forest restoration, and had an overall cost of 3,436 ± 340 €/ha. By contrast, NI and PCL reduced total restoration costs by 50 and 35 %, respectively, and PCL indeed promoted restoration success. We suggest that the full cost of management operations needs to be considered when evaluating the economic implications of post-fire salvage logging. Page 610: The results show that, from an economic point of view, post-fire salvage logging was not the best option, and that less intensive post-fire management may lead to cost reductions and increased reforestation success. We request that planners look at and disclose the high costs of mechanized logging on post-fire landscapes and the costs of all different treatment types.	The cited study is not applicable to the Westside project area because the study area is located where harvesting trees does not provide commercial benefits; the economics of salvage logging versus other treatments cited in the study do not apply to the Westside project area. The costs of treatments in the Westside project area are disclosed in the socio-economic section of Chapter 3 of the final EIS and in more detail in the referenced socio-economic resource report.
142.04 - Harvest Methods	#18926-8	Helicopter Salvage Logging - The United States Forest Service (USFS, US Forest Service, or Forest Service) alternatives do not meet the purpose and need, it does not promote forest and watershed "recovery". Instead the proposed alternatives 2,3,4,and 5 would all substantially increase the risks from future fires, because the preferred alternative in the DEIS, alternative # 2 includes 2,640 acres of helicopter salvage logging (DEIS page 31).! ! Studies and experience on the ground both clearly indicate that helicopter logging leaves behind "jackpots" of highly flammable logging slash due to the high cost of using a helicopter combined with the high cost of treating these fuels on the ground. If fuels are not adequately treated in the ground based methods of salvage logging, this would occur also in many cases.! ! Taking Of Live Old Growth Trees Increases Fire Risks ! Many stands identified for "salvage" logging are older stands where the natural wildfire underburned thus improving these stands. If these live green trees are removed as salvage log it would destroy the work the fire did to create healthy older forests. Many of these trees have been through fires before. ! !	Salvage harvest treatment will identify trees for harvest using the "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011).Treatment in salvage harvest units is limited to moderate to high severity areas (>50% mortality) outside of Riparian Reserves. Fire-damaged green trees with a 70 percent or higher probability of mortality in the next three to five years were included in the salvage harvest proposal. See response to comment12346-55.Harvest systems selection, including helicopter, was considered in the Vegetation Environmental Consequences section, Chapter 3, of the EIS in site preparation evaluations.
142.04 - Harvest Methods	#19075-4	In the USFS own statement "ground based salvage logging could result in a 6 to 1000 fold increase in sediment production". This would not be good for salmon habitat	A project design feature has been developed to require applying soil cover to areas where ground based logging could result in additional sediment production in order to limit the amount of erosion.
142.04 - Harvest Methods	#19077-1	I have worked with the Karuk and the other Tribes in the area for over 20 years. I cannot see how the Forest Service can just go in and clear cut. Thinning is the good way not clear cutting. It damages all the areas including the wildlife areas and the dirt coming off the hills will compromise the fish.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Thinning is proposed for the fuels reduction portion of the project. No clear-cutting is proposed. See Chapter 2 of the final EIS for a description of proposed actions. The EIS discloses effects to wildlife from the project in Chapter 3.

Code	Comment Number	Comment Text	Response
142.04 - Harvest Methods	#19092-2	Selective logging is a good idea. Clear-cutting on a wide scale leads to plantation- like areas. Please allow the time and money for foresters to do a quality job of aiding old-growth type forests recover without making them blindly clear-cut.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 6271-1. Thinning or selective logging is proposed for the fuels reduction portions of the project. No clear-cutting is proposed. See Chapter 2 of the final EIS for a description of proposed action.
142.04 - Harvest Methods	#19157-2	To achieve the most amount of treatment possible prior to insects and disease destroying the standing dead trees, I encourage the use of Ground -based logging systems where ever possible. Cable systems is a second choice.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Ground based and cable harvest systems are proposed in Alternatives 2-5.
142.04 - Harvest Methods	#5873-30	Hutto, R.L., 2006. Toward Meaningful Snag-Management Guidelines for Postfire Salvage Logging in North American Conifer Forests. Conservation Biology Volume 20, No. 4, 984–993. http://web.archive.org/web/20090310114517/http://avianscience.dbs.umt.edu/documents/hutto_conbio_2006.pdf ("Species such as the Black-backed Woodpecker (Picoides arcticus) are nearly restricted in their habitat distribution to severely burned forests. Moreover, existing postfire salvage-logging studies reveal that most postfire specialist species are completely absent from burned forests that have been (even partially) salvage logged. I call for the long-overdue development and use of more meaningful snag-retention guidelines for postfire specialists, and I note that the biology of the most fire-dependent bird species suggests that even a cursory attempt to meet their snag needs would preclude postfire salvage logging in those severely burned conifer forests wherein the maintenance of biological diversity is deemed important.")	The Alternatives will only affect between 8-13 percent of the estimated snag associated species habitat in the project area and cumulative effects area (EIS, Chapter 3, Terrestrial Wildlife, Effects to snag associated species). The remaining areas are not proposed for treatment and would provide ample post-fire habitat for snag dependent species.
142.09 - Roadside Hazard Treatments	#17387-13	Retain all trees (live and dead) that are over 30 inches DBH unless they are hazard trees. These large trees provide forest structure and wildlife habitat even if dead."	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge that large dead snags provide for forest structure and wildlife habitat. For this reason, the team developed project design features to retain legacy components; see the project design features table in Chapter 2 of the final EIS under wildlife for details. There is no diameter limit set for this project. See Chapter 2 of the final EIS for a description of what is being proposed. See response to comment number 18852-15.
142.09 - Roadside Hazard Treatments	#17481-9	Remove all roadside hazard trees. Repair any damage to roads from tree removal.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Road repair and maintenance has been ongoing since the fire, including Burned Area Emergency Reclamation work, as discussed in Chapter 1 of the final EIS. Road maintenance will also be done as needed for this project and beyond what is needed by this project as necessary as part of the regular road maintenance program for the Forest. The project proposes the removal of all fire-damaged hazard trees; no green roadside hazard trees are proposed for removal unless they pose an immediate risk to the road. See Chapter 2 of the final EIS under roadside hazard treatments for a detailed description of what is being proposed.
142.09 - Roadside Hazard Treatments	#18850-4	I appreciate that you are paying close attention to following ridge lines and historical fire lines along with road hazard clean up.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
142.09 - Roadside Hazard Treatments	#18852-15	I support specific hazard tree removal (100% crown mortality) along primary system roads, but do not believe more remote road systems with little usage or planned closures require the same treatments for "safety" rationalizations. The use of the .7% likelihood of mortality prescription I believe is not supported by all the science nor does it assist with long term ecosystem recovery.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Chapter 2 Alternatives, Including the Refined proposed action under Alt 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project. The following Guides were used to determine if a tree is a roadside hazard - Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012) to capture current hazard trees and Report #RO-11-01 "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) in order to capture future hazard trees. Not all trees along a road system are being removed, only ones that meet these two guides.
142.09 - Roadside Hazard Treatments	#18852-39	22) The total lineal distance of the proposed roadside treatments (approximately 650 miles) cannot fully anticipate the resource concerns affected by this proposal. Though roadside thinning is generally desired for fuels reduction and strategic fuel breaks, the expansive nature of this prescription within the scope of this planning effort precludes adequate review. Road thinning which focuses on commodity log production and not fuels risks reduction is counter-productive and not in accord with best management practices.	Chapter 2 Alternatives, Including the Refined proposed action under Alt 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project. The following Guides were used to determine if a tree is a roadside hazard - Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012) to capture current hazard trees and Report #RO-11-01 "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) in order to capture future hazard trees. Not all trees along a road system are being removed, only ones that meet these two guides.
142.09 - Roadside Hazard Treatments	#18858-2	The proposal to log 250 feet on either side of 650 miles of roads in the project area is particularly disappointing, first because it is so unnecessary, and second because it appears to be no more than a fabricated excuse to commercially log thousands of acres of northern spotted owl habitat (and important aquatic habitat) under the guise of a concern for human safety-a uniquely ugly feint. According to the DEIS, 162,300 acres of Forest Service land, or 253 square miles, burned, from which you will remove hazard trees on 650 miles. A little math shows that you intend to remove hazard trees on about 2.56 linear miles of roads per square mile of burned area, on average. But road density is unevenly distributed of course; the maps in the DEIS show many sections where the road density is significantly higher than 2.53 miles. In some of those areas your 500-foot logging swath will encompass nearly 100 percent of the section, because the roads themselves are little more than 500 feet from each other. In such cases, the 1 hazard-tree logging you propose is nowhere near as benign as you suggest. There is no way that all of these 650 miles of roads in this 162,300 acres are needed- are you intending to remove hazard trees on roads that are currently closed? Why have you not considered closing some of these 650 miles roads, rather than logging them? This would be a particularly good option in areas where there is spotted owl habitat, and your failure to consider it is dispiriting and saddening. Sometimes I wonder if the Forest Service has some kind of weird collective road-hoarding complex. You do not need all these roads, and the forest would be better off without them.	Chapter 2 Alternatives, Including the Refined proposed action under Alt 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project.
142.09 - Roadside Hazard Treatments	#18859-6	Specific to the project and to the Pacific fisher, I would suggest that every potential hazard tree within 250 feet of any publicly accessible road be removed. Mortality due to roadkill is an identified threat to fishers and one that I have personally dealt with while conducting research on fishers. While conducting radio telemetry work on fishers in the coast range of California roadkill was a significant source of mortality, second only to predation. Removing snags from roadside areas would cause no significant reduction in the total number of snags available to species like fisher that depend on snags for some phase of their life history. By removing snags close to roads we would be removing the attraction of these areas to fishers thus lowering the likelihood that individual fishers would be killed by passing vehicles.	General comment in favor of roadside hazard tree removal. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
142.09 - Roadside Hazard Treatments	#18870-2	Please focus logging only along major access roads.	Chapter 2 Alternatives, Including the Refined proposed action under Alt 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project.

Code	Comment Number	Comment Text	Response
142.09 - Roadside Hazard Treatments	#18883-17	It makes no sense to remove "hazard trees" along roads that are closed to the public ("Maintenance Level 1" roads). Removal of hazard trees should be confined to legitimate roadside hazard trees that are along roads and capable of falling onto roadways that are open to the public.	See response to comments number 18907-20.
142.09 - Roadside Hazard Treatments	#18883-4	Existing and reopened roads are a major source of sediment to local streams. Combined with movement of any equipment in the forest, the proposed project will increased sediment to nearby streams and the Klamath River. Roadside Hazard Treatment should not be performed because it will contribute significantly to sediment movement and stream damage. No amount of culverts and grading or seeding can be done that will mitigate the adverse erosion effects.	See response to comments number 18907-5. The impacts of existing and reopened roads to soil erosion have been described using the soils stability indicator in the soils report for the project and summarized in Chapter 3 of the EIS.
142.09 - Roadside Hazard Treatments	#18883-5	Removing all dead trees next to roads and those that have a 60 percent or higher probability of dying in the next 3 to 5 years is excessive. Removal of trees within 250 feet on each side of road is not needed for any safety concern and will result in tremendously increased erosion and instability of the roadbed. Removal of trees further from the roadway than 250 feet has no safety justification and will be used by field personnel and fallers to take large green trees and trees that may live for many decades to come. The eroded topsoil will leave higher cut banks. These roads scars will be more visible and decrease scenic values.	The comment reflects the opinion of the author but provides no evidence why hazard tree standards are excessive, or that the consequences described would actually occur, nor does it accurately reflect how green trees are addressed. The removal of all trees within 250' of the road is not proposed; this is just the area being evaluated for roadside hazards. The decision to use a 250 foot boundary is within the discretion of the Forest Supervisor. Only trees that meet roadside hazard criteria, as described in Chapter 2 of the final EIS, will be marked to be cut. Fire damaged trees that have less than a 60% chance of mortality (95% for trees greater than 45") and dead trees may be marked as hazard trees. Only trees that are fire injured, dead and dying that can impact the road will be removed. Green trees will be retained; see response to comment12346-55. Clarifications to this treatment have been made since the draft EIS; please see Chapter 2 of the final EIS for a detailed description of this proposed activity. The soil report for this project describes impacts to soil indicators. Chapter 3 of the EIS summarizes the soils effects analysis. Hazard tree removal will not remove all trees within 250 feet on each side of the road. Effects to scenery are disclosed in Chapter 3 of the EIS and in the Scenery Report and its amendment.
142.09 - Roadside Hazard Treatments	#18883-6	If any dead roadside trees are removed they should be less than 18 inches dbh as trees greater than 18 inches dbh will decay very slowly and will remain as habitat for animals for many decades to come. They pose minimal danger to anything.	See response to comments number 18907-8.
142.09 - Roadside Hazard Treatments	#18907-2	The potential for dead trees to fall on people driving vehicles on public paved or unpaved roads is infinitesimal. The Forest Service and Caltrans will remove any trees that fall on these roadways. Wind, rain and snow will cause dead trees to fall down gradually over a period of many years. Providing "safety" for people who work or visit in forested lands cannot justify the need for the project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Chapter 1 and 2 talk about purpose and need and the proposed action for hazard tree removal.
142.09 - Roadside Hazard Treatments	#18907-20	It makes no sense to remove "hazard trees" along roads that are closed to the public ("Maintenance Level 1" roads). Removal of hazard trees should be confined to legitimate roadside hazard trees that are along roads and capable of falling onto roadways that are open to the public.	Trees along roads that are currently drivable are being marked for hazard tree removal. This may include some level 1 roads that are open and were not closed.
142.09 - Roadside Hazard Treatments	#18907-5	Roadside Hazard Treatment should not be performed because it will contribute significantly to sediment movement and stream damage. No amount of culverts and grading or seeding can be done that will mitigate the adverse erosion effects.	Chapter 3 discusses the effects of the hazard tree removal for hydrology and soils. The impacts of roadside hazard treatments to soil erosion have been described using the soils stability indicator in the soils report for the project and summarized in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
142.09 - Roadside Hazard Treatments	#18907-7	5. Removing all dead trees next to roads and those that have a 60 percent or higher probability of dying in the next 3 to 5 years is excessive. Removal of trees within 250 feet on each side of road is not needed for any safety concern and will result in tremendously increased erosion and instability of the roadbed. Removal of trees further from the roadway than 250 feet has no safety justification and will be used by field personnel and fallers to take large green trees and trees that may live for many decades to come. The eroded topsoil will leave higher cut banks. These roads scars will be more visible and decrease scenic values.	See response to comment numbers 18883-5 and 12346-55.
142.09 - Roadside Hazard Treatments	#18907-8	6. If any dead roadside trees are removed they should be less than 18 inches dbh as trees greater than 18 inches dbh will decay very slowly and will remain as habitat for animals for many decades to come. They pose minimal danger to anything.	Chapter 2 Alternatives, Including the Refined proposed action under Alt 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project. The following Guides were used to determine if a tree is a roadside hazard - Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012) to capture current hazard trees and Report #RO-11-01 "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) in order to capture future hazard trees. Not all trees along a road system are being removed, only ones that meet these two guides. No diameter was set for these treatments.
142.09 - Roadside Hazard Treatments	#18926-4	The primary or first priority treatment should take place on higher travelled roads and trails to provide private property owners with structures and residents, fire managers, and the forest users as the public egress and ingress on emergency access routes and designated safety zones on public, private and/or tribal lands. ! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Roads that are currently drivable by the public are being marked for hazard tree removal. Hazard trees along private property and trails are not being marked. Evacuation routes are a priority; see Chapter 2 of the final EIS for a full description of how roadside hazard treatment is being proposed.
142.09 - Roadside Hazard Treatments	#18926-9	Emergency Access Routes Recognition and Prioritized in Treatments The DEIS states on page 15 "For roadside hazard removal, fire-damaged green trees with a 60 percent or higher probability of mortality within the next three to five years were included in the salvage harvest proposal. Actual distance of roadside hazard treatments may vary based on the Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012)." Roadside hazard trees that are alive with green branches on emergency access routes (safe ingress and egress) that will make shade that add to the shade fuel break should be left in place. If these trees dye, they can be picked up in a future project. A shaded fuel break is or should be the desired condition on all of these emergency ingress and egress routes. This should be reflected in the project documents.! !	Chapter 2 Alternatives, Including the Refined proposed action under Alternative 2 Roadside Hazard Treatments. Maps in the EIS shows the roads that were marked for roadside hazard treatments. Roads that are currently closed, brushed in, over grown were not marked for roadside hazard tree removal unless they accessed a planned fuels, vegetation, timber unit for the project. The following Guides were used to determine if a tree is a roadside hazard - Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012) to capture current hazard trees and "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) in order to capture future hazard trees. Not all trees along a road system are being removed, only ones that meet these two guides. No diameter was set for these treatments. Green trees will be retained; see response to comment12346-55.
142.09 - Roadside Hazard Treatments	#19072-10	2. Roadside Hazard Treatment Alternative 2 proposes to identify and remove hazard trees along about 650 miles of National Forest Transportation System roads, county roads, and state highways. This includes Maintenance Level 1roads used by Forest Service employees and contractors for administrative purposes. Maintenance Level 1 roads are not routinely maintained. Reopening 69 miles of Level 1roads for salvage logging and hazard tree removal may result in significant impacts to water quality, especially in cumulatively impacted watersheds that have burned with a moderate or high intensity.	Chapter 2 of the EIS discusses the different Alternatives, which roads are being selected for roadside hazard tree removal and how. An Alternative has been included that reduces the miles of level 1 roads proposed for salvage logging and hazard tree removal. Green trees are only being marked if they were affected by the fire and meet the Region 5 hazard tree guidelines and fire damage mortality guides. Roadside hazard treatments have been clarified since the draft EIS; see Chapter 2 of the final EIS for a detailed description of treatments. See response to comment number 12346-55 about green trees.
142.09 - Roadside Hazard Treatments	#19157-4	Immediately harvest road side salvage 250 feet and more on both side of the roads in all areas.	General comment in favor of roadside hazard tree removal.

Code	Comment Number	Comment Text	Response
142.11 - Fuel/Fire wood Permits	#10-1	I am on Seiad Oaks Road in Seiad Valley and am especially concerned about the steep burned mountain where the fire came down to my neighbors backyard. It is full of dead trees and seems to be too steep to get the dead trees out which leaves us all living in peril. I would like to see wood being made available to those of us who have wood heating but, like me, do not have a 4WD truck and the equipment for hauling trunks out of the woods... I could go to the side of a road with a chainsaw & cut up logs & carry them in my sedan... I feel the wood sales should benefit the local people.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. In Seiad we do understand there is limited areas of cutting firewood due to the restricted areas. We have in approved National Environmental Policy Act document Thom-Seider EIS areas signed and setup around Seiad - Grider Creek Road, Walker Creek Road, etc. to allow for cutting of under 10 inch diameter at breast height green conifer or hardwoods. A map of these are located at the front desk of our district office. The area you speak of up Seiad Creek Road Seiad Oaks, no access from Forest Service Roads only through private property is a valid general firewood cutting area. You can cut trees meeting the current Klamath National Forest Firewood cutting permit there.
142.11 - Fuel/Fire wood Permits	#3679-1	Which brings up the issue of the current Happy Camp/Oak Knoll woodcutting policy that allows green hardwoods to be cut. This policy needs to be changed, especially since, as I interpret this Draft EIS, hardwoods are finally being valued.	Green hardwoods can be cut using a valid Klamath National Forest firewood permit. Changing this policy is outside the scope of this project.
144.01 - Grazing Permits, Allotments	#18883-7	No grazing from cows should be allowed within the perimeter of any of the three fire areas for many years to come. Grazing is known to be detrimental to springs, creeks, grasslands, and the entire environment. Cows should be kept out of the fire areas and no new grazing areas should be opened to compensate for the loss.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Permitted grazing is outside the scope of this project; however, the management of already permitted grazing operations is being addressed through monitoring and annual operating instructions. Efforts will be taken to schedule grazing in areas that are not actively being treated so as to minimize stress to livestock and protect young seedlings. Permittees will be notified through Annual Operating Instructions of areas where harvesting, burning activity, and/or grazing restrictions will occur that could affect their permit. Additionally, Range project design features have been created to protect rangeland improvements such as cattle guards and corrals. See Chapter 3 of the final EIS under the grazing section or the grazing resource report for more details.
144.01 - Grazing Permits, Allotments	#4-4	Wilderness o Trails maintenance and hazards (possibly chainsaw exemption in burned area) o Erosion control – burned trails o Trailhead and campsite hazards o Livestock grazing as a fuel reduction and meadow retention tool	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Hazard Trees associated with trails within the project area will be addressed separately from this project as part of routine trail maintenance. Trail-side hazard trees will be prioritized and treated based on risk level including probability of tree failure and probability of a target. Selective treatment of hazard trees along trails allows for protection of scenery and the recreation setting. Erosion control is part of project design for proposed actions; see chapter 2 watershed project design features. Livestock grazing is outside the scope of this project, although where it exists already, it is recognized to serve the purpose of fuels reduction of fine fuels at times. Meadow retention is not an objective of this project.
151.01 - Road Construction, Maint.	#12346-45	On page 36 the Forest Service indicates that it intends to re-open 69 miles of closed level 1 roads in order to log along them. This action increases rather than decreases the potential for negative impacts to human health and safety. Closed roads are not subject to motorized travel. Reopening them in order to log along them presents the possibility of injury associated with the logging and involves unnecessary impacts to wildlife habitat and hydrological resources associated with the re-opening of closed (and in some cases decommissioned) roads. The Forest Service's contention that roads are only closed (or decommissioned) until the foreseeable and inevitable fire event occurs would mean that no road on the KNF is ever truly closed or decommissioned. This position would prevent attainment of the NW Forest Plan standard requiring net road reduction in Key Watersheds. Since no roads are ever permanently closed or decommissioned on the Forest, the agency cannot construct (even temporary) logging roads in Key Watersheds and the agency must disclose and analyze the increase in the mileage of logging roads that has occurred in Key Watersheds since the inception of the Forest Plan. The Scoping Notice for the Westside Salvage Logging timber sale indicates that the Forest Service intends to conduct up to 1,300 acres of roadside logging in Inventoried Roadless Areas. Such logging will greatly increase the cumulative edge effects, hydrological effects, barriers to wildlife, and soils impacts of the existing roads and routes in IRAs. Yet the DEIS and its supporting documents contain no analysis or disclosure of the impacts associated with	The amount of temporary road needed to facilitate implementation varies from about 5 miles in Alternative 4 to about 24 miles in Alternative 2. Only fuels treatments and site preparation and planting would occur within those portions of the project in the IRAs. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
		dramatically increasing the roadside clearing and fragmentation within IRAs. Indeed, the 1,300 acre figure found in the scoping notice is absent from the DEIS.	
151.01 - Road Construction, Maint.	#12354-6	Because California has declared the Gray Wolf, Canis lupus, an Endangered Species, and populations of the wolf are moving into Southwest Oregon, we can expect wolves to explore KNF in the next very few years. Roading prevents C. lupus from successfully reproducing, at levels of over .75 kilometers of road per square kilometer. I will not here supply the references, as my letter is getting too long, but suffice to say that this figure is extremely well-supported by decades of study. KNF proposes far too many roads for this private profit logging, and must consider that this may be illegal in itself. I will be contacting agencies and organizations on the subjects of Endangered, Threatened, and Species of Special Concern.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This project does not propose any new system roads. See response to number 12346-32 for description of temporary roads needed.
151.01 - Road Construction, Maint.	#17313-4	An example of temporary roads that appear not to be a sediment concern (ridge top road) and facilitate important fuels treatment for WUI protection are the roads that access units 243-1 and 208. A wildfire in these untreated fuels would threaten a fuelbreak on Frying Pan Ridge and consequently the WUI on the east side of the ridge. Decommissioned roads. There needs to be a compelling reason to reopen a road that has previously been decommissioned. We do not support the opening of roads where culverts have been pulled and drainages reshaped. In some cases, we encourage salvage by helicopter where there is a clear fuels reduction benefit.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter's suggestions either were already or have been incorporated into project design. It appears that the commenter is in favor of proposed fuels treatments proposed in units 243-1 and 208 that are already incorporated into project design. Some salvage harvest by helicopter is also already incorporated into project design. Modified Alternative 3 was developed in response to comments and consultation and is the preferred Alternative for the final EIS. For modified Alternative 3, about three miles of new temporary roads will be constructed. This Alternative reduces the mileage of temporary roads on existing roadbeds that will be used for project access to less than five miles. About five miles of temporary roads on re-opened decommissioned roads are proposed for use. The decommissioned section of Forest Road 46N62 (also referred to as the “Caroline Creek Road”) will remain closed. Sections of decommissioned road associated with dropped salvage units were also dropped; these include decommissioned sections of 45N56YA, 46N42Y, and 46N78 which will remain closed. All temporary roads, including those on previously decommissioned roads, will be closed and hydrologically stabilized according the project design features. See Chapter 2 of the final EIS for a description of proposed actions. Also see response to comment number 12364-1.
151.01 - Road Construction, Maint.	#17349-5	Roads - We advocate that the Forest take full advantage of the existing road system including those road beds that may have been unused for long periods. The existing road beds provide low to zero impact opportunities for access for recovery activities. Also, we advocate serious consideration be given to construction of new roads to facilitate salvage and follow-up treatments where the cash and environmental costs of construction are low compared to the benefits gained from the access.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest has taken advantage of both previously decommissioned roads and existing roadbeds for temporary use. Construction of new roads was not necessary to facilitate salvage or follow up treatments. Also see response to comment number 12364-1.
151.01 - Road Construction, Maint.	#17458-2	For the health of the forest, please do not remove all remaining timber from the burned areas, and do not build roads over the entire area.	All live trees will be retained in salvage harvest units according to the marking guidelines. See response to 12346-55.No new roads are being proposed.

Code	Comment Number	Comment Text	Response
151.01 - Road Construction, Maint.	#17481-10	These roads could and should be brushed in advance of any fires.	Roadside hazard treatments are included as a part of the action Alternatives. See Chapter 2 of the final EIS for a detailed description of what is being proposed regarding roads.
151.01 - Road Construction, Maint.	#17481-13	To reduce future culverts clogging. Increase the undersized culverts.	See response to number 17349-5.
151.01 - Road Construction, Maint.	#17481-14	Consideration should be made for repairs that will be needed on county roads. Increased use of county roads by commercial trucks performing fire recovery activities.	Forest Service contracts require that roads are brought back to their pre-existing conditions following implementation.
151.01 - Road Construction, Maint.	#17501-8	Please drop all commercial units from the Westside Project that would require the building of temporary roads, or the reopening of old roads, even if they would be closed after the timber sale. When the KNF already has an existing backlog of road maintenance way beyond its ability to keep up with, there is no reasoning to justify opening up old roads again or building new roads in the first place.	Road maintenance activities on the forest are beyond the scope of this project. Alternative 4 addresses the concerns raised by the commenter by reducing or eliminating temporary roads.
151.01 - Road Construction, Maint.	#18857-14	No new roads, either permanent or temporary.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
151.01 - Road Construction, Maint.	#18869-3	in doing so we would also reduce the likelihood of future catastrophic fires would be reduce by using the additional roads needed for the salvage logging	See response to number 17349-5.
151.01 - Road Construction, Maint.	#18872-6	road maintenance with other restoration efforts that are most likely to see success, and then move to secondary, but no less important, areas of restoration within the plan.	See Response to number 17349-5
151.01 - Road Construction, Maint.	#18878-15	DEIS: There is a need for worker and public safety and access. (Pg. 10) Comment: In general, we are fully supportive of roadside hazard treatments along access and egress routes for community safety and to support our management objective of putting fire back on a fire-adapted and fire-dependent landscape. This concept is supported by the Karuk Alternative. However, we are concerned with the total amount of road miles to be treated in the Refined Proposed Action. We are opposed to the anticipated treatment along Maintenance Level (ML) land 2 roads and the re-opening of decommissioned roads. This is especially acute in the Grider and Thompson drainages in the Happy Camp Project Area and the West Fork drainage in the Whites Fire Project Area. There is also ongoing concern as to conditions of all ML roads pre and post project implementation and the impact to fisheries resources in both the short and long term.	All Forest Service System roads within the project area will be evaluated for roadside hazard tree identification and removal including maintenance level 2 roads. Roads will also be maintained as needed for project implementation and any legacy sediment sites will be treated. In addition, any previously decommissioned roads that are opened for this project will be closed and hydrologically stabilized following project implementation. While there may be short term negative impacts at the site scale to fisheries during project implementation from roads, the long term impacts would be beneficial because of road maintenance, legacy site treatment and hydrological stabilization of temporary roads. Short term negative impacts would be avoided in Alternative 4 as temporary roads are reduced or eliminated from sensitive watersheds (EIS, Chapter 3, Aquatic Resources). Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
151.01 - Road Construction, Maint.	#18907-29	No new roads should be constructed to harvest dead trees. The economic value of the trees will be far less than the cost of the erosion, sedimentation, and long term maintenance or retirement cost of these roads.	See response to 18883-25.
151.01 - Road Construction, Maint.	#18907-6	Existing and reopened roads are a major source of sediment to local streams. Combined with movement of any equipment in the forest, the proposed project will increased sediment to nearby streams and the Klamath River.	Chapter 1 of the final EIS describes the purpose and need, including the improvement of watershed conditions. Regarding construction and reconstruction of temporary roads, the project includes watershed mitigations, as described in the project design features in Chapter 2 of the final EIS. The majority of the effects on sediment are from the fires themselves, as disclosed in Chapter 3 of the EIS. See the EIS, Chapter 3, Water Quality section for a discussion of effects to sediment regimes from the project. As part of this project, the Forest is also treating within Riparian Reserves and treating legacy sites for the purpose of watershed improvements (see Chapter 2).
151.01 - Road Construction, Maint.	#18909-77	Construction, reconstruction, and maintenance of a water crossing usually requires heavy equipment to be in and near streams, lakes, and other aquatic habitats to install or remove culverts, fords and bridges and their associated fills, abutments, piles, and cribbing. Such disturbance near the waterbody can increase the potential for accelerated erosion and sedimentation from destabilization of streambanks or shorelines, vegetation and ground cover removal, and soil exposure or compaction. In addition, heavy equipment has potential for contamination of the surface water from vehicle fluids. Permits may be required for in-stream work associated with stream crossing construction and maintenance projects. There are specific requirements for such projects under the Clean Water Act and implementing regulations. State and local entities may also provide guidance and regulations. Stream reaches that are likely to be negatively affected by temporary road actions and landings include portions of Doggett Creek, Beaver Creek, Grider Creek, O'Neil Creek, Kuntz Creek, Whites Gulch, China Creek, and Klamath River (due to actions in Gard Creek and Caroline Creek drainages). Temporary roads used by the project include 14 stream crossings. Direct effects to aquatic habitat may occur while crossings on temporary roads are being constructed, or reconstructed, used, and hydrologically restored after use. Due to these actions river/stream habitat for management indicator species may be affected at 14 sites; four perennial stream crossings and ten intermittent stream crossings, none of which are fish-bearing. Reaches of Doggett Creek, Beaver Creek, Grider Creek, O'Neil Creek, Kuntz Creek, Whites Gulch, China Creek, Gard Creek, and Caroline Creek would be affected. Any increase in sediment is contrary to the Clean Water Act.	The Forest will obtain the necessary approvals from the North Coast Regional Water Quality Control Board prior to project implementation. Any guidance or requirements that are associated with those approvals will be followed.
151.01 - Road Construction, Maint.	#18913-3	We are vehemently opposed to the following elements of the Klamath National Forest proposal to: * Build 22 miles of new permanent and temporary roads, especially given the conflict with this has with the Klamath National Forest mandate to create a "minimum system" road network under Subpart A of Travel Management Rule in 2015. Roads across the Forest are a major source of erosion and sediment, which degrades water quality and cements spawning gravels for native fishes. This new road network has the potential to affect more than 3,000 acres in the Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers, as well as proposed Wild and Scenic sections of the Elk, Grider, and South Russian Creek. 6,300 acres of roadless lands are also affected by construction of these new roads, which we find unacceptable if we are to meet state and federal objectives that better enhance headwater habitat for trout, salmon and steelhead.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No new roads are proposed in this project. Temporary roads would be closed and hydrologically stabilized following project implementation. Effects to resources from road construction are discussed in Chapter 3 of the EIS.
151.01 - Road Construction, Maint.	#19075-2	I oppose the creation of new roads for this project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
151.01 - Road Construction, Maint.	#5873-155	In terms of sedimentation, it is the forest roads that may have the most signi?cant impact because of the constant source of sediment they can provide over the life time of the road network.When all attributes are considered it appears that [clearcutting] does not emulate wild?re and may have a more detrimental impact on headwater systems in both the short and long-term. … Overall, the results suggest that harvesting does not emulate wild?re, particularly [clearcutting]. … It is important for forest managers to consider the complex affects that harvest treatments can have on headwater systems if they are going to successfully practice ecosystem management and achieve sustainable forest management. It is also important for managers to understand that there are many other attributes to be considered. In particular, the ability of harvest treatments to emulate wild?re in regards to peak ?ows, organic matter inputs, large woody debris recruitment, channel morphology, and stream biota response. Due to the inability to statistically analyse these attributes they were not incorporated into the scope of this paper. Nitschke C.R. 2005. Does forest harvesting emulate ?re disturbance? A comparison of effects on selected attributes in coniferous-dominated headwater systems. Forest Ecology and Management 214 (2005) 305–319. http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/FireScienceResearch/FuelsManagement/FM-Nitschke05.pdf	Salvage harvest, not clear-cutting is proposed in the Westside Fire Recovery Project. Salvage harvest would not occur within hydrologic Riparian Reserves. Project Design Features from Chapter 2 of the EIS and Best Management Practices in Appendix D are in place to minimize effects to resources from proposed actions, including impacts to sedimentation from the road network.
151.02 - Road Closure, Decomm.	#17460-6	In the DEIS, table 2-42, the 3rd recommendation is "No opening of selfdecommissioned MI and M2 level roads." Part of the response given in the DEIS to this recommendation is: "In response to relevant issue #1, alternative 4 limits the number and location of self decommissioned roads that are proposed for use to further reduce impacts. "Unfortunately the Alternative 4 Map Book provided on the web page hosting the public Westside documents do not indicate exactly which self-decommissioned roads were eliminated under Alternative 4, and no list of such roads was provided in the other DEIS documents: that information should have been provided publicly during the comment period for the public to evaluate, compare, and comment on. I was able to get a list of roads excluded from the project under Alternative 4 from Westside Fire Recovery IDT Leader Mike Hupp. Comparing the list of roads he provided with my own field visits and photographs within the project area, the following roads meet the criteria for Maintenance Level 1 roads, as described in USDA's Forest Service publication "Guidelines for Road Maintenance Levels," due to being blocked by natural vegetative overgrowth, often by trees 3" dbh or larger growing directly in the roadway, and some blocked by additional rockslides, large snags, and brush. Here is a list of roads in the Happy Camp Complex, many of them in worse condition than officially 2 decommissioned roads: 15N09, 16N41, 45N03Y (MI blocked by an earth mound), 46N77A, 46N77D, 46N77F, 46N80X, 46N67A, and the southern portion of 46N78Y. This is not a comprehensive list: there may be more roads within the project area that currently exist in a Maintenance Level 1 state, but are not accurately identified as such by the project. Additionally, parts of 44N40 have also not been maintained, and currently meet the Maintenance Level 1 category: the entrance to 44N40 where it intersects with 46N64 is blocked by rockslides and large downed snags that do not appear to be any part of the BAER project, and the beginning of 44N40 where it intersects with 44N98 is currently being eroded by water runoff running down the road from what appears to be a blocked culvert, and partially blocked by a rockslide beyond that. Road 45N86X almost meets Maintenance Level 1 conditions due to overgrowth and rockfall in the roadway, and is impassable beyond 0.3 miles due to a large snag across the road. At a minimum, road 45N86X would require regrading before use for any salvage or plant-and-release operations, and may require more maintenance due to settling and areas of erosion on the downhill edge of the road prism. None of the roads in this list, that exist at Maintenance Level 1 conditions, were in the list provided to me by Mike Huff; thus none of them are eliminated under Alternative 4. None of them are currently usable along their entire length by motor vehicles, and all of them appear to require regrading along their lengths using bulldozers, increasing ground disturbance impacting watersheds throughout the project. The total length of these roads (excluding 45N03Y, as I have not been able to determine the access level at its eastern terminus) is at least 13 miles; most run across very steep terrain, some cross perennial or intermittent streams. There are several issues that should be addressed directly by the EIS in regards to these roads: 1. Eliminating these roads from hazard and salvage tree removal, as similar MI roads have been in Alternative 4, would lessen the overall impact on the	See response number 12346-32. Also see response to comment number 12364-1.

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		watershed by reducing ground disturbance and retaining post-fire habitat. 2. Because these roads currently exist in a Maintenance Level 1 condition, the ground disturbance associated with their restoration needs to be accounted for under all project alternatives, due to impact on watersheds, fisheries, and potential for spread of non-native invasive species. It is not clear in the published DEIS documents that the deteriorated conditions of these roads has been properly accounted for. 3. Two of these roads exist within the LSRs on Blue Mountain, which has been identified as having a high risk for landslide activity. What is the impact of restoring these roads for salvage operations in this area due to any increased landslide risk? That is not addressed in the Geology Report. 3 4. What other roads are within the Westside Project, for all alternatives, that currently exist under Maintenance Level 1 conditions, and need to be properly evaluated for the effects of restoring them to a usable condition for this project? According to the USDA's "Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl," Attachment A, page B19 (http://www.reo.gov/library/reports/newsandga. pd!): The amount of existing system and nonsystem roads within Key Watersheds should be reduced through decommissioning of roads. Road closures with gates or barriers do not qualifY as decommissioning or a reduction in road mileage. If funding is insufficient to implement reductions, there will be no net increase in the amount of roads in Key Watersheds. That is, for each mile of new road constructed, at least one mile of road should be decommissioned, and priority given to roads that pose the greatest risks to riparian and aquatic ecosystems. This guideline applies within the LSRs to all the alternatives. There is no special provision for "temporary roads" or "new roads" within that set of guidelines without decommissioning an equal length of roads within the project. The alternatives in the DEIS have failed to meet that guideline.	
151.02 - Road Closure, Decomm.	#17481-17	During this process, re-open as many roads as possible. For public health and safety in classes 1 through 4.	Existing National Forest System roads will receive maintenance as needed for project implementation.
151.02 - Road Closure, Decomm.	#18850-5	I am hopeful that if the need to open up old roads, it is only temporary and that they will be closed up again when work is finished.	That is correct, any roads opened for project implementation will be closed and hydrologically stabilized following project implementation.
151.02 - Road Closure, Decomm.	#18858-10	An alternative to close at least some of the roads rather than log them must be formulated, and how this can be done to benefit wildlife should be discussed and considered, and then adopted.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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151.02 - Road Closure, Decomm.	#18926-23	Road Decommissioning ! There needs to be a compelling reason to reopen a road that has previously been decommissioned. No roads should be re-opened in LSR'. Do not re-open roads where culverts have been pulled and drainages reshaped,! ! This is a large project. Road decommissioning would be deferred from the access and travel management plans to be included in large project. Decommissioning of roads should be included in this project in the Salmon River, on the North Fork, and elsewhere. The maintenance costs of keeping a road can be expensive. The US Forest Service says it does not have enough money to maintain the road system annually. Lack of funds for the US Forest Service to maintain all of the roads in the road system is a justification for eliminating some roads. The DEIS does not eliminate or decommission roads. The updated version of the DEIS or the Final Environmental Impact Statement should include decommissioning of roads.! ! Trails - Please add hazard tree removal to the KNF system of trails that are in the affected areas, included in the proposed action. These trails receive hundreds of Visitors each year and burned trees deemed "hazard trees" adjacent to these trails. Many of these trees should be removed and included in this project. The public using these trails should have the same safety precautions in effect as persons traveling the State Highways and County Roads. Waiting for many of these trees to fall at their own volition may take years and will jeopardize trail user safety.! !	See response to number 18858-10. Roads that are re-opened would be closed and hydrologically stabilized following project implementation. Also see response to comment number 12364-1.
152.01 - Trails Construction, Maint.	#18907-17	No work on or near the PCT or other trails should be allowed either in a planning document or on the ground during adjacent activity. Hikers and others using trails like to have snags and woody debris within at least 100 feet of each side of trails for shade and rest areas. No harvesting or equipment access should be allowed to occur within at least 100 feet of each side of these trails or campsites.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project incorporates project design features, as described in Chapter 2 of the EIS for the mitigation of scenery and recreation resources. No salvage harvest (or logging) of green trees that would provide shade for hikers is proposed. See response to comment12346-55. However, roadside hazard treatments of fire-damaged trees are proposed within the boundary of some campsites. Most trails will have immediate hazard trees hand fallen along the trail ways, consistent with existing policy and implemented outside of this project. Effects to recreation and scenery are disclosed by Alternative in Chapter 3 of the final EIS and supporting documents.
181.04 - Make project cost efficient	#17329-2	The draft EIS is proposing to only treat approximately 5% of the total burned area. The selected alternative should treat as many acres as possible on all of the fire areas considered. I want to express the importance of selecting an economical alternative. The selected alternative needs to be implementable if true recovery of these acres is expected. As you know, that can only occur if the project is economically viable. I believe the majority of the taxpayers and county residents would rather see a quick response to the restoration efforts on these fires by producing an economically feasible project that will produce some revenue.	The preferred Alternative 2 aims to maximize the balance of desired outcomes identified in the project's Purpose and Need, which are addressing worker and public safety and access; safe conditions for firefighters performing fire suppression for community protection; a project that is economically viable, meeting project objectives and benefitting our local communities; and restored and fire-resilient forested ecosystems. (EIS Chapter 1) Components of preferred action Alternative 2 will include salvage (6,800 treatment acres within 11,700 acres of units); roadside hazard treatments (650 miles); hazardous fuel treatments (22,900 acres); and site preparation (12,656 acres) for replanting (14,184 acres) to support the desired outcomes identified in the Purpose and Need. An objective of the preferred action Alternative will incorporate timber salvage treatments that will be limited to areas of moderate to high severity vegetation mortality with more than 10 contiguous acres of medium to high severity vegetation mortality and less than 40 percent crown closure. Considerations for salvage logging were also given in relation to accessibility, economics and units that are outside of northern spotted owl core areas that have more than 50% effective nesting, roosting or foraging habitat remaining within the core area. (EIS Chapter 2) Salvage logging will promote ecosystem sustainability by increasing the likelihood and speed by which burned forested areas are reforested following the fires by opening areas up for safe planting and by reducing large-log fuel loads.
181.04 - Make project cost efficient	#18747-3	Salvage harvest is a urgent must. This will reduce the severity of any future burns but must be accomplished soon or the logs will have no value.	An Emergency Situation Determination has been approved by the Chief of the Forest Service. Pursuant to the emergency situation determination the Final EIS and Record of Decision will be released at the same time, eliminating the requirement of an objection period, pursuant to 36 CFR 218.21. The emergency situation determination promotes relief from hazards threatening human health and safety; mitigation of threats to natural resources on National Forest System or adjacent lands; avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration in the most expeditious manner possible within the law.
181.04 - Make project cost efficient	#18859-12	With each passing day, economic value is lost from hazard and salvage timber, meaning the private sector will lose interest in participation and necessary work will be solely dependent upon the difficult and unlikely allocation of taxpayer funds.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.

Code	Comment Number	Comment Text	Response
181.04 - Make project cost efficient	#18859-3	Implementation of the Westside Recovery Project is needed as soon as possible as any delay will cause continued degradation of wood within the project area, making the economic feasibility of the project more difficult.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.
181.05 - General Efficient/ Effective Project	#14-10	The timeframe for getting a return on your investment and allowing for rapid re-establishment of conifer stands is very short. There is a need to make a rapid decision and begin implementation in early June.	Please refer to comment number 18747-3 regarding Emergency Situation Determination.
181.05 - General Efficient/ Effective Project	#16957-2	Another substantive issue that must be addressed is the investment of forest service time and effort, and that of the taxpayers, to implement plantation planting management on these areas. The investment in this type of plantation management comes with need to protect the investment from further fire events. As a taxpayer and one who is concerned with the health and safety of firefighters, rural communities and the health of the forest, I want the forest service to address how their commitment to fire suppression will be able to end the vicious cycle of high intensity fire? Suppressing fire out of these areas in order to secure the investment in timber is a waste of money and effort, these areas have a frequent fire return interval which cannot be controlled. These plantations may put create economically viable timber but only at the expense of continuing to fight fire with large scale efforts that cost a tremendous amount in terms of manpower and funding. These areas will burn again, and it its the job of the forest service to work with communities and native american tribes to return a healthy fire management regime to this landscape.	The project is designed to meet the Purpose and Need, including worker and public safety and access; safe conditions for firefighters performing fire suppression for community protection; a project that is economically viable, meeting project objectives and benefitting our local communities; and restored and fire-resilient forested ecosystems. Implementation funding and fire suppression operations is outside the scope of analysis in this EIS. Planting does not preclude fuels treatments, as discussed in Chapter 2 of the EIS and in Chapter 3 under fuels and vegetation sections. See the fuels section of Chapter 3 for a discussion about the project's effects on fuels conditions.
181.05 - General Efficient/ Effective Project	#17349-1	You and your staff are to be complimented on moving forward promptly with a constructive, action oriented project. We fully support your efforts to utilize all available emergency authorities to expedite the planning and implementation processes.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.
181.05 - General Efficient/ Effective Project	#19-8	Timber Products Company (TPC) is please with the expeditious completion of project scoping and the DEIS. TPC is fully aware that the Klamath National Forest has likely never undertaken a project of this unprecedented magnitude. As mentioned earlier, I must reiterate how extremely important the timing is to the success od this project. If lengthy delays occur, the outcome will undoubtedly be serious limitations to the commercial viability of this project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.
181.05 - General Efficient/ Effective Project	#23-1	I urge you to consider the most cost effective and ecologically efficient alternative possible for the Westside project. The sooner the forest heals from the damaging effects of fire, including the removal of dead trees, the healthier the forest will become in providing valuable habitat for wildlife and fisheries.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Please refer to comment number 18747-3 regarding Emergency Situation Determination.
181.05 - General Efficient/ Effective Project	#28-3	We have to act now to get this work done by selling the burned trees - there's no way that the federal government (tax payers!) can afford to PAY to have them removes after they are rotten and worthless. After their value is gone, the Forest Service will just be leaving a time bomb for future generations in our communities. Why is that a good idea when we can get work done now and make conditions better? Please get this project done as quickly as possible.	Thank you for your comment on the Westside Fire Recovery Project. To facilitate implementation of this project as soon as possible, the Forest has received an Emergency Situation Determination. Please refer to comment number 18747-3.An economically viable project is part of the purpose and need of this project as stated in Chapter 1 of the EIS. (There is a need for a project that is economically viable, meeting the project objectives and benefiting our local communities).

Code	Comment Number	Comment Text	Response
203 - Multiple Resources/Reasons	#12232-1	Natural forest ecosystems are at their most vulnerable just after a major disturbance like a wildfire. Chainsaws and industrial logging equipment are not a form of restoration; they contribute to erosion, compacted soil, polluted streams and degraded landscapes. Please join with fire ecologists, impacted communities, watershed councils, native tribes and conservation groups to focus on restoration and fire safety instead of pushing divisive and controversial clear-cut logging proposals on steep slopes in key watersheds and in critical wildlife habitat.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment is mistaken; no clear-cutting is proposed. See Chapter 2 of the final EIS for a description of proposed actions. Effects are disclosed throughout Chapter 3 of the final EIS.
203 - Multiple Resources/Reasons	#12414-1	Forest fire is a natural ecological occurrence and fosters healthy diversity and generates habitat for many plants and animals. It is completely unacceptable to exploit recent wildfires in order to fast-track illegal logging of protected old-growth forests. According to the The Northwest Forest Plan, some forest areas--like this one--are to be protected from logging. If reserves are only protected until timber planners decide to log them, the plan is useless.	We acknowledge the fire is a natural ecological occurrence; however, the fires of 2014 of the Klamath were outside the range of typical variability with moderate and high severity areas in need of salvage harvest treatments The proposed salvage logging is not illegal but is consistent with Forest Plan and applicable law, regulation and policy. The commenter does not accurately reflect the direction or intent of the Northwest Forest Plan. Salvage logging in Late Successional Reserves in permitted and expected per the Northwest Forest Plan, as incorporated into the Klamath's direction in the Forest Plan. See Chapter 1 of the EIS for a discussion of salvage in Late Successional Reserves.
203 - Multiple Resources/Reasons	#12424-1	So follow the Northwest Forest Plan -- focus logging along major access roads and PROTECT the most important and vulnerable recovering areas: the late-successional and geological reserves. Natural forest ecosystems are at their most vulnerable just after a major disturbance like a wildfire. Chainsaws and industrial logging equipment are not a form of restoration; they contribute to erosion, compacted soil, polluted streams and degraded landscapes. These forests are public lands owned collectively by all Americans. Public lands are meant to be managed for the common good, but instead the Forest Service is declaring the need to send chainsaws into the forest is so urgent that it is an emergency requiring exemptions to environmental laws and short cuts to public participation. I want my public forests to be managed in a way that protects endangered species, preserves clean water and allows the natural ecosystem to heal itself from fire as it has done for millennia.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project is consistent with the Forest Plan, which incorporates directions from the Northwest Forest Plan regarding treatment, especially salvage logging in Late-Successional Reserves. See the beginning of Chapter 3 for a discussion of responsible opposing views. The project is consistent with law and regulations, including the endangered species act and the clean water act. The Forest has been consulting throughout the planning process with regulatory agencies. And, the new preferred Alternative (modified Alternative 3) in the final EIS has been developed in response to consultation efforts.
203 - Multiple Resources/Reasons	#12549-3	The Northwest Forest Plan states that in LSRs living trees in a fire area should be uncut and Klamath Forest Plan requires that snags be retained on a per acre level. The DEIS assumption that moderate fire severity areas no longer support habitat for native plant and animal species is wildly inaccurate. Further, high-severity patches are of greatest importance to ecological integrity as they provide biological legacies that sustain the diversity of plants and wildlife. Post-fire landscapes are not in need of "restoration" because fire itself is a restorative agent.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We are unaware of the assumption that moderate and high severity fire provide no ecological benefit. The Northwest Forest Plan is incorporated into the Forest Plan and is followed for the Westside Fire Recovery project. See Chapter 1 for a discussion of salvage in Late Successional Reserves. The commenter does not provide direct quotes or a correct interpretation of the Northwest Forest Plan. The statements in the draft EIS regarding assumptions of plant habitat suitability in moderate-high intensity burns is directed towards Botanical Species of Concern, not native plants in general. The Botany and Non-native invasive species section of Chapter 3 acknowledges the benefits of moderate to high intensity burns in the regeneration of unique fire-follower plant species.
203 - Multiple Resources/Reasons	#12945-1	Say no to a logging tragedy! The heart of Klamath-Siskiyou bioregion could lose 30,000 acres of prime snag forest habitat on the steepest of unstable slopes above vital wild salmon rivers. Late-Succesional Reserves, Wild and Scenic Rivers, seventy-five watersheds and Caroline Creek eagles, bumblebees, meadows, endemic salamanders, Coho and Chinook salmon, Pacific fisher and seventy threatened Northern spotted owls and a suite of native plants need your help. The Westside situation is perilous. In a time when we need every tree we can grow as a carbon sink, it is NOT time to log! Let alone what you are going to do to increase rock and mudslides and degrade the watershed!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter fails to provide any evidence to support these opinion statements. See Chapter 2 of the EIS for a description of the proposed actions; this project is not proposing to remove 30,000 acres of snags. Effects of the proposed actions is disclosed in Chapter 3 of the final EIS.
203 - Multiple Resources/Reasons	#14038-1	Clearcutting is just wrong in so many ways. The potential for landslides in this area is huge. The impact on wildlife and the environment would be extreme. Please protect these important wildlands, wildlife and watersheds.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a description of proposed actions; no clear-cutting is proposed. The project has been designed to improve wildlife habitat and watersheds, as described in the purpose and needs statements in Chapter 1 of the EIS. Chapter 3 discloses effects by resource area and Alternative.

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203 - Multiple Resources/Reasons	#16129-1	We know how how long it takes to grow these forests and how quickly they are chopped down. Isn't deforestation one of the main causes of global warming , while contributing to loss of habitat for many animals and their subsequent extinction? And then there's the problem of erosion, and a degraded quality of soil from the selfish destruction of our forests.I have read that only 2% of the old growth forests in California remain and would think California authorities would do their best to preserve that which remains or the original majestic forests of California.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter fails to provide any evidence to support these opinion statements. See Chapter 2 of the EIS for a description of the proposed actions and Chapter 3 for a discussion of effects, including climate change.
203 - Multiple Resources/Reasons	#17274-1	This project fails to act in the interests of the affected public and lacks reasonable justification. Soil fertility, water quality, critical habitat for species along with best available science practices all seem to be ignored. In a time when water is scarce around the west US our agencies shouldn't be drafting our rivers down further.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter fails to describe how the interests of the public are not being served by this project. See Chapter 1 for the purpose and need of the project. Direct, indirect, and cumulative effects to wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources are addressed in the Chapter 3 of the EIS, with appropriate references to the scientific literature.
203 - Multiple Resources/Reasons	#17282-1	I am very concerned about the Project's potential impact on water quality and threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild & Scenic Rivers, and roadless areas (some of which have been proposed in legislation as additions to the Marble Mountain Wilderness).	Direct, indirect, and cumulative effects to Roadless Areas, wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, are disclosed in the Chapter 3 of the EIS, with appropriate references to the scientific literature. Project Design Features from Chapter 2 of the EIS are in place to minimize effects to resources. No salvage harvest is proposed within wilderness, backcountry, research natural area, designated or recommended wild rivers, inventoried Roadless Areas, Riparian Reserves associated with stream channels or high ranked northern spotted owl cores in the project area.
203 - Multiple Resources/Reasons	#17282-4	Also, please avoid activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	See response number 17282-1
203 - Multiple Resources/Reasons	#17434-1	The potential impact on water quality and threatened salmon, old growth forests and the Northern spotted owl, existing and proposed Wild & Scenic Rivers, and roadless areas (some of which have been proposed in legislation as additions to the Marble Mountain Wilderness) are poorly analyzed and would likely lead to severe, long term problems for the forest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response number 17282-1. The commenter fails to provide evidence in support of the claims.
203 - Multiple Resources/Reasons	#17450-1	I endured and observed up close the massive "salvage" logging operation in the Little North Fork area last fall. This operation destroyed wildlife habitat, increased erosion and runoff into the Salmon River and generally made a mess of our mountains. In addition it was very disruptive to community life (logging trucks blasting through Sawyers Bar starting at 3:00 AM for months on end) and provided no economic benefit to the local communities - the vast majority of the loggers, truckers and support personnel were from out of state.	It appears that the commenter is referencing the Salmon Salvage project, which is an action considered for cumulative effects for this project, as denoted in the Appendix of the EIS. The cumulative effects of this action when combined with the proposed actions of the Westside Fire Recovery project are disclosed throughout Chapter 3 of the EIS. Effects to Roadless Areas, wildlife and soil erosion are disclosed in the Chapter 3 of the EIS, with appropriate references to the scientific literature. The Westside Fire Recovery project, although similar in nature, does not have the same proposed actions as the Salmon Salvage Project. Project Design Features from Chapter 2 of the EIS are in place to minimize effects to resources.

Code	Comment Number	Comment Text	Response
203 - Multiple Resources/Reasons	#17465-1	As lovers of the out-or-doors, campers, hikers, and birders, my husband and I are VERY upset over your proposed Westside Fire Recovery Project of logging for the Klamath National Forest! We feel that your plans would be extremely disruptive for the plants and animals that call this forest home! Your methods of logging, including building extra roads and working on steep hillsides, are completely unnecessary, damaging to the ecosystem involved, and ruinous for the scenic value of this beautiful area! The work that you are suggesting would not be protective of the local watersheds and would seriously threaten the local fish, especially the salmon! We strongly support, instead, the Kanuk Indian Tribe's proposed alternative plan that we feel focuses on restoration after the previous fires and protection of the watersheds, the local plants and animals, and the native cultural resources that have been there for thousands of years. Their alternative plan does NOT threaten the Wild and Scenic Rivers in the area, nor does it ruin other local rivers that should have this designation in the future! It is far more important to save the ecosystem than it is to log a few thousand board feet of timber. The jobs that your plan creates will be soon gone, but the damage to the Klamath National Forest will remain for decades afterwards! We believe that the Kanuk Indian Tribe's proposed alternative plan for the Klamath National Forest is the correct and proper plan for sustainable reforestation, restoring the forest after last year's fires, and protecting the land and rivers for the myriads of creatures and plants that live there. Their plan does NOT add additional, unnecessary roads to the forest and keeps logging to a manageable minimum, while it will encourage the natural regeneration of the forest. Additionally, their plan gives important long-term protection to the watersheds, salmon and other fish, and keeps the roadless areas as they are now! Please reconsider your plan and adopt the more ecologically sound plan put forth by the Kanuk Indian Tribe!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 12414-1. See Chapter 1 of the EIS for a discussion of the purpose and need of the project. See Chapter 2 of the EIS for a description of the proposed actions. Direct, indirect, and cumulative effects for all Alternatives to wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, as well as management requirements to minimize adverse effects, are addressed in the Chapter 3 of the EIS, with appropriate references to the scientific literature. Project design features found in Chapter 2 of the EIS associated with proposed activities are intended to protect resources and species. See Chapter 2 of the EIS under Alternatives considered through consultation, for a description of how the Karuk Alternative has been considered and incorporated into the preferred Alternative for the final EIS.
203 - Multiple Resources/Reasons	#17472-1	The Klamath is a unique and beautiful place and should not be viewed as a commodity! Since the Klamath watershed and forests are still recovering from all the intensive logging in the past, please consider letting the forest heal on its own! I visit the Klamath and the Smith Rivers every year. These are exceptional recreation areas and should be treated with respect and care instead of clear cutting and degrading the streams and surroundings for logs that probably won't even be milled in America! Why aren't we preserving these beautiful habitats for future generations instead of raping and pillaging the land for a few dollars? The precious salmon and watersheds will not benefit from this project! Please value the natural resources of this place! Let mother nature heal herself.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 12414-1. See Chapter 1 of the EIS for a discussion of the purpose and need of the project. See Chapter 2 of the EIS for a description of the proposed actions. Direct, indirect, and cumulative effects for all Alternatives to recreation, wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, as well as management requirements to minimize adverse effects, are addressed in the Chapter 3 of the EIS, with appropriate references to the scientific literature. Project design features found in Chapter 2 of the EIS associated with proposed activities are intended to protect resources and species. The affected environment (or existing condition, including past actions) of the project area is disclosed by resource area throughout Chapter 3 of the EIS.
203 - Multiple Resources/Reasons	#17481-27	Alternative 1: There are many opportunities to assist the forest in recovery with nominal short term negative environmental effects and very significant long term favorable environmental effects. Such opportunities include removal of fuel loading through salvage logging, site preparation for reforestation, and fuel treatment to protect infrastructure, private property and improve future fire fighter safety. All of these measures better position the forest to withstand future fires because intensity and damaging effects will be reduced. Reforestation along with the associated site preparation will speed the establishment of a desirable level of conifer stocking where that component was lost to high intensity fire. All of the above measures serve to accelerate habitat recovery for spotted owls and related species. Properly designed, all the above activities can be implemented with nominal additional negative environmental effects above those imposed on the land from the fire. I do not like any part of this alterative because it does nothing to assist or accelerate the recovery of the burned forest. Plus the No Action will for-go the socio-economic benefits such as employment associated with recovery activities and the potential to generate revenue from the sale of dead timber which can be reinvested in the damaged lands. Also foregone will be the benefits of fuel treatment to reduce the hazard in and adjacent to communities such as Happy Camp, Seiad Valley, Hamburg, etc.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The agency acknowledges the statements made by the commenter, many of which reflect the disclosure of effects throughout Chapter 3 of the EIS. The analysis of the no action Alternative serves as a baseline comparison on which other action Alternatives can be analyzed and compared.

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203 - Multiple Resources/Reasons	#18853-5	With this as background, our membership has reviewed the proposed action for the Klamath National Forest and we strongly believe that Alternative Two should be supported. Forest health is paramount to the environmental soundness of California. The proposed action will allow our skilled Licensed Timber Operators to move in and get the job done with regard to fuels reduction and the safeguarding of the forest against future fire risk; and will also allow our workers to salvage burned trees before they create a hazard that can lead to future fires and to the infestation of pests. The plan would also allow our operators to "partner" with the federal government on restoration of forest habitat, via reforestation and other techniques. We again urge the United States Forest Service and you to adopt Alternative 2, the action as proposed by the Forest Service.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Alternative 2 was the preferred Alternative in the draft EIS; however, in response to consultation and other public comments, the preferred Alternative is now a modified Alternative 3.
203 - Multiple Resources/Reasons	#18857-12	No salvage units in the Grider Creek drainage to protect roadless values, watershed values, scenic values - such as the Pacific Crest Trail (PCT) and connectivity between the Marble Mountains Wilderness, the Siskiyou Crest and the adjacent LSRs. * No salvage units should be proposed in the following watersheds or areas to protect ecological values, scenic values, and recreational qualities within and adjacent to large Inventoried Roadless Areas or Wilderness Areas. This would include the following areas: Happy Camp Fire: Grider Creek, N. Fork Kelsey Creek, McGuffy Creek, Kuntz Creek, Tom Martin Creek Whites Fire: E. Fork Whites Gulch, Sixmile Creek, South Russian Creek, Tanners Peak area, 3	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. In response to consultation and other public comments, the preferred Alternative is now a modified Alternative 3.
203 - Multiple Resources/Reasons	#18864-1	Please please please choose the most ecologically and environmentally sound actions instead of clear cutting, building,, and logging over 600 miles of roads that will erode. Protect the wildlife and future generations! We all need to breathe clean air and drink clean water. If you do not stop this. We will.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. No clear-cutting is proposed in the Westside Fire Recovery Project. See response number 8435-1 for description of clearcutting verses salvage logging. See Chapter 2 of the final EIS for what is being proposed.
203 - Multiple Resources/Reasons	#18866-1	Please find an ecologically sound alternative solution that will benefit and help our fish, wildlife, trees, climate, and human population. Please stop the West Side Fire project. Thank you.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
203 - Multiple Resources/Reasons	#18867-2	I value post-fire habitates for salmon, birds (including spotted owls), many wild mammals, and all living beings on the Klamath National Forest. This timber volumn is not needed! Opening up roads- erosion plus disconnecting wild terrain equals bad news!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Project effects are disclosed in Chapter 3 of the EIS.
203 - Multiple Resources/Reasons	#18868-1	Human life is part of forest life- the Eco system includes all humans, animals, plants and earthly life. We need clean air and water to sustain life! Trees, soil, and water (etc.) Depend on all species growing and surviving.	The agency acknowledges the humans are part of the ecology. See effects to air, water, soil, and climate change in Chapter 3 of the EIS.
203 - Multiple Resources/Reasons	#18878-69	Draft Karuk Tribe Department of Natural Resources Eco-Cultural Resources Management Plan (06-05-10) (http://karuk.us/images/docs/dnr/ECRMP 6-15-10 doc.pdf)	Citation only. Citation has been reviewed. Any identified culturally significant resources will be protected from project activities using project design features and/or Standard Resource Protection Measures. The Forest Service is actively consulting with the Karuk Tribe; see Chapter 1 of the EIS.

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203 - Multiple Resources/Reasons	#18878-70	Holmlund, Croy Robert 2006. Fish, Forests, Fire, and Freedom: Infringements of Karuk Religious Freedom Through Federal Natural Resource Management. Humboldt State Master Thesis	We agree that culturally significant resources are more than simply artifacts and anthropological histories. Any identified culturally significant resources will be protected from project activities using project design features and/or Standard Resource Protection Measures. The Forest Service is actively consulting with the Karuk Tribe; see Chapter 1 of the EIS. Citation only. Citation has been reviewed and incorporated into the project record.
203 - Multiple Resources/Reasons	#18878-71	Taylor, A.H., Skinner, C.N., and Agee, J.A. 2006. Klamath Mountains bioregion. In N. G. Sugihara, J. W. Van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, Fire in California's ecosystem. Berkeley and Los Angeles: University of California Press	Citation only. This citation paper has been reviewed. We agree with the commenter in citing this paper that "more area is burning at high intensity, and this is related, in part, to higher quantities and more homogeneous fuels caused by accumulation during the fire-suppression period." The Fire and Fuels report in the EIS describes proposed treatments and concludes that the treatment design would assist in planned and unplanned fire into the future. This would allow fire to play a role on the landscape into the future and would reduce the likelihood of the treated area burning at higher intensity and severity into the future.
203 - Multiple Resources/Reasons	#18926-6	The third priority should include the protection of resources in a prioritized manner. The priority being sensitive resources down to matrix lands. ! ! Reduction of the Fire Risk in Future Fires !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
203 - Multiple Resources/Reasons	#19078-1	I wish to express my disapproval of the Westside Timber Sale due to impacts to the Klamath River's key salmon refugia, cumulative impacts to forest and watershed, and violations of the Clean Water Act, the Endangered Species Act, NEPA and California's Porter Cologne law. I incorporate by reference the comments of the Klamath Siskiyou Wildlands Center, the Center for Biological Diversity, the Karuk Tribe and the Environmental Protection Information Center and the Klamath Forest Alliance.	See response to number 12549-5

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203 - Multiple Resources/Reasons	#5873-49	The agency often cites Franklin and Agee. 2003 "Forging a Science-Based National Forest Fire Policy," Issues in Science and Technology Online. Fall 2003. http://web.archive.org/web/20071215154828/http://www.issues.org/issues/20.1/franklin.html to support "active management" after fire. This paper simply does not support aggressive salvage logging. In fact, it has very short discussion of post fire logging that includes the following: Management of postburn areas, including timber salvage, needs to incorporate the concept of biological legacies. Salvaging dead and damaged trees from burns involves the ecology of a place, not simply economics and fuels. In addition to effects on postfire wildlife habitat, there are also effects of salvage logging on soils, sediments, water quality, and aquatic organisms. Significant scientific information exists on this topic as well as on biological legacies. Biological legacies differ by orders of magnitude in natural forests, a fact that should guide restoration programs. Where stand-replacement fires are characteristic, such as with lodgepole pine and Pacific Coast Douglas fir forests, massive areas of standing dead and down trees are usual; salvage operations generally are not needed and do not contribute to ecological recovery, even though they do provide economic return. On the other hand, uncharacteristic stand-replacement fires in dry forests can produce uncharacteristic levels of postfire fuels, including standing dead and down trees. Removing portions of that particular biological legacy may be appropriate as part of an intelligent ecological restoration program, and not simply as salvage. (emphasis added) At most this paper supports removal of a portion of the uncharacteristic fuels. The only fuels that would be "uncharacteristic" and the small trees that grew up as a result of fire suppression. If the tree was there before fire suppression, than it should remain after a stand replacing fire. Only small fuels should be removed. This intent is clear from Jerry Franklin's work on The Klamath Tribes' Forest Management Plan. Specific principles to guide removal of trees, snags, and logs from burned sites are as follows: … 2) Trees (live and dead) and down wood will be retained in sufficient quantities to provide for wildlife and ecological needs, including long-term structural enrichment of the site. However, this goal does have to be evaluated in the context of whether the post-fire levels of snags and down wood are within the characteristic range for the plant association; i.e., where pre-burn stands had uncharacteristic stand densities for that plant association. General guidelines for retention of trees (live and dead) and down wood within the wildfire area are as follows: Retain amounts and distributions of trees as would be characteristic of the pre-burn (historical) landscape … … Large snags persist for the longest period, and are most difficult to replace. Consequently, snag and log retention will focus on the largest (21"+ DBH) pieces in the post-burn landscape. … The retention standards should be checked to make sure that they will provide amounts and distributions of snags and down wood that will meet requirements for species at risk, sensitive species, and other species of special interest to the Tribes (such as mule deer). If they will not meet the species requirements, adjust the retention standards accordingly. There is an important caveat: this may not be done if providing for a particular species requires maintaining uncharacteristic levels of post-fire fuels over a significant portion of the burned landscape. As noted above, proposed levels of snag and down wood retention will be evaluated to determine that they will not result in fuel loadings that are above characteristic levels for the plant association. Where they do, the goal will be to adjust retention to characteristic levels. In such a case retention of the large snags and down wood will be the standard since these structures contribute less to fuels on a cubic foot basis, persist longer, and provide habitat for more species. (emphasis added) K. Norm Johnson, Jerry Franklin, Debora Johnson. The Klamath Tribes' Forest Management Plan. Dec 2003. http://web.archive.org/web/20040103034821/http://www.klamathtribes.org/forestplan.htm pp 108-109. The Franklin and Agee piece also makes clear that salvage logging must be considered in an ecological restoration framework and all adverse impacts of the logging must be considered. A truly ecological post-fire plan would involve: • rehabilitating fire fighting impacts (e.g. minimize erosion and block OHV use, re-establish native plant communities), • significant road closures to protect watershed values and avoid the knee-jerk removal of hazard trees, • culvert removal or replacement to provide for passage of fish sediment and woody debris, • a long-term plan for managing fuels in the future, • plans to avoid as much as possible impacts from seeding (e.g. weeds and competition with native plant communities), planting (dense plantations), logging (e.g. loss of snag habitat, loss of cover, etc.)	See the beginning of Chapter 3 for a discussion of responsible opposing points of view. The final EIS and supporting documents incorporate best available science.

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203 - Multiple Resources/Reasons	#5873-97	The NEPA document also fails to disclose that NOT salvage logging (e.g., natural recovery) may have some countervailing benefits in terms of fire risk and reburn potential, including: (a) large logs store water, (b) standing snags provide some shade, (c) regrowth tends to be more patchy and less dense and continuous, (d) fuels in the form of branches and dead trees fall to the ground slowly over time and have a chance to decay as they added, (e) falling snags over time ten to break up the continuity of fuels in the form of brush and reprod.	The effects of not salvage harvesting are discussed under Alternative 1, no action. Throughout the document we acknowledge the importance of retaining large woody debris and snags. See the Chapter 1, salvage in Late-Successional Reserve and the beginning of Chapter 3 for responsible opposing points of view. Because we recognize the importance of these components on the landscape, coarse/large woody debris and snag retention were incorporated into project design; see watershed and wildlife project design features in Chapter 2 of the final EIS. Treatments are not affecting stream shade because no salvage harvest is proposed in hydrologic Riparian Reserves and project design features apply for roadside hazard treatments watershed-5 and -23, Chapter 2 of the final EIS). Outside of hydrologic Riparian Reserves, shade was also considered as follows: "Units identified for salvage harvest and site preparation and planting activities had high to moderate vegetation mortality due to the 2014 fires. These areas burned at such intensities that they no longer offer adequate canopy cover to provide the shade, moisture, humidity, and temperature characteristics required by most Sensitive species (assumption being field verified)." In the hydrology section of Chapter 3, Riparian Function is analyzed at the project scale. The analysis includes shade reduction not related to debris flows along stream channels. The trend also considers effects to large wood recruitment in the short and long term. We also analyze the difference between salvage logging and not in terms of fire hazard/risk and reburn potential. Fuel loading, decay rates, and brush regeneration are also considered in the fuels analysis; see Chapter 3 of the final EIS.
203 - Multiple Resources/Reasons	#7904-1	I'm writing to request that you withdraw the proposal for the "Westside Fire Recovery Project" in the Klamath National Forest. Fire is not only natural in this area, it is essential to maintain the area's natural diversity. And while recent fire suppression and other interventions have significantly changed the area's historical fire regime, and some fires today may therefore arguably cause harm to the ecosystem, the evidence now seems clear that post-fire logging generally increases any such negative impacts rather than mitigating them. This is especially true for the steep slopes and sensitive aquatic habitats which are the hallmarks of the entire Klamath bioregion and for the old-growth forests targeted for a substantial part of the Westside project. Please allow natural post-fire succession to take its course, and keep any interventions modest and science-driven, rather than industrial-scale and economically motivated as the Westside project appears to be.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised.
203 - Multiple Resources/Reasons	#9222-1	Please do your job and protect the Klamath National Forest. This is some of the most beautiful area I have backpacked and I feel a special need top speak in it's defense. Clear cutting this area will lead to a great deal of erosion, impairing the clean running of the streams, and hurting the salmon. Trees stabilize slopes and provide habitat for many species. Your own rules are in place to protect the forest and it's inhabitants. Follow these rules, don't circumvent them.	See response to comment number 6271-1.
204 - Wildlife	#14120-2	The animals are running out of places to live and be safe. Our wildlife are under threat from so many angles. They desperately need to be protected, mainly from humans. Life is hard enough for people, let alone the animals. Can't we please offer them some much needed help?!	The benefits and negative effects of the Westside Fire Recovery project on wildlife species in the project area are described in the Wildlife reports (Management Indicator Species, Survey and Manage, Biological Evaluation and Migratory Bird reports).
204 - Wildlife	#17349-9	Wildlife - For big game species the fires will be a positive thing in terms of forage quantity and quality over the next 10 years or more. Keep in mind that salvage and reforestation activities will also benefit these same species by creating a different age class of forage in the treated areas thereby extending the time period of favorable forage conditions. For old-growth species the fire obviously altered the habitat. Recovery treatments will have relatively small effects on the short term post fire habitat but will have substantial long term benefits from fuel treatments and tree species composition. Noise effects will be a factor but for the most part need to be tolerated in order to reap the long term benefits.	The big game species identified in the Forest Plan are a Management Indicator Species used for Forest Plan analysis and these species were not intended to be analyzed at the project scale. However, we have added a brief analysis to the in the Wildlife Report Amendment to respond to this comment.
204 - Wildlife	#17375-4	Any area that provides connectivity to previously impacted areas is of greater value to wildlife and water quality than the sum of the parts	Connectivity is addressed in the Wildlife Biological Evaluation (as amended). There is no salvage logging in the stream related Riparian Reserves which offer connectivity within and between watersheds. Alternatives 3 focuses on reducing the effects to connectivity in the Beaver Fire area and Alternative 5 does not have any salvage in the Late Successional Reserve. The project design and range of Alternatives illustrates the varied effects to connectivity that might occur while meeting the purpose and need.

Code	Comment Number	Comment Text	Response
204 - Wildlife	#17501-4	All units within the Westside Project that would require the removal of green trees for yarding or operational needs should be dropped from the project. All green trees should remain this burned ecosystem to help speed the recovery of the land on its own. Drop the units in the Caroline Creek Bald Eagle Management Area. There is no excuse for logging near bald eagle nesting sites. Bald eagles have evolved with fire and they will be more harmed from the logging of its snag habitat than it will be from the naturally occurring fire.	Forest Plan Standard and Guideline Management Area 5-43 which provides for a protection areas around nest and roosting sites was incorporated into the analysis and project design features. However, Forest Plan Standard and Guideline Management Area 5-57 provides an exemption for hazard tree removal and salvage activities that benefit eagle habitat. The salvage harvest reduces fuels around bald eagle nests and roost sites which is beneficial for reducing future wildfire behavior/severity in the future.
204 - Wildlife	#17501-6	How can the KNF possibly suggest that it is okay to log within northern spotted owl (NSO) home ranges? There are 94 nest sites, core areas and home ranges, also know as Activity Centers in the project area, 92 of these sites will be treated in the Westside Project. The project may adversely affect 70 NSO Activity Centers! How can this be acceptable when this species is listed as threatened under the ESA, and may be up-listed because its population continues to decline. At a continued loss of 3% a year according to U.S. Fish and Wildlife, the NSO will most likely be listed as endangered, but only because projects like the Westside still keep getting proposed. There is no reason to log within NSO activity centers when there is so much timber that can still be logged from second growth or areas that don't have NSO activity centers. Drop all units in the Westside Project that will adversely impact the NSO. Contradicting the findings of the DEIS, that NSO use of burned areas is scientifically unclear, the Wildlife BA makes it clear that "owl use of burned areas is well documented," and that "snags and live trees" in burn areas are used for perch sites when foraging in fire-effected areas (Wildlife BA P. 38). The Wildlife BA also identifies a study by Clark (2007), stating that NSO often respond to severe fires by expanding home range size. This study and its findings were not adequately utilized in the DEIS analysis and all home ranges effected by high severity fire should be expanded by at least one-third to address direct and indirect NSO impacts In some areas salvage logging has excluded most of the inventoried roadless area from potential wilderness designation. Thousands of acres have been salvage logged with extreme impacts to roadless values. Many of the areas identified in the Forest Plan as not currently meeting the criteria for retention of roadless area values are listed as showing signs of "alteration" or "excessive alteration" due to degradation by salvage logging. In areas where "natural integrity in no longer maintained," salvage logging is nearly always to blame. I believe the KNF must fully disclose these forest-wide impacts to an important forest resource -roadless areas - by identifying the number of acres salvage logged in roadless areas since 1987, the percentage of roadless areas impacted by salvage logging, the percentage of roadless acreage impacted and the cumulative impact of this logging in roadless habitats. In their paper, "Restoration of Federal Forests in the Pacific Northwest," professors Norm Johnson and Jerry Franklin state, "Conflicts often exist between economic and ecological objectives as timber salvage is generally about recovering economic values rather than enhancing ecological recovery." They also list three recommendations under "General Post Disturbance Guidance," these recommendations include: 1) Do no significant additional ecological damage to the biota and functional capabilities of the post disturbance ecosystem, with particular consideration of soil and aquatic resources. 2) Consider the merit of potential activities in the context of the primary management objectives for the site. For example, salvage would appear to be inappropriate in areas that have been allocated primarily to maintenance of native biodiversity and functions and natural forest ecosystems (including old growth) and 3)	Northern Spotted owl use of fire affected areas is described in the Biological Assessment in the section called “northern spotted owl use of the post-fire landscape”. In this section of the Biological Assessment, the summary of literature on this topic includes Dr. Clark among may other researchers that have contributed to the current body of literature on northern spotted owl use of fire affected landscapes. The past actions on the Forest including salvage harvest were incorporated in the wildlife analysis by evaluating the existing condition of habitat. Estimating the amount of salvage harvest in 1987 will not change the existing habitat in the project area. The existing habitat is the result of many factors including human and natural disturbances. Thank you for pointing out these management recommendations. After reviewing “Restoration of federal forests in the Pacific Northwest: strategies and management implications” authored by Johnson and Franklin (2009), we didn’t find the same recommendations in the document as those presented in the comment. However, the commenter seems to be pointing out a concern about salvage harvest. The final EIS provides information concerning salvage harvest in Chapter 3 of the final EIS in the sections called “Responsible opposing views and agency’s response to issues raised”.
204 - Wildlife	#17764-2	You should take a lot more time considering all of the wildlife habitats you are going to disrupt by trying to allow anyone to begin cutting this summer, 2015.	Several reports were generated to describe the effects to a wide array of habitat and species as a result of all of the action Alternatives of the Westside Fire Recovery project. These include the Management Indicator Species report, the Biological Evaluation, the Survey and Manage report and the Migratory Bird Report. These reports have been further amended as a result of additional information and public comment. The results of the analysis contained in the reports is summarized in the draft EIS and in the final EIS.
204 - Wildlife	#18726-2	All trees that might possibly survive are needed for site regeneration. They provide site adapted seed sources, shade for seedlings, and many benefits for wildlife. It is natural for trees to die. Diseased, damaged and dead trees provide key structural components in late successional forests. They provide important habitat for wildlife	Trees that have less than a 70% probability of mortality (as defined by Report #RO-11-01) in the next three to five years are not being considered for salvage harvest (See Chapter 2 of the final EIS). Fire killed trees will be retained in hydrologic Riparian Reserves, inner gorges and other retention areas to ensure legacy components remain on the landscape until the ecosystem is capable of replacing them (See Response 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" in Chapter 3 of the final EIS).

Code	Comment Number	Comment Text	Response
204 - Wildlife	#18859-5	As a professional wildlife biologist with nearly 25 years of experience working in northern California forest ecosystems, it is imperative to the future of our forests to implement recovery and restoration efforts as soon as possible. It is my professional opinion that the Westside Recovery Project will have no significant negative impact on species such as northern spotted owls, Pacific fisher, and coho salmon. The greater long term threat to these species is not implementing this project and dealing with the inevitable re-burn that will take place on these acres.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
204 - Wildlife	#18899-1	The Center for Biological Diversity, KS Wild, Environmental Protection Information Center, and Klamath Forest Alliance submit the attached comments from spotted owl biologist Monica Bond regarding the impacts of the proposed Westside Project on the ESA listed northern spotted owl. We respectfully urge you to protect northern spotted owl habitat within the Project area from salvage logging, including (and especially) the severely burned forest that these owls rely on in post-fire landscapes for finding the food they need to survive. For example, Clark et al. 2013 determined that no salvage logging should occur within a 2.2. km radius of owl centers in order to protect owl habitat (nesting, roosting, and foraging) in post-fire landscapes. Moreover, because northern spotted owls are listed under the ESA, protection of their habitat, as a matter of law, must err on the side of conservation.	The commenter overstates the results of a researcher. Clark's 2007 thesis and subsequent papers are clear that he was unable to separate the effects of high-severity fire, salvage logging and past timber harvest. Darren Clark's 2013 paper coauthored by Dr. Robert Anthony and Dr. Lawrence Andrews provides strong evidence that site occupancy of spotted owl nesting territories declined in the short-term following wildfire, and that habitat modification and loss due to past timber harvest, high severity fire and salvage logging jointly contributed to declines in site occupancy, his research cannot tell us definitively how salvage logging itself contributed to the effect. His 2011 paper, again co-authored by Drs. Anthony and Andrews, notes that survival rates in post-fire landscapes may be influenced by habitat degradation in stands of low to moderate severity fire due to delayed tree mortality, changes in microclimate and prey abundance or increased predator pressure, all of which are co-variates that have not been adequately studied in the scant literature on owls and wildfire. In his 2013 paper, Clark suggests "a cautionary approach when applying our findings to future land management decisions." Although he recommends restricting salvage logging on public lands within 2.2 kilometers of spotted owl territories, his recommendation does not have the certainty of the commenter's statement that he "determined that no salvage logging should occur within a 2.2 km radius of owl centers…" Indeed the Endangered Species Act requires that consulting biologists 'err on the side of the species' in providing guidance in an uncertain field. Note that the low-level of treatment across the very large fire-affected areas (6.3 % of the fire affected area is actually being considered for salvage) could indeed be interpreted as a conservative approach. Moreover, the Endangered Species Act doesn't generally require a full ' hands off' approach unless an action truly jeopardizes the continuing existence of the species. The Endangered Species Act certainly allows for moderate levels of treatment including and up to treatments that may result in actual 'take' of a species. Given the low level of take requested in this project and the large amounts of fire-affected lands that will be left untreated or very lightly treated, this decision certainly 'errs on the side of the species.'

Code	Comment Number	Comment Text	Response
204 - Wildlife	#18916-2	The DEIS makes the following representation regarding my 2013 study pertaining to Pacific fishers and wildland fire: "Fisher use of fire affected habitat is not well understood (Hanson 2013). In southern Sierra Nevada, fisher scat was found in pre-fire dense, mature mixed conifer that was both fire effected and not fire effected (Hanson 2013). However, the study didn't provide an estimate of post-fire canopy cover which can be an important habitat component in linking fisher use with habitat conditions. In addition, forest stand complexity and physical structure can provide cover that is likely important for fisher in fire affected forests, but these attributes were not measured. Basically, the article (Hanson 2013) provided some evidence that fisher will use fire affected habitat, but the stand characteristics that may aid in explaining these observations were not explored." With regard to DEIS's characterization of Hanson (2013), it dodges the central findings, and is misleading and internally contradictory. For example, the Wildlife Biological Evaluation (on p. 20), which was incorporated by reference into the DEIS, claims that I did not include forest structure in my analysis, but in the first quoted sentence above the DEIS admits the opposite. In fact, I explicitly analyzed fisher use by fire severity and pre-fire structure/composition--both dominant size class and canopy cover--and forest type (see Abstract, and Results at p. 26, of Hanson 2013). Further, the DEIS claims that I didn't quantify post-fire effects, but this is inaccurate. In my Methods (see p. 25 of my study), I explicitly describe the fire severity categories analyzed, and the level and range of tree basal area mortality associated with each (canopy cover mortality levels track very closely with percent basal area mortality--see, e.g., Miller et al. 2009), where higher-severity was defined as 50-100% basal area mortality (which is the equivalent of 50-100% canopy cover mortality-see Miller et al. 2009, Vol. 113, pp. 645-656 in Remote Sensing of Environment). Below is a brief summary of my findings in Hanson (2013): Hanson, C.T. 2013. Pacific fisher habitat use of a heterogeneous post-fire and unburned landscape in the southern Sierra Nevada, California, USA. The Open Forest Science Journal 6: 24-30. (Pacific fishers are using pre-fire mature/old forest that experienced moderate/higher-severity fire more than expected based upon availability, just as fishers are selecting dense, mature/old forest in its unburned state as well. The proportion of higher-severity fire was significantly higher within 0.5 kilometers of fisher detection locations than at random locations, indicating that fishers are selecting areas with relatively higher levels of higher-intensity fire. When fishers are near fire perimeters, they strongly select the burned side of the fire edge. Both males and female fishers are using large mixed-intensity fire areas, such as the McNally fire, including several kilometers into the fire area.) In addition, I gathered additional data in the McNally fire, using the same methods described in Hanson (2013), but focused mainly in large higher-severity fire patches, and found very strong use of large, intense fire areas patches in dense, mature/old conifer forest, especially by female fishers. My findings are in-press in a new study, Hanson (2015), the results of which I summarize below: Hanson, C.T. 2015. Use of higher-severity fire areas by female Pacific fishers on the Kern Plateau, Sierra Nevada, California, USA. The Wildlife Society Bulletin (in press). (Using a Pacific fisher scat-detection approach, the current hypothesis among land managers that fishers will avoid higher-intensity fire areas was rejected, and fishers used unlogged higher-intensity fire areas at levels comparable to use of unburned dense, mature/old forest. Female fishers demonstrated a significant selection in favor of the large, intense McNally fire over adjacent unburned mature/old forest, and the highest frequency of female fisher scat detection was over 250 meters into the interior of the largest higher-intensity fire patch (over 12,000 acres).	See response to comment 18916-3.

Code	Comment Number	Comment Text	Response
204 - Wildlife	#18916-3	The Wildlife BE (p. 20) also claims the following, in response to Hanson (2013): "Even areas with shrub and other ground cover, fisher are subject to higher rates of predation (Wengert 2013)." However, this is inaccurate and highly misleading, as the areas Wengert (2013) found to represent the overlap between predators of fishers, and fishers, were barren/rocky areas and open/shrub areas that were not consistent with dense, old forest that burned at higher-severity. Higher-severity fire occurring in dense, old conifer forest creates a unique forest habitat type called "complex early seral forest", which cannot be equated with general "open" or "shrub" conditions. Many types of ground cover are open, or are comprised of some level of some type of shrubs, but this does not make them complex early seral forest, which contains an abundance not only of tall, mature shrubs (which provide high levels of cover for hunting fishers), but also a very high abundance of medium and large snags, and downed logs (which fishers can travel next to for cover from predation). Because of these factors, the open/shrub areas in Wengert (2013), as described in the Wildlife BE, cannot be honestly compared to the complex early seral forest areas that fishers are actively using, and selecting, in Hanson (2013) and Hanson (2015) and, by the same token, cannot be compared to the areas of dense, mature/old forest that experienced higher-severity fire in the Westside fire area. Suggestions to the contrary are not scientifically legitimate or valid, and appear to be nothing more than an attempt to dismiss and minimize adverse effects of the proposed post-fire logging on a species that is proposed for listing under the ESA. As I concluded on p. 28 of Hanson (2013): "My results indicate that fishers benefit not from moderate/higher-severity fire in general but, rather, moderate/higher-severity fire in mature/old forest with moderate to high pre-fire canopy cover. Such areas have high structural complexity [21, 30], and can have higher overall biomass (live and dead sources combined) than unburned old forest [31]. Both of these are reduced by postfire logging [32]…While moderate- and higher-severity fire certainly reduce overstory canopy cover, they greatly accentuate structural complexity, and density, with regard to snags, downed logs, montane chaparral patches, and natural conifer regeneration patches [21, 30, 34] (Fig. 3). The "complex early seral forest" habitat resulting from higher-severity fire is, as a result of this complexity and high biomass, rich in native biodiversity and wildlife abundance [21, 34-38]. This may help explain why fishers are not declining on the Kern Plateau [27], despite the fact that a high proportion of the forested landscape has recently experienced large, mixed-severity fires." I encourage you to withdraw the Westside post-fire logging project, or at least scale it back dramatically to avoid logging in LSRs and roadless areas, and generally areas of dense, mature/old forest that experienced moderate/high-severity fire in order to avoid adverse impacts to Pacific fishers, based upon the best available science. In such a revised project, as I recommend, management would be limited to felling genuine hazard trees that are dead and are within falling distance of roads maintained for public use (maintenance level 3, 4, and 5 only).	The approach to analyzing fisher included concepts from Hanson (2013). As of the date of this response Hanson (2015) was not available for review. Fisher habitat classifications are described in Table 7 of the Biological Evaluation(as amended). The fisher analysis was updated for the final EIS and does not assume that all areas burned with high or moderate severity were non-habitat. Denning/Resting and foraging habitat that was burned with high/moderate severity fire was assumed to become movement habitat. Movement habitat was considered habitat in both the connectivity and home range analysis. So areas that met denning/resting and foraging habitat that burned with moderate and high severity where treatment is proposed is assumed to be a modification or removal of fisher habitat.
204 - Wildlife	#18926-17	The salvage activities proposed within LSRs as part of the Westside Fire Recovery Plan are inconsistent with NWFP intent and direction for management of LSRs, including their treatment following a major disturbance. Salvage will make no positive contribution to the reestablishment of late-successional forest habitat or to the early successional ecosystems that provide habitat for NSO prey species, among many others. Retention of large snags and logs are critical parts of the natural recovery processes and none of this wood legacy can be demonstrated as being in excess to ecological needs on moist forest sites; indeed, all of the scientific evidence is to the contrary. Removal of medium and fine fuels, but not large snags and logs, may be ecologically justifiable on sites characterized by PAGs with Fire Regimes I and II. Issues associated with fire suppression could be addressed by creating snag-free corridors or narrow FMZs. Some limited tree planting may be justified to provide seed sources for tree species otherwise likely to be absent or under-represented but the plantings should be carried out in low numbers and at variable density. Establishment of large areas of plantations, even at low density, is inappropriate within the LSRs or on sites characterized by Fire Regimes I and II. Current knowledge regarding the ecology and recovery of the NSO is inadequate in the DEIS should be considered during revision of the DEIS or a Final Environmental Impact Statement.! ! To support this position on what to do in an LSR after a forest fire (salvage logging, tree planting, etc) and consistency with the Northwest Forest Plan, I hereby incorporate by reference the comments	See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised for a discussion of the many issues raised in this comment.

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		with scientific studies dated April 6, 2015 and submitted on April 21, 2015 by Dr. Jerry Franklin for the Westside Fire Recovery Project.! !	
204.01 - NSO	#12346-72	Conservation of listed species is literally an afterthought in the KNF's rush to salvage log as many acres as possible as quickly as possible. The Biological Evaluation (BE) and Biological Assessment (BA) for impacts to the NSO cannot inform agency planning or alternative development because the logging alternatives were developed prior to the completion of a BE or BA. Indeed, as of March 31, 2015, neither document is available to the public during the DEIS commenting period and neither document informed development of the DEIS. Please note that page 10 of the Wildlife Biological Report contends that "[a] detailed discussion and review of the literature concerning NSO use of fire affected forest is available in the Biological Assessment." But it was not. Throughout much of the truncated NEPA commenting period the KNF has withheld the BA from the public. Similarly, page 12 of the WBR incorrectly states that "[m]ore information on NSO critical habitat is available in the project Biological Assessment. As of March 31, 2015, this statement is simply false. The alleged information is unavailable to the public. Page 38 of the WBR contends that "[a] detailed description of [the] affected environment for the northern spotted owl is described in the project Biological Assessment." This may be so, but such a description is useless if the public is precluded from being able to review it in a timely manner.Page 149 of the DEIS indicates that the KNF intends to log 1,205 acres of habitat deemed critical for the survival and recovery of the NSO. Page 3-4 of the DEIS discloses (but does not analyze) that the 2014 fires negatively impact 31,000 acres of suitable NSO habitat. The KNF proposes to further remove 456 acres of Nesting and Roosting habitat, 432 acres of Foraging habitat and 317 acres of Dispersal habitat (DEIS page 149) through the logging of large snags, future coarse woody debris, and roadside logging of live green trees in stands that currently provide critical NSO habitat in Late-Succesional Reserves. This LSR and CHU logging will have the effect of "reducing canopy cover and other habitat characteristics" necessary for the survival and recovery of the species. Rather than protect, restore and conserve the remaining NSO habitat, KNF timber planners prefer to rely upon the contention that they are not increasing the risk to NSO reproduction "not because the actions [logging] do not have an effect but because most of the activity centers with other actions are already at the highest level of risk for this analysis." This is an unacceptable approach to the recovery of a threatened subspecies whose population is in decline and cuts against Recovery Action 12 of the 2011 final NSO Recovery Plan.	It was the Forest's intention to post the Wildlife Biological Evaluation and Wildlife Biological Assessment at the same time for public comment. We recognize there was a delay in posting the Biological Assessment, but this document was available to the public during about half of the comment period and subsequently, the Forest extended the comment period. The northern spotted recovery plan consistency is discussed in the Wildlife Biological Assessment in Table 2 and Appendix B. However, it is important to acknowledge that the analysis presented in the Wildlife Biological Evaluation or the Wildlife Biological Assessment for Critical Habitat was not intended to be a measure of the Recovery Plan. The Recovery Plan is a guidance document that provides recommendations to aid in the recovery of the northern spotted owl. The Recovery Plan is also intended to be used as a whole and not necessarily as individual Recovery Actions.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#12346-73	As stated on page 49 of the WBER: Overall, the amount of NSO critical habitat has been on a decline because of large fire events that resulted in removing many acres of habitat. The 2014 fires added to this negative trend in the amount and quality of NSO critical habitat. The additional removal of NSO critical habitat from alternative 2 will continue this negative trend. Even though 3 On March 27, 2015, two weeks after commencement of the shortened DEIS commenting period (due to "Alternative NEPA Arrangements) KS Wild received an email from Wendy Coats of the KNF indicating that an Updated Wildlife Biological Report had been placed on the project web site and that the updated document scrubbed all mention of the still unavailable Biological Evaluation and Biological Assessment which continue to be incomplete and hence incapable of influencing the design of the proposed logging alternatives which the public is tasked with commenting upon. 26 there is no defined minimum threshold for NSO critical habitat that would aid in determining the magnitude of effects, KLE7 is likely the most affected critical habitat subunit from fires in the last few decades in the project area and the proposed [logging] treatments will further affect some of the remaining habitat. On April 2, 2015, several weeks into the public comment period for the Westside salvage logging project, the KNF belated released a Draft Biological Assessment for the spotted owl. Pages 55-56 of that document indicate that the agency intends to take action which may jeopardize the continued existence of the species in the Klamath National Forest. KNF timber planners intend to conduct logging activities "Likely to Adversely Affect" 70 owl activity centers. Page 56 of the Draft BA concludes "a total of 75% of the ACs [activity centers] in the analysis area will be adversely affected by the proposed treatments. In addition, 23% of all activity centers on the west side of the KNF will be adversely affected by the proposed activities." It appears that the KNF also intends to remove designated NSO critical habitat located in known activity centers that have been designated critical to providing demographic population support for the species. The DEIS and the Draft BA fail to disclose or analyze the location and impacts of critical habitat removal that occurs outside of known NSO activity centers. The Northern Spotted Owl Recovery Plan (2011; NSO RP) provides direction to the Forest Service regarding the management of spotted owls generally, as well as after wildfire specifically. According to the United States Fish and Wildlife Service, "Recovery Actions' are near-term recommendations to guide the activities needed to accomplish the recovery objectives and achieve the recovery criteria," such that a species may be delisted from ESA protection. Recovery Action 10 directs federal agencies to: "Conserve spotted owl sites and high value spotted owl habitat to provide additional demographic support to the spotted owl population. The intent of this recovery action is to protect, enhance and develop habitat in the quantity and distribution necessary to provide for the long-term recovery of spotted owls." NSO RP, III-43. The NSO RP also states "this recommendation includes currently occupied as well as historically occupied sites (collectively "spotted owl sites," see Appendix G: Glossary of Terms)." Id. at III- 42. Furthermore, the NSO RP states that "As a general rule, forest management activities that are likely to diminish a home range's capability to support spotted owl occupancy, survival and reproduction in the long-term should be discouraged." Id. at III-43. It appears that the Westside project is likely to adversely affect 70 spotted owls, and yet the Forest Service nonetheless is proposing to move forward with post-fire logging activities that will not "conserve" spotted owl sites. In addition, post-fire logging will "diminish a home range's capability to support spotted owl occupancy, survival and reproduction in the long-term," the very activity the NSO RP states should not occur. NSO Recovery Plan Recovery Action 12 directs: "In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large 27 trees, medium and large snags, downed wood)." NSO RP, III-49. Post-fire logging particularly targets medium and large fire-killed trees (snags) for removal. The NEPA analysis does not explain how the proposed action is consistent with these (and other) provisions of the NSO RP, as required by law. 40 C.F.R. § 1508.27(b)(10) (consideration of a project's significance requires an analysis of "Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment").	The Endangered Species Act does not allow a Federal agency to “Jeopardize” any threatened, endangered, or proposed species. To ensure that “Jeopardy” does not happen, the action agency must consult with the U.S. Fish and Wildlife Service or National Marine Fisheries Service. The Forest has been in consultation with both of these Federal agencies for the past several months. However, the action agency can consult on a project that may result in effects that are likely to adversely affect a spotted owl activity center as long as the action doesn’t reach the point of “Jeopardy”. The Wildlife Biological Evaluation and the Wildlife Biological Assessment both analyze the effects of the proposed activities on spotted owl critical habitat and spotted owl activity centers. The critical habitat and activity center analyses are not the same. Activity centers may or may not contain critical habitat but the effects to an activity center are the same regardless whether this activity center contains critical habitat. Critical habitat is a geographically defined area that varying amounts and quality of habitat; however, the effects to critical are assessed based on the “primary constituent elements” that represent the important biological elements for spotted owl habitat. The effects analysis for critical habitat estimates the effects to the primary constituent elements within each Critical Habitat subunit. The Northern Spotted Owl Recovery Plan is not a regulatory document. The Recovery Plan provides many recommendations to minimize effects to spotted owls. Recovery Action 12 speaks directly to the need for post-fire silvicultural treatments should focus on conserving and restoring habitat elements that take a long time to develop (e.g. large trees, medium, and large snags, down wood). The Recovery Plan also discusses the one of the primary threats to spotted owls is the loss of habitat to wildfire. The Westside Fire Recovery Project is trying to balance the current and future needs of northern spotted owls and their habitat. More information is available in the final EIS under the heading titled “Responsible opposing views and agencies’ responses to issues raised” the second topic called “Whether there is “excess material” that can be removed” provides a detailed description of the various guiding documents used to inform land management and snag retention. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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204.01 - NSO	#12346-74	Similarly, the NEPA analysis does not explain how the Westside project will contribute to the recovery of the northern spotted owl. 40 C.F.R. § 1508.27(b); 16 U.S.C. 1536. The DEIS also misrepresents the best available science on spotted owl use of burned forests. The DEIS erroneously states that "The use of post-fire burned areas for foraging is a point of disagreement in the literature because there is little evidence to support idea that these areas are actually being used for foraging; although owls have been found in these areas, there is no evidence that they are foraging. For the purpose of this analysis, due to the lack of information on how these burned areas are being used, use of post-fire burned areas for foraging will not be discussed further." DEIS, 132. This is in error. As the FWS has stated, the "best available information suggests that even with loss of forest canopy cover and other key habitat components typically found in NRF habitat, burned areas can provide some habitat function for spotted owls depending on fire severity. For example, areas that burned at low severity in some cases still provided spotted owl nesting, roosting, and foraging function. Areas that were burned at moderate and high severity may provide some limited nesting and foraging depending on burn patch size, edge type, and proximity to known sites (Bond et al. 2002, Bond et al. 2009, Clark 2007, Clark et al. 2011, and Clark et al. 2013 plus other authors per Appendix C)." United States Fish and Wildlife Service, Biological Opinion for the Douglas Complex Post-Fire Salvage project, TAILS #01EOFW00-2014-F-0161 (2014) (Douglas Complex BiOp). FWS also explains that "studies of spotted owls in post-fire landscapes indicate that spotted owls use forest stands that have been burned, but generally do not use stands that have been burned and logged." Id. While spotted owls prefer late-successional habitat when it is available, they have been observed foraging in areas burned by fires of all intensity categories. The research indicates that "low- to moderate-severity fires that retain adequate canopy can function for nesting or roosting and thus allow the continued use of spotted owl activity centers, while territories that burned at high-severity no longer supported nesting spotted owls. It is expected that within mixed severity burns, spotted owls will select the best available post-fire suitable habitat and Activity Centers at these locations may persist into the future." Id. "However, results of these and other studies are confounded because of post-fire logging that occurred within the study areas." Id. "While the role of this burned habitat is unclear in overall spotted owl population maintenance, available information suggests that in the short-term this habitat, in particular when it is salvage logged, likely contributes to reductions in spotted owl survival and occupancy." Id. Indeed, "spotted owl use of these burned areas is well documented (Bond et al 2002, Bond et al. 2009, Clark 2007, Clark et al. 2011, Clark et al. 2013, Gaines et al. 1995, Jenness et al. 2004, King et al. 1998, Lee et al. 2012, Roberts et al. 2011)." See also, NSO RP, III-47 - III-49. Similarly, the DEIS fails to discuss how spotted owls change their use of habitat post-fire. According to the FWS, "Where spotted owl activity centers are affected by fire (any range of severities) but sufficient habitat remains in the home range and immediately adjacent area, site fidelity may cause spotted owls to increase the size of their home ranges or shift locations to encompass the best available habitats rather than vacate the burned site (King et al. 1998, Clark 2007, Clark et al. 2011, 2013). Thus, a shift by spotted owls may occur under conditions where the burned area is presumably still functional in terms of extant spotted owl habitat and the affected area is considered to be occupied. This shift is likely to occur within the pre-fire home range of the affected spotted owl(s)." Douglas Complex BiOp. Indeed, "Clark (2007) found that in high severity burned landscapes, and landscapes with salvage harvest, spotted owls are likely to increase their home ranges to compensate for the loss of suitable habitat and this will likely impact spotted owl habitat-fitness." Id. Clark and others concluded that "spotted owls may shift their habitat use patterns and/or increase their home range size to encompass the best available suitable habitat post-fire rather than vacate the affected site, unless very poor habitat conditions exist over much of their home range (King et al. 1998, Clark 2007)." Id. Spotted owls that shift and/or expand their home ranges in response to wildfire take advantage of unoccupied habitat that may be necessary for the species to persist in a postfire environment. The NSO Recovery Plan states that "it is not uncommon for an occupied spotted owl site to be unoccupied in subsequent years, only to be re-occupied by the same or different spotted owls two, three or even more years later (Dugger et al. 2009). While temporarily unoccupied, these sites provide conservation value to the species by providing habitat that can	As stated in the draft Wildlife Biological Assessment submitted to U.S. Fish and Wildlife Service on April 16, 2015 and posted to the project website on the same day, "the U.S. Fish and Wildlife Service compilation and review of the most recent and pertinent research on northern spotted owl use of the post fire landscape... had considerable influence on the effectsanalysis for the proposed Westside Fire Recovery project. Information within Appendix C of theDouglas Biological Opinion has been incorporated into the analysis of northern spotted owl use of a post-fire landscapeand the assessment effects from the proposed project." Please see the Wildlife Biological Assessment for more information on the results of these studies and how their analyses were incorporated into the Westside Fire Recovery project.

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		be used by spotted owls on nearby sites while also providing viable locations on which future pairs or territorial singles can establish territories." NSO RP, III-45. Unoccupied owl habitat is important post-fire because it represents vacant territory that may be recolonized by shifting or dispersing owls. In a heavily fragmented landscape like the planning area, these "vacant" sites may represent the best remaining suitable habitat. Id. The DEIS does not address this issue at all. At the very least, there is scientific controversy around the use of burned forests by northern spotted owls. The Forest Service is required by NEPA to disclose and respond to this controversy in the FEIS. 40 C.F.R. §§ 1502.24; 1508.27(b)(4); 1502.9.	
204.01 - NSO	#12707-1	The below seems accurate after considerable time researching. However, understand also that the Northern Spotted owl is now a serious candidate for Endangered status with USFWS. What this means, is that ANY habitat fragmentation occurring through post-fire logging is now being scientifically understood as having severe repercussions for their local survival or extinction. Please review the repeated information below. thank you.	The Northern Spotted Owl Recovery Plan identified current and past habitat loss and competition with barred owls are the primary threats to spotted owl. Habitat loss can result from natural disturbances and land management, but wildfire, at least in the Klamath Province, is the leading cause of habitat loss. However, recent research has provided information that spotted owls, under certain circumstances, may not be as affected by fire as previously thought. Despite this information, the research community hasn't agreed to the level of effects fire may have on spotted owls. In the Biological Assessment under the subsection called "northern spotted owl use of the post-fire landscape" provides a summary of the research related to spotted owl use of fire affected habitat and potential effects to activity center occupancy, survival, and reproduction.

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204.01 - NSO	#17111-12	The NSO is a species of special interest and one that almost certainly has been significantly negatively impacted by the 2014 fires. Restoration of suitable habitat for NSO has been used as a justification for intensive salvage and tree planting programs, such as in Alternative #2 of the DEIS. However, there is no scientific evidence to support the hypothesis that either activity will contribute either significantly or positively to a more rapid recovery of NSO habitat or NSO populations than allowing natural recovery processes. In fact, it is certain that salvage will not do so; the potential value of some tree planti ng could be argued.	The restoration aspect of the Westside Fire Recovery Project is not for the sole benefit of spotted owls; rather the purpose and need of the project identifies particular elements that benefit current and future forests which happens to benefit spotted owls. Our project has no intent to manage spotted owl populations; the Forest focuses our efforts to manage areas for multiple uses including habitat for spotted owls. Our project is designed to target the issue of reducing the risk of large scale high severity fire; this design is directly in line with the Northern Spotted Owl Recovery Plan which identifies one of the primary threats to spotted owls is the loss of habitat to wildfire. Tree planting research has provided information that sometimes appears to be contradicting, but like most research, the substantive enrichment is located in the details. Whether tree planting is helpful towards the regeneration of forested habitat is not a simple answer. Chapter 3 of the EIS provides a detailed response on the topic of tree planting in the sections called “Responsible opposing views and Agency’s to issues raised”.
204.01 - NSO	#17111-17	This significant information regardi ng NSO, as well as impacts of the Barred Owl, needs to be acknowledged and considered in the final EIS. Specific consideration needs to be given to the impacts of: (I) salvage on development of the debris-rich Jate-successional conditions characteristic of forested NSO (and prey) habitat; and (2) establishment of conifer plantations on the amount and distribution of shrub-dominated early successional habitat in which the woodrat resides.	See response to 18899-8
204.01 - NSO	#17111-22	Salvage will make no positive contribution to the reestablishment of late successional forest habitat or to the early successional ecosystems that provide habitat for NSO prey species, among many others.	Thank you for sharing your opinion. The final EIS provides information concerning tree planting in Chapter 3 of the final EIS in the sections called “Responsible opposing views and Agency’s to issues raised”. The Wildlife Biological Assessment provides an effects analysis for the proposed treatments on prey species located in the section called “effects on prey, competitors or predators”.
204.01 - NSO	#17111-23	Retention of large snags and logs are critical parts of the natural recovery processes and none of this wood legacy can be demonstrated as being in excess to ecological needs on moist forest sites; indeed, all of the scientific evidence is to the contrary. Removal of medium and fine fuels, but not large snags and Jogs, may be ecologically justifiable on sites characterized by PAGs with Fire Regimes I and II.	Response 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" in Chapter 3 of the final EIS describes the balance the Westside Fire Recovery is striking between retaining legacy components on the landscape until the ecosystem can replace them and reducing the risk of future wildfire. The analysis, along with the Fire and Fuels analysis in Chapter 3 of the final EIS, argues that retention of all dead wood currently on the landscape creates an undesirable risk of future high-severity fire. See also EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised
204.01 - NSO	#17111-28	The DEIS does not appear to include some current and relevant information regard ing habitat preferences of the NSO. Alan B. Frankli n et al. (2000) report that in northwestern California, the highest habitat fitness for NSO is found in landscapes that are a mixture of mature and old forest with open vegetation types, such as brush fields and young forest, and not i n landscapes dominated by old forests. The fact that an early successional species -the dusky-footed woodrat -is the primary prey for NSO in this region may be part of the reason that owls prefer a mixed landscape. In any case, the fact that habitat fitness for the owl is favored by a heterogeneous landscape mosaic should be factored into decisions regarding establishment of conifer plantations, both withi n and outside of LSRs	Like Dr. Franklin and co-authors (2000) point out in their article, the general area where our project area occurs displays a heterogeneous environment of habitats; this complex environment is largely shaped by wildfire that may be best described as low to moderate severity fire environment (Taylor and Skinner, 1997). Spotted owl prey species can occupy the same habitat commonly associated with spotted owls, but some prey species like the woodrat or mouse can be found in early successional habitat. However, the fires occurring in 2014 burned very large areas (100s of contiguous acres) at high fire severity in portion of the fire perimeters while other portions burned in at severities and scale that more closely resemble those that would create the complex habitat that Dr. Franklin described. The Westside Fire Recovery Project is focusing salvage harvest in the large patches of high severity fire and reduces treatment in areas that more closely resemble the complex habitat that is associated with the project. Planting of trees in the project is not intended to interfere with the complex habitats. This is evident by the tree planting prescription and design which avoids rows of evenly spaced planted trees. Instead, the planting prescription attempts to provide a balance between giving young trees some help to grow with less competition but the space between these planted trees will still provide the herbaceous and brush components that are common in early successional habitat in the project area. The final EIS provides information concerning tree planting in Chapter 3 of the final EIS in the sections called “Responsible opposing views and Agency’s to issues raised”.

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204.01 - NSO	#17111-29	Unfortunately, the DEIS also fai ls to acknowledge some important information with regards to the ecology of the NSO in the Klamath-Siskiyou region, either in the literature review or in analyzing effects of various alternatives. In a study of NSO habitat fitness in relation to landscape conditions, A. Franklin et al. (2000) show that a mosaic of older forest interspersed with early successional vegetation types had the highest fitness for NSO. Landscapes dominated either primarily or exclusively by older forest or primarily by early successional vegetation provided lower levels of fitness than the mosaic based on estimates of survival and fecundity. Hence, landscape mosaics of mature and old forest and early successional habitats, the latter including brush fields, would be appropriate recovery targets for restoration programs focused on NSO habitat	Dr. Franklin and co-authors article titled “Climate, habitat quality, and fitness potential in Northern Spotted Owl populations in Northwestern California” (2000) provide an abundant amount of information linking Northern Spotted Owl and ecological theory. The Westside Fire Recovery used Dr. Franklin’s work in the analysis for Northern Spotted Owls in the Wildlife Biological Assessment located in the section called “methods for assessing habitat fitness of fire-affected activity centers”. The Wildlife Biological Assessment explicitly uses Dr. Franklin’s work in combination with more recent research to identify the spotted owl activity centers that are more likely to contribute to higher levels of survival and reproduction as identified in the Wildlife Biological Assessment as “fitness potential”. In other words, activity centers with “high fitness potential” are more likely to provide resources to support survival and reproduction than an activity center identified with “low fitness potential”. This information was used in the development of the project Alternatives, especially Alternative 3 and modified Alternative 3.
204.01 - NSO	#17111-30	I also noted that the DEIS does not appear to have fully considered recommendations of the 2011 Final Revised NSO Recovery Plan. Specifically, Recovery Plan Action 10 advises, "Conserve spotted owl sites and high value spotted owl habitat to provide additional demographic support to the spotted owl population", which includes protecting both historically and currently occupied NSO sites (NSO Recovery Plan 111-42 - III-47. It appears that numerous sites will be eliminated by the proposed salvage logging (DEIS 148-149). Recovery Action 12 advises, "In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large trees, medium and large snags, downed wood)" (NSO Recovery Plan III-49). LSRs are certainly lands where "management is focused on development of NSO habitat"! As noted in the DEIS, the Westside proposal will remove many of the medium and large snags: "salvage activities will reduce snag densities of trees equal to or greater than 14 inches in diameter at breast height (dbh)" (DEIS 122)	The Northern Spotted Owl Recovery Plan is not a regulatory document; rather this plan provides recommendations that will aid in the conservation of the Northern Spotted owl. However, the Westside Fire Recovery Project did consider this plan through design of the project. Recovery Action 12 does describe the need to retain particular features, but the Recovery Plan also describes the need to reduce the loss of spotted owl habitat to wildfire. The intent of the Recovery Plan is likely more related to finding a balance between retaining some important features like large dead trees while reducing fuels that may contribute to high severity fire. The Project Design Features identify the retention of legacy features that include disproportionally large dead trees in salvage harvest unit plus retention of dead trees in riparian reserves which commonly contain the largest size class trees. In addition, trees with a 30% or greater chance of surviving the effects of the fire in the near future will not be harvested. The Wildlife Biological Assessment discusses the Recovery Actions in the sections called “Consistency with recovery plans and other guidance” and in appendix B. The Wildlife Biological Evaluation and Wildlife Biological Assessment evaluated all potential activity centers that may be affected by the actions proposed in the Westside Fire Recovery Project. As a result of this evaluation, we identified 94 activity centers which represent the culmination of past and current activity centers. In fact, we analyzed activity centers from the 1990’s that haven’t had a spotted owl detection in the last decade; further, we identified activity centers that are highly likely to represent different nest sites used by the same owl pair. In addition, activity centers that have lost considerable amounts of habitat to natural disturbance and no owls have been detected in these activity centers in recent years have been included in this analysis. From a qualitative and quantitative perspective of existing quality, quantity, and distribution of habitat, the project area is highly unlikely to support 94 activity centers simultaneously. Therefore, the spotted owl analysis takes into consideration the effects to the currently occupied activity centers plus the unoccupied activity centers that may become occupied in the future despite the existing habitat conditions of the activity center.
204.01 - NSO	#17375-3	The Northern spotted owl needs mixed forest, including old growth.	Northern Spotted Owl habitat has been described to included different ages classes and species compositions which can include old-growth conifer forests and mixed conifer forest types. The Biological Assessment describes the habitat types and fire affected habitat in the sections called “methods for assessing pre-fire habitat suitability” and “methods for assessing effects to northern spotted owl habitat from wildfire”.
204.01 - NSO	#17460-2	I have several concerns with Alternative 2 (the alternative being promoted by the forest service). In addition to those highlighted by Professor Franklin, the first is the effect on Northern Spotted Owls, which are likely to be adversely affected, according to the USFS Wildlife Biological Assessment, dated April 16, 2015.	The effects to wildlife are described for all action Alternatives and this information will be used to develop a decision that balances resource concerns with the purpose and need of the project.
204.01 - NSO	#17481-29	Alternative 3: Likes/Dislikes - I like the aspects of this Alternative that involve recovery activities identical to Alternative 2. I dislike the aspects of this Alternative that reduce recovery activities for the perceived benefits to Spotted Owls ,etc. I believe the reduction in salvage logging activity will reduce the long term habitat while gaining a very limited short term benefit of lower disturbance levels.	Thank you for sharing your opinion. The combination of rules the Forest must follow in conjunction with balancing the needs of several wildlife species that extend well beyond spotted owl while still meeting the purpose and need of the project presents a challenge. However, a balance approach for any one resource has inherent trade-offs which may result in a benefit for one species while negatively affecting another. For Northern Spotted Owls, Alternative 3 is one approach to balancing the purpose and need of the project while reducing the effects to the spotted owl by reducing treatment in areas that are likely to be more important to spotted owls.
204.01 - NSO	#18849-3	while this lingering debris will only provide greater fuel in future fires at the expense of remaining habitat for the Northern spotted owl.	We agree that the retention of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province. The intended purpose of salvage of fire-killed trees is to reduce the amount and continuity of fuels that would be created when those trees break or fall to the ground and become surface fuel. These actions compliment proposed fuel reduction and strategic fuel management zones as part of a landscape scale strategy to reduce the size and severity of future fires (Thompson et al, 2007). Our goal is to reestablish the high frequency - low severity fire regime that characterized the Klamath Province so that fire could play its natural role on the landscape. Salvage logging is proposed in conjunction with fuels treatments. Salvage harvest would remove the heavy fuels that would contribute to future high severity fires, decreasing the amount and continuity of fuels on the landscape and reducing fire risk for the Northern Spotted Owl. See the beginning of Chapter

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			3 for a discussion of responsible opposing points of view.
204.01 - NSO	#18852-51	-"Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl, 1994." Late-Successional Reserves are identified with an objective to protect and enhance conditions of late- successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth forest related species including the northern spotted owl. Limited stand management is permitted, subject to review by the Regional Ecosystem Office. While priority should be given to salvage in areas where it will have a positive effect on latesuccessional forest habitat, salvage operations should not diminish habitat suitability now or in the future. Tree mortality is a natural process in a forest ecosystem. Diseased and damaged trees are key structural components of late-successional forests. Accordingly, management planning for Late-Successional Reserves must acknowledge the considerable value of retaining dead and dying trees in the forest as well as the benefits from salvage activities. In all cases, planning for salvage should focus on long-range objectives, which are based on desired future condition of the forest. Because Late-Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions. The rate of development of this habitat will vary among provinces and forest types and will be influenced by a complex interaction of stand-level factors that include site productivity, population dynamics of live trees and snags, and decay rates of coarse woody debris. Because there is much to learn about the development of species associated with these forests and their habitat, it seems prudent to only allow removal of conservative quantities of salvage material from Late-Successional Reserves and retain management opportunities until the process is better understood. (Standards and Guidelines C-13) Surviving trees will provide a significant residual of larger trees in the developing stand. In addition, defects caused by fire in residual trees may accelerate development of structural characteristics suitable for associated species. Also, those damaged trees that eventually die will provide additional snags. Consequently, all standing live trees should be retained, including those injured (e.g., scorched) but likely to survive. Snags provide a variety of habitat benefits for a variety of wildlife species associated with late-successional forests. Accordingly, following stand-replacing disturbance, management should focus on retaining snags that are likely to persist until late- successional conditions have developed and the new stand is again producing large snags. (Standards and Guidelines C-14) Late-successional forest communities are the result of a unique interaction of disturbance, regeneration, succession, and climate that can never be recreated in their entirety through management. The structure, species composition, and function of these forests are, in their entirety, not fully understood. (Standards and Guidelines B-5) Late-successional forests are those forest seral stages that include mature and old-growth age classes. One goal of these standards and guidelines is to maintain late-successional and oldgrowth species habitat and ecosystems on federal lands. Another goal of forest management on federal lands is to maintain biological diversity associated with native species and ecosystems in accordance with laws and regulations. Forest ecosystems are quite variable throughout the range of the northern spotted owl. Therefore, site-specific knowledge of ecosystems will be incorporated into watershed-level analysis and integrated into Forest and District plans and province-level planing. (Basis for Standards and Guidelines B-1) The structure and composition of late-successional and old-growth forest ecosystems have been detailed in numerous publications. Four major structural	The final EIS provides information concerning tree planting in Chapter 3 of the final EIS in the sections called “Responsible opposing views and agency’s response to issues raised”.

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		attributes of old-growth Douglas- fir forests are: live old-growth trees, standing dead trees (snags), fallen trees or logs on the forest floor, and logs in streams. (Basis for Standards and Guidelines B-2)	
204.01 - NSO	#18852-52	-"RECORD OF DECISION for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl; Mike Espy, Secretary, U.S. Department of Agriculture; Bruce Babbitt, Secretary, U.S. Department of the Interior" In addition, timber sales must undergo appropriate site-specific analysis, and must comply with applicable regulatory requirements for public participation and administrative appeal.	The final EIS is a site-specific analysis that involves the public through the National Environmental Policy Act process.
204.01 - NSO	#18857-10	No salvage in Critical Habitat for NSO.	The decision must balance the effects to resources with meeting the purpose and need of the project. Alternative 1 (no action) is included in this decision process.
204.01 - NSO	#18858-11	I have attached to these comments copies of Monica Bond, et. al., Habitat Use and Selection by California Spotted Owls in a Postfire Landscape , Journal of Wildlife Management 73(7); Derek E. Lee, et. al., Dynamics of Breeding-Season Site Occupancy of the California Spotted Owl in Burned Forests, The Condor 114(4); Saab et.al., Nest-site selection by cavitynesting birds in relation to postfire salvage logging , Forest Ecology and Management 257 (2009) 151-159 ;	Citation only; no comment for agency response. See responsible opposing points of view at the beginning of Chapter 3 regarding a discussion of input presented by Monica Bond.

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204.01 - NSO	#18858-4	The spotted owl sections of this DEIS are sparse and partisan. You state there is a "disagreement" about whether spotted owls use burned areas for foraging, but do not cite your evidence of this. Instead you say only that "use of post-fire burned areas for foraging will not be discussed further." DEIS at 132. You have clearly picked a side in this disagreement-the one that favors your logging plans-but how do you address the recent radio telemetry studies (by Lee and Bond, attached to these comments) that show spotted owls not only use burned areas for foraging, but prefer burned areas for foraging? Do you accuse these researchers of falsifying their data? As an example, Bond states: The California spotted owls we studied used all severities of burned forest for nesting, roosting, and foraging during the breeding season 4 years after a large forest fire. We detected a negative effect of distance from the center of an owl's foraging range on utilization of habitat for foraging, regardless of burn severity, as expected for central-place foragers. However, we documented one owl traveling 3.4 km from the center of a foraging range, indicating that an owl will travel at least this distance while foraging during the breeding season. After accounting for distance, spotted owls selected burned areas for foraging over unburned forest, with the greatest selection for high-severity burned areas. Monica Bond, et. al., Habitat Use and Selection by California Spotted Owls in a Postfire Landscape , Journal of Wildlife Management 73(7) at 1121. (Emphasis added). And Lee: Forest fire, particularly high-severity fire, is generally presumed to reduce occupancy by California Spotted Owls, 2 on the basis of modifications to the forest canopy, basal area of live trees, and other vegetation and habitat elements. Our results do not support this presumption and instead corroborate and elaborate on previous studies of the Spotted Owl that found occupancy not diminished by forest fires of varying severities (Bond et al. 2002, Jenness et al. 2004, Roberts et al. 2011). We found no significant effect of fire on occupancy dynamics for up to 7 years post-fire and for the vegetation conditions of the sites in our study. (…) At our burned sites, an average of 32% of suitable vegetation burned at high severity, yet rates of colonization of and local extinction from these sites were not significantly different from those at unburned sites. Thus owls continued to occupy sites where nearly one third of their suitable habitat burned severely. Derek E. Lee, et. al., Dynamics of Breeding-Season Site Occupancy of the California Spotted Owl in Burned Forests, The Condor 114(4) at 799, 800. Similarly, I find no mention in your DEIS of the findings in the Revised Northern Spotted Owl Recovery Plan, which states, "Results from the three radio-telemetry studies of spotted owls in post-fire landscapes indicate that spotted owls use forest stands that have been burned, but generally do not use stands that have been burned and logged." Revised Recovery Plan at III-48. (Emphasis added). (The Recovery Plan cites, later in that paragraph, the Bond studies). You have plainly failed to use the best available science on spotted owls in your DEIS, and this failure has colored-tainted, actually-the entire analysis. For example, your decision "not to discuss" that spotted owls forage in burned areas permits you to claim only a loss of 432 acres of foraging habitat from your logging plan under Alternative 2. DEIS at 149. It seems to me that you are pretending "not to discuss" the foraging aspect, but in actuality what you are not discussing is your reason for believing that burned forest is not foraging habitat-that is what you are not discussing: that and, of course, the science that does not go your way. You are only too happy to discuss foraging habitat on your own terms, and announce that there isn't any foraging habitat left. And what is your justification for departing in such a startling and brazen manner from the findings in the Recovery Plan? I feel you should discuss that, too.	The DEIS provided a summary of the documents that are incorporated by reference. Given the inherent nature of a summary being brief and provide the reader a snapshot of information while still providing a full explanation of the topic in the supporting documents. However, the FEIS provides a much more detailed description of the relevant research used in the Northern Spotted owl analysis in the Terrestrial Wildlife section. The DEIS does state the fact that among the available research, there isn't complete agreement on the effects of wildfire on NSO. The commenter provides several pieces of literature but lacks the complete breath of available research. Darren Clark and co-authors in "Relationship between wildfire, salvage, and occupancy of nesting territories by northern spotted owls" (2013) states "The few studies that have been conducted on spotted owls in burned landscapes have provided equivocal results regarding the effects of wildfire on the species." The Forest isn't attempting to contest the validity of any researcher or particular study, we are simply pointing out the fact that NSO use of fire affected areas isn't completely clear and further research is needed to better understand this relationship. Meanwhile, the FEIS provides a more detailed summary of the information we gleaned from the research community, the methods used to develop the analysis, and the results of the analysis.
204.01 - NSO	#18858-7	The FEIS must squarely address the impacts your logging, particularly the roadside hazard removal, will have to the northern spotted owl, using actual spotted owl science as it is represented in the Revised Recovery Plan and in the current literature.	The final EIS incorporates the Wildlife Biological Assessment by reference. The Wildlife Biological Assessment clearly identifies each treatment and corresponding effect in the section called " Effects to northern spotted owl and northern spotted owl habitat from the proposed activities".
204.01 - NSO	#18859-10	while this lingering debris will only provide greater fuel in future fires at the expense of remaining habitat for the Northern spotted owl.	See response to 18849-3.

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204.01 - NSO	#18899-12	The DEIS further concludes (on page 147), that Alternative 1 (no action) is "unlikely to provide the needs for reproducing northern spotted owl [sic]." But, as described above, there is no sound scientific basis 11 for this statement. And, just one paragraph later, the DEIS states "[t]he lack of treatment will retain all the remaining habitat and important legacy structures to aid in the development of owl habitat by providing physical structure as the stand regenerates. Since northern spotted owls and their prey rely on these structures to fulfill their needs for survival and reproduction, the maintenance of large trees and large woody debris will increase the quality of future owl habitat." These are obviously conflicting statements. Other conflicts include different numbers in Table 3-8 (page 145) compared with Table 3-6. Both tables are describing exactly the same thing but the numbers are different. Given continued occupancy and reproduction in Spotted Owl sites that experienced significant amounts of severe fire, the conclusions in the DEIS are not supported and will instead lead to loss of important habitat for a species that is already ESA listed. The DEIS (on page 148) concludes with regards to the Preferred Alternative 2: Direct and Indirect Effects Risk to Reproduction: All the known activity centers within the analysis area will have some type of treatment in the home range but the level of effects will vary. For analysis indicator 1, three activity centers met the 'very low' criteria before treatment and alternative 2 will not affect this activity center's [sic] risk level. However, one activity center moved to a higher risk level from moderate level. The remaining activity centers did not move in risk level.	The commenter takes the “unlikely to provide the needs for reproducing northern spotted owl” out of context. The full sentence refers only to the 12 or more activity centers that were heavily affected by the fire and within the context of regeneration of these areas. Indeed, these sites are severely affected with high-severity fire and have lost most of the elements that can sustain owls. Although planting can accelerate the establishment of forest cover and can accelerate the growth of suitable habitat, it does not immediately restore suitable habitat. The second reference, i.e. “[t]he lack of treatment …” refers to critical habitat within the area and includes all fire affected habitat, low through moderate to severe. Both low-severity fire and to a lesser extent moderate severity fire does in fact retain significant elements of northern spotted owl habitat and can provide suitable habitat immediately. It’s disingenuous to suggest that these statements conflict when they refer to very different components of the project. *** Most of these low – to moderately affected areas will be only very lightly treated to reduce the likelihood of stand replacing fire in the near future and provide better conditions for the surviving trees. Remember that the criteria for salvage is very generous and will retain all trees that have at least a 30% chance of surviving. Thank you for pointing out the discrepancy between tables 3-6 and 3-8. Table 3-6 appears to be the correct data. We will correct the error. The ‘final’ paragraph referred to by the commenter is actually the beginning of the section analyzing the effects of Alternative 2 on the northern spotted owl. Because of the effects of the wildfire, most of the activity centers found within the project area are already strongly affected and placed in a high to moderate risk category for spotted owl reproduction. Although treatments are likely to adversely affect spotted owl habitat within most of the activity centers treated, these treatments will not affect the current risk assessment for reproduction as was caused by the wildfire.
204.01 - NSO	#18899-13	The DEIS (on page 148) also concludes with regards to the Preferred Alternative 2: Cumulative Effects Risk to Reproduction: The direct and indirect effects of alternative 2 plus the effects resulting from other actions within the analysis area do not change the risk level for any of the activity center. The risk level does not change due to the other actions, not because the actions do not have an effect but because most of the activity centers with other actions are already at the highest level of risk for this analysis. These activity centers will continue to have a high risk to reproduction and reproduction is not likely to occur in these activity centers so the cumulative effects of adding the effects of alternative 2 to the effects of other actions will not have a substantial effect on reproduction. Emphasis added. These conclusions that activity centers will not change risk level is not supported, as post-fire logging can adversely impact occupancy and thus reproduction (Lee et al. 2012, Clark et al. 2013) and the underlying methodology is fundamentally flawed. Another issue is that the BE states (on page 11) that "[h]owever, moderate level ACs may shift to high risk regardless of this project because of delayed tree mortality." This statement ignores the importance of trees to the post-fire environment and ability of Spotted Owls to use a site after fire. They require trees for perching and pouncing. A study cited in the BA-Irwin et al. 2012-specifically states that as long as some trees are standing (including 8-10 years after the fire, in the case of Irwin's study), they can be used by owls. Salvage logging removes those trees and reduces the usefulness of the site to owls, which is one of the reasons that the NSO RP recommends the retention of these habitat features. NSO RP, page III-49.	The commenter challenges the draft EIS’s conclusions that proposed project activities would not affect the risk level to northern spotted owl reproduction in the Aquatic Conservation Strategy. The AC’s referred to in the draft EIS were severely affected by the wildfire to the point where our best science determined that the likelihood of successful northern spotted owl reproduction was very low or low. This is a threshold determination that once affected to such a severe degree, moderate project treatments will not affect the already very low likelihood of reproduction. Fire effects have already removed the thermal and predator cover, the dead and downed logs, the mid-story structures for perching, the overstory structures for nesting, etc.

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204.01 - NSO	#18899-14	An additional major flaw in the DEIS is the statement on page 132: The use of post-fire burned areas for foraging is a point of disagreement in the literature because there is little evidence to support idea [sic] that these areas are actually being used for foraging; although owls have been found in these areas, there is no evidence that they are 12 foraging. For the purpose of this analysis, due to the lack of information on how these burned areas are being used, use of post-fire burned areas for foraging will not be discussed further. No serious Spotted Owl biologist would agree with this premise; indeed all of the major studies of foraging habitat over the past > 30 years have conducted some kind of telemetry and assumed nighttime locations are foraging. This assumption was established first by world expert on Spotted Owls, Dr. Eric Forsman, in his publication (Forsman 1984) on page 13: At night when adults were not calling or moving from 1 place to another, they were considered to be foraging even if they did not move for long periods of time (except, of course, for incubating or brooding females). This approach was adopted because it was extremely difficult to distinguish between foraging and resting behavior at night. For example, an owl might be immobile (i.e., "resting") for some time and yet still be actively watching for prey. If we accept this premise that nighttime locations may not be foraging, then all definitions of suitable foraging habitat must be rendered invalid because they all rely on the assumption identified above. This would entail re-writing the entire Northern Spotted Owl Recovery Plan of 2012, NSO Critical Habitat designations, and all Forest Service regulations with respect to management of foraging habitat. Moreover, many of the studies that used nighttime radio-tracking to estimate foraging actually observed foraging on numerous occasions (see e.g., Forsman 1984), thus providing support for nighttime observations as foraging behavior. In sum, the habitat fitness potential methodology adopted in the BA and DEIS was based only on studies in forests that had not recently burned. There are more relevant studies in recently burned forests demonstrating that owls continue to occupy and reproduce even in sites with large amounts of highseverity fire. Lee et al. (2013) specifically cautioned that not all sites with high amounts of severe fire were unoccupied. The attached Appendix A (soon to be published in a peer-reviewed scientific journal as Lee and Bond in press B) shows that even sites with the vast majority of a 300-acre Protected Activity Center severely burned, California Spotted Owl pairs were present in the Rim Fire. Further, Lee et al. (2012) documented a 38% probability of re-colonization of unoccupied sites during any given year after fire, so even unoccupied burned sites stand a good chance of being re-colonized. In light of the best available science and the imperiled status of the NSO, all the Northern Spotted Owl sites in the Westside Project should receive protection from post-fire logging.	Although using telemetry to identify preferred foraging areas is accepted methodology when working in intact northern spotted owl habitat, the use of the same methodology to presume foraging behavior in burned over habitat is more questionable. Site fidelity behavior patterns can tie northern spotted owl to areas once productive for foraging that no longer provide an adequate prey base. A better way to express the thought behind the quote offered from the draft EIS may be to say that although telemetry in a limited number of studies have found owls within high-severity burn areas, we cannot presume that they were foraging there successfully. In Darren Clark's 2007 thesis four radio-collared birds were returned dead in an emaciated condition. We should presume that these birds had been foraging, but were for unknown reasons unsuccessful in that foraging and could not sustain themselves in whatever habitat they were left with post-fire. Also, as Dr. Forsman points out in his quote offered by the commenter "it was extremely difficult to distinguish between foraging and resting behavior at night." The convenient and accepted research presumption of foraging in previous studies does not in any scientific sense, help distinguish between these behaviors. And again the argument that to question the validity of the assumption "then all definitions of suitable foraging habitat must be rendered invalid" is scientifically specious. Science advances through challenges its own assumptions when technique or data provides the substance to critique well-accepted paradigms. The statement in the draft EIS was not a challenge to the accepted paradigm of accepting all telemetry locations as foraging sites but merely a recognition of the untested presumption and a question of whether or not that presumption should be unquestionably applied to a 'new' habitat type – recently burned forest.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-16	IV. The Preferred Alternative Fails to Use the Best Available Science or Scientist Recommendations The BA offers quite a bit of discussion about Spotted Owl fire studies, but ultimately the proposed logging in the Preferred Alternative 2 does not appropriately analyze, incorporate, or use results from the published studies to inform management. Recommended Protective Areas-First, the BA designates a 500-acre core area in the ACs within which logging is restricted in low-risk sites (and only 11 sites were designated as low risk: 83 sites are moderate-high risk and there is no restriction on logging in the ACs). Bond et al. (2009) recommended not logging within 1.5 km of core nest/roost areas-this translates into a 1,750-acre area. More applicable to the Westside Project is a study about Northern Spotted Owls in burned and salvagedlogged landscapes (Clark et al. 2013). Clark et al. (2013) found that occupancy of Northern Spotted Owl territories in a recently burned landscape that was subjected to salvage logging declined at a greater rate than in a landscape that had not burned recently. Initial occupancy was best predicted by older forests that burned with a moderate severity at the core scale. This study combined early seral, severely burned, and salvaged logged forest into one category and thus could not separate the effects of salvage logging from fire. Nonetheless the authors stated (on page 11): Our results contrast with those of previous studies that compared occupancy rates of spotted owls in burned and unburned landscapes. Jenness et al. (2004) found that territory occupancy of Mexican spotted owls in burned areas was similar to unburned areas. Roberts et al. (2011) found that site occupancy of California spotted owls in randomly selected burned and unburned areas were similar. Neither of these studies was affected by the high degree of salvage logging 16 we observed following the Timbered Rock burn, which may explain the difference between our results and those of previous studies. Emphasis added. The authors went on to state (on page 13) …the large areas of clear-cuts created by salvage logging and past timber harvest (approx. 45% of the area within 2,230 m of spotted owl territories…) potentially exacerbated declines in site occupancy following the Timbered Rock burn or confounded the effects of wildfire. Declines in site occupancy may not be as large in burned areas that were not subjected to previous timber harvest or substantial amounts of post-fire salvage logging. Importantly, Clark et al. (2013) recommended restricting salvage logging after fires on public lands within 2.2 km of Spotted Owl territories (the median home range size in this portion of the Spotted Owl's range) to limit the negative impacts of salvage logging. This restriction on logging within 2.2 km of core nest/roost areas should be placed at all known ACs, not just the ACs the BA identified as "low risk," as it is not possible to determine post-fire occupancy based solely on habitat metrics, and because unoccupied burned sites have a good probability of being re-colonized in the future (see discussion above). Buffer Distance from Edge-Second, the BA states (on page 22) that "A large proportion of PFF is habitat that burned at the highest severity and therefore contains minimal amounts of structure or cover. Because of this, it was assumed that NSO would not use this habitat when it occurred too far from exiting cover - estimated to be approximately 500 feet." Bond et al. (2009) documented preferential use of severely burned complex early seral forest stands, and Comfort (2013) and Eyes (2014) found preferential use of hard edges between high-severity fire areas and other types. However, none of these studies examined the extent to which owls will venture into the interior forest to forage, thus the 500-foot buffer is purely arbitrary. I could find no reference to a 500-foot edge threshold in Comfort (2013) or Eyes (2014). Bond et al. 2009 recorded multiple foraging locations in the interior of large high-severity patches. There is no actual scientific basis for the statement that owls would not travel more than 500 feet from the edge of a fire.	The comment claims that spotted owl analysis fails to consider “best available science”. The “best available science” is addressed in the Code of Federal Regulations (40CFR1502.24) “Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.” The FEIS terrestrial wildlife section for Northern Spotted Owl analysis provides the professional and scientific integrity throughout the document and it provides ample discussion of the relevant research that discusses both sides of the contradicting science related to the spotted owl use of fire-affected habitat in the section called “Use of Fire-Affected Habitat” and "Site Occupancy". In addition, the FEIS presents the effects of salvage on NSO and it is described in the section called “Land Management” subsection “salvage harvest”. This commenter also presents two “management recommendations” from Clark et al. 2013 and Bond et al. 2009. Please see comment #18899-1This comment also disagrees with the use of a 500ft buffer to define post-fire foraging areas. Please see response to comment #18899-4.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-17	Finally, as described above, protective measures should be in place for areas beyond 500 acres because Spotted Owls require foraging habitat farther from their breeding season nesting stands. Surveys-In the Preferred Alternative 2, surveys will only be done prior to project implementation, but are largely meaningless for owl conservation because this alternative only protects forests within 0.24 mile of nesting areas during Feb 1 to July 9 (Table 2-35 on page 88). Lee et al. (2012) recommends surveys be conducted for 2 years to be confident about occupancy, and USFWS requires the use of a standard protocol of multiple-year surveys. However, even unoccupied sites had a 38% probability being re-colonized in any given year after fire (Lee et al. 2012). I recommend not placing any ACs into risk categories until at least 2 years of protocol surveys in all sites have been conducted, but all ACs should receive protection from logging.2 The NSO Recovery Plan states that 2 The Forest Service should also address the issue of reduced detectability of Northern Spotted Owls when Barred Owls are present (Kelly et al. 2003, pp. 51-52; Courtney et al. 2004, p. 7-16; Olson et al. 2005, p. 929; Crozier et al. 2006, p.766-767), particularly because NSO occupancy is a key component of the Forest Service's effects analysis. 17 it is not uncommon for an occupied spotted owl site to be unoccupied in subsequent years, only to be re-occupied by the same or different spotted owls two, three or even more years later (Dugger et al. 2009). While temporarily unoccupied, these sites provide conservation value to the species by providing habitat that can be used by spotted owls on nearby sites while also providing viable locations on which future pairs or territorial singles can establish territories. NSO RP, III-45. Unoccupied owl habitat is important post-fire because it represents vacant territory that may be recolonized by shifting or dispersing owls. In a heavily fragmented landscape like the planning area, "vacant" sites may represent the best remaining suitable habitat. Id. The DEIS does not address this issue at all.	For the most part, these comments focus on owl conservation protocols on an undisturbed landscape and fail to address the reality of a burned landscape. The 500 acres represents the core use area of a spotted owl in undisturbed conditions and covers 80% of their usual use. Although generally owls are central place foragers and an owl circle reasonably represents their estimated territory, in reality, spotted owls resting and foraging use is highly dependent on the specifics of habitat availability and typically rest and forage where opportunities present themselves. Radio telemetry work generally shows complex polygons of use where their time is differentially spent where presumably conditions are functionally best. Stand altering treatments are focused on severely burned areas that are already compromised for full functionality. As we have stated previously, the research literature is uncertain about the value of severely burned areas. Existing telemetry data and logic argues that spotted owls will use these areas if they provide good foraging and that their use of these more open areas is challenged by the lack of cover and the predation pressure the may feel in such areas. Site fidelity may encourage owls to use these areas immediately after the fire, and they may indeed be useful at that time when any prey that may survive the high severity conditions are displaced from their usual cover and may be more vulnerable to predation. These conditions would change rapidly as surviving predators take advantage of the disturbance. Once the immediate flush of available prey is exhausted, it is not likely that the area would be valuable for foraging until post fire sprouting of vegetation provides a foraging base for prey. Relative to the specific sites we consider in this proposed project, the current research cannot fully explain the likely sequence of prey availability and owl use, especially relative to rapidly decaying conditions of much of the remaining snags in a severely burned area. Although snags with available perch branches are useful for foraging owls, once they decay to a point that perch branches have fallen, they become unavailable for foraging owls. Some of this logic may explain the emaciated owls found in the post-fire landscape by Darrin Clark in his thesis work. Site fidelity has kept owls within a burned landscape that inadequately provides foraging opportunities or that require an unreasonable expenditure of energy to provision themselves. Although two-year protocol surveys do provide a greater reliability in the presence of barred owls, the nature of commercial salvage prevents us from delaying treatments for that long. However, following protocol is a probability issue – the single year surveys we've committed to may not provide the full surety of a two-year survey, they do provide useful information, just at a lower level of certainty. As the northern spotted owl Revised Recovery Plan recognizes (page III-21) that "given the need for action in the face of uncertainty" managers should implement a program that will reconcile the goals of conserving and encouraging spotted owl habitat while better enabling forests to recover from past management measures (fire suppression that fosters conditions that present higher probabilities of high-severity, stand replacing wildfires) and respond positively to climate change with resilience. University of Montana wildlife professor L. Scott Mills emphasizes the need for management action and states "…embrace uncertainty. Do not be intimidated by the fact that ecological processes are complex. Do not feel that wide variance in estimates of parameters come from weak science. Do not freeze up from a lack of knowledge…The lack of full scientific certainty should never be used as a reason of inaction in the face of a wildlife population problem. Embrace uncertainty." (page xiv, Mills 2007). At the same time, Recovery Action 16 requires the consideration of "long-term maintenance of local forest management infrastructure as a priority in planning and land management decisions" (page III-53, Revised northern spotted owl Recovery Plan). Again, this focuses us on the relatively small percentage of the burned landscape that will be treated with salvage logging. Although treatments affect a relatively small portion of the landscape, they provide needed revenue to local communities and are a vital aid in maintaining that local infrastructure.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-18	I have one final critique from the Forest Service's analyses. The DEIS (on page 3) notes "[s]ome fires, or portions of fires, burned within wilderness area, where natural processes drive restoration." The Late- Successional Reserve network of the Northwest Forest Plan is also a land allocation where natural processes must take precedence over economic recovery: "The objective of Late-Successional Reserves is to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth related species including the northern spotted owl," NFP S&G page C-9, and LSRs "are to be managed to protect and enhance conditions of late-successional and old-growth forest ecosystems." NFP S&G page C-11. Moreover, natural restorative processes cannot be restricted just to wilderness when, as here, the well-being of an ESA listed species is at stake. Conclusion Protection of all 94 ACs affected by the 2014 fires is necessary for the survival and recovery of the Northern Spotted Owl. This should be achieved by conducting no post-fire logging within at least a 2.2 km (Clark et al. 2013) to 3.4 km (Carey et al. 1992) radius area surrounding the nests/roost sites. If the Forest Service were to fully consider all the year-round requirements of the Northern Spotted Owl and ensure that its actions would not threaten the continued existence of this declining, federally listed subspecies, it would refrain from conducting post-fire logging anywhere in the fire complex that might be used by the owls, including during the non-breeding season, with the exception of removal of hazard trees as necessary along well-traveled roadways and adjacent to infrastructure. Otherwise, there will certainly be adverse impacts of the Westside Project on the Northern Spotted Owl's ability to use burned stands for hunting, as well as serious negative impacts on the suite of burned-forest dependent species including woodpeckers, bluebirds, house wrens, deer mice, and a host of other organisms that survive and reproduce better in severely burned forests than anywhere else. Please do not hesitate to contact me with any questions. I am always happy to assist.	The consideration of Northern Spotted Owls and the post-fire environment is summarized in the Terrestrial Wildlife Section "Northern Spotted Owl: Relevant Scientific Literature" subsection in Chapter 3. Since the literature doesn't provide a clear linkage between suitable habitat, fire affected habitat, and spotted owl reproduction, we used recommended home range and core size for activity centers and the habitat minimums of suitable habitat (USDI U.S. Fish and Wildlife Service 2009) and professional judgment to estimate the possible spotted owl use of moderate- and high-severity fire-affected habitat. Snag and legacy component retention design incorporated into all Alternatives of the Westside Fire Recovery project (See Chapter 2 of the final EIS) provide for continued movement and use even after fire salvage. Limited operating periods will reduce the disturbance to Northern Spotted Owls that do remain in the vicinity of salvage units as well. These mitigations are not clearly considered in the findings of Clark et al (2013) or other Northern Spotted Owl post-fire effects literature. The Westside Fire Recovery project is designed to balance the need for legacy components on the landscape in the long-term and the need to protect the area from future high-severity wildfires via fuels reduction. (See response 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" in Chapter 3 of the final EIS)

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-19	Post-Fire Foraging-In all available studies of Spotted Owl post-fire habitat selection using radio-tagged owls (Clark 2007, Bond et al. 2009, Eyes 2014), unburned or low-severity burned NR habitat is consistently extremely important for this species for nesting, roosting, and foraging. However, all of these studies also show that Spotted Owls use high-severity patches for foraging, including relatively large patches (e.g., 36 ha in Yosemite National Park; Eyes 2014 on page 28; and in Bond et al. 2009, in the McNally Fire, California Spotted Owls were detected foraging well in the interior of a > 100-ha severely burned patch). High-severity patches near the nest had the highest probability of use by owls in burned foraging ranges in the Sequoia National Forest (Bond et al. 2009; selection probability for severely burned forest high closest to nest). The BA provides extensive discussion of work conducted by Clark (2007) on Northern Spotted Owls. Unfortunately, the BA fails to divulge that much of the high-severity burned forest on private lands in the Timbered Rock study area was post-fire logged, which likely contributed to lower daily survival rates in the post-fire landscape (Clark et al. 2011) as well as lower occupancy (Clark et al. 2013). Lee et al. (2012) reported that for most of their sample of California Spotted Owl sites in the Sierra Nevada where 7 salvage logging was known to occur, owls were present after fire but not detected after post-fire logging (Lee et al. 2012 on page 800 state: "post-fire logging…occurred within 2 years after the fire near at least eight of our 41 burned sites. Severn of the eight sites that were later logged were occupied by California Spotted Owls after the fire but none of the eight sites was occupied after logging…"). Lee et al. (2013) reported lower probability of occupancy of burned sites by owls after salvage logging in southern California, although the effect was not statistically significant (logging in this study was restricted to relatively small-scale removal of hazard trees on private lands rather than commercial harvest such as that proposed in the Westside Project). With regards to foraging habitat selection, Clark (2007) states on page 100 of his M.S. thesis: "[all owls were] 2.33 times more likely (95% CI = 1.75-3.09, p < 0.0001) to use NRF habitat with high severity burn than early-seral forests. NRF habitats with moderate and high severity burn and RF with moderate severity burns were selected and used more frequently than available, but overall use of these habitats was relatively low." Salvage logged sites were used less frequently than available, and in the same fashion as early seral forest stands. For just owls within the perimeter of the burn, "NRF habitats of any fire severity were selected, with low/unburned stands being 3.23 times…, moderate severity stands being 4.48 times…, and high severity stands being 3.58 times more likely used than early seral habitat." (Clark 2007, page 103). The owls also used salvage logged areas, but only where associated with riparian buffers and patches of leave trees, and some locations were from the logged areas prior to or during timber harvest (although number of these locations was unknown). "Areas that received clearcut salvage were rarely used." (Clark 2007, page 103, emphasis added).	The commenter implies more certainty than the literature suggests. The commenter overstates and simplifies the findings in the literature and understates the complexity of the relationship between owls, fire and salvage logging. Spotted owl use of high-severity burned areas is still very much uncertain and is likely to be highly site-specific and variable. Relevant to the discourse and little mentioned in the comment is the July 2014 Master's Thesis of Ms. Stephanie Eyes. Using radio-telemetry in the Yosemite National Park, Ms. Eyes tracked spotted owl use of burned areas post fire. Ms. Eyes's research was more robust than previous efforts to document spotted owl use of burned areas and extends the body of literature on the topic extensively. Ms. Eye's thesis contradicts some of the most important conclusions of previous studies such as Ms. Monica Bond's 2009 study. The commenter criticizes the Biological Assessment (BA) for not comprehensively analyzing fully the body of literature that addresses owl use of burned areas, particularly Clark's 2007 Thesis . However, the BA extensively addresses the relevant literature and notes, as does Dr. Patricia's Manley's 2014 declaration regarding the use of this literature to argue against salvage logging in the Rim Fire. The BA comes to the appropriate conclusion that "owl use of burned areas is well documented but links between owl use, fire severity and intensity of salvage are not clear." (page 38, BA) Also that "[F}actors involved in northern spotted owl's periodic selection of burned areas for foraging are not known at this time, and further research is needed to account for the many other aspects of a burned landscape that would factor into the northern spotted owl selection process.' (page 38, BA). Given the uncertainty of the literature regarding not only the northern spotted owl's response to the burned landscape, but their response to salvage logging, the Forest has proposed the reasonable and prudent course of using extensive on-the-ground review of site specific conditions to limit salvage logging to a very small percentage of the larger landscape and to avoid primary owl cores entirely. Of the 187,100 acres of Federal land that was burned within the project area, only 10,250 acres (5.4%) are being considered for salvage and of those acres only 7,940 acres will be salvaged which will further reduce the proportion of treatment (4.2%) in the project area that removes most of the burned snags. Remember that leaves 179,160 acres (95.7%) of the burned area on federal lands within the project un-salvaged. Project design features will leave all burned trees that have at least a 31% probability of surviving as determined by professional guidelines in salvage harvest units. Given the uncertainty of spotted owl biologists in determining the likely use of any given area by spotted owls post fire, there is certainly a risk in going forward with any salvage. However, given the economic support salvage operations can afford hard hit rural communities, the infrastructure support salvage operations provide struggling rural mills and the ecological advantage of salvage in providing for adequate regeneration, a balanced risk of providing for salvage on such a small percentage of the larger burned landscape is a reasonable risk. One must keep in mind that even in the northern spotted owl Revised Recovery Plan, Recovery Action 16 calls The devil is in the details. And in this case, the contradictions in the literature regarding the details of how exactly spotted owl were using burned over areas cannot be resolved without additional research to separate out the factors that are affecting owl's use. In the meantime, the site-specific analysis provided by the BA using the best available knowledge of spotted owl biology and behavior in the area in question combined with the reasonable guidelines to avoid disturbing areas that may have remnant owls, certainly outweigh the narrow results of the available research.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-2	The following comments address the Draft Environmental Impact Statement (DEIS), the Biological Assessment (BA), and the Biological Evaluation (BE) for the Westside 'Fire Recovery' Project, a logging project that harvests trees from forests recently burned by fire. Ninety-four Northern Spotted Owl (Strix occidentalis caurina) Activity Centers ("AC") were impacted by fire, and the project's Preferred Alternative 2 will conduct logging in more than 90 of these ACs. In summary: ? The BA and DEIS fail to include Post Fire Foraging ("PFF") habitat as suitable habitat in the assessment of habitat risk potential of an Activity Center, despite admission that Spotted Owls forage in severely burned forest. ? The BA's assessment of reproductive potential does not consider evidence that offspring are often produced at Activity Centers with high amounts of high-severity fire. ? The BA's reproductive risk assessment methodology incorrectly places Activity Centers into the moderate and high risk category, thus opening them up to harmful post-fire logging, despite the fact that these areas, if not used for nesting, will likely be used as foraging habitat if left unlogged. ? The Preferred Alternative 2 does not base its protective standards on the published literature about Spotted Owls and fire, and even the most protective design feature-no logging in the 500-acre core area of 11 Activity Centers-will not prevent loss of those 11 sites' associated foraging habitats, and leaves no protection at all for the other 83 sites. ? All of the Westside Project's Action Alternatives fail to give Spotted Owls the benefit of the doubt, as is required by the ESA (see TVA v. Hill, 437 U.S. 153, 194 (1978)), and all the alternatives will very likely result in harmful effects to more than 90 Northern Spotted Owl breeding sites and associated foraging habitats.	The Endangered Species Act Handbook authored by the U.S. Fish and Wildlife Service and National Marine Fisheries Service indeed cautions consulting biologists to 'err on the side of the species.' However, that caution refers to the effects analysis itself and fosters determinations that, when faced with the uncertainty in likely effects that is common in wildlife sciences, favors the more adverse possibilities. Essentially by assuming the worst, consulting biologists focus on all the range of minimizing actions that may reduce the eventual impact of the project. The Biological Assessment does just that and assumes adverse effects on the owls that may or may not be occupying the majority of its affected activity centers. The Project appropriately provides Project Design Features that, in cooperation with the U.S. Fish and Wildlife Service, were designed to minimize those adverse effects while ensuring that the purpose and need of the project would be fulfilled. The Endangered Species Act allows for a balance between the conservation of individuals of the species and the need for project implementation that would have adverse effects. When action agency biologists determine that adverse effect may occur on individuals, it is the responsibility of the U.S. Fish and Wildlife Service to complete a jeopardy analysis that will determine if the proposed actions are likely to jeopardize the survival and recovery of a listed species. Although likely to adversely affect individual northern spotted owl, the U.S. Fish and Wildlife Service has determined that the proposed actions are not likely to jeopardize the species. In that case, under streamlining, we jointly look for project design features that are likely to reduce the effect of adverse actions while avoiding changes to the project that would compromise its ability to meet the purpose and need. The Endangered Species Act does not require a cessation of all actions that may adversely affect individuals.Keep in mind that adverse effects may be as mild as a distant disturbance that may interfere briefly with a foraging or resting behavior or of course as severe as breeding failure, out-migration or even death. The Endangered Species Act limits the regulatory agency to developing reasonable and prudent measures and their implementing terms and conditions that do not alter the basic design, location, scope, duration or timing of the action. They are limited to requiring only minor changes. Generally under streamlining, the Forest Service and U.S. Fish and Wildlife Service work together during project planning to devise designs that would minimize adverse effects even more than might be possible using the regulatory framework of the Endangered Species Act. Under streamlining, these minimizations are included as explicit or implicit project design features rather than as reasonable and prudent measures. In order to avoid major changes to the project design, much of the efforts to provide design features may only be able to reduce the likelihood of the more severe adverse effects rather than eliminate adverse effects entirely. Reducing the likelihood of more severe adverse effects may simply maintain them as less severe disturbances or habitat alterations. They are still adverse effects, but less likely to cause an impairment in basic life-sustaining behaviors. Due to the need for rapid project development, collaborative efforts may be more limited than would generally be the case in a more typical vegetation management project. Nevertheless, the U.S. Fish and Wildlife Service have been involved to some degree from the beginning of our efforts and have been valuable and necessary partners in the project development. Pages 15 and 16 of the Biological Assessment detail some of the changes in project design as a result of the Level 1 consultation process, although keep in mind that many of the project design features were included in the original proposal in anticipation of the level 1 streamlining process.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-20	It is true that Clark's radio-tagged Northern Spotted Owls preferred old, structurally diverse forest as foraging habitat, but they also preferred severely burned forest (i.e., used it more than it was available)-a point that cannot be discounted by the Forest Service during analysis of effects of removing this foraging habitat. These severely burned patches were rare within owl home ranges in the study, yet were used more frequently than available. Clark (2007) specifically stated: "[w]hile, these areas of stand replacement may not provide high quality habitat, they likely provided some benefit to owls following wildfire because owls did make use of these stands. I hypothesize that high severity burns in NRF habitat which created early seral stands may be used by owls because they may provide increased prey abundance…but I was unable to test this hypothesis. Furthermore, large dead trees created by wildfire are likely to serve as "legacy structures", and provide coarse woody debris and snags for future late-successional forests…, potentially making these stands important to creation of spotted owl habitat in the future. In addition, early seral forests created by disturbance events that are not altered by timber harvest are extremely rare…and support some of the highest levels of biodiversity…Therefore, the potential ecological benefits of large standing dead trees should be weighed against social and economic objectives when considering land management activities." (Clark 2007, page 115). At base, Clark (2007) found that use of high-severity burned forests for foraging was more than expected based on their availability to the owls. And in Bond et al. (2009), Spotted Owls selected severely burned forest for foraging significantly more often than expected based on availability within foraging ranges (see Figure 1, Bond et al. 2009 on page 1120). 8 Overall, actual telemetry locations from Clark and Bond et al. show that Spotted Owls largely avoided foraging in clearcut salvage-logged stands (very few points in those stands), and any use in these areas was associated with riparian buffers and retention stands. This is the best available science. The BA provides extensive discussion on use of burned stands, but only very vaguely discusses salvage logging and provides no analyses whatsoever. The only discussion provided in the BA regarding effects of salvage logging states (on page 34): "…links between owl use, fire severity and intensity of salvage are not clear. Researchers were typically unable to separate effects of pre-fire timber harvest, wildfire, and post-fire salvage harvest. Research results are highly variable, depending on methods, burn severities, proximity of NSO's to fire and spatial arrangement. Research of NSO use of burned areas has also been confounded by small sample sizes. In addition, general terms used in the literature including 'moderate severity' and 'salvage logging' make comparison to specific conditions found within the project area difficult. Most references to 'salvage logging' in the literature refer to clear-cut logging, and do not factor in design features such as leave tree groups, legacy tree retention, core area avoidance or even limited operating periods." This discussion provides no information whatsoever about any of the results from published literature about effects of salvage logging (e.g., Clark 2007, Clark et al. 2011; 2013, Lee et al. 2012; 2013). These studies all provided at least some informative data about effects, as I have described above, despite the differences in study areas and logging types. Research has not been "confounded" by small sample sizes, because effect sizes were large enough to obtain significant parameter estimates for most of the studies. Even with variability of selection among owls, we know that not only can this raptor use the severe fire areas, but also that it can prefer them. Given that the ESA requires erring on the side of species' conservation in light of the precarious state of ESA-listed species such as the Northern Spotted Owl, instead of assuming salvage logging might not harm owls, the DEIS must assume, given the best available science, that logging potential foraging habitat will indeed cause significant adverse impacts to the subspecies. Unfortunately, there is not a single Northern Spotted Owl study available investigating occupancy, survival, reproduction, and foraging in a study area with no salvage logging. Darren Clark and Emily Comfort both found important results about effects of post-fire logging on Spotted Owls, but this fire complex on the Klamath National Forest is a truly fantastic opportunity to gather data on responses in an post-fire landscape that has not undergone salvage logging, particularly with such a large sample size (94 ACs affected by fire). The BA's analyses only vaguely discuss salvage logging and do not provide any useful details from the literature. A valid hypothesis based on the best available scientific data is that a mosaic of forest types, ranging from older forest with high canopy cover (for nesting and roosting) to complex early seral burned forests with abundant snags (for	We agree with the commenter that these high severity burn sites may provide some valuable foraging for northern spotted owl post-fire. But we may disagree on their long-term value. Again, it's reasonable to assume that post fire conditions may provide a flush of easily available prey that may have survived the fire, but find themselves in a significantly changed landscape where their familiar cover sites are now unavailable. Limited green forage is likely to also drive these prey species further from cover and again provide for 'easy pickings' immediately after the fire. We currently do not know how long this condition might last, but it is reasonable to assume that it is likely to be short-term and that surviving individuals will not prosper or breed significantly until there is green-up and their own foraging conditions improve. So there may be two pulses of prey availability relative to changing conditions post fire – an immediate flush of prey availability post fire, and a longer term flush after green-up and post-fire conditions improve breeding in the prey species. These two pulses may be separated by a time where these high severity areas offer relatively little available prey.I also agree with the commenter relative to the importance of legacy structures. Keep in mind that the proposed salvage logging is unlikely to fully clearcut large areas. The project considerations for salvage harvesting offered on page 12 of the BA limit salvage harvesting significantly related to the northern spotted owl. Project design features listed in table 6 on page 16 of the BA describes retention that more closely resembles a mosaic of harvested clumps and clumps of green, legacy and pre-existing and post-fire snags. Because of the nature of the descriptive prescription we cannot model out on such a large landscape acre by acre what the landscape will retain post treatment. Treatment actions will be responsive to the actual on site conditions and be limited by the project design features and the commitment to retention found in the draft EIS and the BA. However we can say that considerable care has been taken to maintain legacy structures within the treatment areas and these structures will be available immediately post fire through treatments and will serve to provide habitat elements into the future. Treatments should maintain a mosaic of conditions where post-fire conditions allow that mosaic. The purpose of the BA is not to discuss the effects of salvage logging in general. The purpose of the BA is to determine what effects that salvage logging may have on listed species that may occur in the project area. That is a much narrower focus than the more general evaluation implied by the commenter. The BA does cite Clark 2007 and 2011 as well as the Lee 2012 paper cited by the commenter. The two Clark papers are cited on page 22 in the context of post-fire foraging habitat and in a number of other places as well. The Lee paper is first cited on page 36 in the context of northern spotted owl use of post-fire landscapes. The assumption is NOT that salvage logging will not harm owls, in fact the adverse effect determinations on most activity centers demonstrates that is not the base assumption. Again the Endangered Species Act does not require action agencies to avoid all adverse effects. We have an obligation to minimize those effects and the U.S. Fish and Wildlife Service has the responsibility to determine the larger population level jeopardy determination, but adverse effects in themselves do not necessarily preclude taking management action. Indeed, the large scale of the treatments are entirely derivative of the large scale of the wildfire events. The level of severity and impact on intact owl sites should be in itself a message for the need for treatments to lower the probability of such losses. Although the commenter ably makes an argument for the value post-fire to northern spotted owl of high severity burn areas, they cannot reasonably compare those sites to intact forest with that mosaic of forest types. Our treatments are intended to not only better restore these areas to intact forest, but to protect neighboring, low severity or unaffected forest lands from similar events.

Code	Comment Number	Comment Text	Response
		foraging) within a home range can provide the elements necessary to maintain productivity of Northern Spotted Owls.	

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-21	Finally, Recovery Action 10 in the Northern Spotted Owl Recovery Plan (NSO RP) (2012: III-43) states "Conserve spotted owl sites and high value spotted owl habitat to provide additional demographic support to the spotted owl population." Since at least two studies recommend not salvage logging in Spotted Owl ranges, Clark et al. 2013 and Bond et al. (2009), and even the BA acknowledges (on page 35) that "NSO foraging activity in these burned areas is supported in the literature…", then logging this 9 habitat within core areas in the Westside Project would be a violation of not only the best available science, but this recovery action as well. Similarly, Recovery Action 12 in the NSO RP (2012: III-49) states that "In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large trees, medium and large snags, downed wood)." However, the Westside Project - which is located in Northern Spotted Owl Critical Habitat and Late-Successional Reserves, and are "lands where management is focused on development of spotted owl habitat" - would remove the remaining habitat features (snags and downed wood, as well as some live trees) that are essential to recovery of the species, and is inconsistent with the best available science and the NSO RP. In short, there is no evidence to support salvage logging in owl ranges while there is substantial evidence showing that salvage logging will likely harm Northern Spotted Owls. II. The BA/BE's "Habitat Fitness Potential" Methodology for Ranking Spotted Owl Activity Centers and Allowing Salvage Logging in High and Moderate Risk ACs is Fundamentally	The BA addresses Recovery Actions 10, 12 and 32 in some detail on pages 8 and 9. Page 9 presents a table addressing the primary recommendations of each of these Recovery Actions and states the project design features that intend to implement these recommendations. Although Clark 2013 did recommend that salvage logging be restricted within 2.2 km of an northern spotted owl site (a home range) he also states that his study was “opportunistic and observational.” His study could not reasonably separate out the effects of high-severity fire, past timber activities and salvage logging and he recommends “a cautionary approach when applying our findings to future land management decisions.” Without diminishing the importance of either Darrin Clark’s work or that of Monica Bond, its important to point out the remaining uncertainty and that other research such as that of Stephanie Eyes (2014) or Emily Comfort (2013) has found an avoidance of high-severity burn areas by spotted owls. Stephanie Eyes thesis work evaluated twice as many owls as did Monica Bond and monitored them over three seasons of habitat use rather than just one. Salvage logging is not undertaken specifically to support northern spotted owl individuals. In fact, it is avoided in the most sensitive sites and in the areas most likely to support continuing northern spotted owl presence in the burn areas. There are likely to be some indirect beneficial effects to northern spotted owl in promoting future habitat and reducing the risk of future stand replacing fires in other areas, but these are not presented as primary reasons for treatment. For the most part, the commenter overstates the effects of the proposed activities and does not balance these out with the project design features such as the maintenance of remnant legacy components. See response to comment12346-55. See the beginning of Chapter 3 for responsible opposing points of view.
204.01 - NSO	#18899-22	The DEIS (page 43) describes the assessment and management of Northern Spotted Owl Activity Centers (ACs) as follows: 1. In 0.5 mile core areas (500 acres): if the site contains > 50% suitable NRF habitat, and if an additional 1,086 acres NRF habitat is in the outer home range (0.5 to 1.3 miles), then the site is "high potential." In the Preferred Alternative 2, only these core areas are protected from logging, but logging can still occur in home ranges of these sites. 2. In 0.5 mile core areas (500 acres): if the sites contains < 50% suitable NRF habitat, and if > 20% NRF habitat is in 1.3 mile (1,375-ac) home range, then the site is "moderate potential." 3. If < 20% NRF remains in 1.3 mile home range, it is "low potential." Logging will be conducted in all moderate and low potential core areas and home ranges. The BA (page 25) cites studies by Dugger and Franklin to justify the 50% suitable habitat threshold, but these studies were not conducted in recently burned study areas, and therefore are not the best available science for determining the "potential" of a recently burned site. Because we now know that Spotted Owls not only use severely burned forest for foraging, but actually prefer it (use it more than available), there is no scientific basis to conclude that such areas are not suitable habitat. They are suitable, and any credible analysis of site "potential" must therefore account for that fact. The risk-potential methodology does not derive from the best available science and instead derives solely from an assessment of Northern Spotted Owl demography based on habitat in sites in longunburned landscapes. But post-fire forests are not at all the same as logged forests. Rather, radiotelemetry studies document, and the BA agrees (on page 35), that "NSO foraging activity in these burned areas is supported in the literature." Even though the agency specifically recognizes the fact that PFF is important foraging habitat, the analysis categorizes risk to owl reproduction using only traditionally defined suitable NRF habitat from long-unburned forests, and assumes that the risk assessment in this post-fire landscape need not account for the benefits of PFF. This is arbitrary and results in an incorrect assessment of risk.	The commenter criticizes the BA for the use of guidelines developed in research conducted in unburned sites in determining habitat suitability and reproduction potential, while at the same time using research conducted in unburned sites to provide argument that the assumption that telemetry data of a stationary bird indicates foraging activity. As action agency wildlife biologists, we act as consumers of research and must accept the need to apply research conducted in another location, under different circumstances, with limited or narrow focus to our very site-specific, purpose and need specific projects. Inevitably it takes a certain amount of speculation based on the known research, the known life history, essential behaviors and known demographics of the species. This is then tempered with our own field history of surveys, observations and area-specific knowledge. We must assess the work of Dugger and Franklin, as well as the works of Bond and Lee, relative to the site-specific differences. None of these apply absolutely or without error to the current conditions and must be evaluated relative to the known differences. One of the reasons the courts have provided broad discretion to agency biologists is derivative of this need for interpretation of data relative to project scale conditions. Relative to the comment, it is not certain that spotted owls will always preferentially use high-severity burn areas for foraging, not do we know why there may be differences between the various researchers. Our response to that uncertainty is to balance our treatments with this knowledge and the need for meeting our purpose and need, while at the same time meeting the requirements of the Endangered Species Act for minimization of adverse effects and the need under National Environmental Policy Act to fully disclose the potential effects of the project in the draft EIS. In that effort to balance the probabilities of adversely affecting the owl with the need for treatments, the BA does evaluate post-fire habitat extensively and within the context of the best available research. Pages 36 through 40 of the BA evaluate the post-fire use of habitat by owls and appropriately note the differences between the available research and the current site conditions. Post fire foraging habitat is noted in Table 8 of the BA and it is evident that it was used in the development of site specific determinations.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-23	Further, even sites with a large amount of high-severity fire can still be occupied and reproductive, which is well-documented in the literature (Bond et al. 2002, Jenness et al. 2004, Lee et al. 2013). For 10 example, Jenness et al. (2004: page 769) found in Mexican Spotted Owl sites, "[f]ires burned > 50% of each of the three burned survey areas [1-km circles around nests/roosts] with successful nests in 1997 (including stand-replacement-level percentages of 8, 31, and 32%)…" In a burned landscape in southern California, Lee et al. (2013) found that only when 50% of forested habitat in a 500-acre core area burned severely did there begin to be negative effects on occupancy-but many sites that burned greater than this threshold were still occupied, and increasing amounts of high-severity fire did not adversely impact reproduction in the best, most reproductive sites. Instead, the most productive Spotted Owl sites (i.e. consistently occupied and reproductive) in this southern California study area showed negligible impacts of severe fire on reproduction no matter how much of this fire occurred in a 500-acre core area (Lee and Bond in press A). In addition, a study of Spotted Owl site occupancy in the Rim Fire showed no reduction in occupancy by pairs, no matter how much of 300-acre PAC burned at high severity (Lee and Bond in press B; see attached Appendix A for letter to the Stanislaus National Forest describing these data). Therefore, it is essential not to assume that NRF habitat which, because it burned severely and now falls below the Forest Service's risk-potential thresholds, is therefore non-reproductive. Again, burned forests are structurally and biologically different from logged landscapes, and severely burned forest is known to provide important suitable habitat for owls. Nonetheless the DEIS (on page 141) says: "80 percent of the activity centers analyzed in the project area is at moderate or high risk to reproduction. The 'high' risk activity centers in the project area are not likely to produce any offspring because the core and home range aren't expected to provide enough of the resources needed to support the adults and offspring." As described above, this is an unjustified assumption that is not supported by scientific data from burned landscapes, and is instead contradicted by the best available science. The best available science shows that occupancy by pairs of owls was largely unaffected by amount of severe fire in the absence of salvage logging (Appendix A, attached), suggesting that most sites remain occupied and productive after fire regardless of fire severity (but before salvage logging). This demonstrates the remarkable ability of owls to coexist with severe fire, and also shows that habitat use will be influenced by site-specific factors (as noted in the BA on page 34: "Factors involved in the NSO's periodic selection of burned areas for foraging are not known at this time, and further research is needed to account for the many other aspects of a burned landscape that would factor into the NSO selection process.") However, the BA ultimately acknowledges (on page 35): "NSO foraging activity in these burned areas is supported in the literature…" Therefore it is not biologically valid for the BA to fail to consider PFF as potentially suitable habitat when categorizing habitat in ACs. There is a disconnect here where the agency acknowledges the use of burned forests on one hand, but then fails to consider it suitable on the other hand, thus improperly placing far too many ACs into the high risk category and, worse, exposing them to post-fire logging. This lack of consideration of the suitability of PFF directly results in the logging of what is actually suitable habitat and wrongly results in an artificially high number of ACs (83) being placed into the moderate and high-risk category (assuming little or no chance of reproduction), and therefore open to logging. This flawed process will cause significant harm to sites that actually could support reproductive owls, if they were left unlogged. If burned PFF habitat were properly called "suitable," then far more ACs would be in the low-risk category where core areas would not be logged	The Biological Assessment (BA) and Biological Evaluation (BE) both have an analysis to estimate the effects on northern spotted owl as a result of the proposed activities in this project, but these analyses are not the same and are not intended to be identical. The BE provides a relative change in the level of “risk to reproduction” based on effects to northern spotted owl habitat within the core and home range as described in the BE under the section called “analysis indicator”. The BE presents four levels of “risk to reproduction”: very low, low, moderate, and high risk to reproduction. For each of these levels of risk, a description of reproduction potential is provided given the amount of habitat occurring in the core and home range. For example, an activity center with “very low” risk to reproduction will likely provide sufficient resources to support reproduction, but if the project resulted in this same core and home range in a loss of habitat that resulted in this activity center moving in level of risk from “very low” to “moderate”, then this activity center would have a much lower potential for reproduction. An activity center with a “high risk to reproduction” that had a reduction in habitat as a result of this project is still affecting this activity center. Activity centers identified with a “high risk to reproduction” is described in the BE as reproduction is not likely to occur in the activity center because of the low number of habitat acres occurring in the core and home range. This doesn’t mean that reproduction couldn’t occur in activity centers identified with a “high risk to reproduction” rather successful reproduction is associated with relatively large number of suitable habitat acres and a low level of suitable habitat would provide challenges for reproducing northern spotted owl that would likely result in a lack of reproduction. A Biological Assessment is a document used to communicate information and analysis between the Forest and the U.S. Fish and Wildlife Service under the Endangered Species Act for consultation on the Westside Fire Recovery Project. The BA only analyzes one Alternative or combination of Alternatives as decided by the responsible official. Unlike the BE which must meet the requirements of the National Environmental Policy Act, the BA must meet the requirements of the Endangered Species Act thus the analysis provided in the BA may be similar but it is not necessarily the same as the BE. The northern spotted owl analysis in the BA does include fire-affected habitat into the effects analysis. The BA provides a review of the literature and it incorporates pertinent research into the analysis include northern spotted owl fire-affected habitat. The BA provides a detailed description and review of the literature associated with northern spotted owl use of fire-affected habitat under the section called “northern spotted owl use of the post-fire landscape”. In addition, the BA presents the process used to incorporate northern spotted owl research into the analysis in the section called “methods for assessing effects to northern spotted owl habitat from wildfire” and this section also defines fire-affected northern spotted owl habitat. The BA also outlines the methods used to include fire-affected habitat into the effects analysis in the section called “methods for assess impacts to individual activity centers”. The methods used to assess each of the northern spotted owl activity centers in the analysis area are displayed in the BA under the section called “methods for assessing habitat fitness potential of fire-affected activity centers”. Based on suitable northern spotted owl habitat, each activity center was placed into one of the three possible “habitat fitness potential” categories: high, moderate, or low fitness potential. This analysis is based on the northern spotted owl Recovery Plan recommended Interim Guidance (2012); northern spotted owl analysis is recommended to identify the activity centers that are most likely to contribute towards northern spotted owl recovery through reproduction (Recovery Action 10, pages III-43 to III-47). The interim guidance recommends focusing vegetation management in activity centers with ≤50% (250 acres) nesting/roosting and foraging habitat in the core and ≤40% (1,336 acres) nesting/roosting and foraging habitat in the core and home range combined (page III-45). Using this guidance, the northern spotted owl analysis resulted in 11 of the 94 activity centers evaluated in the analysis area being identified as meeting this recommendation and those activity centers were assigned a “low habitat fitness potential” as a result of the current habitat conditions; these activity centers are estimated to contain less than 700 acres of nesting/roosting and foraging habitat within the core and home range combined. In this project, the “high habitat fitness potential” activity centers are identified with >50% (250 acres) nesting/roosting and foraging habitat in the core and >20% (665 acres) nesting/roosting and foraging habitat in the core and home range combined which is a lower level of habitat than recommended in the interim guidance. Therefore, based on the amount of habitat, there are activity centers identified as moderate and high habitat fitness potential that could be identified in a low habitat fitness potential level. The BE provides a different approach for estimating effects on northern spotted owl using an analysis indicator called “risk to reproduction”. This comment may be combining these analyses that resulted in an interpretation that appears to be a far greater level of effects than actually presented in the analysis.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-24	The Preferred Alternative 2 restricts salvage logging only within 500-acre core areas in 'low-risk' ACs.1 However, protecting just the 500-ac core is insufficient, as Northern Spotted Owl home ranges are typically larger than 500 acres, owls expand their use of habitat as the breeding season progresses, and more distant locations may be critically important for survival. 1 Biologically, the Forest Service's approach is to "write off" those ACs where the unburned or low-burned potential nesting and roosting habitat is most limited post-fire. In fact, these sites require even greater levels of protection, and the ESA does not permit the FWS to write them off. TVA v. Hill, 437 U.S. 153, 194 (1978) ("Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities"). 13 The concept of a 'core area' is to encompass and protect the best nesting, roosting, and foraging habitat in a contiguous manner close to the territory center. It has been demonstrated that the Protected Activity Center and the actual core area of the nest and daytime roost sites of California Spotted Owls showed considerable overlap, thus verifying the efficacy of the PACs for owl conservation (Berigan et al. 2012). Several studies, however, have noted the importance of habitats beyond the core area for overall year-round survival. Wiens et al. (2014: page 11) stated "Core-use areas only provide a fraction of the resources required for reproduction and survival, but these areas typically contain unique structure and resources required for nesting, roosting, and provisioning young." Emphasis added. Core areas are the most likely to be defended from conspecifics, but are not the total area required for survival and reproduction. Similarly, in their study of foraging habitat of Northern Spotted Owls in the Olympic Peninsula and North Cascades, North and Reynolds (1996: page 642) noted "[c]aution…should be used when inferring habitat quality from site use-intensity. The amount of time an animal spends in 1 area does not necessarily correspond to the site's habitat value. For example, an animal may spend only 5 minutes a day drinking, yet if water is scarce, the site is essential to the animal's survival." Emphasis added. The fact that most locations of Spotted Owls are within the core use area (because they are central-place foragers) does not negate the importance of foraging sites beyond the core areas. Adult survival is an important parameter in population growth rates for this species, where adult survival is high with low temporal variation, and reproduction/recruitment is low with high temporal variation (Franklin et al. 2000). Numerous radio-telemetry studies have documented expansion of habitat use by Spotted Owls during the overwinter nonbreeding season, which is also the most energetically stressful time when most mortality of adults and dispersing juveniles occurs (Franklin et al. 2000). Wiens et al. (2014) reported nonbreeding season home ranges of Northern Spotted Owls in the Coast Range of Oregon were twice as large as those used during the breeding season. In another study (Glenn et al. 2004), nonbreeding season home-range sizes of Northern Spotted Owls in the Oregon Coast Range were on average 1,239 ha (SE = 134), and 898 ha (SE = 147.3) in the breeding season-this amounts to use of an average of 3,062 acres during the nonbreeding season.	The activity center “core” is a one-half mile radius typically centered on the nest site. The core is specifically identified because the core typically contains the majority, of the northern spotted owl activity during the nesting period. As discussed in the BA in section called “methods for assessing habitat fitness of fire-affected activity centers”, the amount and quality of habitat in the core is strongly associated with successful reproduction. In addition, the northern spotted owl Recovery Plan recommends to “emphasize vegetation management treatments outside spotted owl core areas…” (page III-34). Therefore, minimizing effects to habitat in the core is likely one of the most important components in northern spotted owl recovery. The effects of the proposed activities for each of the Alternatives are available in the Biological Evaluation.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-25	Why do many Spotted Owls expand their winter movements and occasionally even migrate? This is likely because Spotted Owls are capable of depleting the prey supply in the breeding season core area during nesting. Carey et al. (1992: page 233) found "moderate-to-high foraging activity (> 0.3 owl-years within 1 km of the center of the trap grid) appeared to depress flying squirrel populations…Populations on two trap grids that contained owl nest sites (in 1986) showed marked depression…" In a recent study, 4 radio-tagged Mexican Spotted Owls moved to wintering areas that burned 4-6 years earlier and that had 2-6 times greater abundance and biomass of small mammal prey than nest core areas associated with those owls (Ganey et al. 2014). Similarly, Block et al. (2005) found 2 radio-marked Mexican Spotted Owls moved to a wintering area where prey biomass during the winter was 7 times greater than during winter in the nesting area of these owls. These studies indicate that wintering areas-and in the case of Ganey et al. (2014), burned wintering areas-provided important foraging habitats during an energetically stressful time of year. The literature on movements and habitat use of Spotted Owls can help us to estimate a more robust amount of habitat to protect from logging. The table below is from Carey et al. (1992) page 231. The study was conducted partly in the Klamath Mountains. Over 24 months, "areas traversed ranged from an average of 533 + 58 hectares in the MCC to 2,908 + 595 hectares in the DFF," (Carey et al. 1992: page 231). In the table below, the most applicable habitat type to the Westside Project would be MCF2, the 14 mixed-conifer fragmented old forest in the Klamath. These owls traversed over 4,438 acres, and up to 5,083 acres (including +1 SE and converted from hectares), based on a Minimum Convex Polygon. In the study, the length of the major axes traversed by owls ranged from an average of 2.9 km in MCC clumped old forest, to 5.5 km in MCF2 fragmented old forest. If we assume the center of the axis was the nest, and used the most applicable habitat type to the Westside Project (MCF2), then the average farthest distance owls ranged from their nest was approximately 2.75 km (= 5.5 km / 2), and the maximum farthest distance was 3.45 km (= 5.5 + 1.4 / 2). Indeed, Bond et al. (2009) found a female California Spotted Owl ranged > 3.4 km from the nest during the breeding season, a distance similar to that found by Carey et al. (1992). That female remained for several days in the distant stand, and then returned to areas closer to the nest. Therefore, an adequately protective buffer around nests/roost sites would likely be at least a 3.5 km radius. This radius, however, does not even consider winter migratory movements in which owls travel even farther distances seeking out foraging habitats. Wiens et al. (2014: page 185) documented Northern Spotted Owls often were located 3-4 km from their breeding sites in fall and winter, but 5 of 23 owls migrated to a winter home range that was 7-25 km distant from their breeding range. Bond et al. (2010) also documented expanded winter movements by California Spotted Owls, including a pair that migrated 13 km from their breeding season territory center-they then moved back to the same breeding site the following spring. In a major study of > 70 radio-tagged Northern Spotted Owls from 3 areas in the Klamath and South Cascade mountains, Irwin et al. (2012) observed 4-6 individuals moved to lower elevations each winter, and roosted in conifer forests but foraged < 600 m from the nearest conifer forests, perching from scattered trees and snags in oak savannahs and manzanita shrubfields . Although these distances are the farthest traveled and not the average, the depletion of prey within high-use breeding-season foraging areas forces owls to travel to new locations to hunt, and using the farthest location would be the most conservative protective standard. Overall, we must assume that, given the energy needed to travel to distant foraging habitats, these hunting grounds are important to the individuals and necessary for their survival. Therefore, it stands to reason that for the high reproductive potential, low-risk Activity Centers, a 500 acre area-while comprising the nest and most breeding-season roost sites-falls far short of the area actually required by Spotted Owls to maintain 15 survival and reproduction. Even the 1,086 home range is far too small an area given their actual use patterns. Thus, it is not scientifically valid or cautious management to conclude that no adverse effects will occur from merely protecting 500 acre core areas of a handful of the so-called low-risk sites, especially since many additional sites likely will support reproduction and should be included in this lowrisk category.	The defined “core” and “home range” area has been described differently depending on the spot within the northern spotted owl range, but the Klamath Province has a defined core and home range size. The U.S. Fish and Wildlife Service has defined the core (one-half mile radius) and home range (1.3 mile radius) which is typically centered on a nest site (northern spotted owl Recovery Plan 2012 and the Regulatory and Scientific Basis for the U.S. Fish and Wildlife Service Guidance for the Evaluation of Take for Northern Spotted Owl on Private Timberlands in California’s Northern Interior Region 2009). Using the defined core and home range, the “submitted” Biological Assessment estimated the effects of the proposed activities (using Alternative 2 with modification) and determined that 70 of the 94 activity centers analyzed were “likely to be adversely affected” by the project. However, this determination has a wide spectrum of effects which range from effects that barely exceed “insignificant” or “discountable” to the level of affecting many acres of suitable habitat. Although the determination is accurate based on the described process of consultation, the consequences of the estimated effects on the 70 activity centers are not equal.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-26	Moreover, the available research suggests that Northern Spotted Owls expand and shift their core and home ranges post-fire. FWS (2014, page 32 of Douglas Complex Post-Fire Salvage Project Biological Opinion, TAILS #01EOFW00-2014-F-0161) explains that "Clark (2007) found that in high severity burned landscapes, and landscapes with salvage harvest, spotted owls are likely to increase their home ranges to compensate for the loss of suitable habitat and this will likely impact spotted owl habitat-fitness." Id. on page 43. Clark and others concluded that "spotted owls may shift their habitat use patterns and/or increase their home range size to encompass the best available suitable habitat post-fire rather than vacate the affected site, unless very poor habitat conditions exist over much of their home range (King et al. 1998, Clark 2007)." Id. on page 33. Spotted Owls that shift and/or expand their home ranges in response to wildfire and subsequent postfire logging take advantage of unoccupied habitat that may be necessary for the species to persist in a post-fire environment. Protection of all habitat needed year-round is likely to be especially important for this seriously declining subspecies, and past and continued logging may explain population declines range-wide despite protection of core areas	Spotted owls can move from one nest site to another for various reasons including natural disturbance. This possible movement of a nest location is one of the primary reasons for conducting northern spotted owl surveys throughout the life a project. The Westside Fire Recovery Project is currently being surveyed , but surveys are not complete for this year at this time. If a new nest site is discovered (a nest not previously considered during consultation with the U.S. Fish and Wildlife Service) before the completion of a project, then the Forest is require to re-initiate consultation to account for the possible effects resulting from completing the project. The analysis presented in the BA and BE includes the best available data on northern spotted owl locations.
204.01 - NSO	#18899-4	This project would conduct post-fire logging in up to 94 Northern Spotted Owl Activity Centers (AC = ~1,086 acres surrounding nests/roost locations). In the Forest Service's Preferred Alternative 2, only 11 of these ACs were categorized as "low risk" and thus their 500-acre core areas will be protected from logging (but the home ranges of all ACs are open for logging). The other ACs will experience logging even within the 500-acre core areas because the Forest Service erroneously deemed these as low-quality sites with low potential for reproduction. The analysis of impacts in the Westside BA and BE with respect to Northern Spotted Owls is fundamentally flawed, thus leading to conclusions about impacts that are not supported by scientific data. One key reason the analysis is flawed is because the Forest Service acknowledges (BA page 22) that "even with the loss of canopy cover and key habitat components typically found in the NRF habitat, studies indicated that burned areas can still function as foraging habitat after the fire, depending on many factors including patch size, edge type, burn severity, and proximity to known owl sites." The BA 4 defines this foraging habitat as "PFF," or "Post Fire Foraging." Then, however, in the methodology used to determine 4 categories of risk as described in the BA/BE and DEIS, the agency does not consider the burned forest (PFF) as suitable - it instead ignores the PFF when calculating suitable habitat as part of the process of defining low, moderate, and high risk ACs. Moderate and high risk ACs are assumed to have low potential for reproduction. This lack of consideration of the suitability of PFF resulted in an artificially high number of ACs (83) placed into the moderate and high-risk category (assuming little or no chance of reproduction), thus subjecting the 500-ac core areas of these ACs to post-fire logging. This is counter-productive because the very areas that need protection from post-fire logging-severely burned areas-are instead opened to logging under the false pretense that such areas are not important to owls. In fact, these areas are critically important because they provide the habitat owls need to find food to survive in the post-fire environment. The Forest Service's wrongful assumptions thus will cause significant harm to 83 sites, and will likely preclude the sites' ability to support owls. Indeed, post-fire logging has been demonstrated to reduce occupancy of Spotted Owl territories (see discussion, below), and post-fire logged sites are very rarely used by foraging owls; unlogged burned sites, on the other hand, are frequently used for foraging by Northern Spotted Owls. Further, to assume likelihood of reproduction at a site based solely on amount of unburned/low-burned NRF habitat is incorrect because it does not reflect scientific data showing owl occupancy and reproduction even at sites where a substantial amount of habitat burned at high severity.	The research associated with spotted owl use of fire-affected forest lacks clarity and agreement between researchers. The BA provides a brief review of the relevant research in the section called “northern spotted owl use of the post-fire landscape” and we found that the research has opposing views. For example, Clark et al. (2013) states “the few studies that have been conducted on spotted owls in burned landscapes have provided equivocal results regarding the effects of wildfire on the species [spotted owl]”. Eyes (2014) states “ Overall, California spotted owl avoided high severity forest patches and used lower severity patches, consistent with my predictions and previous research on northern spotted owls (Clark 200, Comfort 2013).” While Lee and Bond (2015) stated “Our findings add to the growing body of research that fire, even high-severity fire, is not a major threat to the persistence of California Spotted Owls in the Sierra Nevada (Bond et al. 2002, 2009, Roberts 2008, Roberts et al. 2011, Lee et al. 2012).” As presented in Dr. Manley’s review of the available research concerning spotted owl use of fire-affected forests in her declaration for the US District Court, the available research displays disagreement and until research provides more fully developed, it is premature to make clear conclusions about spotted owl use of high fire severity affected forests and the level of effects resulting from salvage harvest (Center for Bio. Div. vs. Forest Service Oct 1, 2014).We weighed the information in these articles displayed above plus many other articles not presented here (see the BA) and used our own experience and professional judgement to develop the methods presented in the BA. We focused our analysis on the quality, distribution, and amount of habitat and recognized that pre-fire suitable habitat that burned at moderate and high severity fire could provide foraging opportunity. However, given the large expanses of contiguous moderate and high severity fire affected forest in the project area, it isn’t reasonable to assume that an owl would tradeoff the cover of high quality habitat to venture far into a burned forest that provides much less cover to escape predation for the potential reward of a possible meal. Therefore, we limited the value of fire-affected habitat to 500 feet from existing suitable habitat. This scenario provides likely use pattern based on our professional judgement and review of the literature, but we are not saying that a spotted owl would not venture further than 500 feet into moderate and high severity fire affected habitat from suitable habitat; rather we think that most spotted owls would use high quality habitat first and given the biotic (e.g. pre-fire habitat quality and adjacent existing habitat quality) and abiotic (e.g. slope position and patch size) of the fire affected habitat, spotted owls are most likely to use fire affected habitat within 500 feet of existing suitable habitat.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-5	Another fundamental flaw in the Westside BA/BE is the failure to develop management standards based on the best scientific data available, including protecting owl home ranges from post-fire logging (see e.g. Clark et al. 2013; Bond et al. 2009). The BA/BE arbitrarily assume owls will not forage more than 500 feet from the edge of high-severity patches, which is not based on any published scientific studies of which I am aware. Even if the 500-acre cores of all ACs received protection from post-fire logging, there is no scientific evidence that this minimal protection will have no adverse impact on the owls at the larger home range scale, as owls utilize areas far outside the 500-ac core area for foraging, particularly during energetically stressful overwintering months after the prey supply has been depleted within the birds' nesting areas. This is why the published literature speaks to protecting not just core areas, but home ranges as well (Clark et al. 2013). These major flaws in the impacts analysis result in unacceptable levels of habitat loss from post-fire logging in the Westside Project, which is especially problematic and worrisome given that the Northern Spotted Owl continues to experience population declines, and scientific studies show adverse effects of post-fire logging on occupancy, survival, and habitat use. Below, I provide additional details and information regarding these failures in the BA and BE analyses of impacts which I hope will be useful in a new, updated analysis of the impacts of post-fire logging.	We are not aware of any rule that prohibits effects on spotted owl. The Endangered Species Act likely presents the greatest amount of requirements for the actions that may affect northern spotted owl. The Forest has entered into consultation with the U.S. Fish and Wildlife Service per Section 7 of the Endangered Species Act. After we completed the analysis of effects of the project on spotted owl, the level of effects rose to the level of a formal consultation. A formal consultation is basically started when the estimated level of effects on spotted owl or its critical habitat resulting from the proposed activities exceed the level of “insignificant” or “discountable”. However, a Federal agency proposed actions can’t “jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat” (Section 7(a)(2) Endangered Species Act). Therefore, formal consultation has a wide range of effects that may occur within a given project and still be within the formal consultation process. The Westside Fire Recovery Project has identified several spotted owl activity centers with the determination that the proposed activities are “likely to adversely affect” spotted owl activity centers or its critical habitat. Given the wide range of effects that could occur within the formal consultation framework, the Westside Fire Recovery Project BA provides stepwise process of displaying effects for each activity center. This is accomplished by presenting the existing amount of habitat occurring in the core and home range with the acres of habitat degraded, downgraded, or removed for each activity center. Plus, we developed “intensity factors” that incorporate the best available research into triggers that represent when the proposed activities have exceeded the level of “insignificant” or “discountable” effects. Therefore, each activity center that was assigned an “intensity factor” was also assigned a determination of “likely to adversely affect”. The remaining activity centers without a determination had a site specific evaluation where a combination of effects were identified that resulted in a portion of these activities centers with effects that exceeded “insignificant” or “discountable”. The BA provide a detailed process described under the section called “methods for assessing impacts to individual activity centers”.
204.01 - NSO	#18899-6	I strongly recommend protection of all 94 ACs affected by the 2014 fires by conducting no post-fire logging within at least a 2.2 km (3,756 acre) area surrounding the nests/roost sites. Even better, if the Forest Service were to fully consider all the year-round requirements of the Northern Spotted Owl and ensure that the agency's actions would not threaten the continued existence of this declining, federally listed subspecies, it would refrain from conducting post-fire logging anywhere in the fire complex that owls might use, with the exception of removal of hazard trees as necessary along well-traveled roadways. Otherwise, there will certainly be adverse impacts of the Westside Project on the Northern 5 Spotted Owl's ability to use burned stands for hunting, as well as serious negative impacts on the suite of burned-forest dependent species including woodpeckers, bluebirds, house wrens, deer mice, and a host of other organisms that survive and reproduce better in severely burned forests than anywhere	The Westside Fire Recovery Project will undoubtedly have effects on several wildlife species as a result of all Alternatives including the “no action” Alternative. This is one of the primary reasons for completing the extensive resource documents. For wildlife alone, we have provided a Biological Assessment, Biological Evaluation, Management Indicator Species, Survey and Manage, and Migratory Bird Reports to describe the effects of the project may have on several individual species or groups of species. Even though we didn’t analyze all wildlife species that could occur within the project, the species within the documents identified above provide a description of effects across all the terrestrial habitats in the project area. Therefore, though possibly indirectly, even deer mice are considered in the effects analysis of this project.
204.01 - NSO	#18899-7	The BA/BE and DEIS Fail to Adequately Describe the Scientific Literature that Shows Salvage Logging is Harmful to Spotted Owl Occupancy, Survival, and Habitat Use The DEIS (page vi) states that there is disagreement about the effects of salvage logging on Northern Spotted Owls. This is incorrect, at least within the expert scientific community that conducts research on Spotted Owls. The only published scientific data available demonstrate nothing but adverse effects of post-fire logging on this species. There is not a single published study showing post-fire logging is beneficial to owls - only the Forest Service's incorrect assumption that trees must be replanted after fire to regrow a forest. The reality is that Spotted Owls are not only remarkably tolerant of high-severity fire in their home ranges and even core areas, but also they use severely burned forest to find the food they need to survive. Habitat Attributes for Prey-The BA section entitled "NSO use of post-fire habitat" provides a literature review of some of the available studies on Spotted Owl occupancy, reproduction, survival, and space use after forest fire. However, there are numerous statements that should be revised to provide a more accurate and balanced representation of the literature. For example, on page 32, the BA states "Replacement woody debris may replenish from falling snags and trees or may remain in areas where fire intensity was less severe." This statement should also be extended to areas of high fire severity, where snags and coarse woody debris, herbaceous plants, and shrubs can be plentiful (Bond et al. 2009, Donato et al. 2012, DellaSalla et al. 2014). These habitat attributes-which are eliminated after post-fire logging-can support a variety of small mammal species that are consumed by Spotted Owls (Forsman et al. 1984, Williams et al. 1992), possibly explaining why these owls can use complex early seral burned forests for foraging. There is no scientific justification to say woody debris and falling snags will remain only in areas burned less severely.	This sentence was intended to reflect that snags in areas affected by high severity fire provide future coarse woody debris and when compared to forests that burned at lower severity fire, high severity fire affected areas may lack coarse woody debris immediately after a fire.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-8	The BA also provides no information about project effects to small mammal potential prey for Northern Spotted Owls. There is no mention of proposed management of shrubs in the Westside Project, but salvage operations often remove shrubs because they are perceived to compete with tree seedling regrowth (although this is not actually true, and nitrogen-fixing shrubs like Ceanothus can improve soil conditions). Deer mice (Peromyscus maniculatus) increased significantly over time in moderate and severely burned mixed-conifer forests in the San Bernardino Mountains of southern California over a 5- year post-fire period (Borchert et al. 2014). During two years subsequent to intense fire in forests in Montana, deer mice were invariably the most numerous species in burned study sites (Zwolak and Forsman 2007). Dramatic increases in deer mice in severely burned conifer forests were not due simply to colonization of the burn from surrounding unburned forests. When population densities were low, the vast majority of individually ear-tagged deer mice were found in post-severe-fire forest areas, and mice appeared regularly in unburned forests only when population densities were high (Zwolak and Forsman 2008). This finding indicated that severely burned forest was preferred deer mouse habitat and that the post-fire population increase was intrinsic to the burn, thus the burn itself was a source habitat. 6 Pocket gophers (Thomomys bottae) were the second most important prey item for California Spotted Owls by percent biomass in the Sierra National Forest (Munton et al. 2002) and the most important prey item in burned landscapes of the Sequoia National Forest (Bond et al. 2013) based on analyses of regurgitated pellets. Pocket gophers are uncommon in mature and older forests with little or no herbaceous ground cover (Williams et al. 1992), and thus will probably benefit from the complex early seral habitat created by fire. For example, high-intensity burned patches documented by Bond et al. (2009) contained high levels of herbaceous vegetation.	The Biological Assessment does describe the effects of the proposed activities on northern spotted owl prey species. Prey species are described in several portions of the BA. For example, in the BA under section called “Species life history and status” subsection “northern spotted owl Prey”, prey species that are likely to occur in the analysis area are discussed. In section “northern spotted owl use of the post-fire landscape”, prey species are discussed in reference to the change in habitat conditions due to fire and the possible effects to prey species abundance. In section “Effects to northern spotted owl and northern spotted owl habitat from the proposed activities”, the BA describes the effects of each proposed activities such as salvage harvest, fuels management zones, and underburning on likely changes to prey abundance. Prey are discussed again in section called “effects on prey, competitors, or predators” which describes the overall effects of the project on prey species habitat.We agree that fire can influence small mammal distribution and populations. Zwolak and Foresman (2007) found small mammal communities differed between burned and unburned forest habitat. Generally, burned areas had a higher proportion of deer mice when compared to other species captured in the study area, but species diversity increased the year following the fire. Generally, deer mice numbers increased in fire affected areas (Zwolak and Foresman 2008). However, red-backed voles, bushy-tailed wood-rats, and flying squirrels avoided burned areas for at least two years after the fire. This avoidance of burned areas was attributed to the possible reduction in food resources, predation, and distance from colonists. The primary prey species associated with northern spotted owl in California is the dusky-footed woodrat, northern flying squirrel, red tree vole, and deer mice presented in order of importance (Franklin 1997). The Westside Fire Recovery Project contains all these species except red tree vole and the northern flying squirrel is likely not as common as described in Franklin (1997) study area. When comparing frequency and biomass, the woodrat and flying squirrel are the most important prey species (Franklin 1997). Woodrats are associated with brush habitat and are in low abundance in old-growth forests (Sakai and Noon 1993). Northern flying squirrels are associated with mid- and late-seral forests (Carey et al. 1992). High severity fire affected areas in the project area, deer mice are likely present and will likely increase in density. Shrubs are likely to establish within most areas that lack tree canopy cover. After shrubs establish, woodrats should become more abundant and these woodrats may enter the adjacent closed canopy forest where northern spotted owl could capture these prey. Prey capture in the brushy areas is difficult for northern spotted owl (Franklin 1997). However, until brush covers these fire affected areas, deer mice are likely accessible to northern spotted owl as a food source. Northern flying squirrels are not likely present in high severity fire affected areas since these areas lack tree canopy cover. As the forest develops into mid-seral conditions, flying squirrels may return to these areas.The proposed planting of trees in the Westside Fire Recovery Project is prescribed at a minimum spacing of 12 feet between seedlings. These trees have an estimated probability of mortality of about 40-50% thus increasing the spacing between seedlings when mortality occurs. The seedlings will be planted after the fuels are reduced to meet desired fuels conditions in the salvage harvest and site preparation and plant treatment units. No herbicide will be used to control shrubs in the project, but proposed treatments may post-pone shrub growth (i.e. fuels treatment) or interrupt shrub growth in small pockets (i.e. possible hand treatment around seedlings). For northern spotted owl, treatment units will likely have a variety of stages of early seral vegetation to possible food sources for foraging and outside the treatment units, there are a wide-range of vegetation conditions ranging from herbaceous habitat to late-seral conifer forest. Overall, spotted owls will have diverse habitat types to forage within and the species and density of those species are anticipated to reflect the habitat type.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18899-9	The BA also contains an incorrect assertion-that severe fire causes a limitation of coarse woody debris. The BA (page 32) states "habitat attributes such as coarse woody debris (CWD) for prey habitat…can be altered drastically and be limiting after severe wildfire." (Emphasis added.) It is completely erroneous to state that CWD in severely burned complex early seral forests would be limiting. In fact, it is welldescribed in the scientific literature that complex early seral forests contain abundant dead wood which is not present after regeneration harvest or post-fire logging (Donato et al. 2012, DellaSalla et al. 2014). This dead wood is strongly associated with small mammal habitat (and hence Northern Spotted Owl prey) in all kinds of forests, burned or unburned. Spotted Owl Nesting-Another erroneous assumption regards Spotted Owl nesting in burned forests. The BE (page 10) states "the research does suggest that fire affected habitat could be used for foraging, but not nesting." Actually, Bond et al. (2009) documented 2 California Spotted Owl nests in conifer forest burned at moderate severity in the Sequoia National Forest: "We documented one nest tree in unburned mixed conifer-hardwood, one in conifer forest burned at low severity, and 2 in conifer forest burned at moderate severity. One pair, nesting in a stand burned at moderate severity, produced the only fledgling of the 4 nesting attempts. All 4 nest trees were large (>72 cm) conifers, including one apparently killed by the fire within a moderately burned stand." (Emphasis added.) This may be a small sample but it refutes the statement in the BE that "areas burned with…moderate burn severity are no longer considered suitable habitat for nesting, roosting or long-term occupation…" (BE page 33). I agree that optimal nesting habitat is likely to be in traditionally defined mature and old-growth habitat with large trees and high canopy cover, but the data also show that successful nesting is possible in moderately burned forest.	Generally, in the project area, high severity fire consumed most of the woody debris. This woody debris will be replaced as the dead trees start to fall over. Small snags typically start falling over soon after the fire but larger snags may take a few years to fall over unless some other disturbance (e.g. windstorm) intervenes. Since woody debris is such an important habitat component to small mammals, it is important to consider the amount of current and future woody debris. This why the BA describes woody debris as a habitat attribute in the section called “northern spotted owl use of the post-fire landscape”. The BA states “Areas burned with high burn severity are no longer considered suitable habitat for nesting, roosting or long term occupation by spotted owls because these areas no longer supply the habitat attributes needed for thermal protection, nesting structure and cover from predators necessary for long term viability…” (page 36 of “submitted” BA). As pointed out in the comment, Bond et al. (2009) reported two nests in moderate fire severity affected conifer forest. We are not refuting whether or not moderate severity could provide nesting opportunity in certain circumstances. As described in the BA, moderate severity can contain small inclusions of forest habitat with low fire severity. These small inclusions could provide micro-site conditions to provide nesting opportunity. This is why the Forest is completing spotted owl surveys to find potentially nesting spotted owls prior to implementation and not solely rely on habitat typing to dictate where a spotted owl might nest.
204.01 - NSO	#18909-123	The survey strategy in the Wildlife BA does not give the public or decision maker enough information. It is not known if the surveys preformed will be done according to protocol or what AC's will be surveyed. Assumptions in the BA BA 19, "The NSO habitat layer, derived from the EVEG 2007 remotely sensed data, provides a generally accurate depiction of NSO habitat at the scale at which it was used for this analysis; however, variations exist across the landscape, where habitat will be under-typed in some areas and over-typed in others; generally the habitat is depicted accurately. The majority of the uncertainty in the habitat typing within the layer stems from the category assigned to the habitat (i.e. 'nesting/roosting' or 'foraging'), but the designation as 'suitable' is generally correct." (Emphasis added). We are not sure what the BA means by 'generally'. Furthermore, there is a clear distinction between suitable N/R habitat and Foraging. The DEIS fails to make an accurate distinction between habitat types. BA 19, "NSO home ranges and core areas represent the "best" placement of an activity center that we can make given the lack of recent surveys for the majority of the project area and the uncertainty inherent in using simple circles to represent owl use patterns at the home range and core area scale. Level 1 biologists used the more pertinent and applicable observation data within NRIS and CNDDB databases to establish the location of the activity center." What observations are those and what conclusions have been drawn from them? It is arbitrary and capricious to elect to change Activity Center boundaries, if that is what is being implied by this assumption. It is difficult for the public to ascertain an accurate account of how AC's are being analyzed. BA 19, "When salvage units contain inclusions of habitat that burned at low severity (RAVG grid code 1 and 2), the areas that burned at low severity will not be harvested but will instead be delineated as retention clumps; these clumps will be excluded from treatment unless specific circumstances occur where implementation is hampered and these areas must be entered or crossed in order to access a road. When this occurs, all efforts will be made to retain trees that don't meet the set probability of mortality (70% probability of mortality for salvage units and 60% of mortality for roadside hazard). However, in order to account for this potential impact to NSO habitat, we are assuming that 10% of the total grid code 1 and 2 inclusions will be degraded to the point that the NRF may not function as NFR post-treatment due to residual or unintentional damage during implementation." We are not sure why low severity areas are included in treatment boundaries. The DEIS claims that they are not at all considered for treatment. Which units contain low severity patches? What does the BA mean by 'all efforts'?	Northern spotted owl surveys are not required by the Endangered Species Act; however, the action agency is required to reduce the potential of “harm” to a listed species. Surveys are simply one tool to aid in identifying the location of a particular species; areas that contain a threatened or endangered species can be avoided by project activities in time or space thus reducing the possibility of harm. Survey protocol is designed to provide consistency in survey efforts (methods of surveying) and estimate the likelihood of an individual may be detected (mathematical calculation based the number of times a particular area was surveyed using specific survey method). Deviations in protocol as defined in “Protocol for Surveying Proposed Management Activities that may Impact Northern Spotted Owls” (U.S. Fish and Wildlife Service 2012) can reduce the likelihood of detection of an individual in a particular area when occupied. The Forest has developed a survey strategy that follows the survey methods described in the survey protocol. The Wildlife Biological Assessment describes the spotted owl survey strategy in the section called “northern spotted owl Survey Strategy”. Further, the Wildlife Biological Assessment describes the areas where protocol is not met in the section called “Unsurveyed Suitable Habitat in the Analysis Area”. An EIS is summarization of the various reports drafted by specialists and these reports provide more detailed information than is summarized in the EIS. The commenter is clearly able to find these reports given the fact that the comment cites the Wildlife Biological Assessment. The Wildlife Biological Assessment describes northern spotted owl habitat in great detail in the section called “Methods for assessing pre-fire northern spotted owl habitat suitability” and describes fire affected habitat in the section called “methods for assessing effects to northern spotted owl habitat from wildfire”. These sections combined describe nesting/roosting, foraging, and dispersal habitat and the resulting effects of each fire severity on each habitat type. The assumptions and description of the data used in the northern spotted owl analysis are described in the Wildlife Biological Assessment in the sections called “Assumptions for this analysis”, “Methods for assessing pre-fire northern spotted owl habitat suitability”, and “Methods for assessing effects to northern spotted owl habitat from wildfire”. The methods for analyzing northern spotted owl is available in the section called “Methods and definitions”. Activity centers are created by using spotted owl survey data and habitat. The activity center analysis uses two circles (one-half and 1.3 mile radius) centered typically on the most recent nest site. The purpose of this analysis is to estimate the potential effects the project may have on nesting spotted owl. The process is described in the Wildlife Biological Assessment under the subheading “Placement of Activity Centers” in the “Methods and definition” section.The prescription for salvage harvest is described in Chapter 2 of the final EIS. The Wildlife Biological Assessment is analyzing the effects to habitat; the potential effects are described in the Wildlife Biological Assessment in the section called “Methods for assessing impacts to individual activity centers”.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18909-124	BA 19, "Post-fire foraging (PFF) area is most likely to be used by NSO within 500 feet of an existing patch of suitable habitat (patch size is >5 acres of NR and F combined)." Wildlife BA 50, "Although the exact maximum distance an owl might travel from the edge of suitable habitat into PFF to forage is unclear because the research doesn't report this attribute; we are assuming the likelihood of an owl using PFF will decrease as the distance increases from suitable habitat and consequently, the value of PFF for foraging opportunity will decrease with distance from suitable habitat. After review of recent literature on the use of edge habitat (Comfort 2013; Eyes 2014) and in consultation with Level 1 FWS biologists, and professional judgment, we are assuming that PFF within a 500 foot buffer from existing, currently suitable NRF is the most likely type of PFF used by foraging owls. This doesn't mean that owls will not use areas beyond 500 feet for foraging, rather that the incidence of this is likely uncommon." The Comfort 2013 dissertation states at page 53, "Vegetation communities were significantly closer to old-growth community structure in edges between unsalvage-logged edges and salvage- logged edges 14 years following a wildlife in a northern California mixed conifer-hardwood stand (Hanson and Stuart 2005)."On page 56, "Hanson and Stuart (2005) found an increase in edge influence of 15-30 m in edges created by adjacent low- and high-severity fire when the high- severity portion had been salvage-logged compared to unlogged edges. Our results suggest that edge effects from salvage-logging, increased the patch size of higher severity disturbance." On page 57, "On federally-managed lands that were not salvage logged, fire severity was greater close to the edges of boundaries with privately managed land. The difference in severity was most likely due to edge effects from salvage logging and not from the pre-existing fuel loads or the fire per se." On page 88, "However, spotted owls in this study area had greater local extinction probabilities and a larger reductions in site occupancy than a nearby mature site that did not experience fire and salvage-logging (Clark et al. 2013)." While the Comfort 2013 dissertation, which looked at fire and owl use in one watershed, conclusions imply that NSO's do not use large expanses of high severity. However, NSOs do use the edges of high severity patches adjacent to home ranges. Our understanding of diffuse edge is as defined in Clark 2013, "Diffuse edges were defined as the interface between stands that had less than a 40-year age difference." However it seems the agency is using the more common definition such as dispersed. <u>The Bond 20095 study found that owls had a "high probability of foraging in burned areas, including high severity, within 1.5 km of nests or roosts. The 500' assumption is arbitrary and capricious.</u> 5 Bond M.L., Lee D.E., Siegel R.B., Ward, J.P. Jr. 2009. Habitat selection and use by California spotted owls in a post-fire landscape. Journal of Wildlife Management 73:1116-1124 Page 21, "Due to the scope and scale of this project, it was not practicable to field validate the remotely sensed habitat data (EVEG) for all areas affected by all project activities, but the portion that was field evaluated resulted in an reasonably accurate assessment of the habitat layer depicting NRF habitat even though there was some error in accurately splitting NR and F over the entire analysis area. Even though NR and F are sometimes presented separately in this analysis, most of the analysis combines NR and F to reduce this potential error." There are obvious inadequacies in the project NEPA analysis documents given the scope, scale and rushed timing of the proposed project. The BA does not disclose what portion or percentage of the project was field verified. Given that the project area is over 200,000 acres and that the field verification that was done was 'reasonably' accurate the DEIS and BA fail to take the "hard look" that NEPA requires.	This comment appears to imply that spotted owls may travel long distances through fire affected habitat to forage and cites Bond et al. 2009. Bond and others (2009) state “California spotted owls whose territories included unburned and burned Sierran mixed conifer forest of low- to high-severity made use of all burn severities, with high probability of foraging in burned areas, including high severity, within 1.5 km of nests or roosts, and selectively roosted in low-severity burned areas”. The 1.5 km distance was derived from modeling spotted owl detection data which provided a location of each owl in the landscape among other data like the type of habitat and fire severity. The results of this analysis basically provides information that spotted owls may travel within the core and home (northern spotted owl home range is defined as about 2km) to forage in all fire severities, but Bond et al. doesn’t imply that spotted owls will travel 1.5km from suitable habitat into moderate and high fire severity affected forest to forage. The actual path and associated habitat that a spotted owl may travel through to reach an area to forage is not directly discussed in Bond et al. 2009. We use a 500ft buffer around suitable habitat to define the spatial boundary where Post-Fire Foraging would occur for the analysis. The next comment claims that our analysis fails to take a “hard look” at the habitat data used in the spotted owl analysis. A “hard look” has implications to the quality of the analysis presented in the Biological Assessment. Therefore, the response to this comment will use some of the basic principles of an analysis that constitutes a “hard look” and these are presented below with a response.§ Assumptions are spelled-out;o On pages 19-20 of the “submitted” BA, the section called “assumptions for this analysis” provides several assumptions used in use of the northern spotted owl habitat data.§ Inconsistencies are explained;o On pages 20-24 of the “submitted” BA, the sections called “methods for assessing pre-fire northern spotted owl habitat suitability” and “methods for assessing effects to northern spotted owl habitat from wildfire” describe the process used to identify northern spotted owl habitat and possible error in the data.§ Methodologies are disclosed;o On pages 20-24 of the “submitted” BA, the sections called “methods for assessing pre-fire northern spotted owl habitat suitability” and “methods for assessing effects to northern spotted owl habitat from wildfire” describe the various methods of defining the habitat pre- and post-fire.§ Contradictory evidence is rebutted;o There are several locations in the BA where contradictory evidence is discussed. For example, starting on page 36 of the “submitted” BA, the section called “northern spotted owl use of the post-fire landscape” discusses the contradictory research associated with spotted owl use of fire affected habitat. § Records referenced are solidly grounded in science;o The records referenced in the BA are a result of peer-reviewed literature, peer-reviewed survey design (northern spotted owl survey protocol), or peer-reviewed inter-agency documents (e.g. northern spotted owl Recovery Plan).§ Guess work for the reader has been eliminated (line of logic illustrated); and o The BA provides an ample amount of explanation and discussion to illustrate the evidence presented, facts found, and resulting process and determination of effects based on proposed activities for spotted owl.§ Conclusions are supported in a manner capable of public and judicial understanding.o We developed stepwise process to illustrate the analysis process so the reader would know the categorical reason for the determination assigned to each activity center. For example, starting on page 27 of the “submitted BA, the section called “methods for assessing impacts to individual activity centers” provides a description of each “intensity factor” used in the analysis to make a determination for each activity center. Then the results of the analysis was displayed in a table that provides an activity center number and the associated “intensity factor” and corresponding determination.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18909-26	On page 115 of the DEIS, "Hazard tree removal where it does not overlap with proposed salvage harvest units will decrease fuel loading and, therefore, potential fuels hazard; this will indirectly promote conifer regeneration." This is not supported by the best available science. For instance it is well known that opening forest canopies can increase solar radiation leading to increased brush growth, which increase ground and ladder fuels, in turn increasing fire risk. Also stated on page 115 of the DEIS: "When combined with the direct and indirect effects of the proposed salvage, site preparation, and planting treatments, the end result would be an increase in acres treated for hazardous fuels reduction, an increase in acres of roadside treatments and an increase in acres of planted conifer stands set on a trajectory towards establishing resilience to fire, insects, and disease and towards achieving northern spotted owl dispersal, foraging and nesting/roosting habitat characteristics. The objectives of the proposed project are in concert with those proposed by these overlapping projects which may no longer be implemented within the project area due to changes in conditions." The assumption that conifer plantations would set a trajectory towards establishing resilience to fire, insects, and disease and towards achieving northern spotted owl dispersal, foraging and nesting/roosting habitat characteristics is a broad assumption not based on the best available science, given that the project is contrary to the recovery of the species and would likely negatively affect Northern spotted owls. The proposed project would also remove, downgrade and degrade thousands of acres of Critical Habitat, suitable habitat and negatively affect Activity Centers. Further, it is not clear which NEPA projects will no longer be implemented as this information is not readily available in the DEIS or supporting files. The DEIS fails to consider all of the past, present and reasonably foreseeable national forest timber sales as well as private lands timber harvest plans.	The effects of the proposed activities on northern spotted owl and its critical habitat are presented in the "environmental consequences" in the Biological Evaluation. The past and present effects to northern spotted owl habitat are incorporated into the habitat baseline as reflected in the Biological Evaluation in the section called "affected environment". The current and reasonably foreseeable actions on public and private land are considered for cumulative effects are displayed in Appendix C of draft EIS.
204.01 - NSO	#18909-35	Analysis Indicator #1 is Inadequate to "Provide a Clear Basis For Choice" Among Alternatives The analysis indicators used for the northern spotted owl analysis are insufficient to provide readers with an informed understanding of the different impacts to northern spotted owls from the various project alternatives. Despite numerous hours referencing the DEIS, the BA, and the Wildlife BE, the impacts of the project, particularly the preferred alternative, are unclear. The Wildlife BE makes reference that the analysis indicators were developed using the Forest Plan Standards and Guidelines. The Klamath LRMP does not direct the Forest Service to use this analysis indicator. Please explain how and why you chose the risk to preproduction analysis indicator because: (1) it appears to be novel; (2) it does not help explain or elucidate differences between the various alternatives; and (3) other indicators, which are more commonly used, provide a clearer understanding of the project impact to NSO. First, to novelty: in the hundreds of environmental documents we have reviewed we have not ever seen "risk to reproduction" in any other agency analyses. A cursory Boolean Google search for all websites containing the phrases "northern spotted owl" and "risk to reproduction" returns only 3 websites. None of these 3 links were environmental impact documents, which utilized the risk to reproduction as an analysis indicator. Second, the risk to reproduction, as an analysis indicator, does not provide contrast between the various alternatives, even though the various alternatives have significantly different impacts to NSO. This violates NEPA's command that environmental impact statements "sharply define the issues and provide a clear basis for choice among options by the decision maker and the public." 40 C.F.R. § 1502.14. For example, the DEIS states that as a result of fires, 3 NSO core/home ranges have a very low risk to reproduction, 14 have a low risk, 51 have a moderate risk, and 12 have a high risk. Under Alternative 2, which proposes the most cut of any of the alternatives, only "one activity center moved to a higher risk level from moderate level." (Pg. 148). The DEIS acknowledges that while the various action alternatives all will affect fewer acres than the preferred alternative; however, even Alternative 5-which removes from salvage all units overlapping Late-Succesional Reserves, Riparian Reserves, and Inventoried Roadless Areas- will still have the same risk to reproduction as Alternative 2. By refusing to acknowledge the habitat potential for post-fire landscapes, as discussed above, the agency has muted the very real differences to spotted owls between the alternatives and have failed to sharply define and provide a clear basis for choice. Furthermore, the "risk" to reproduction ignores that many of the affected areas still provide high habitat value. As shown in the Draft Biological Assessment, most activity centers still have high or moderate	Northern Spotted Owl habitat that burned or not burned during the 2014 fires were assessed in the Biological Assessment. However, as described in the Biological Assessment, in the section called “methods for assessing effects to northern spotted owl habitat from wildfire”, suitable habitat that burned at moderate and high severity are categorized into fire affected nesting/roosting or post fire foraging. post fire foraging was further divided into two categories; post fire foraging that occurs within 500 feet of suitable habitat was identified as the area more likely to be used by spotted owls than more distant post fire foraging. Regardless of the name, Nesting/Roosting, Foraging, fire affected nesting/roosting, and post fire foraging were tracked throughout the analysis and considered in the effects analysis.

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		habitat fitness potential. In other words, by focusing on the negative impacts from last summer's fires, the Forest Service ignores the fact that most activity centers still provide good quality habitat. Third, the choice of risk to reproduction appears even more unusual, and ultimately inappropriate, in light of other indicators the Forest Service could have chosen (and indeed consider in other documents, such as the project Biological Assessment). While KNF's analysis under the "risk to reproduction" does not show much of a difference between the baseline conditions and the various alternatives, the project Biological Assessment shows that the preferred alternative has potential significant impacts to the threatened Northern spotted owl. As outlined in the Biological Assessment, the preferred alternative would likely adversely affect 70 NSO Activity Centers. The preferred alternative may affect but is not likely to adversely affect an additional 20 NSO Activity Centers. Insofar as a discussion of alternatives must elucidate the environmental impacts of each alternative and provide a meaningful basis for choice, the use of risk to reproduction completely fails. Given that agencies are directed to directed to prepare environmental impact statements concurrently with and integrated with consultation requirements under the Endangered Species Act, 40 C.F.R. § 1502.25, and that the information presented in the Biological Assessment allows for a more meaningful review of the project's impact to NSO, it is unclear why-other than to obfuscate the differences between project alternatives-the Forest Service would choose to examine the risk to reproduction.	
204.01 - NSO	#18909-36	Difficulties comprehending the NSO analysis indicators are compounded by inconsistent baseline numbers. Table 3-6 on page 141 of the DEIS states: there is a very low risk to reproduction for 3 ACs; a low risk to reproduction for 14 ACs; a moderate risk to reproduction for 51 ACs; and a high risk to reproduction for 12 ACs. By contrast, table 3-8 on page 145 of the DEIS states: there is a very low risk to reproduction for 1 AC; a low risk to reproduction for 18 ACs.	Yes, the draft EIS has an error in Table 3-8. Thank you for pointing out the error.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18909-37	Please provide citations to scientific literature to support wildlife assumptions in the DEIS, as these assumptions do not fit the best available science. On page 10 of the Wildlife BE, the DEIS assumes habitat burned at a low severity will still function as it did pre-fire. Further, it states that habitat burned at moderate severity will not function as it did, pre-fire, rather nest/roosting will become foraging habitat and foraging will become post-fire foraging. The BE also states the post-fire foraging will not be part of the analysis criteria because "the analysis doesn't provide a clear understanding on how [post-fire foraging habitat] contributes to satisfying nesting NSO needs." The BE does not discuss KNF's assumptions toward high-severity patches. The agency completely writes off the value of medium severity patches, which served as pre-fire foraging habitat and any high-severity patches. These assumptions do not match the more detailed discussion of post-fire habitat value provided in Appendix A of the Wildlife BE. The BE states that the relationship of post-fire areas to areas with sufficient cover or other features influences NSO use of these post-fire areas: It is the spatial context of the overall habitat available for use by owls that is critical for an analysis of habitat suitability. The proportion and arrangement of unburned or low burn severity suitable habitat in relationship to moderate or high severity burn areas within an NSO home range is one of the key factors in determining the likelihood of use by NSO's. This relationship is important because NSO's will focus their use of burned areas for foraging in areas with adjacent cover. The distance to cover is a key factor influencing use of burned areas. Because habitat selection by NSO's is strongly influenced by abiotic features such as distance to water, proximity to nest, slope position, and elevation it is possible that use of the burned habitats by NSO as described by Clark (2012) or Bond (2009) may occur due to the juxtaposition of the burned areas in relation to some other feature, such as a nest site or water, rather than based on the "suitability" of the area, particularly if the owls were accustomed to using the area prior to the fire. Factors involved in the NSO's periodic selection of burned areas for foraging are not known at this time, and further research is needed to account for the many other aspects of a burned landscape that would factor into the NSO selection process. (Emphasis added). The DEIS' assumptions are even more suspect given the assumptions provided in the Draft Biological Assessment. For example, on page 23 of the Draft Biological Assessment, the agency states that for the evaluation of project impacts, it assumes spotted owls will use areas which once serve as nesting/roosting habitat which burned at high severity if that habitat is currently within 500' of suitable nesting/roosting habitat. Further, it assumes for the Biological Assessment that pre-fire foraging habitat that burned at both medium and high severity will serve as post-fire foraging habitat if within 500' of suitable nesting/roosting habitat. To reiterate, the agency takes radically different positions in two documents, which purport to examine the impacts of fire on spotted owl habitat. In the DEIS, the agency indicates that it believes that high severity patches have no habitat value and medium severity patches only have value if they previously served as nesting/roosting habitat while the Biological Assessment analyzes the habitat potential for both high and medium severity patches. In short, the assumptions would likely have significant impacts on the project analysis in two ways. First, by assuming that moderate and high-severity areas might not provide any habitat value, the agency's evaluation of the impact from the fires of 2014 would be exaggerated-it would show that the owls have been more impacted by the fires than they actually were. By changing the baseline, from which the impacts from alternatives are compared, the actual impacts of the various alternatives are impossible to know. Furthermore, by assuming that owls do not utilize post-fire areas, the agency is able to make it seem that the various alternatives-which allow for drastically different levels of timber removal-will not impact the owl in different ways. See the discussion of the inadequacy of the risk to reproduction for more information. Please indicate why KNF uses different assumptions for different environmental review documents. As stated the DEIS should be rescinded in order to correspond with the best available science and allow for a meaningful evaluation of the project's impacts.	The Wildlife Biological Evaluation analysis is not required to be identical to the Wildlife Biological Assessment. The Biological Assessment is a document used to communicate proposed actions for one Alternative or combination of Alternatives as decided by the Forest Service responsible official and the effects on threatened and endangered species under section 7 of the Endangered Species Act. The effects are used in a determination of effects as "no effect", "may effect, not likely to adversely affect", or "likely to adversely affect" for each threatened or endangered species. The Biological Evaluation reports effects of each Alternative on northern spotted owl to provide the decision and the public a comparison of effects. The Biological Evaluation as amended provides the assumptions used to identify fire affected northern spotted owl habitat.

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204.01 - NSO	#18909-38	Please explain how and why the agency chose to compare alternatives according to impacts to Critical Habitat. Generally, as an analysis indicator, this option makes more sense than analysis indicator #1-impacts to Critical Habitat is often used as a measure of impacts to NSOs. However, here it is not an appropriate analysis indicator because it fails to provide meaningful analysis for the project's impact to NSO Activities Centers or suitable habitat, which do not fall within NSO Critical Habitat. Part or all of an activity may be outside of identified Critical Habitat and only measuring change to Critical Habitat ignores project impacts to these areas. A cursory review of a map overlaying surveyed NSO Activity Centers with Critical Habitat shows that many owl Activity Centers fall wholly outside of Critical Habitat or only part of the Activity Center is within identified NSO Critical Habitat. Again, the agency has more relevant and useful analysis indicators. In the Draft Biological Assessment, the Forest Service provides information on project impacts to individual NSO activity centers, for example. The unnamed table on page 54, for example, estimates the intensity of impacts to individual owl centers, as do the unnamed tables on pages 55 and 57. The unnamed table on pages 58-60 provides information on acres removed, degraded, and downgraded for each Activity Center. This short table provides more information on the actual impacts of the preferred alternative than the entire DEIS.	The northern spotted owl analysis indicator called "changes to critical habitat" as presented in the Wildlife Biological Evaluation as amended provides the effects to northern spotted owl critical habitat. This indicator was presented in response to public comment during the scoping process. In addition, this indicator provides effects to critical habitat by subunit for each Alternative.
204.01 - NSO	#18909-40	It is impossible to analyze the project impacts because of the numerous inconsistencies in the DEIS and supporting documents. According to DEIS table 3-9 on 149, Alternative 2 will remove a total of 536 acres of nesting and roosting habitat, 605 acres of foraging habitat, and 617 acres of dispersal habitat. The text discussing the changes to Critical Habitat from Alternative 4 on page 149 of the DEIS does not make sense in light of the stated changes under Alternative 2. The DEIS states: "The effects of alternative 4 on critical habitat are similar to alternative 2 except fewer acres of critical habitat will be removed." However, the same paragraph then states under Alternative 4, "There is a loss of 1,195 acres of nesting/roosting, 2,642 acres of foraging and 2,781 acres of dispersal." In other words, though we are told in one sentence that Alternative 4 will remove fewer acres of Critical Habitat than Alternative 2, the number provided by the Service state that Alternative 4 will remove 659 more acres of nesting/roosting, 2,037 more acres of foraging, and 2,164 more acres of dispersal habitat than Alternative 2. Table 2-34 states that Alternative 1 would have cumulatively impact 552 acres of Critical Habitat. However, the test on page 147 states that Alternative 1 would only affect 452 acres. Table 3-10 also states that Alternative 1 will cumulatively impact 442 acres. Again, the DEIS is so faulty that it makes the comparison of alternatives impossible.	Thank you for identifying the errors. These numbers have been updated in the final EIS.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#18909-41	Like the assumptions for Analysis Indicator #1, the Wildlife BE states that in evaluating the change to Critical Habitat, KNF assumes that pre-fire NSO foraging habitat that burned at either moderate or high-severity will not function as habitat post fire and that pre-fire NSO nesting/roosting habitat that burned at high-severity will not function as habitat. These assumptions do not match the more detailed discussion of post-fire habitat value provided in Appendix A of the Wildlife BE. The BE states that the relationship of post-fire areas to areas with sufficient cover or other features influences NSO use of these post-fire areas: It is the spatial context of the overall habitat available for use by owls that is critical for an analysis of habitat suitability. The proportion and arrangement of unburned or low burn severity suitable habitat in relationship to moderate or high severity burn areas within an NSO home range is one of the key factors in determining the likelihood of use by NSO's. This relationship is important because NSO's will focus their use of burned areas for foraging in areas with adjacent cover. The distance to cover is a key factor influencing use of burned areas. Because habitat selection by NSO's is strongly influenced by abiotic features such as distance to water, proximity to nest, slope position, and elevation it is possible that use of the burned habitats by NSO as described by Clark (2012) or Bond (2009) may occur due to the juxtaposition of the burned areas in relation to some other feature, such as a nest site or water, rather than based on the "suitability" of the area, particularly if the owls were accustomed to using the area prior to the fire. Factors involved in the NSO's periodic selection of burned areas for foraging are not known at this time, and further research is needed to account for the many other aspects of a burned landscape that would factor into the NSO selection process. (Emphasis added). The DEIS' assumptions are even more suspect given the assumptions provided in the Draft Biological Assessment. For example, on page 23 of the Draft Biological Assessment, the Service states that for the evaluation of project impacts, the agency assumes spotted owls will use areas which once serve as nesting/roosting habitat which burned at high severity if that habitat is currently within 500' of suitable nesting/roosting habitat. Further, the agency assumes for the Biological Assessment that pre-fire foraging habitat that burned at both medium and high severity will serve as post-fire foraging habitat if within 500' of suitable nesting/roosting habitat. To reiterate, KNF takes radically different positions in two documents, which purport to examine the impacts of fire on spotted owl habitat. In the DEIS, the Service indicates that it believes that high severity patches have no habitat value and medium severity patches only have value if they previously served as nesting/roosting habitat while the Biological Assessment analyzes the habitat potential for both high and medium severity patches. In short, the DEIS likely overestimates the impact of the summer's fires on the northern spotted owl and underestimates the impact of logging projects on the owl. We believe the multiple inconsistencies to be a result of the expedited timeline, which reiterates the need to slow down in order to have an accurate account of the effects to threatened and endangered wildlife so as to make an informed decision.	See response to comment number 18909-34
204.01 - NSO	#18909-42	The DEIS, Wildlife BE and BA all fail to consider or disclose the how the proposed actions will affect the designated function of the Critical Habitat subunits e.g. connectivity and demographic support. There is no clarity how they are contributing to recovery by the magnitude of adverse effects to this population of NSOs. Critical Habitat is defined as "the specific areas . . . essential to the conservation of the species and which may require special management considerations or protection." 16 U.S.C. § 1532.	The Terrestrial Wildlife Biological Assessment as amended discloses the effects to Critical Habitat Subunits in section Effects to PCE's. Subunits Klamath West 7, Klamath West 8, Klamath East 6, and Klamath East 7 were established to function for Northern Spotted Owl Demographic Support. The summary of effects tables are included in the Biological Assessment by Critical Habitat Subunits for the consultation Alternative. The determination in the Biological Assessment is build off of these effects. An independent review of the analysis and the determination of effects will be conducted by the US Fish and Wildlife Service in their Biological Opinion.
204.01 - NSO	#18909-43	The Westside DEIS and Wildlife BA do not adequately follow the Recovery Actions 10, 12 or 32 in the 2011 Revised Recovery Plan for the NSO. The minimal attempt through illegal PDF's does not provide adequate forest structure to benefit the owls. Spanning snag retention over 100 acre areas is not consistent with the KNF LRMP or NFP Standard and Guidelines.	Like discussed in comment number 12346-75, the project does meet the Forest Plan. For northern spotted owl, compliance with recovery actions 10, 12, and 32 are discussed in the Biological Assessment under the section called "consistency with recovery plans and other guidance". The Biological Assessment provides a brief description for each of these recovery actions and the associated project designs that were developed to be consistent with the Recovery Plan. However, the northern spotted owl Recovery Plan isn't a regulatory document, but it is used as a tool to provide consistency and minimize effects on northern spotted owl while meeting the purpose and need of the project. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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204.01 - NSO	#18909-47	It is unclear what affect the 2014 fires and fire suppression activities had on the owls or their Critical Habitat, suitable habitat or Activity Centers. The DEIS fails to provide this information. The BA and DEIS fail to mention what the spatial analysis area is for NSOs. Do the documents consider ACs 1.5 miles from the project area boundary?	The effects resulting from the 2014 fires and associated suppression actions are analyzed in the Emergency Consultation Assessment. The Westside Fire Recovery Project incorporated those effects created by the 2014 fires and associated suppression actions into the existing northern spotted owl habitat condition. The existing northern spotted owl habitat condition is described in the Biological Evaluation under the section called "Affected Environment" and in the Biological Assessment under the section called "Existing Environment". The Biological Assessment also provides a brief description of the changes in the amount of northern spotted owl habitat under the section called "Existing Environment". The spatial bounds for the northern spotted owl habitat analysis is defined in the Biological Evaluation under section called "spatial and temporal bounds". The northern spotted owl habitat analysis area is the treatment units plus a 1.3 mile buffer from all proposed treatment units.
204.01 - NSO	#18909-48	BA 55, "Salvage harvest is not proposed in core areas for ACs identified as "high" or "moderate" "habitat fitness potential" (except four "moderate" ACs) but all other treatments may occur in both home ranges and core areas." It is not clear in the BA what types of treatments are planned in NSO core areas and home ranges.	The Biological Assessment describes all the potential treatments in this project under the section called "Description of the proposed activities" and Chapter 2 of the draft EIS . Except four moderate activity centers, all the high and moderate activity centers don't contain salvage harvest in the core. However, any of the other proposed treatments (excluding salvage harvest) could occur in the core or home range of any activity center regardless of the potential fitness level. Salvage harvest could occur in any of the activity center home ranges and in the core of the four moderate level activity centers and low level activity centers.
204.01 - NSO	#18909-50	The ESA requires consultation with the Fish and Wildlife Service or the NOAA Fisheries Service for any "agency action" that "may affect" a listed species or its critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §402.14(a). The consultation requirement reflects "a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies." Tenn. Valley Auth. v. Hill, 437 U.S. 153, 185, 98 S. Ct. 2279, 57 L. Ed. 2d 117 (1978). The letter attached to the Submitted BA states that the KNF is in formal consultation with the US Fish and Wildlife Service. Is this true? What type of consultation has been happening with the USFWS and has the KNF provided sufficient information for the Biological Opinion? Was the USFS consulted on the submitted BA?	The level of effects for a given project on threatened or endangered species can result in one of the three possible determinations for northern spotted owl and critical habitat: 1) "no effect", 2) "may affect but not likely to adversely affect", or 3) "likely to adversely affect". The Klamath National Forest requested formal consultation for Westside Fire Recovery Project with the U.S. Fish and Wildlife Service because the Biological Assessment prepared by the Klamath National Forest determined that the effects proposed were "likely to adversely " affect northern spotted owl and its critical habitat. The Klamath National Forest projects typically are consulted at the "informal" level which has a coinciding determination of "may affect but not likely to adversely affect". The "submitted BA" is the basis of the Westside Fire Recovery project consultation, but the consultation process may result in changes to the "submitted" Biological Assessment.
204.01 - NSO	#19079-5	Part of the burned area was a roadless area old growth habitat for wildlife. The survivors that fled are in the surrounding forests. Other forest near the burn with other status designation, slated to be logged now become the potential habitat for owls and other animals. Where in the DEIS does it report man hours finding owls?	northern spotted owl surveys are currently being conducted within the project area. The surveys are following the US Fish and Wildlife northern spotted owl survey protocol (2012) with modification in part of the consultation process with U.S. Fish and Wildlife Service.
204.01 - NSO	#5873-129	The Northwest Forest Plan ROD page 66 says that “Salvage is not required to be beneficial” but the February 1994 Biological Opinion for the Northwest Forest Plan disagrees. The Northwest Forest Plan Standards & Guidelines must be interpreted to err on the side of caution and retain all large trees. The BiOp says: a. “ASSUMPTIONS: To ensure that the analysis under section 7 of the Act had a measurable baseline, or starting point, the following assumptions were identified to assist in the development of this opinion: 1. Riparian and Late-Successional Reserves (LSRs) will retain reserve status and will not be available for timber production other than as provided in Alternative 9 (i.e., salvage and silvicultural treatments beneficial to the creation of late-successional conditions).” P 4. b. “the alternatives presented in this SEIS propose a network of designated areas managed primarily to protect and enhance habitat for the northern spotted owl and other late-successional and old-growth forest related species” p 5. c. “Late-Successional Reserves would be managed to protect and enhance habitat for late-successional and old-growth related species including the northern spotted owl and marbled murrelet. Some level of silvicultural treatment (such as thinning young stands) is permitted in certain age stands to accelerate the development of old-growth habitat characteristics, subject to review by the Regional Ecosystem Office…. Stand and vegetation management of any kind, including prescribed burning, is considered a silvicultural treatment and is subject to review.” p 5. d. “SPOTTED OWL ACTIVITY CENTERS: … Salvage of dead trees would be based on guidelines adapted from the Final Draft Spotted Owl Recovery Plan…” p 7. e. “CONSERVATION RECOMMENDATIONS: … Restricting harvest activities in LSRs to thinning and other silvicultural treatments that are beneficial to creation of late successional forests as identified in Alternative 9 is believed, at the present time, to be necessary to promote the conservation and recovery of listed species consistent with Section 7(a)(1) of the Endangered Species Act.” P 48.	The Westside fire Recovery Project is consistent with the management direction of the Late-Successional Reserves including salvage harvest. The Northwest Forest Plan provides a series of Standards and Guidelines that guide management within the Late-Successional Reserves that is described in the document called Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl. In the section of the Standards and Guidelines called Late Successional Reserves, a sub-section called Guidelines for Salvage provides conditions where salvage harvest is appropriate in Late Successional Reserves. In addition to following these standards and guidelines, the proposed project may require Regional Ecological Office review. The Westside Fire Recovery Project is under current review of the Regional Ecological Office to ensure the project is following the intent of the Late-Successional Reserve management.

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204.01 - NSO	#5873-132	The agency may not justify logging on the assumption that the fire has destroyed the spotted owls' habitat. The only sure way to destroy the owls habitat is to conduct heavy handed salvage logging. Studies show that spotted owls are capable of returning to habitat even highly altered by fire. Spotted owl biologist Monica Bond found that owls in northern California returned to four sites where the majority of the territory had burned. Bond, M. L., R. J. Gutierrez, A. B. Franklin, W. S. LaHaye, C. A. May and M. E. Seamans. 2002. Short-term effects of wildfires on spotted owl survival, site fidelity, mate fidelity, and reproductive success. Wildlife Society Bulletin 30(4):1022-1028. Severe wildfire can decrease the suitability of northern spotted owl nesting and roosting habitat by removing overstory canopy and setting late seral-stage forests back to earlier seral stages. On the other hand, fire appears to be beneficial to fitness of northern spotted owls by creating ecotones that may improve foraging habitat. Larger-sized snags should be retained because they provide the basis for restoration of late successional forest conditions that will support future spotted owl nesting, roosting and foraging habitat.	The Biological Assessment provides a synthesis of the relevant literature concerning northern spotted owl use of fire-affected habitat in the section called " northern spotted owl use of the post-fire landscape". The effects of the proposed activities are discussed in the section called " direct and indirect effects of the proposed actions". Project design features do provide for the retention of legacy features such as large snags that take many years to develop as described in Chapter 2 of the draft EIS. These legacy features are retained for the purpose of providing forest structure as the stand regenerates after the fire.
204.01 - NSO	#5873-137	Here is a good description of high quality owl habitat that might develop after fire and without salvage logging. "High use northern spotted owl foraging habitat is typically characterized by high density of large snags and diverse canopy structure that provide habitat for prey species as well as hunting perches for owls (North et al 1999)" USDI FWS 2004. S&M BO BLM FS 03-03-04.doc [M]edium and high use areas [for northern spotted owls] often had large rot-resistant snags (western redcedar or Douglas-fir) resulting from the site's past disturbance. … The carry-over of these large structures into the regenerating stands may have produced sufficient foraging habitat for the owl even though other attributes of the stand were typical of younger forests. Old growth legacy structures in younger stands may improve wildlife habitat quality for many late-seral associated species. … Legacy structures, such as large trees and snags, may diversify habitat conditions in young, regenerating stands and eventually improve foraging conditions for future spotted owl use. North, M.P., Franklin, J.F., Carey, A.B., Forsman, E.D., and Hamer, T. 1999. Forest stand structure of the northern spotted owl's foraging habitat. For. Sci. 45: 520-527. http://www.fs.fed.us/pnw/pubs/journals/pnw_1999_north001.pdf. Buchanan et al. (1999) recommend that younger forests managed for Spotted Owls on the Western Olympic Peninsula should contain >10 snags/ ha that are > 50 cm dbh. … Retention of legacy (snags and course woody debris) in current areas of timber harvest will shorten the time necessary for those areas to achieve the habitat complexity deemed to be suitable Northern Spotted Owl habitat." Courtney, SP; J A Blakesley. 2004. Scientific evaluation of the status of the Northern Spotted Owl. http://www.sei.org/owl/finalreport/finalreport.htm pp 5-15, 6-8.	Northern Spotted Owl habitat can be qualitatively described while focusing on particular aspects of the habitat such as large trees and dense tree canopy cover. However, depending on the geographic location, the definition of habitat can vary; comparing coastal influenced conifer forest with eastside mixed conifer can result in different tree size and species composition yet both habitats can provide the opportunity for successful reproduction. Without a localized perspective and definition of spotted owl habitat, the quality and quantity of habitat can be very different. Although the habitat description for the research sighted in the comment is likely accurate for those study areas, the Wildlife Biological Assessment provides a description of habitat that is found in the project area.
204.01 - NSO	#5873-140	A third study relevant to post-fire management supports the idea that abundant structures (i.e. snags & logs) should be retained after fire because complex young forests are more resilient and support more diverse spotted owl prey bases. Our results support hypotheses that: (1) biocomplexity resulting from interactions of decadence, understory development, and overstory composition provides pre-interactive niche diversification with predictable, diverse, small mammal communities; (2) these communities incorporate numerous species and multiple trophic pathways, and thus, their integrity measures resiliency and sustainability.	This is from Carey and Harrington 2000. This quote was the last two sentences of the summary of this article. The study conducted by Carrey and Harrington was in 30- to 70-year-old coniferous forests in western Washington. In particular, the study was conducted on the Olympic National Forest in northern Washington state. The literature does not address post-fire habitats or post-fire management of snags and logs. The results specifically address second-growth forests and small-mammal communities within them. The literature makes no attempt to address post-fire forests and spotted owl prey base.
204.01 - NSO	#5873-153	Salvage logging and regen harvest will reduce populations of small mammals important for spotted owls and other predators Small mammals are important prey for spotted owls and other focal predator species. Canopy removal and reduced stand complexity caused by regen harvest are adverse to small mammals such as red-backed voles, flying squirrels, and red tree voles. "Clearcuts are dryer than intact stands (Tappeiner et al., 2007), thus many conifer clearcutsmay be too dry for red-backed voles (D.E. Pearson, personal communication), which are known for their high moisture requirements (Getz, 1962). … Red-backed voles strongly prefer structurally complex micro-habitats (Pearson, 1994)." Rafal Zwolak 2009. A meta-analysis of the effects of wild?re, clearcutting, and partial harvest on the abundance of North American small mammals. Forest Ecology and Management 258 (2009) 539–545. http://stkctr.biol.sc.edu/Reprints/Reprints_4/Zwolak_2009.pdf	Zwolak (2009) does not mention the species red tree vole or flying squirrels in this article. While the literature does state that salvage logging and regen harvest will reduce small mammal populations, this effect is not consistent for all small mammal species. The article states that that "the impact of different disturbances on the abundance of small mammals (i.e. positive or negative) appears to be species-specific, but disturbance type may influence the magnitude of this effect. In coniferous and mixed forest, all disturbances except for partial harvest triggered significant increases in the abundance of deer mice and declines in red-backed voles. In deciduous forest, clearcutting did not result in a consistent change in abundance of deer mice and red-backed voles." Additionally, Zwolak illustrated that the effects of forest harvest on small mammals are not equivalent to those of wildfire. Effects of clearcutting are milder than those of stand-replacement wildfires, at least for the red-backed voles, which tended to decline in abundance after disturbances, and deer mice, which tended to increase. These responses are consistent with habitat associations of these species, not the effect of the disturbance. Finally, red-backed voles are not found within the project area and are thus not affected by the project's effects.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#5873-177	Salvage in LSRs and CHUs and Dry Forests The Revised Recovery Plan for the northern spotted owl recommends retention and restoration of structure function and process across the dry forest landscape. This includes legacy retention after fires. The 2011 Final Revised Recovery Plan for the Northern Spotted Owl says, In general, we recommend that dynamic, disturbance-prone forests of the eastern Cascades, California Cascades and Klamath Provinces should be actively managed in a way that reconciles the overlapping goals of spotted owl conservation, responding to climate change and restoring dry forest ecological structure, composition and processes, including wildfire and other disturbances (Noss et al. 2006, Spies et al. 2006, 2010a, Agee and Skinner 2005, Healey et al. 2008, Mitchell et al. 2009). … …[O]ur intent in this Revised Recovery Plan is to embed spotted owl conservation and recovery within broader dry forest ecosystem restoration efforts to increase the likelihood spotted owl habitat will remain on the landscape longer and develop as part of this fire adapted community … To accommodate future disturbances and restore ecosystem resiliency, we believe it is essential to restore ecosystem structure, composition and processes. Restoring ecosystem structures that provide resiliency will necessitate maintaining and restoring the biological legacies that typically persist through disturbance events and influence the recovery process in the post-disturbance landscape (Franklin et al. 2000). With respect to the dry forest landscapes, structural legacies include not only the large trees that tend to be fire tolerant, but the snags and downed wood that were created as a result of the disturbance event. Structural legacies serve valuable functions such as reproductive structures that facilitate plant propagation, modifying microclimates, or improving connectivity through the disturbed area (Franklin et al. 2007). … These principles should be part of any dry forest restoration treatment: … Retain and restore heterogeneity within stands (i.e., manage for fine-scale mosaic within stands). This includes both vertical and horizontal diversity. … … [P]ost-fire timber harvest activities “undermine many of the ecosystem benefits of major disturbances” (Lindenmayer et al. 2004:1303) and frequently “ignore important ecological lessons, especially the role of disturbances in diversifying and rejuvenating landscapes” (DellaSala et al. 2006:51). … studies of spotted owls in post-fire landscapes indicate that spotted owls use forest stands that have been burned, but generally do not use stands that have been burned and logged. Consistent with restoration goals, post-fire management in these areas should promote the development of habitat elements that support spotted owls and their prey, especially those which require the most time to develop or recover (e.g., large trees, snags, downed wood). Such management should include retention of large trees and defective trees, rehabilitation of roads and firelines, and planting of native species (Beschta et al. 2004, Hutto 2006, Peterson et al. 2009). We anticipate many cases where the best approach to retain these features involves few or no management activities. … Many researchers supported the need to maintain habitat for spotted owl prey. For example, Lemkuhl et al. (2006) confirmed the importance of maintaining snags, downed wood, canopy cover, and mistletoe to support populations of spotted owl prey species. Gomez et al. (2005) noted the importance of fungal sporocarps which were positively associated with large downed wood retained on site post-harvest. Carey et al. (1991) and Carey(1995) noted the importance of at least 10 to 15 percent cover of downed wood to benefit prey. The costs and benefits of post-fire harvest to the development of habitat for spotted owls and their prey should be evaluated by interagency teams (e.g., Level 1 teams) during the consultation process.	Everything following "the 2011 Final Revised Recovery Plan for Northern Spotted Owls says" are direct quotes from the 2011 Final Revised Recovery Plan for Northern Spotted Owls. The Table 2 and Appendix B of the Wildlife Biological Assessment (in Appendix G of the final EIS) describe how the project is compliant the 2011 Final Revised Recovery Plan for Northern Spotted Owls.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#5873-178	Recovery Action 12: In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large trees, medium and large snags, downed wood). Examples of areas where we believe this recovery action would greatly benefit future spotted owl habitat development include such fire-affected areas as the Biscuit fire, the Davis fire and the B&B complex. USFWS 2011. Final Revised Recovery Plan for the Northern Spotted Owl. pp III-20, III-32 – III-34, III-48 – III-49. Note also, the 1994 Northwest Forest Plan ROD (page C-11, and 1994 FSEIS page F-146) says that " ... activities required by recovery plans for listed threatened and endangered species take precedence over Late-Successional Reserve standards and guidelines." Also, keep in mind the FWS' June 28, 2011 Response to Comments on the Revised Recovery Plan says "Whether a burned area could support nesting spotted owls is not relevant to our recommending focusing on spotted owl habitat restoration and conservation of legacy habitat elements in areas where pre-fire management focused on developing spotted owl habitat. This recovery action is designed to provide for legacy habitat elements remaining after high-intensity fires which will contribute to future habitat development." http://web.archive.org/web/20130315193800/http://www.fws.gov/oregonfwo/Species/Data/NorthernSpottedOwl/Recovery/Library/Documents/Comments.Responses.pdf And, keep in mind "where pre-fire management focused on developing spotted owl habitat" includes all dry forests, e.g. "[O]ur intent in this Revised Recovery Plan is to embed spotted owl conservation and recovery within broader dry forest ecosystem restoration efforts" The 2008 FRP (p 116) also says "Large and old trees, either living or dead, are important wherever they occur." The FWS response to comments on the draft recovery plan says "post-fire harvest recommendations stress the need to conserve large trees, both living and dead, as they are important components to the restoration of owl habitat after wildfire events." And recommends that after fire or other disturbance the agencies should "conserve the remaining large trees and snags." http://www.fws.gov/pacific/ecoservices/endangered/recovery/pdf/NSO_RPApp_F_Response_to_Comments_5_7_08.pdf. Since large snags take a very long time to grow and recruit, salvage logging should retain all large snags. Any salvage logging proposal must also carefully disclose and balance all detrimental effects and alleged beneficial effects of salvage logging and connected actions like road building. Clark looked at post-fire habitat selection by spotted owls after several wildfires in southern Oregon and determined that low severity fire in nesting, roosting, foraging habitat appears to benefit spotted owl occupancy and colonization. Initial occupancy was positively influenced by the amount of roosting and foraging habitat with low severity burn within the core (ß = 0.08, 95% C.I. = -0.02 – 0.17) … Colonization rates were positively influenced by the amount of nesting, roosting and foraging habitat that received a low severity burn within the core (ß = 0.08, 95% C.I. = 0.02 – 0.15). Darren A. Clark. 2007. Demography and Habitat Selection of Northern Spotted Owls in Post-Fire Landscapes of Southwestern Oregon. M.S. Thesis. Oregon State University. Robert Anthony, Advisor. Figure 6.1 shows that nesting, roosting, foraging habitat is used more frequently than random sites even after it has experienced moderate or high severity fire, while areas that were salvage logged were used less frequently than random sites. See also, Clark, Anthony & Andrews 2013. Relationship Between Wild?re, Salvage Logging, and Occupancy of Nesting Territories by Northern Spotted Owls. The Journal of Wildlife Management 77(4):672–688; 2013; DOI: 10.1002/jwmg.523 ("Timbered Rock had a 64% reduction in site occupancy following wild?re (2003–2006) in contrast to a 25% reduction in site occupancy at South Cascades during the same time period. This suggested that the combined effects of habitat disturbances due to wild?re and subsequent salvage logging on private lands negatively affected site occupancy by spotted owls. In our second analysis, we investigated the relationship between wild?re, salvage logging, and occupancy of spotted owl territories at the Biscuit, Quartz, and Timbered Rock burns from 2003 to 2006. Extinction probabilities increased as the combined area of early seral forests, high severity burn, and salvage logging increased within the core nesting areas	"Currently, the most important range-wide threats to the spotted owl are competition with barred owls, on-going loss of spotted owl habitat as a result of timber harvest, habitat loss or degradation from stand replacing wildfire and other disturbances, and loss of amount and distribution of spotted owl habitat as a result of past activities and disturbances." (Revised Recovery Plan for the Northern Spotted Owl (Strix occidentalis caurina) 2011 (page vii))).To ensure the Northern Spotted Owl persists as a species and potentially reach the level where the species no longer needs protection of the Endangered Species Act, the Northern Spotted Owl Recovery Plan was written to provide the basis of spotted owl management and at some point, reach the "recovery objectives" (page ix). One of the three "recovery objectives" states the objective of the Revised Recovery Plan is reached when "…adequate habitat is available for spotted owls and will continue to exist to allow the species to persist without the protection of the Endangered Species Act…" However, wildfire poses a challenge to meeting this objective; the 2014 fires on the Klamath National Forest has considerably increased the amount of habitat lost or degraded by stand replacing fire thus further reducing the likelihood spotted owl Recovery Objectives likelihood of being reached in the near future. There is likely no quick fix to stand replacing fire in spotted owl habitat, but the Westside Fire Recovery Project provides a series of treatments that are designed to reduce the amount of stand replacing fire. The Westside Fire Recovery Project is meeting Recovery Action 12. The Recovery Plan describes Recovery Action as "In lands where management is focused on development of spotted owl habitat, post-fire silvicultural activities should concentrate on conserving and restoring habitat elements that take a long time to develop (e.g., large trees, medium and large snags, downed wood)." Project Design Features focus retaining legacy features such as disproportionately large trees/snags or large coarse woody debris in salvage harvest units. These large features typically take many years to create thus these features are important to retain on the landscape. In addition, Riparian Reserves which typically contain trees within the larger size classes because these areas usually contain slightly better site conditions than the surrounding area outside the Riparian Reserves will be retained in the salvage harvest units. Further, any trees that are likely to live (30% or greater likelihood of surviving) will be retained in the salvage harvest unit thus providing current habitat structure and future legacy components. Northern Spotted Owl use of fire affected areas is discussed in the Biological Assessment in the section called "northern spotted owl use of the post-fire landscape".

Code	Comment Number	Comment Text	Response
204.01 - NSO	#5873-179	First of all, do not assume that fire has rendered spotted owl habitat unsuitable. “The Timbered Rock Study presented evidence that the northern spotted owl has locations in areas with high severity burns. See AR 341-369. Additionally, there was evidence presented by Jerry Franklin, Professor of Ecosystem Analysis at the University of Washington, that ‘[r]etention of large snags and logs are specifically relevant to Northern Spotted Owl since these structures provide the habitat that sustain most of the owl’s forest-based prey species.’” FSEEE and EPIC v. US Forest Service, Civ. No. C 05-2220 SI & C 05-2227 SI (N.D. Cal.) June 27, 2005. Also, page 6 of the BE for the Rogue River National Forest’s Ashland Forest Resiliency DEIS has a very interesting paragraph that references the Timbered Rock Fire telemetry findings AND habitat analysis conducted at Biscuit: "There have been recent large fires in SW Oregon, in particular the Biscuit and the Timbered Rock fires, which have significantly reduced NRF within the province. However, analysis conducted on the effects of the Biscuit Fire using recent work by Zabel et al (2003) showed that of the 49 owl pairs affected by the fire, it was likely that only seven were no longer extant. In addition, of the 15 spotted owl pairs affected by the Timbered Rock Fire, 11 of those pairs continue to occupy their historic activity centers even thought (sic) they were subject to varying degrees of fire severity. There is uncertainty as to how spotted owls respond to fire in SW Oregon and research is currently being conducted in an attempt to answer that question." The referenced study is: Cynthia J. Zabel, Jeffrey R. Dunk, Howard B. Stauffer, Lynn M. Roberts, Barry S. Mulder, and Adrienne Wright. 2003. Northern Spotted Owl habitat models for research and management application in California (USA). Ecological Applications 13:1027-1040. This study suggests that "suitable" habitat within 0.5 miles of the nest site is the best indictor of continued NSO presence. And contends that if more than 20% of "suitable" habitat remains within 0.5 miles of the activity center that the NSOs will stick around post-fire. Second, manage the post-disturbance landscape for owl and their prey by retaining all large snags. The Final Draft Spotted Owl Recovery Plan (USDI 1992 p 71) requirements for post-fire salvage say “management to provide the maximum likely benefits for owls and their prey is an appropriate strategy.” Probably the most important things that the agencies can do after fire are: 1. Make sure that current owl habitat (both suitable and marginal) is protected from disturbance. The adverse effects of wildfire are often over-estimated. Courtney et al 2004. Fires cause incomplete loss of spotted owl habitat elements, so the remaining habitat elements such as surviving green trees and large snags may still provide current habitat for spotted owls. 2. Manage for abundant populations of owl prey species. Where owl prey base is diverse and abundant spotted owl home ranges tend to be smaller which is energetically advantageous and enhances owl survival rates. (Carey 2004). “Numerous patches of low foraging quality can have negative impacts on owl demography and behavior (Carey et al 1992).” (Carey 2004). and this is precisely what salvage logging will do to current and future spotted owl home ranges. A large number of owl prey species have some association with snags and down wood either as sites for denning or as a source of fungal food supplies. Removing large amounts of dead trees and down wood after a fire dramatically simplifies the forest structure for many decades and will have adverse effects on the development and recovery of populations of owl prey species. Retaining all large snags is called for in the spotted owl recovery plan and the Northwest Forest Plan. 3. Protect all large snags. Snags and down wood are integral parts of spotted owl suitable habitat, in fact, snags and down wood are included in the official definition of owl habitat. Removal of snags will directly eliminate primary constituent elements of spotted owl habitat. 4. Allow for slow and natural successional development. The diverse plant communities and complex structures that develop after fire provide excellent habitat for spotted owl prey species. Do not rush to plant conifers at high density which will truncate successional development.	The Wildlife Biological Assessment provides a discussion of the relevant literature concerning spotted owl use of fire affected areas in the section called “northern spotted owl use of the post-fire landscape”. The final EIS provides a response concerning tree planting and salvage harvest in Chapter 3 of the final EIS in the section called “Responsible opposing views and agency’s response to issues raised”. See response to comment12346-55.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#5873-180	Diminishment and Negative effects “Salvage guidelines [for Late-Succesional Reserves] are intended to prevent negative effects on late-successional habitat, while permitting some commercial wood volume removal. … While priority should be given to salvage in areas where it will have a positive effect on late-successional forest habitat, salvage operations should not diminish habitat suitability now or in the future.” Northwest Forest Plan ROD page C-13. These words indicate a "zero tolerance" policy for anything that would degrade habitat now or in the future. The agency has a burden to show in the NEPA document that the snags they want to remove have zero habitat value for spotted owls or other late-successional species now or in the future. The NEPA document must meet this burden. The record clearly shows that these large trees provide both future nest sites for owls and their prey species. Dense clumps of snags may also provide near-term foraging habitat. Every large tree removed is a potential nest site lost or a potential foraging opportunity forgone. Retention of snags shortens the time period when these stands are unsuitable habitat, while salvage logging lengthens the unsuitable timber period. When the agency argues that removal affects only a small area of the reserves and abundant habitat is provided in areas not logged, they fail to recognize the "zero tolerance" language. The agency simply cannot argue that removal of potential nest trees and structures important to prey species will not diminish habitat value. The NEPA analysis never reaches the core question, that is: Whether removal of large snags through salvage "prevents negative effects" or "diminishes late successional habitat now or in the future." Removal of large numbers of large snags from the LSR will have negative effects on habitat and will diminish LSOG habitat now and in the future by: 1. directly eliminating nesting opportunities for owls and their prey; 2. reducing the quality of future LSOG habitat that develops within salvage areas; 3. extending the time period that salvage areas remain non-suitable for owls and other species; causing the premature departure of some LSOG species that are still hanging on in the legacy-rich post-fire environment, and delaying by decades the return of LSOG species to areas that are salvage logged; 4. retarding vegetative recovery that is already ongoing; 5. increasing the uncertainty that LSOG will develop from the homogeneous and simplified initial conditions that result from salvage logging; 6. causing detrimental on current and future LSOG via effects on soils and spreading weeds	Response number 3 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" Section in Chapter 3 of the final EIS addresses the concern about efficacy of salvage harvest in Late-Successional Reserves, meeting the Northwest Forest Plan (and therefore the Klamath National Forest Plan) Standard and Guidelines and recommendations in Forest Ecosystem Management Assessment Team.

Code	Comment Number	Comment Text	Response
204.01 - NSO	#5873-181	The FEMAT scientists recognized that … Salvage of dead trees has significant effects on the development of future stands and the suitability as habitat for a number of organisms. Snag removal results in long-term impacts on the forest community because large snags are not produced by the new stand until trees become large and begin to die from natural mortality (often a period of 50-100 years). Snags are used extensively by cavity nesting birds and mammals such as woodpeckers, nuthatches, chickadees, squirrels, red tree voles, and American marten. Removal of snags following disturbance can significantly reduce the carrying capacity of these specie for many years. … … Salvage policies of options generally ranged from no salvage to limited salvage as permitted by the Final Draft Recovery Plan for the Northern Spotted Owl (USDI 1992). This plan would allow removal of small diameter snags and logs but would also require retention of snags and logs likely to persist until the new stand begins to contribute significant quantities of coarse woody debris." FEMAT page IV-37. The May 6, 1994 Scientific Analysis Group Q&As clearly indicated the intent of the NFP ROD that salvage for risk reduction in LSRs must be consistent with the salvage recommendations in the Final Draft Recovery Plan for the Northern Spotted Owl (December 1992). See below. The agency must retain all large snags because they are the most likely to last the longest and fill the snag recruitment gap as the post-fire landscape recovers from the fire. The so-called "brain book" that agency staff use to clarify the direction in the Northwest Forest Plan ROD urges the agency to use the requirements from the final Draft Recovery Plan for the Northern Spotted Owl which requires retention of all scorched trees that "may live" as well as all snags over 20 inches because these live trees and larger snags are most likely to last more than 100 years and help to fill the temporal gap in snag recruitment as the post-fire stand develops. Denton K, 1994. "SEIS Team/Scientific Analysis Group Qs &As [Summary]" May 6, 1994 ("[T]hese responses represent what the SEIS Team intended for many of the standards and guidelines… The following document is a compilation of those SEIS Team questions ands SAG responses that relate to standards and guidelines contained in the final Record of Decision."). "Salvage in LSRs to Reduce Fire Risk (SAG2;Q#9): Under Alternative 9, is salvage [in Late-Succesional Reserves] permitted to reduce fire hazard or risk? How and who defines acceptable risk? "SAG response: Salvage can be used to reduce risk throughout the range of the owl based on the salvage guidelines adapted from the final draft recovery plan. Silvicultural prescriptions can be used to reduce risk in areas subject to large scale disturbance (east side) using guidelines for reducing large scale disturbance adapted from the final draft recovery plan. (S&Gs pages C-13 and C-12)"	Response 3 in the "Responsible Opposing Views and Agency's response to Issues Raised" in Chapter 3 of the final EIS argues that the proposed salvage logging meets the Forest Plan and Late-Successional Reserve assessment requirements and recommendations. The Westside Fire Recovery Project is complying with the Standards and Guidelines for Late-Successional Reserve management including guidelines for salvage (pages C-11 to C-16). Any disagreement between the authors of the EIS and the Standards and Guidelines presented in Northwest Forest Plan Record of Decision in Attachment A is outside the scope of this project. It is the responsibility of the Forest to meet the intent of the Northwest Forest Plan through the use of the Standards and Guidelines. In addition, the Regional Ecological Office is reviewing this project to ensure consistency with the Northwest Forest Plan Standards and Guidelines (standards and guidelines page E-16). The Regional Ecological Office "...provides staff work and support to facilitate RIEC decision making and prompt interagency issue resolution in support of implementation of these standards and guidelines" (page E-16).
204.01 - NSO	#5873-76	Back in the early 1990s the Forest Service recognized the their forest plans were not adequate to maintain populations of spotted owls and they tried to develop plans to conserve spotted owl without following NEPA and NFMA procedures. The courts said they had to stop cutting owl habitat until they had complied with environmental laws. This is the same situation we find ourselves in today with dead-wood associated species. The agencies should stop harming dead wood habitat until they have a legal plan to conserve associated species over the long-term. Seattle Audubon Society v. Epsy, 998 F.2d 699, 704 (9th Cir. 1998) (an agency must re-examine its decision when the EIS "rests on stale scientific evidence and false assumptions").	See response to 5873-72. It is an extension of this comment, and is responded to there.

Code	Comment Number	Comment Text	Response
204.02 - Pacific Fisher	#12346-61	As indicated on page 7 of the Wildlife Biological Evaluation Report "[t]he primary goal of forest management is to avoid or minimize impacts to species whose viability has been identified as a concern." Management Direction 8-17 and 8-18 on page 4-28 of the Klamath National Forest Plan indicates that Pacific Fisher are a Sensitive species and directs the agency to "collect information on Sensitive species to assess population distribution and habitat 30 associations." No effort to address fisher population distribution has been made in support of the proposed Westside timber sale. What is disclosed in the DEIS (page 155) is that implementation of "Alternative 2 will affect habitat connectivity in 13 watersheds" such that 7 watersheds will go from having moderate connectivity for Fisher to low or very low and 6 watersheds will go from having low habitat connectivity for Fisher to having very low connectivity. Additionally, page 57 of the WBER indicates the proposed logging will result in three watersheds (Cougar Creek-Elk Creek, Lower West Fork Beaver Creek, and Tom Martin Creek-Klamath River) that currently are within the home range threshold for Fisher habitat dropping below the threshold. Bats	The analysis for this project assumed the possibility that all 7th fields could be occupied by fisher if enough pre-fire habitat occurred. Alternative 2 has the most effect on fisher connectivity and home range potential. However, Alternative 3, 5 and Alternative 2 as modified, have lesser effects to fisher connectivity and home range potential.
204.02 - Pacific Fisher	#17460-3	Retention of habitat for wildlife connectivity, particularly the Pacific fisher; while this concern is mitigated in Alternative 3, it is subsequently discarded in Alternatives 4 and 5.	In the National Environmental Policy Act process relevant issues discovered through the scoping process drive Alternative development. Alternative 3 was developed specifically to address Relevant Issue number 1 (Chapter 1 of the final EIS) which is a disagreement over treatments effects to wildlife habitat and connectivity. Alternative 4 was developed to address watershed concerns and Alternative 5 was developed to address a disagreement over salvage in the Late-Successional Reserves. Alternatives 4, 5 and Alternative 2 as modified all have a reduction in proposed activities so they indirectly reduce effects on wildlife connectivity.
204.02 - Pacific Fisher	#18859-6	Specific to the project and to the Pacific fisher, I would suggest that every potential hazard tree within 250 feet of any publicly accessible road be removed. Mortality due to roadkill is an identified threat to fishers and one that I have personally dealt with while conducting research on fishers. While conducting radio telemetry work on fishers in the coast range of California roadkill was a significant source of mortality, second only to predation. Removing snags from roadside areas would cause no significant reduction in the total number of snags available to species like fisher that depend on snags for some phase of their life history. By removing snags close to roads we would be removing the attraction of these areas to fishers thus lowering the likelihood that individual fishers would be killed by passing vehicles.	Hazard tree removal treatments is intended to remove trees that pose a hazard to Forest infrastructure in the project area as defined by the Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region (Angwin et al. 2012).

Code	Comment Number	Comment Text	Response
204.02 - Pacific Fisher	#18909-55	At page 134-135 of the DEIS states, "High connectivity means that there is sufficient habitat to th provide cover for fisher, marten, and wolverine moving within a 7 field watershed. Moderate th connectivity means there is some challenge to the species moving within a 7 field; this increases the risk to mortality and requires extra expense of energy to deviate around large openings. Low connectivity presents a great challenge because these species are likely to shift their territory to a more contiguous placement of habitat or move through areas with little to no cover. The final category, very low connectivity, represents a situation where openings exceed the gap distance th that would let these species move through a 7 increased." field watershed; risk to survival is substantially The DEIS at page 143 states that, out of 67 watersheds none have high connectivity, " 37 watersheds have low (16) or very low (21) habitat connectivity." The DEIS fails to consider how the low connectivity in over half of the project area watersheds are affecting the viability of Pacific fisher populations. The DEIS at page 135 states, "The effect of a loss of a home range is difficult to estimate in terms of population viability. Habitat lost is difficult to replace and it may take many years before the area develops into habitat again." "The loss of one home range may not have large effects on the population, but the loss of several home ranges can result in large effects to the population." On page 23 of the Wildlife BE, KNF states, "All pre-fire habitat that received high fire severity (>75% of basal loss) is considered non-habitat for this analysis." On page 131 of the DEIS, the agency states, "The analyses are based on the best scientific and commercial data available at the time this document was written. This assumption does not appear to fit the best available science. As found in Hanson (2013)11: 11 Hanson, C.T. 2013. Habitat use of Pacific fishers in a heterogeneous post-fire and unburned forest landscape on the Kern Plateau, Sierra Nevada, California. The Open Forest Science Journal 6:24-30 (emphasis added). In surveys on the Kern Plateau in the southwestern Sierra Nevada, within unlogged post- fire forests with mixed-severity effects from large fires, and in unburned forests, I found that fishers selected Sierran mixed-conifer forests in both post-fire and unburned areas, and selected closed-canopied, mature/old forest in unburned forests, as well as burned forests that had this structure in the pre-fire condition. When fishers were near burned/unburned edges, they selected the within-fire side. Fishers used dense, mature/old forest that experienced moderate/high-severity fire at the same level as unburned dense, mature/old forest, and both males and females were found deep inside large fires- several km from the fire perimeter. These results indicate that fishers may benefit from the structural complexity of such post-fire habitat for foraging. On page 20, the Wildlife BE acknowledges that fishers utilize high severity fire areas despite their loss of canopy cover, and that "[f]or high severity fires, retention of large trees and snags may be more important than canopy cover." But this potential foraging habitat is ignored in the Service's assumption. Further, the proposal to heavily log high severity patches would remove the remaining large trees and snags and would remove all remaining cover. The proposed project violates the Klamath National Forest Standard and Guideline 8-18, which directs the agency to "[a]void or minimize impacts to Sensitive species where possible." Please explain how the agency is in compliance given that the DEIS indicates that the project will directly remove 3 home ranges, and cumulatively remove a fourth home range. On page 155 of the DEIS indicates: Alternative 2 will affect habitat connectivity in13 watersheds. There are seven watersheds that will go from moderate habitat connectivity to low or very low connectivity in this alternative; the remaining six watersheds will drop from low to very low habitat connectivity. Three (Cougar Creek-Elk Creek, Lower West Fork Beaver Creek, and Tom Martin Creek-Klamath River) of the 25 watersheds that meet the criteria of possibly containing or contributing to a fisher home range fall below the fisher home range threshold in alternative 2. These three watersheds are not likely to contain a fisher home range after treatments are completed. On page 156 of the DEIS, KNF also states: Adding the direct and indirect effects of all other actions will result cumulatively in one watershed falling below the level of habitat needed for a fisher home range. The Big Ferry-Swanson watershed is affected by the Singleton project and projects on private land that will result in the loss of habitat and home range potential in the watershed; adding these effects to those of alternative 2 will result in measurable cumulative effects. Pacific fishers are commonly observed on the lower 2/3 slope, however the DEIS focuses snag retention on the lower 1/3 slope. Further, the DEIS fails to provide adequate mitigations, including snag and Coarse	The analysis was modified for the final EIS to assume that the denning/resting and foraging habitat burned with high and moderate became movement habitat. Movement habitat was considered habitat in both the connectivity and home range analysis. So areas that met denning/resting and foraging habitat that burned with moderate and high severity where treatment is proposed is assumed to be a modification or removal of fisher habitat. Alternative 3, 5 and Alternative 2 modified all have reduced effects to fisher connectivity and home range potential compared to Alternative 2. Project design features regarding coarse woody debris and snag retention are in Chapter 2 of the final EIS. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
		Woody Debris retention, to protect the survival of this Sensitive and candidate species. The DEIS also fails to analyze and disclose the effects from the proposed projects on the viability of the species.	

Code	Comment Number	Comment Text	Response
204.03 - WL - MIS	#12346-75	The DEIS and its supporting documents make no attempt to quantify project impacts to snag associated MIS species present in the planning area. The Klamath LRMP, Standard & Guide 8-19 (page 4-28) directs the Forest to "[c]ollect information on sensitive species to assess population distribution and habitat associates." Give this clear direction to "collect information…to assess population distribution," and given that MIS are designated by the KNF "because their population changes are believed to indicate the effects of management activities it is difficult to understand how MIS could fulfill their management function if KNF timber planners refuse to collect information about MIS population size, distribution and trends. Please note that in 2006 KNF timber planners responded to concerns about project impacts to MIS Species in the Horse Heli timber sale DEIS by contending that retention of habitat in the "Late Successional Reserve land allocation" was sufficient to "provide for late-successional species" and hence the KNF was somehow relieved of its duty to disclose project impacts to MIS Species. Yet here, in Westside, the KNF is specifically proposing to extensively log snag associate MIS habitat locating squarely within the LSR land use allocation while again refusing to survey for MIS species, analyze project impacts on MIS species, quantify project effects to MIS species, or reveal the population data and trends for snag associate MIS species in the timber sale area. 31 The NFP at C-42 clearly states: "As a minimum, snags are to be retained within the harvest unit at levels sufficient to support species of cavity -nesting birds at 40 percent of potential population levels based on published guidelines and models." Page 162 of the DEIS acknowledges that "units will not provide 5 snags per acre but the project will meet the Forest Plan standards of 5 snags per acre averaged over 100 acres." C-42 above applies to "harvest unit" scale and the KNF cannot avoid implementation of this substantive snag retention requirement by drawing units larger on maps (and not logging adjacent Riparian Reserves) and averaging snag retention outside of actual logging areas in order to avoid providing habitat for snag associated MIS species. Page 49 of the Draft Westside Biological Assessment indicates that "[i]n units less than 100 acres in size, snag retention will occur only in the riparian reserves and will be limited in areas lacking riparian reserves." Hence snag retention requirements will not actually be met in actual harvest units. As stated on page 6 of the Management Indicator Species Report The importance of recently burned forests to breeding cavity-nesting birds is well known. Primary cavity excavators are important members of forest ecosystems because the cavities they excavate may be used by secondary cavity nesters, including bats, American marten, many owl species, and other birds. Rather than disclose the impacts of LSR snag removal across thousands of acres of snagassociate MIS species, both the MISR and the DEIS rely entirely on the retention of 5 snags per acre to mitigate project effects. In fact no harvest unit will actually retain 5 snags per acre in the unit. Rather, the KNF is playing math games with averaging and scale to mask site-specific project impacts while refusing to analyze or disclose project impacts. Even if the KNF were to leave 5 snags per acre in logging units (which it is not) that would still not relieve the agency of its duty to utilize the MIS program to disclose project impacts to MIS populations. Reciting tree standards and guidelines does not constitute disclosure of project effects on MIS species. Further, the contention that "0 acres" of snag associate species habitat will be removed (on the 3/10/15 MIS Table) is arbitrary and capricious. Our organizations intend to photodocument the extensive removal of snag associate species habitat if the Westside project proceeds.	Forest Plan Standard and Guideline 8-22 says "Provide for an average of 5 snags per acre, in a variety of size and decay classes, within each landscape. These snags need not be equally distributed. The actual number of snags to be maintained in areas managed for timber production may vary from 2 to 5, depending on the amount of snags available within the surrounding landscape and the desired future condition of that landscape." Table 4-4 of the Forest Plan goes on to provide the number of snags required over 100 acres required for 'good quality' habitat (page 4-30). The interpretation of this evidence is that the snag retention requirements should be averaged over 100 acres to best meet the Forest Plan intentions. The final EIS summarizes the Management Indicator Species report. The Management Indicator Species report outlines in detail the effects to associated habitat for each assembly and was incorporated by reference into the final EIS. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.03 - WL - MIS	#5873-23	Given the regional deficit of young complex forests and the fact that many species, such as woodpeckers and secondary cavity users, appear to be adapted to exploit the structure and resources available within disturbed forests, the agencies should comprehensively consider and disclose the direct and indirect effects of salvage logging on species associated with young complex forests. The Forest Service has numerous Management Indicator Species whose populations have not been monitored, so the agencies lack the information necessary to that the salvage logging program will maintain species viability. d. the effects of salvage logging on the development of complex forest habitat; “The early post-disturbance period of forest ecosystem development - pre-tree-canopy closure - is profoundly important!” because it is heterogeneous, light-energy rich, structure rich, biodiversity rich, and process rich.	the Forest Service/Bureau of Land Management-administered lands and Interior Columbia Basin as a whole." The article does not provide any information on the historic level of snags within the Klamath Province area and thus does not make any conclusions on the range of availability of large snags within the project area. Korol et. al (2002) states that "Large snags should return to historical levels on Forest Service/Bureau of Land Management lands, but remain at roughly 75% of the historical amount across the Basin. Both small and large down wood amounts should remain above historical levels on Forest Service/Bureau of Land Management lands and across the Basin." The article does not conclude that the increases in large snags will occur in roadless and wilderness areas. The article compares the 3 Alternatives (S1, S2, and S3) and compares how fuels reduction efforts in both Alternatives S2 and S3 should reduce large down wood amounts in actively managed areas. But that this should be offset by increases in late seral forest in unroaded and wilderness areas, creating large down wood levels far above historical conditions. This is outside the scope of the project.

Code	Comment Number	Comment Text	Response
204.03 - WL - MIS	#5873-75	The agencies need to prepare a EIS to consider a replacement methodology for maintaining species and other values associated with dead wood. This is especially critical because adequate dead wood is recognized as an essential feature of healthy forests and the Forest Service has identified lots of “management indicator species” associated with dead wood habitat.	A different EIS about replacement methodology is outside the scope of the project. See response to comment number 5873-72. For the actions proposed, we are already doing an environmental impact statement. Best available science was used during project design and analysis, as referenced throughout the final EIS and supporting documents.
204.04 - WL - S&M	#18909-62	Salvage treatment units will not provide five snags on every acre but the project will meet the Forest Plan standard of five snags per acre- averaged over 100 acres. This is inconsistent with snag retention guidelines. The project would result in 11,693 acres of snag habitat being degraded and 1,692 acres would be removed. Cavity-nesting species are prime beneficiaries of fires, 62 species of birds and mammals use snags, broken-topped, diseased or otherwise "defective" trees for roosting, denning, foraging, or other life functions. The White-headed Woodpecker, Pygmy nuthatch and Flammulated owl all have habitat ranges within the project area. The Northwest Forest Plan (NFP) at C-45-46 states, "White-headed Woodpecker, Black-backed Wood Pecker, Pygmy nuthatch and Flammulated Owl- These species will not be sufficiently aided by application of mitigation measures for riparian habitat protection." It continues, "Specifically, the Scientific Analysis team recommends that no snags over 20 inches DBH be marked for cutting." The KNF LRMP requires that the largest snags be retained as they last longer make the best wildlife habitat. The DEIS fails to comply with the KNF LRMP and the NFP. Forests that burn at high severity burn, snag forests, are often incorrectly assumed to be damaged. Ecologically, this is strongly contradicted by the scientific evidence. Peak biodiversity levels of higher plants and vertebrates are found in patches of snag forest habitat-areas where most or all of the trees are killed by fire, consistent with the principle that pyrodiversity enhances biodiversity, especially where mixed-severity fire effects occur. As a result, avian species richness and diversity increases in heavily burned patches occurring within a mix of low and moderate severity effects. Scientists recommend that forest managers ensure the maintenance of moderate and high severity fire patches to maintain populations of numerous native bird species positively associated with fire. At the landscape level, high severity habitat (unlogged) is among the most underrepresented and rare forest habitat types. Page 144 of the DEIS states, "Prior to the fire, a large portion the project area likely provided habitat for survey and manage species. However, in the area that burned with moderate and high severity effects in the 2014 fires, with the loss of canopy cover, decaying large coarse woody debris and leaf litter to provide micro-site conditions, persistence for most of the mollusk and salamander sites is not likely. Therefore, only habitat that burned at very low and low severity is expected to contain the survey and manage species." As noted above this assumption is not based in common sense or the best available science.	Snag retention requirements will be met by a multitude of mitigations described in Response number 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" Section in Chapter 3 of the final EIS. Areas that had high severity vegetation burn were not considered to have no habitat value. The Wildlife section in Chapter 3 in the final EIS describes how severely burned areas were considered as habitat for the species analyzed. For instance, the analysis for the Northern Spotted Owl considered post-fire foraging habitat in the analysis of effects and pre-fire Pacific fisher habitat that had high fire severity in movement habitat in the connectivity and home range potential analysis. The reasoning for considering areas with moderate and high vegetation burn severity non-habitat for many of the survey and management species is described in the Survey and Manage Report and Wildlife report amendment. Whether or not fire creates conditions that may affect the species occupancy of a particular site, the intent of the Survey and Manage standards and guidelines is to protect known sites. For this project, project design features were developed to apply the standards and guidelines to protect these sites regardless of the current condition. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.05 - WL - FS Sensitive	#18909-29	The KNF LRMP at page 4-23, states: "6-8 Sensitive species: Project areas should be surveyed for the presence of Sensitive species before project implementation. If surveys cannot be conducted, project areas should be assessed for the presence and condition of Sensitive species habitat." The Terrestrial Wildlife section of the DEIS is so inadequate that KNF must rescind the DEIS. As discussed below, the analysis is plagued by both numerous and pervasive mistakes which make it impossible for the public or for the decision maker to meaningfully evaluate the comparative merits. Furthermore, the analysis indicators chosen by the agency do not provide a clear basis for choice among the decision maker; rather, they cloud the reason and important differences between the project alternatives. The agency cannot merely correct the mistakes identified below in the final EIS because this would inhibit the public's opportunity to comment on the project's impacts and the impacts of the proposed alternatives.	The project meets the requirements of Forest Plan Standard and Guideline 6-8. Surveys for Forest sensitive species were not completed. However, the analysis for Forest sensitive species assumed presence in all areas with suitable habitat as defined by the best available science.

Code	Comment Number	Comment Text	Response
204.05 - WL - FS Sensitive	#5873-34	Bats find favorable habitat in burned areas with abundant and diverse snags and abundant and diverse flying insects. Salvage logging will remove potential roost sites, and food sources. Carol Chambers and Erin Saunders. BATS IN THE BURNS - Studying the impact of wildfires and climate change. BATS. Bat Conservation International. Winter 2013, Volume 3, No. 4. http://www.batcon.org/index.php/media-and-info/bats-archives.html?task=viewArticle&magArticleID=1154	Chambers and Saunders (2013) state that while bats prefer unburned areas if available they will use snags affected or created by wildfire especially large diameter trees. Westside Fire Recovery includes the retention of legacy components such as large fire killed trees and pre-existing snags which will indirectly benefit bat species. The analysis indicator chosen to illustrate effects to Forest sensitive bat species was risk of disturbance focused on potential hibernaculum and maternity roost sites because of the Forest Plan Standard and Guideline directing the focus on underground spaces (Forest Plan page 4-32) and the importance of these areas to populations within fire affected areas.
204.05 - WL - FS Sensitive	#5873-71	An example of how salvage would lengthen the period that a forest remains inhospitable to wildlife is provided by the following study, Payer, D.C., and D.J. Harrison. 2000. Structural differences between forests regenerating following spruce budworm defoliation and clear-cut harvesting: Implications for marten. Canadian Journal of Forest Research 30(12): 196572. ("Summary: The authors looked at the use of clearcuts and areas where spruce budworm has caused mortality in relation to the American marten. When establishing new territories, martens avoid clearcuts but do not avoid stands with a history of extensive tree mortality caused by eastern spruce budworm. Although live tree basal area was similar between stand types, the results showed that the vertical structure provided by large snags can offset the limited availability of live trees for the marten, particularly where coarse woody debris and understory vegetation are plentiful.") http://www.umaine.edu/cfru/documents/payer.pdf	Habitat is defined by biotic and abiotic features that are used by a particular species to meet the needs of survival and reproduction. Fire can create dramatic changes in the habitat by altering the vegetation composition in a particular area; whether or not a particular area is "inhospitable" is determined by the species of interest. Like fire, salvage harvest can further change the vegetation structure, but without context of particular species, it is incorrect to identify salvage harvest as creating "inhospitable" conditions. For marten, fire can remove important habitat components like tree canopy cover which is described in the Wildlife Biological Evaluation (pages 20 and 21). Not all clearcuts are created equally, as described in the Wildlife Biological Evaluation, the size of the clearcut and the amount of residual woody debris can influence the potential movements of a marten.Prayer and Harrison (2000) studied the effects of land management on marten in Maine. The authors examined the difference in marten use of forest experiencing spruce budworm that defoliates the trees and land management that removed all the trees (i.e. clearcut). The authors found that marten avoid clearcuts but marten were found in stands affected budworm. Stands with affected by budworm had more snags, downed logs, and root masses and included taller trees when compared to clearcut stands. This physical vegetation structure is likely an important component for marten use because trees/snags can provide vertical structure while woody debris can provide cover along the ground. The Wildlife Biological Evaluation discusses these same principles and consequentially, an analysis indicator called "habitat connectivity" was developed to measure the effects of salvage harvest because snags and coarse woody debris have been described as important habitat components for marten to move through the home range and across the landscape (i.e. habitat connectivity). Further, the Westside Fire Recovery Project added snag retention areas in the salvage harvest units that will increase the amount of snags and coarse woody debris to reduce the potential effects to marten. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.06 - WL - General	#12346-17	Page 29 of the ACSOR acknowledges that salvage logging may negatively impact temporal connectivity "at the site scale" but dismisses the negative impact because "project design features that require snag retention in the salvage units will meet the standards and guidelines at the site scale." This contention is incorrect, the PDFs do no such thing. In fact, the logging PDFs call for: (1) Counting Riparian Reserves as "units" in order to double-count the Reserves for leave-tree purposes while clearcutting the actual harvest units; (2) Defining units larger than the actual harvest area in order to count trees outside of the logging zone as "leave trees" and (3) Averaging leave tree retention over 100-acre plots such that many "units" will be effectively clearcut. Hence the project will indeed negatively impact terrestrial connectivity at the site scale in violation of ACSO 2. Inexplicably, on page 29 of the ACSOR the Forest Service claims that leaving felled snags greater than 26" DBH on site in the Riparian Reserves for fish bearing streams while removing smaller snags in these areas and all snags in the Riparian Reserves for non-fish bearing streams will retain habitat connectivity. In fact smaller snags and snags in non-fisher bearing Riparian Reserves directly contribute to wildlife connectivity and their removal will inhibit attainment of ACSO 2. Indeed, retention of terrestrial wildlife connectivity was one of the primary reasons the NWFP established Riparian Reserves for non-fish bearing streams.	The Riparian Reserves that occur in the defined salvage units will not be salvage logged as described in Chapter 2 of the final EIS. Snag retention for units greater than 100 acres require the retention of 2-8 snags per acre averaged over the unit which will include any Riparian Reserves or legacy components within the unit. In units less than 100 acres snag retention will only occur in Riparian Reserves and where legacy components occur. The acres of Riparian Reserves in salvage units are only being counted once in the analysis of connectivity in the Wildlife Biological Evaluation and in Chapter 3 of the final EIS. Additional snags may be retained due implementation constraints as well that may increase the number of snags within the unit beyond the planned 2-8 snags. The project design feature described in the comment referring to the retention of 26 inch trees in Riparian Reserves will be applied to hazard tree removal units only. Riparian Reserves help "...enhance habitat conservation for organisms dependent on the transition zone between upslope and riparian areas, improve travel and dispersal corridors for terrestrial animals and plants, and provide for greater connectivity of late-successional forest habitat." (Northwest Forest Plan Record of Decision, page 7). The species that benefit from Riparian Reserve connectivity include the Northern Spotted Owl, survey and manage species and Forest sensitive species. Connectivity analysis was not specifically completed for every species considered in the final environmental impact statement (EIS). However, the connectivity analysis for Fisher, Martin and Wolverine and the logic behind the assumptions in the Terrestrial Wildlife Biological Evaluation (as amended) provides estimated effects that could occur for many more species than these three weasels. Given the activities proposed and the limitation opening pose to fisher, marten and wolverine (to a much less degree) to move through the landscape, connectivity for the fisher, marten, and wolverine can still provide an estimate of connectivity for many other species including spotted owl. Like fisher, marten, and wolverine, spotted owl likely use overstory tree canopy cover to avoid predation and find needed resources while moving through the landscape; however, the spotted owl likely to cross larger opening than the opening sizes presented for the fisher, marten, and wolverine analysis. Therefore, the fisher, marten, and wolverine connectivity analysis likely underestimates the level of connectivity. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.06 - WL - General	#12346-58	As indicated on page 7 of the Wildlife Biological Evaluation Report "[t]he primary goal of forest management is to avoid or minimize impacts to species whose viability has been identified as a concern." Forest Sensitive Species (FSS) are plant and animal species identified by a Regional Forester for which population viability is a concern. Hence the KNF must conduct its management "to avoid or minimize impacts" to bald eagles. That has not occurred in the Westside planning process. 29 As disclosed on page 151 of the DEIS "Alternative 2 will have treatment within 0.5 miles of all four bald eagle nest sites…[And] "the Caroline Creek eagle nest will have a large proportion of potential future nest trees removed from the nearby area." Page 53 of the WBER indicates that "Caroline Creek eagle nest has salvage and roadside hazard treatment within 600 feet of the nest." This will result in "a high risk of the eagle pair not finding a nest tree in the future if the eagles choose to move." (DEIS page 151). It appears that Project Design Feature "Wildlife 4" at page 89 of the DEIS provides an exemption to the Bald Eagle seasonal protections for two log landings located in Caroline Creek. Hence the project does not in fact avoid or minimize impacts to bald eagles.	The projects does minimize effects to nesting bald eagles through project design features by separating the timing of project implementation when the eagle nest is not active. In addition, project design doesn't remove large trees within 330 feet of the nest tree. Although the U.S. Fish and Wildlife Service does recommend to retain mature trees within one-half mile from large bodies of water, this isn't a requirement.
204.06 - WL - General	#12346-59	As indicated on page 7 of the Wildlife Biological Evaluation Report "[t]he primary goal of forest management is to avoid or minimize impacts to species whose viability has been identified as a concern." Yet page 153 of the DEIS indicates that all of the KNF logging alternatives "will remove habitat and result in two nests increasing the level of risk to reproduction from moderate to high." Page 55 of the WBER concludes that the proposed logging "will result in the Hickory and West Whites goshawk nest having a high level of risk to reproduction.	Standard and Guideline 8-18 states "Avoid or minimize impacts to Sensitive species where possible. If impacts cannot be avoided, analyze the potential effects on the population or its habitat within the landscape and on the species as a whole…." There are project design features that limit operating periods around Northern Goshawk nests which will minimize effects to nesting birds. The effects of the project on Northern Goshawks is detailed in the Terrestrial Wildlife Biological Evaluation (as amended) which is summarized and incorporated by reference into the draft EIS and the final EIS.
204.06 - WL - General	#12346-60	As indicated on page 7 of the Wildlife Biological Evaluation Report "[t]he primary goal of forest management is to avoid or minimize impacts to species whose viability has been identified as a concern." Page 61 of the WBER acknowledges that "[t]ractor [yarding] will likely compact the most amount of salamander habitat, followed by cable yarding corridors where several logs are basically dragged over the same ground." The KNF proposes to "mitigate" these direct impacts by buffering 19 "known sites." See DEIS page 158. However, it does not appear that pre-disturbance SMS surveys were conducted prior to the Westside timber sale planning effort. Instead it appears that the 19 "known" sites are "known" from historic surveys and that the KNF has elected to ignore the survey protocols of the NWFP and rely on "mitigation" involving "known sites" that is not informed by a projectspecific effort to determine where salamanders are located.	The Wildlife Biological Evaluation analyzes two species identified as a Forest Service Sensitive Species that are also identified as a Survey and Manage Species in part of the Northwest Forest Plan. Yes, pre-disturbance surveys are required for some Survey and Manage Species for specific types of treatments. However, pre-disturbance surveys are require prior to treatment not prior to planning of a treatment. The Forest is conducting surveys to be compliant with the Survey and Manage Standards and Guidelines.
204.06 - WL - General	#12346-62	The DEIS contains no substantive or quantified information regarding project activities on Pallid, Townsend's Big-Eared or Fringed Myotis bat species. Instead the DEIS offers conclusory statements unsupported by analysis or data of any sort. Page 60 of the WBER concludes (again with no supporting data or analysis) that "the [sensitive bat] sites with potential cave or cave like structures in the 13 sites with a high risk of disturbance are likely the most vulnerable to abandonment which could affect a population." But these effects are not disclosed or quantified.	The analysis on the effects to Forest sensitive bat species is summarized in the draft EIS but the details of the effects are in the Terrestrial Wildlife Biological Evaluation as amended which is incorporated by reference into the draft EIS.

Code	Comment Number	Comment Text	Response
204.06 - WL - General	#12346-66	Page 8 of the Wildlife Biological Evaluation Report acknowledges that the Caltrans and CDFW commissioned California Essential Habitat Connectivity Project indicates that the "Westside Fire Recovery project area contains portions of the identified Essential Habitat Connectivity area" and that "Theobald et al. (2011) found similar important of the Westside Fire Recovery project area for contributing to large scale wildlife connectivity as the California Essential Habitat Connectivity project." Yet these findings and recommendations are not reflected in the Forest Service proposed logging proposal. Westside Salvage KNF timber planners allegedly developed Alternative 3 to "address" the significant issue of wildlife connectivity. Yet all of the developed logging action alternatives (including Alternative 3) target the Grider and Walker Creek watersheds for significant logging, yarding, road, and landing activities. This is not the first time that KNF timber planners have attempted to exploit wildfire to log the Grider Creek wildlife connectivity corridor connecting the Marble Mountains Wilderness with the Red Buttes Wilderness Area. Following the 1987 fire season the KNF proposed significant salvage logging in the Grider Creek. In 1990 the Ninth Circuit Court of Appeals (Marble Mountains Audubon v Rice) noted that fish and wildlife concerns "received only cursory attention" particularly concerning the Grider Creek biological corridor which "represents a corridor of relatively uninterrupted forest habitat connecting the Marble Mountains Wilderness to the Klamath River and the unroaded Ft. Goff and Portuguese drainage and the Red Buttes Wilderness to the north." The Forest Service decision to ignore "fish and wildlife concerns" involving a unique biological corridor of regional significance was struck down. But history is unfortunately repeating itself and every logging alternative that the KNF developed involves removing snags, live trees, and recovering forests in Walker and Grider Creek that provide wildlife connectivity that allows for dispersal and genetic flow between two regionally significant source population habitats. Why has the KNF refused to consider or develop an action alternative that does not convert thousands of acres in Walker and Grider Creek into fiber plantations to the detriment of all other forest values?	The Habitat Connectivity section of the Biological Evaluation discusses the use of the California Essential Habitat Connectivity Project relative to the Westside Fire Recovery project. The product was developed for large-scale (regional) planning and is subject to additional analysis if used at the project scale. Alternative 3 was designed to respond to Relevant Issue number 1 which focused on salvage logging effects to wildlife which includes connectivity. Salvage logging was restricted in the Beaver fire area due to the concern over fragmentation related to private land salvage activities. Wildlife project design features 11, 12, 18, 19, 20, and 21 were also added to mitigate concerns related to Relevant Issue number 1 (Issues section of Chapter 1 of the final EIS). Alternative 5 reduces the acres in the Walker and Grider Creek areas. There is only about 320 acres of salvage in Walker Creek and no salvage in Upper Grider, Lower Grider, Cliff Valley or Rancheria Creek 7th field watersheds in Alternative 5. The effects of each Alternative to fisher and marten connectivity was analyzed in the draft EIS and the Wildlife Biological Evaluation and is a proxy for Northern Spotted Owl (See Wildlife Report Amendment).
204.06 - WL - General	#12354-2	Read More: http://www.esa journals.org /doi /full /10. 1 890 /1OS1-0761(2000)010%SB0233:EOIDOL%5D2.0.C0:2 Radeloff, Volker C., David J. Mladenoff, and Mark S. Boyce. "Effects of interacting disturbances on landscape patterns: budworm defoliation and salvage logging." Ecological Applications 10, no. 1(2000): 233-247. Some Picea and Abies tree species of Pacific rainforests regenerate well, or even better on rotting logs, than directly in soil. Removing /clearing understory or fallen logs , or of dead or dying trees can diminish speed of regrowth. Numerous animal species from predators like Northern Spotted Owl, Pacific Fisher American Pine Marten, nesting raptors, lose habitat. So also do porcupines, flying squirrels, cavity-nesting birds, and even rare tree fungi. Common rodent prey of NSO and other predators: Peromyscus appear to be habitat generalists, and populations are little affected by local changes within typical salvage, small clearcut, or natural fire-affected areas. They DO need ground cover, both coarse woody debris and early to mid-seral stage ground habitat, and thus, herbicide use and fuels red uction may significantly adversely affect their numbers and presence. (Menzel et al., 1999) Owl prey are dependent upon hypogeous fungi for varying parts of their diets, and assist fungal dispersal through fecal pellets. Clearcutting, as in OR, along with drought, may negatively influence both ectomycorrhizal fungi and small mammal populations, reducing Owl prey. Some mammal species switch to lichen, which may also be vulnerable to heavy disruptive influences. Howard F. Sakai and Barry R. Noon Dusky-Footed Woodrat Abundance in Different-Aged Forests in Northwestern California. The Jou rnal of Wildlife Management Vol. 57, No. 2 (Apr., 1993), pp. 373-382 Published by: Wiley on behalf of the Wildlife Society Stable URL: http://www.jstor.org/stable/3809436 Douglas C. Ure, Chris Maser; Mycophagy of red-backed voles in Oregon and Washington. Canadian Journal of Zoology, 1982, 60(12): 3307- 3315, 10.1139/z82-419 Sanjay Pyare and William S. Langland (2001) PATTERNS OF ECTOMYCORRHIZAL-FUNGI CONSUMPTION BY SMALL MAMMALS IN REMNANT OLD-GROWTH FORESTS OF THE SIERRA NEVADA. Ecology Vol. 59, No. 4 (Summer, 1978), pp. 799-809. Published by: Ecological Society of America. Article Stable URL: http: //www.jstor.org/stable/1 938784 Chris Maser, James M. Trappe and Ronald A. Nussbaum. Fungal-small mammal interrelationships with emphasis on Oregon coniferous	The Wildlife Biological Evaluation, Wildlife Management Indicator Species Report, and the Wildlife Biological Assessment analyzes several species such as the northern spotted owl, Pacific fisher, northern goshawk, and cavity nesting birds to determine the level of effects the project may have on these species. Further, these documents disclose the effects of each Alternative including a "no action" Alternative which describes the direct and indirect effects of taking no action. For northern spotted owl, the Biological Assessment describes the effects of the proposed activities on northern spotted owl prey species (e.g. Peromyscus sp.).

Code	Comment Number	Comment Text	Response
204.06 - WL - General	#12354-3	forests Ecology Vol. 59, No. 4 (Summer, 1978), pp. 799-809 Published by: Ecological Society of America Article Stable URL: http: //www.jstor.org/stable/1 938784 Thomas P. Sullivan, R. A. Lautenschlager and Robert G. Wagner. Clearcutting and burning of northern spruce-fir forests: implications for small mammal communities. Article first published online: 25 DEC 2001 DOI: 10.1046/j.1 365-2664.1999.00408.x Marc D Meyer, Malcolm P North, Douglas A Kelt Short-term effects of fire and forest thinning on truffle abundance and consumption by Neotamias speciosus in the Sierra Nevada of California. Canadian Journal of Forest Research, 2005, 35(5): 1061-1070, 10.1139/x05- 032 Marc D Meyer, Malcolm P North, Douglas A Kelt Fungi in the diets of northern flying squirrels and lodgepole chipmunks in the Sierra Nevada. Canadian Journal of Zoology, 2005, 83(12): 1581-1589, 10.1139/z05-156	The excerpt from this letter doesn't provide a project specific comment to respond to. The articles presented in this excerpt appear to reference research on small mammal responses to land management. However, effects of the proposed activities on spotted owl prey species in discussed in the section called "Effects on prey, competitors, or predators" in the Wildlife Biological Assessment.
204.06 - WL - General	#12354-4	2. Thus the immense increase in roading fragments and destroys habitat for numerous creatures, including amphibians, some of which are severely imperiled and/or endemic. Roading and amphibia n dispersal/movement: Salvage roading must allow for proper culverts and other methods of securing streams, spring patches, wet zones from fragmenting amphibian populations. Amphibians tend not to cross active roads successfully, resulting in severe isolation of subpopulations into tiny patches, which are more susceptible to local extinction. (only invasive and damaging bullfrogs might be good crossers, carrying increased chytrid parasites, MORE lethal to native amphibian). Insufficient study of salvage logging's effects on CA species of special concern has occurred. How can salvage logging be permitted when this is the case? Some relevant references : Richard T. T. Forman and Lauren E. Alexander Roads a nd Thei r Ma jor Ecological Effects Annual Review o[Ecology and Systematics Vol. 29, (1998) , pp. 207-231+C2 Published by: Annual Reviews Stable U RL: http://www.jstor.org/stable/221 707 Significant disturbance and red uction of salamander population due to logging roads (but not to Maine frog species - CA Species of Special Concern, like red & yellow legged frogs might suffer more, as they require wetter, cooler habitat: Some species of special concern in CA salamanders: California tiger salamander - Ambystoma californiense, Siskiyou Mountains salamander, Plethodon stormi , Scott Bar Salamander? Red and Yellow-legged Frogs de Maynadier, P. G., and M. L. Hunter J r. "Road effects on amphibian movements in a forested landscape." Natural Areas journal 20, no. 1(2000): 56-65. complete CA Special Animals list http:/jwww.d fg.ca.gov/wildli fe/nongame/list html Trombulak, S. C. and Frissell, C. A. (2000), Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities. Conservation Biology, 14: 18-30. doi: 10.1046/j.1 523-1739.2000.99084.x Abstract: Roads are a widespread and increasing feature of most landscapes. We reviewed the scientific literature on the ecological effects of roads and found support for the general conclusion that they are associated with negative effects on biotic integrity in both terrestrial and aquatic ecosystems. Roads of all kinds have seven general effects: mortalityfrom road construction, mortalityfrom collision with vehicles, modification of animal behavior, alteration of the physical environment, alterution of the chemical environment, spread of exotics, and increased use of areas by humans. Road construction kills sessile and slow-moving organisms, injures organisms adjacent to a road, and alters physical conditions beneath a road. Vehicle collisions affect the demography of many species, both vertebrates and invertebrates; mitigation measures to reduce roadkill have been only partly successful. Roads alter animal behavior by causing changes in home ranges, movement, reprod uctive success, escape response, and physiological state. Roads change soil density, temperature, soil water content, light levels, dust, surface waters, patterns of runoff, and sedimentation, as well as adding heavy metals [especially lead), salts, organic molecules, ozone, and nutrients to roadside environments. Roads promote the dispersal of exotic species by altering habitats, stressing native species, and providing movement corridors. Roads also promote increased hunting, fishing, passive harassment of animals, and landscape modifications. . . . . Our review underscores the importance to conservation of avoiding construction of new roads in roadless or sparsely roaded areas and of removal or restoration of existing roads to benefit both terrestrial and aquatic biota.	Project Design Features have been developed to minimize the effects of project activities on riparian areas including streams, springs, and wet meadows as described in Chapter 2 of the final EIS. We used the best available science which included professional judgement to estimate the level of effects on the amphibian analyzed in the final EIS. However, data gaps in the research don't prohibit actions per 40CFR1502.22 in the National Environmental Policy Act process.

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204.06 - WL - General	#12354-5	DeMaynadier, Phillip G., and Malcolm L. Hunter J r. "The relationship between forest management and amphibian ecology: a review of the North American literature." Environmental Reviews 3, no. 3-4 (1995): 230-261. Abstract Questions about the compatibility of forest harvesting practices and conservation of biological diversity are largely driven by concerns that habitat quality for many species may be degraded in intensively managed forest landscapes. We review the literature on relationships between common forest harvesting practices and the distribution and abundance of amphibians, a group that has attracted considerable attention in recent years because of their potential ecological importance in forest ecosystems and because of reports of widespread population declines. Clear-cut harvesting generally has negative short-term impacts on local amphibian populations, especially salamanders.. . . However, research on the influence of forest age suggests that the long-term effects of forest harvesting on amphibians are variable, and for many species these effects can be mitigated if regeneration practices leave adequate microhabitat structure intact. In contrast, long-term effects can be significant in forest plantations, which are often associated with intensive site preparations and stand management practices that modify levels of coarse woody debris and other microhabitats. Other forest practices reviewed for their effect on amphibians include prescribed fire, logging roads, and streamside harvesting. We discuss problems commonly encountered in the experimental design and measu rement of forest amphibian populations, including a notable lack of pretreatment data, and outline several aspects of amphibian-forestry relationships in need of further research. Management recommendations relevant to conserving upland and riparian zone amphibian habitat during forest harvesting are offered.	See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. The Westside Fire Recovery Project is consistent with the recommendations provided in the document (DeMaynadier and Hunter 1995) presented by the commenter. DeMaynadier and Hunter (1995) provide a review of the available research to aid in lowering the effects of land management on amphibians. In particular, the section called “Management considerations” provides several management recommendations for specific habitat types that are intended to retain important features for amphibians. Summary of recommendations for managing forested areas.For Upland habitats:• Retain sufficient residual structure scattered heterogeneously across the stand, thus minimizing the contrast in abundance and distribution of microhabitats between managed stands and natural stands.• Leave scattered patches of live trees and snags rather than widely spaced individual trees during a clear-cut harvest• Provide for scattered recruitment of dead wood on the future standFor Riparian habitats:• Avoid riparian areas as much as possible when building forest roads.• Limit tree cutting 30 to 100 meters (about 100 to 330 feet) from the watercourse The Westside Fire Recovery Project is currently applying these recommendations:Project Design Features or by project design:Upland habitats• Snag retention patches are distributed across salvage harvest units• Legacy components (as described in the Project Design Features) • Trees that don’t meet the probability of mortality will be retained in the salvage harvest unit• Plus protection buffers around Siskiyou Mountains salamander habitat will retain additional snags in salvage harvest unitsRiparian Reserves• Salvage harvest avoids Riparian Reserves (150 to 340 feet buffer depending on site tree height and whether the watercourse is fish bearing) thus riparian areas will retain snags or live trees. • By project design, new road construction avoids Riparian Reserves.
204.06 - WL - General	#12354-6	Because California has declared the Gray Wolf, Canis lupus, an Endangered Species, and populations of the wolf are moving into Southwest Oregon, we can expect wolves to explore KNF in the next very few years. Roading prevents C. lupus from successfully reproducing, at levels of over .75 kilometers of road per square kilometer. I will not here supply the references, as my letter is getting too long, but suffice to say that this figure is extremely well-supported by decades of study. KNF proposes far too many roads for this private profit logging, and must consider that this may be illegal in itself. I will be contacting agencies and organizations on the subjects of Endangered, Threatened, and Species of Special Concern.	The gray wolf is still protected under the Endangered Species Act. Therefore, the wolf is covered in the Wildlife Biological Assessment As described in the Wildlife Biological Assessment, there are currently no wolves occupying the project area. However, if a wolf is confirmed to in the project area, then the Forest is required to contact the U.S. Fish and Wildlife Service to possibly initiate consultation.
204.06 - WL - General	#17387-13	Retain all trees (live and dead) that are over 30 inches DBH unless they are hazard trees. These large trees provide forest structure and wildlife habitat even if dead."	See response to 18909-30.
204.06 - WL - General	#18747-4	Although I have not seen any comments from Wildlife Personnel about how wildlife was affected I urge that those personnel be actively engaged in the planning in order to protect as much habitat and seasonal feed areas for Elk, Deer and Bear as possible. For instance manzanita brush (especially the low growing variety) is a major source of berries and the chinquapin trees provide an edible nut. These are two examples of food sources that may be removed during clearing, burning or providing landing areas.	Wildlife specialists have been active members of the interdisciplinary team for this project. Site preparation focused on areas historically dominated by conifers (Chapter 2 of the final EIS) areas with a high level of hardwoods including manzanita and chinquapin were avoid where possible. Reforestation prescriptions reflect the need for both conifer and hardwood components in the forest landscape.
204.06 - WL - General	#18857-9	No salvage units in special habitat designations such as Northern spotted owl (NSO) activity centers, peregrine falcon or goshawk activity centers. * No salvage units in Bald Eagle Management Areas.	The decision must balance the effects to resources with meeting the purpose and need of the project. Alternative 1 (no action) is included in this decision process.
204.06 - WL - General	#18876-1	Please avoid this plan, and all activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	The decision must balance the effects to resources with meeting the purpose and need of the project. Alternative 1 (no action) is included in this decision process.

Code	Comment Number	Comment Text	Response
204.06 - WL - General	#18909-125	The Siskiyou Mountains Salamander (Plethodon stormi) is endemic to 420 square miles of known habitat in northern Siskiyou County, CA and southern Jackson Country, OR. About 25% of its range overlaps the Happy Camp Fire area. The DEIS at page 136 and 143 states that there are 48 known sites for the Siskiyou Mountains Salamanders in the project area and that "Many of these known sites were affected by the 2014 wildfire" and that "Most of the sites experienced high and moderate severity fire." The DEIS fails to analyze and disclose affects to known sites, suitable habitat and populations of the rare and endemic Siskiyou Mountains Salamanders from the 2014 wildfires. This is important, given that at least 25% of its range may have been affected by fire. The DEIS contains opposite statements. On page 144 it states that, "[t]hese sites have not been surveyed after the fire but it is likely that these sites are still occupied." On page 146 in Table 3-8 it states, "48 known sites and the 2014 fires removed most or all of the tree canopy cover leaving very little habitat; sites are unlikely to be occupied." How is the public or decision maker able to gain an accurate understanding of the affects to these extremely rare salamanders? The DEIS fails the "hard look" NEPA requirement. The DEIS at page 139 states, "Requirements of the 2001 Record of Decision include management of known sites as recommended by species review and conducting pre-disturbance surveys of potential habitat and managing any discovered sites for Siskiyou Mountain salamander and Tehama chaparral snail (both analyzed as sensitive species), and the blue-gray taildropper. It is assumed that pre-fire habitat that burned with high or moderate vegetation- burn severity is no longer habitat so pre-disturbance surveys will not be completed. The analysis indicator for effects on survey and manage species is the number of known sites affected by the project activities." (Emphasis added). KNF Fails to adhere to the Northwest Forest Plan's Survey and Manage Requirements. The Siskiyou Mountains Salamander is a Category A species under the Survey and Manage (S&M) provisions of the Northwest Forest Plan. The Forest Service is directed to survey potential habitat prior to proposed activities and manage known sites. Page 8 of the 2001 S&M Guidelines state: "Surveys Prior to Habitat-Disturbing Activities: Surveys will be conducted at the project level prior to habitat-disturbing activities, and in accordance with Survey Protocols, to avoid loss of undiscovered sites by habitat-disturbing activities. Species sites found as a result of these surveys will be managed as known sites." According to the survey protocol, "Most proposed timber management activities, including . . . salvage would trigger surveys. These types of activities involve reduction of canopy and high levels of disturbance to the substrate."8 8 David R. Clayton et al., Survey Protocol for the Siskiyou Mountains Salamander (Plethodon stormi), V. 3.0 (October 1999) Then the Survey and Manage Report states that, "pre-disturbance surveys will be evaluated for salvage units, road construction, and landings within stands over 80 years of age that contain existing habitat for Tehama chaparral snail, Siskiyou Mountains salamander, or blue-gray tail dropper per the decision of the Responsible Official."	Thank you for pointing out the mistake in the draft EIS. We have corrected this error in the final EIS. The Westside Fire Recovery Project is consistent with the Northwest Forest Plan Standards and Guidelines for those species identified as Survey and Manage that occur in the project area and may be affected by the project activities. The Northwest Forest Plan as modified identify the particular species that should be surveyed prior to implementation and any site where the species is known to occur or suspected to occur should have limited activities. The intent of these surveys are to identify the location of this species prior to ground disturbing activities in order to reduce the potential of negative effects to the habitat or individuals. This means that surveys need to be completed prior to ground disturbance for any one acre. In other words, the project doesn't need to be completely surveyed prior to the start of the project as long as the units with activity have surveys completed prior to the start of activities within those units. The Forest is currently identifying Siskiyou Mountains salamander habitat in the treatment units per the Northwest Forest Plan Standards and Guidelines. However, it is important to acknowledge that surveys are not required to be completed prior to the planning of this project. Planning the Westside Fire Recovery Project will not affect this species because no action can occur until after a decision is signed. A decision is signed after the planning process is completed.

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204.06 - WL - General	#18909-126	There are two major issues with the Survey and Manage requirement violations. First, surveys are not discretionary. Second, even if the surveys were completed, it is doubtful that they would comply with the survey protocol. As established in the survey protocol, "Surveys for animals must occur during the appropriate months: generally late fall through late spring. These times coincide with the fall and spring rainy seasons."9 As indicated by the agency it intends to begin logging before the rainy season. Either way, the Survey and Manage requirements of the Northwest Forest Plan are violated. 9 David R. Clayton et al., Survey Protocol for the Siskiyou Mountains Salamander (Plethodon stormi), V. 3.0 KNF's Impact and Alternatives Analysis is Based on False Assumption: The Service's analysis of the project's impact on Siskiyou Mountains salamander is based on a false assumption, that is that all moderate and high severity burn areas are no longer habitat. As such, it places un-surveyed and surveyed salamanders at risk. Page 32 of the Wildlife BE assumes that "Surveys have identified all occupied habitat." This is false and the Service employees have already flagged this concern internally. (October 1999) (Page 141, emphasis added) On February 15, 2015, Sam Cuenca sent an email to other interdisciplinary team members titled, "Westside and Salamanders URGENT Concern!" in which he raised a concern about salamander surveys and known sites. He wrote, The concern in this project is the use of tractor logging on talus habitats. This is not an action that is conducive to maintaining populations on occupied habitat. We have very limited data on known sites and I have already helped to consolidate the knows (sic) sources for Chad (FS, FWS, Cal Fish and Game, NRIS, CNDDB sources). The thing that I wanted to share is that according to the protocol and the draft conservation strategy when an animal is detected on a parcel of talus the entire talus parcel is considered occupied. We have never been able to survey a 100% sample of talus so we use the presence as an index to the entire parcel/patch. I am not sure where we are with recommendations and pdf development but I am sure we are running out of time. In essence, I believe that tractors should not be on any occupied or presumed occupied talus. This species is endemic, sensitive to disturbance of impaction, and not very mobile from site to site. If it can at all be considered, I recommend that known sites AND un-surveyed potential occupied talus be managed to minimize tractor use on these very sensitive sites. Salvage operations in this status should either be treated with end lining, or dropped. There are not many situations like this on the ground so it should not have a large impact to the alternatives. These sites are endemic and very unique on with westside of the Forest. Disturbing them could affect an entire localized population. I know the project timelines are critical. I believe maintaining the integrity of these species as we manage our forest is even more critical.10 10 Email from Sam Cuenca to Chad Bell (emphasis added). This false assumption, that surveys have documented all known sites, impacts project implementation. The Service provides for a number of project design features, Wildlife-8, 9 and 10. According to the Service's Survey and Manage Report: In order to avoid potential effects to known sites, a protection buffer will be applied to known sites using a Project Design Feature (PDF) thus mitigating potential effects. Therefore, the use of protection buffers for all known sites and surveys of Tehama chaparral snail, Siskiyou Mountains salamander, and blue-gray taildropper will meet the compliance for Survey and Manage requirements. So, there are no sites directly impacted by the treatments in any alternative. As discussed earlier, the agency is not complying with survey requirements. Thus, the project design features which may protect some known areas do nothing for the un-surveyed and unknown salamander populations. Further, the proposed removal of canopy and shade and possible compaction will likely create conditions that would risk salamander survival. Surveys have shown that salamanders use early seral habitat, such as natural recovery areas post-fire. According to the US Fish and Wildlife Service, http://www.fws.gov/yreka/plethodonspecies.html surveys have detected Siskiyou Mountains and Scott Bar salamanders in drier environments within early seral stage stands. The DEIS fails to consider how both salamander species utilize early seral stands. Further it is not clear in the DEIS if the agency is following recommendations in the Candidate Conservation Agreement for these species.	The Scott Bar salamander is not identified as Threatened or Endangered under the Endangered Species Act, Management Indicator Species, survey and manage, or Forest Service sensitive species thus an effects analysis on the Scott Bar salamander is not required. However, the Siskiyou Mountains salamander, as a survey and manage species, requires predisturbance surveys with exceptions as described in the Survey and Manage Report.

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204.06 - WL - General	#18909-127	The spatial scale for Siskiyou Mountains Salamander impacts is set at 130 feet and the Wildlife PDF 8 on page 89 states that sites will be flagged on the ground, however after speaking with Chad Bell at the most recent Sawyers Bar Open House it has come to our understanding that salamander sites are flagged with approximately 20'x 20' buffer. This distance does not provide adequate protection for these rare and endemic species. However, the Wildlife BE states at page 33, "Since this species doesn't move far, we will buffer each known location by 130 feet to represent a maximum distance a salamander might move even though the entire area may not contain suitable habitat." This conflicting information makes writing informed comments difficult. Please do inform us of the proposed distance and length for Siskiyou Mountains Salamander buffers and what types of treatments are happening adjacent to them. Because these species complete their life cycles in an area of approximately 2.5 acres and have not been observed migrating between subpopulations it is crucial to adequately protect all known sites and suitable habitat. The DEIS fails to sufficiently consider the benefits of live green trees in moderate fire severity areas, snags and Coarse Woody Debris (CWD) on shade and microclimates. The DEIS states that, "Even though canopy cover is considered a critical component for Siskiyou Mountains salamander habitat, canopy cover was not analyzed because very little canopy cover is expected to be affected by project activities. Instead, this analysis will focus on assessing the level of risk to local populations based on the amount of habitat disturbed by treatment."	Siskiyou Mountains salamander habitat footprint can vary in shape and size. Depending where on the Forest, the habitat can be rather small (<0.1 acre) or a fair bit larger (several acres). However, the Survey and Manage Survey Protocol does discriminate any site based on the size or shape of the habitat footprint. Per the Survey Protocol for the Siskiyou Mountains Salamander (Plethodon stormii) (1999), a protection buffer is applied around the periphery of the identified site; the periphery is determined by identifying the maximum extent of the habitat. For example, an individual salamander discovered in the center of a habitat patch 100-feet by 100-feet would simply identify that patch as occupied thus the entire 100ft by 100ft habitat patch will be delineated to not receive salvage harvest. In addition to delineating the habitat that is currently occupied or previously confirmed as occupied, the forest is delineating areas that are possibly occupied but no salamanders have been found in the area. The Northwest Forest Plan only requires the protection of known sites or newly discovered sites as a result of pre-disturbance surveys, but given the importance of this species, the Forest has expanded the protection areas to include areas with no detections but contains higher quality suitable habitat that may become occupied in the future. See response to comment 12346-55 about green trees.
204.06 - WL - General	#18909-44	The DEIS and the BA fail to consider the threat of Barred owls within the project area and they provide no analysis of barred owl presence in the project area. The assumption that "salvage would accelerate the restoration of suitable NSO habitat, and fuels treatments would reduce fuel loadings and risk of stand-replacing fire" is not based on the best available science.	The BA provides an analysis of the barred owl and spotted owl interaction in the section called "effects on prey, competitors or predators".

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204.06 - WL - General	#18909-51	Eleven goshawk nests have been occupied at some point in the last twenty years within or near the project area. Only one of the nest sites meets the standards for habitat minimums, which is mostly outside the fire perimeter. The project proposes treatment within 0.25 miles of six goshawk nest sites (Kohl, Beaver, China, Elk, Middle, and Hickory). The project would remove habitat around four nests (Beaver, Hickory, Kelsey and West Whites) causing a high level of risk to reproduction. Goshawks, like many other rare, long-lived species, show great fidelity to certain spatial elements within landscapes (meadows, northerly aspects, water sources), and are unlikely to be successfully managed with an approach based solely on acres of suitable forest structure. The DEIS violates the KNF LRMP 8-10 Requirements for goshawks: I. Primary Nest Zone Establish a 0.5 mile radius circle (504 acres) around the last known nest or the geometric center of a cluster of all known nests. Within this circle, maintain 40% (200 acres -- California Cascades/Eastern Klamath Province) or 60% (300 acres -- Western Klamath/California Coastal Provinces) in dense mature forest cover (>>60% CC, >>24 inches DBH [4B,C+]). The existing nest stand should be used to determine desired forest structure. This 200-acre (or 300-acre) area should include the active and historic nest stands and be as contiguous as possible relative to existing conditions. The remaining 60% (or 40%) should be managed for a habitat mosaic dominated by large-tree conditions and open understories (3N,G - 4P,N,G+), but lower canopy closure (40-60%) and small openings are allowable. Encourage the use of underburning, precommercial thinning and fuels reduction to achieve desired habitat conditions. II. Foraging Habitat Zone Establish a 1-mile radius circle (2,010 acres: 1,506 acres excluding Primary Nest Zone) centered on the Primary Nest Zone. Maintain 60% (900 acres) in a mosaic of mid-mature (3N,G+) to late-successional forest condition. Desired conditions include open understories, large CWD, large snags, and small openings. The remaining 40% can be younger stands with small openings. Encourage the use of underburning, fuels reduction, and thinning to achieve desired habitat conditions. III. Disturbance Restrict habitat-modifying activities between March 1 and August 31 within Primary Nest Zone (0.5 mile radius). Restrict loud and/or continuous noise within 0.25 miles of active nest sites during the same period. Normal levels of vehicle traffic on existing roads may be excluded in cases where goshawks appear to be habituated to such activities. Please elaborate on PDF-6. PDF-6 states: A survey strategy will be developed prior to project implementation for goshawk. If survey results locate a nesting pair project activities will not occur within .25 miles of this site location from (March 1- August 31). If preimplementation surveys determine no nesting activity, then seasonal restrictions may be lifted for the year. (Page 89). Please identify which approved survey strategy KNF will utilize. At a Forest Service open house in Sawyer's Bar, Chad Bell indicated that the Forest Service is currently performing broadcast surveys. Note, the Klamath LRMP states, "Planned timber sale areas should be surveyed to Region 5 protocol for goshawks for a minimum of 1 season (intensive protocol) or 2 seasons (broadcast only)."6 The survey protocol utilized by Region 5 requires that broadcast surveys be completed "at least twice in a given year."7 If surveys have already been completed, please indicate so. 6 Klamath National Forest Standards and Guidelines # 8-20. 7 Woodbridge, B.; Hargis, C.D. 2006. Northern goshawk inventory and monitoring technical guide. Gen. Tech. Rep. WO-71. Washington, DC: U.S. Department of Agriculture, Forest Service. 80 p at 3-14	Clarification: The Standard and Guideline the commenter is quoting from is 8-20, not 8-10. Standard and Guideline 8-20 does outline the requirements for primary nest zones, foraging habitat zone and disturbance restriction. The Standard and Guideline is prefaced with a recommendation that "Implementation should be integrated into landscape-level planning for diversity, rather than approached as single-species protection". The Biological Evaluation analyzes relative to the Standard and Guideline and allows the responsible official to compare the effects to Northern Goshawks in concert with the landscape objectives including fuels reduction, hazard tree removal and reforestation. The survey strategy will include stand searches and broadcast surveys to identify new or alternate nests. Known nest sites will be visually surveyed as to minimize disturbance to nesting Northern Goshawks. The survey strategy can be found at http://www.placer.ca.gov/~/media/cdr/ECS/EIR/Homewood/Biological/BIO%2034_Forest Service_2000.PDF.
204.06 - WL - General	#18909-53	The endemic Scott Bar salamander (Plethodon asupak), discovered in 2001, is currently known to occur in a very small area near the confluence of the Klamath and Scott Rivers. The international Union for Conservation of Nature has assessed it as being a "vulnerable species". Both the Siskiyou Mountains and the Scott Bar salamander have the smallest ranges of any western salamanders in their genus. The loss or decline of salamanders from forest ecosystems has important consequences up and down the food chain. Salamanders play a key role in forest nutrient flow, regulating the abundance of soil invertebrates that are responsible for the breakdown of plant detritus. Salamanders' loss from forests is indicative of changes that will likely affect a broad array of species. The Westside project area contains Scott Bar salamander habitat but the agency fails to survey or analyze any effects to this species.	The Scott Bar salamander is not considered threatened, endangered, or proposed under the Endangered Species Act not does this species appear on the Forest Service Sensitive Species, Management Indicator Species, or Survey and Manage species lists. Therefore, the Scott Bar salamander is not required to be analyzed in this project.

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204.06 - WL - General	#18909-54	KNF LSRA 1-46, "Although no amphibian surveys have occurred within Eddy Gulch LSR, suitable areas are likely occupied by Del Norte salamander. Del Norte salamanders have recently been confirmed to the south in Cecil Creek; just to the west, at Idlewild Campground; and just to the north near Jessups Gulch." The Westside NEPA analysis fails to consider effects to Del Norte Salamanders another rare and endemic species.	The Survey and Manage species list is subject to change. The Del Norte salamander was originally listed as a Survey and Manage species in 2001, but due to recent legal proceedings, the list of Survey and Manage species has been modified again as described in the Forest Service Regional Guidance 2014. Excerpt from Forest Service Regional guidance: “This memorandum provides direction for implementation of the January 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (Forest Service et al. 2001) and is based on the district court’s remedy order issued on February 18, 2014 (Conservation Northwest v. Bonnie, W.WA number C08-1067-JCC). This remedy order followed after the 9th Circuit Court of Appeals rejected the 2011 Consent Decree executed in resolution of the district court action (Conservation Northwest, et al v. Harris Sherman, et al and D.R. Johnson Company, 715 F.3d. 1181, C.A. 9 (Wash), April 25, 2013).”
204.06 - WL - General	#18909-56	The Forest Service Must Survey for Sensitive Bats: Klamath LRMP 8-39 directs the Service to "[c]onduct surveys of crevices in caves, mines and abandoned wooden bridges and buildings for the presence of roosting bats, including fringed myotis, silver-haired bats, long-eared myotis, long-legged myotis and pallid bats" within Matrix and AMA lands. The LRMP further states, "As an interim measure [until surveys are conducted], timber harvest is prohibited within 250 feet of sites containing bats." The Klamath LRMP at page 4-19 further states, "2-7 Management activities near a cave, or the course of such a cave, should be designed in a way to insure protection of the cave resources until a determination can be made about the significance of the cave resource. Cave inventories and the determination of significance should be based on the process outlined by the 1988 Federal Cave Resources Protection Act." As provided in the Wildlife BE at page 42, there are "a few bridges in the project area that may provide the structure for a bat roost" and "there are 58 sites identified containing a case, mine, or the potential to contain either of these structures." The BE does not contain any information about survey efforts. If the Forest Service does not survey for bats, it must prohibit project operations within 250 feet of potential sites. According to table 10 on page 28 of the Wildlife BE, the Forest Service categorizes prolonged activities within 250 feet of potential habtat-i.e., one of the 58 sites identified above-as having a high risk of disturbance. As indicated in table 31, all project alternatives will include actions within 250 feet of a potential bat site. These actions within 250 feet of a cave are not in compliance with the Klamath's LRMP. The DEIS does not adequately disclose any actual analysis and contains only conclusory results of cumulative effects to bat species. The Wildlife BE at page 60 states, "The direct and indirect effects for each of the alternatives plus the cumulative effects will result in about doubling the number of sites with a high risk of disturbing bats." High risk of disturbance may result in a maternity roost being abandoned with the fate of the offspring likely dependent on their age. High disturbance of a hibernaculum will likely result in all bat ages leaving the warmth of the cave to the colder outside; this may result in death of the bats. The DEIS fails to analyze or disclose how this will affect bat populations and their viability.	A project design feature was added between the draft EIS and final EIS to exclude salvage within 250 feet of cave or mine openings. Hazard trees that are felled within 250 feet of a cave or mine opening will be left on site. Ground based and skyline salvage harvest are the activities likely to affect caves resources in the project area. There only one skyline salvage unit proposed in areas underlain directly by limestone or marble bedrock (unit 208) which have high probability of caves. A field survey was completed by the Forest Geologist and no caves were found in the unit. There are a few locations where hazard tree removal units overlap with limestone and marble bedrock. However, the effects to caves from dropping and leaving hazard trees will be small. The probability of affecting a potential significant cave is very low (Geology report as amended). The effects to Forest sensitive bat populations is analyzed in the Terrestrial Wildlife Biological Evaluation and was summarized in the draft EIS. The Wildlife Amendment clarifies the activities anticipated to disturb bat species and the level of effects. All activities were considered to have some level of disturbance to bats if near potential hibernacula except grazing for cumulative effects. This includes underburning, hand piling and chainsaw noise.
204.06 - WL - General	#18909-58	The Caroline Creek eagles nest area, which has been active for decades would be destroyed. The project would remove 180 acres of habitat within 600 feet of the nest, making a high risk of eagles abandoning the nest during the nesting period and a high risk of the eagle pair not finding a nest tree in the future. Three other nest sites, Donna, Muck-A-Muck, Frying-pan and three winter roost sites exist along the Klamath and Scott Rivers, occur within the project area. The Westside project proposes treatment within 0.5 miles for all four bald eagle nest sites, all four nest sites have been active recently and are likely to continue to be active. The DEIS fails to meet the KNF LRMP MA5-43 which requires that management is to protect and maintain nesting and roosting sites.	Forest Plan Standard and Guideline Management Area 5-43 was considered in the analysis and project design features. However, Forest Plan Standard and Guideline Management Area 5-57 provides an exemption for hazard tree removal and salvage activities that benefit eagle habitat. The salvage harvest reduces fuels around bald eagle nests and roost sites which is beneficial for reducing future wildfire behavior/severity in the future.
204.06 - WL - General	#18909-59	Willow Flycatcher Willow flycatchers breed in moist, shrubby areas, often with standing or running water and winters in shrubby clearings and early successional growth. Habitat for the species was assumed rd to be 3 order streams and wet meadows. The Westside project would result cumulatively in four watersheds shifting from a low to a high level of habitat alteration. The Westside DEIS fails to consider wintering habitat and the effects of grazing on riparian willow habitat.	The Willow Flycatcher is a migratory bird that is a summer resident of California but winters in Central and South America. Therefore, the project doesn't affect Willow Flycatcher wintering habitat. Grazing does occur in the project area and is considered in the cumulative effects of the Willow Flycatcher.

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204.06 - WL - General	#18909-60	Western bumblebee (Bombus occidentalis) populations have declined dramatically in recent years and like other species of bumblebees, it is sensitive to habitat disturbance. In the project area, high-quality habitat for bees is likely to occur in the meadows where several species of flowering plants occur. Meadows also offer a high density of plants to provide additional structure and small animal burrows that bees also use for nesting. The western bumble is likely to occur over much of the KNF although it has only been incidentally observed. The actual distribution of the bee on the forest is not known. Although the species is not exclusively associated with meadows, there is a strong relationship with its habitat needs and meadows. As stated in the Wildlife BE at page 36, the Western bumblebee "prefer open meadow like areas with a high diversity of plan structure with an abundant amount of flowering plants." The meadows upon which Western bumblebees rely upon are likely in healthy shape, but for the project. As indicated in the DEIS on page 160: "According to the vegetation burn severity data, most of the 4,000 acres of meadows in the project area burned at low severity in the 2014 fires; therefore it is likely that many of the meadows still contain vegetation which can provide basic structure for a bumble bee nest site and will produce flowering plants this spring." According to the Wildlife BE, all alternatives would produce a "high" level of disturbance in five 7th field watersheds, indicating that five or more acres of meadow habitat will be disturbed. Further, the project alternatives would produce a "moderate" level of disturbance for another five 7th field watersheds. Cumulative effects with other projects would result in another three watersheds going from a low level of disturbance to a moderate level. A high level of disturbance in five meadows would result in affecting at least five bee colonies where reproduction will be compromised. Moderate level of disturbance will result in eight colonies of bees traveling further to find food resources if a colony is present within close proximity to the treatments. The Westside project would diminish eight and destroy five meadows and possibly five colonies. This is contrary to maintaining and enhancing meadows as directed in the KNF Forest Plan. These meadows are possibly culturally significant areas. The Klamath LRMP contains standards and guidelines for Forest Service actions involving meadows. In particular, the Service is directed to "Maintain or enhance meadows where appropriate." (8-42). Further, "Proposed management actions should be evaluated as part of the environmental analysis process. Proposed actions also should consider such factors as the availability of meadow habitat within the landscape and the known or suspected use of the area by wildlife." (8-43). The DEIS and Wildlife BE violate the KNF LRMP and the R5 FSH 2509.22 - Soil And Water Conservation Handbook, Chapter 10 - Water Quality Management Handbook12.11 Exhibit 18, BMP 1.18 - Meadow Protection During Timber Harvesting which states, "As a minimum, meadow protection requirements contained in the forest LRMP must be identified and implemented." Further, the R5 FSH 2509.22 - Soil And Water Conservation Handbook, Chapter 10 - Water Quality Management Handbook12.51 Exhibit 03, BMP 5.3 - Tractor Operation Limitation in Wetlands And Meadows, states: Objective: To limit turbidity and sediment production resulting from compaction, rutting, runoff concentration, and subsequent erosion by excluding the use of mechanical equipment in wetland and meadows except for the purpose of restoring wetland and meadow function. Explanation: This is a preventative practice designed to preclude the concentration of surface runoff and soil compaction, which can lead to rill and gully erosion with associated turbidity and sedimentation. This measure precludes, or reduces the need to take corrective measures to dissipate concentrated surface water runoff.	There are Project Design Features that are designed in the meet the Best Management Practices 1.18 and 5.3. See Appendix D in the final EIS.
204.06 - WL - General	#18909-61	Franklin's bumblebee (Bombus franklini) was historically found only in a small area in southern OR and northern CA. The Westside project has habitat and past known locations for the bee, however, no surveys or consideration are given to this imperiled bee species. Franklin's bumblebee has the most restricted range of any bumblebee in the world (please see Franklin's Bumblebee Range Map). Its entire distribution can be covered by an oval of about 190 miles north to south and 70 miles east to west. Populations were readily found throughout its range throughout the 1990s but have declined precipitously since 1998; subsequent yearly surveys have suggested this bee is in imminent danger of extinction.	The Franklin's bumble bee is not identified as Threatened or Endangered under the Endangered Species Act, Management Indicator Species, Survey and Manage, or Forest Service sensitive species thus an effects analysis on the Franklin's bumble bee is not required. However, the western bumble bee which is identified as a Forest Service species was analyzed for this project and the effects are displayed in the Wildlife Biological Evaluation.

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204.06 - WL - General	#18909-63	The cumulative effect will be 1,318 acres of hardwood habitat being removed and would not function as habitat in the near future. Please define hardwood habitat. Many hardwood tree species are culturally significant. Species recognized on the KNF as being associated with hardwoods are the Acorn woodpecker and the Western gray squirrel. The KNF LRMP standards require that pure hardwood stands be managed for wildlife habitat values and to maintain or improve the presence of Oregon white oaks.	Site preparation focused on areas historically dominated by conifers (Chapter 2 of the final EIS) areas with a high level of hardwoods were avoid where possible. Reforestation prescriptions reflect the need for both conifer and hardwood components in the forest landscape. Hardwood stands are defined as areas with more than 40% of the basal area being made up of hardwood species (Forest Plan Final EIS, page 3-35). The species assemblages considered for hardwood management indicator species is in the Forest Plan Final EIS on page 3-37. Oregon white oak is listed here.
204.06 - WL - General	#18909-65	The distribution of marten (Martes Americana) in the project area is not well know and martens have not been detected at any of the fisher survey stations nor have surveys been done to assess population distribution. Martens are known to occupy higher elevations with true fir forest types so while habitat exists in the project area, the DEIS claims they are not likely to occur in the project area. True fir high elevation stands occur near Tyler Meadows, Eddy gulch ridgeline and within the Grider Creek drainage. Like fisher, marten are also associated with late-successional conifer forests characterized by an abundance of large dead and downed wood and large, decadent live and dead trees. The DEIS fails to analyze or disclose where and how many acres of true fir forest stands are located and the effects that treatment will have on marten populations.	In the project area, marten more likely to be moving through the area than establishing a home range. Therefore, we thought habitat connectivity is likely a more important measure of affects than the change in acres of habitat. The habitat connectivity analysis takes into account the change in habitat and provides a measure that reflects how treatment within each Alternative might affect a marten's likelihood to move within a watershed. The analysis indicator is site specific and it is sensitive to the proposed activities.
204.06 - WL - General	#18909-66	There are sixteen documented detections of wolverines (Gulo Gulo) in the project area but the wolverine has not been observed on the KNF since the 1980's. The wolverine's home range is 38 to 347 square miles with the closest located study to the project area reporting an average of 130 square miles. Wolverines are typically associated with high elevation >7,200 feet within conifer forest consisting of Douglas fir in lower elevation to true fir and lodgepole pine at higher elevation. The DEIS fails to adequately consider effects to wolverine.	The Wildlife Biological Evaluation and summarized in final EIS does analyze the effects of the project on wolverine. The wolverine is more closely associated with higher elevations that are distant from humans such as the Marble Mountain Wilderness. The Marble Mountain Wilderness is in the analysis area but no treatment is proposed in the wilderness; if a wolverine occupied the portion of the wilderness that boarders the project, the wolverine may experience some noise disturbance but the project is more likely to affect a wolverine crossing the landscape. Ruggiero and co-authors (1994) identified the need to consider movement corridors for wolverines to ensure wolverine can move from one large block of habitat to the next. As described in the Wildlife Biological Evaluation, providing movement corridors is important for wolverines (discussed in the Wildlife Biological Evaluation). The habitat connectivity analysis estimates the effects the project may have on the likelihood a wolverine being able to move across the landscape.
204.06 - WL - General	#18909-67	The Gray wolf (Canis lupus) is a culturally significant, Federal and State listed Endangered species. The DEIS fails to consider the significant effect of the large scale habitat removal and disturbance, as considered in the Westside project, would have on this Gray wolves. The Wildlife BA page 6 states, "There is no scientific evidence that wolves have occurred within the analysis area for over 100 years. The single individual is currently hundreds of miles from the analysis area." If the agency took the time to look at a map it would see (See Wolf Use Map, January 15) that the Rogue Pack is approximately 60 miles away and the Keno wolves are approximately 80 miles from the project area. OR-7 is not a single individual. He has a pack (information on the Rogue Pack was provided in our Scoping comments). This includes his mate and three pups from last year. It is expected that the pack will have more pups born this year. There have been two individual wolves located in the Keno area. Wolves may not have been in the project area for 100 years but scientific evidence and common sense show wolves will be returning to CA in the next decade, as seen in WA and OR. OR-7 made northern CA part of his home range for four years prior to raising his pack. Wolves need more than food. They need a connected landscape and prefer low road density12. Because much of the expected habitat for wolves is on national forests, particularly the Klamath National Forest13 14, land managers need to start preparing for their return and their recovery. 12 Carroll, Carlos, McRae, Brad H. and Brookes, Allen. Use of Linkage Mapping and Centrality Analysis Across Habitat Gradients to Conserve Connectivity of Gray Wolf Populations in Western North America. Conservation Biology, Volume, No., 1-10 13 California Department of Fish and Game Gray Wolves In California An Evaluation Of Historical Information, Current Conditions, Potential Natural Recolonization And Management Implications. December 2011 14 Larson, Tad and Ripple, William. Modeling Gray Wolf (Canis lupus) habitat in the Pacific Northwest, U.S.A. Journal of Conservation Planning. Vol. 2 (2006) 17-33 We are curious to know if a qualified wildlife biologist wrote this section of the BA. If so, we question the level of competency within the agency and reiterate the need for the US Forest Service to work with the California Department of Fish and Wildlife and more closely with the US Fish and Wildlife Service.	See response to comment number 12354-6

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204.06 - WL - General	#19-4	"A substantial amount of long-term wildlife habitat was lost as a result of the 2014 fire season., including an estimated 31,000 acres of northern spotted owl (a federally listed species under ESA) habitat and an estimated 47,000 acres of Pacific fisher (a candidate for listing under ESA) habitat". DEIS page 13 "Large portions of Late-Succesional Reserves and habitat burned with high severity fire" DEIS page 13 If various "protective" land allocations are to have any positive, on the ground effect in the future, an analysis should detail the end of the implementation of these land allocations within the Westside Fire Recovery Project.	The final EIS summarizes the effects to both Northern Spotted Owl and pacific fisher in the wildlife environmental consequences section in Chapter 3. The simple measure of habitat removed does not capture the complex effects that the Westside Fire Recovery project may have on wildlife and viable populations. So more synergistic indicators were used to describe effects. The analysis outlines the effects to Northern Spotted Owl risk to reproduction and changes in critical habitat. Effects to pacific fisher were based on connectivity and home range potential.
204.06 - WL - General	#3678-21	T&E Wildlife Species – No Action direct and indirect effects "Northern Spotted Owl Alternative 1 will not plant any trees or create fuel breaks to protect the project area from future wildfires. Northern spotted owls lost a large part of their habitat in the project area as a result of the 2014 fires. Planting can play an important part in expediting the forest regeneration and development of northern spotted owl critical habitat. Fuels treatments can also aid in reducing the likelihood of additional northern spotted owl habitat burning at high severity." "Fisher, Marten and Wolverine The 2014 fires removed a large portion of the habitat for these species (habitat associated with older forests with dense canopy cover), thus reducing the number of home ranges for these species. The loss of habitat is likely to continue if another wildfire begins, thus continuing to set back the development of forested habitat. The high-severity burned forest is not likely to provide much habitat for use by these species since most of the vegetation cover has been removed. The connectivity in the watersheds is likely to decline from current condition as this occurs (see the affected environment section). A lack of overhead cover resulting from the 2014 fires is likely to obstruct the movements of fisher and marten but, as the snags start to fall over along with shrub growth, the area may provide enough physical structure for fisher and marten to move across these openings. The loss of cover will affect marten and fisher much more than wolverine. MIS Wildlife – No Action direct and indirect effects "Snag Associated Species In this alternative, there will be no removal of trees, road construction, or any other activities associated with the project. Potential negative effects of no action would be high fuel loads and risk of future high severity fire adjacent to remaining habitat or within regenerating habitat. Positive effects would include the total retention of snags which are important habitat features within remaining late seral closed canopy coniferous habitat. "Hardwood Associated Species Alternative 1 does not have any direct effects on hardwood-associated species. Hardwood stands burned with moderate or high severity effects in the 2014 fires are not likely to meet the needs of these species because they are completely or partly dependent on hardwood mast as a food source. Without a food source, the species are likely to leave this fire-affected habitat to occupy areas with live trees. In the long-term, some of the hardwoods will re-sprout and provide future habitat for these species assuming wildfire doesn't return in the near future. An indirect effect of alternative 1 comes from the large fuel loads within or adjacent to the hardwood stands that are likely to contribute to another wildfire occurring that will prevent these stands from developing into a hardwood forest. "Migratory Bird Species This alternative will have no direct or indirect effect on the compliance with the MOU between the USDA Forest Service and USDI Fish and Wildlife Service. Migratory birds affected by the 2014 fires will continue to be threatened by the possible re-occurring wildfires that may affect unburned habitat. Bird species associated with snags and early seral habitat will have abundant habitat and predicted future wildfires will add to this already abundant habitat." Ms. Johnson, Mr. Yost, and Mr. Bell, please become familiar with the real wildlife/fire science below. Most wildlife biologists learn this in college and apply the knowledge to their work. "Animals, as well as plants, can benefit from fire. Some individual animals may be killed, especially by catastrophic fires, but populations and communities are rarely threatened. Many species are attracted to burned areas following fires — some even during or immediately after the fire." Congressional Research Service Report "Forest Fire/Wildfire Protection" February 14, 2005 http://www.coloradofirecamp.com/congressional_research/forest-fire-wildfire-effects.htm "Recently burned areas represent an important type of habitat that many species of animals have evolved to utilize. Snags (standing dead trees) provide critical nesting and foraging habitat for birds and small mammals, and as they decay and fall, create additional habitat for small mammals and terrestrial amphibians as coarse woody debris." Campbell, John L. Ph.D, Dan C.	The analysis presented in the Wildlife Biological Evaluation, Biological Assessment, Survey and Manage, Management Indicator

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		Donato, Joe B. Fontaine J. Boone Kauffman Ph.D., Beverly E. Law Ph.D., and Doug Robinson "Biscuit Fire Study." Oregon State University Department of Forest Science Terrestrial Ecosystem Research and Regional Analysis. 2003. http://zircote.forestry.oregonstate.edu/terra/biscuit.htm "We do not need to be afraid of the effects of wildland fire in our forests. Fire is doing important and beneficial ecological work," said the report's author, Dr. Chad Hanson, a forest and fire ecologist and Director of the John Muir Project. "It may seem counterintuitive, but the scientific evidence is telling us that some of the very best and richest wildlife habitat in western U.S. forests occurs where fire kills most or all of the trees. These areas are relatively rare on the landscape, and the many wildlife species that depend upon the habitat created by high-intensity fire are threatened by fire suppression and post-fire logging." Hanson, Chad Ph.D. February 2, 2010 "New Report Debunks Myth of 'Catastrophic Wildfire' " http://johnmuirproject.org/documents/Myth%20of%20Catastrophic%20Wildfire%20Media%20Release.pdf "Contrary to what you may think, a forest fire does not reduce everything to a lifeless ash. Instead, it leaves behind a landscape of blackened trees interspersed with remnants of green, intact forest. Post-fire specialists such as wood-boring insects quickly colonize the dead trees (snags), attracting an array of woodpeckers." "Identifying the ecological value of a post-fire structure and the characteristics that make it attractive to wildlife is important." Nappi, Antoine Ph.D., Pierre Drapeau Ph.D., Jean-François Giroux Ph.D. and Jean-Pierre Savard Ph.D. "Snag use by foraging black-backed woodpeckers (Picoides articus) in a recently burned eastern boreal forest." The Auk 120(2): 505-511. 2003. http://www.borealcanada.ca/research_arc_hot_e.cfm Observation: Ms. Johnson, Mr. Yost, and Mr. Bell, perhaps you know about this wildlife/fire relationship and you might have used it had you not been directed to push the timber sale by describing how No Action will be a poor choice whether it's true or not. Opposing Views Attachment #8 contains 26 more science conclusions showing that post-fire conditions benefit wildlife. Did you really believe the public wouldn't notice that your effects disclosures are inconsistent with best science?	
204.06 - WL - General	#5873-138	One study in the southern Oregon Coast Range found that flying squirrels disproportionately chose large snags (80% >50 cm) for nesting. See Carey, Wilson, Maguire, & Biswell; DENS OF NORTHERN FLYING SQUIRRELS IN THE PACIFIC NORTHWEST, J. WILDL. MANAGE. 61(3):684-699 http://www.fs.fed.us/pnw/pubs/journals/pnw_1997_carey001.pdf	Carey et al. 1997 describes the use of den sites by northern flying squirrels from 3 forest sites. Den sites varied widely based on availability of nest site, availability of food, predator avoidance, social interactions and location, weather, understory canopy etc. Size of snags was not the primary factor of use, as squirrels used both snags (cavities) and nests (on branches/boles). Carey does state that there appears to be a relationship between the use of large, old trees (live and dead) and squirrel abundance. Additionally, the article states that two-thirds of all nests were in live trees (not snags), regardless of region and that live trees were most often residual trees >50cm diameter at breast height. "Live trees offer several advantages that snags lack: overhead branches provide extra protection from weather; protection from predators in the form of cover and escape routes; and persistence for a long time, first as a live tree, and eventually as a snag. The high use of live trees suggests that cavity dens of flying squirrels may be best described in terms of decadence and cavity trees (live and dead), rather than snags." In particular, the article states, " live trees are important den structures for mammals (and many birds, including spotted owls), regardless of seral stage. Forest managers should consider live den and nest trees when managing for flying squirrels, spotted owls, and late-successional forests. Leaving large snags is a management option, but current federal safety regulations require leaving a large buffer area around any retained snag (Myers and Fosbroke 1995) and snags may have to be retained in clusters away from management activity. Snag retention may not be feasible in many situations; den tree management can augment cavity tree management. Live trees with cavities can be retained with few safety restrictions. Live trees will continue to grow and persist over a much longer period than snags, eventually develop into snags, and require less management intervention over time. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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204.06 - WL - General	#5873-25	Jerry Franklin - What is a 'Good' Forest Opening? – Powerpoint http://courses.washington.edu/esrm315/Lectures/FranklinEarlySuccession.pdf e. all the new science related to salvage logging and dead wood, including but not limited to: Beschta R.L., J.J. Rhodes, J.B. Kauffman, R.E. Gresswell, G.W. Minshall, J.R. Karr, D.A. Perry, F.R. Hauer, and C.A.Frissell, 2004. Postfire management on forested public lands of the western USA. Cons. Bio.,. http://pacificrivers.org/files/post-fire-management-and-sound-science/Beschta-etal2004.pdf and Rose, C.L., Marcot, B.G., Mellen, T.K., Ohmann, J.L., Waddell, K.L., Lindely, D.L., and B. Schrieber. 2001. Decaying Wood in Pacific Northwest Forests: Concepts and Tools for Habitat Management, Chapter 24 in Wildlife-Habitat Relationships in Oregon and Washington (Johnson, D. H. and T. A. O'Neil. OSU Press. 2001) http://web.archive.org/web/20060708035905/http://www.nwhi.org/inc/data/GISdata/docs/chapter24.pdf	There is no project specific comment. However, the final EIS provides information concerning tree planting and salvage harvest in Chapter 3 of the final EIS in the sections called "Responsible opposing views and agency's response to issues raised".
204.06 - WL - General	#5873-27	"[T]here's a looming shortage of diverse young forests - where seedlings intermingle with fallen logs, standing dead snags, and shrubs - that provide specialized habitat for certain animals and plants. … there's a looming gap in diverse, young, early-successional conifer forest, the type of forest that once came in naturally after forest fires. These young forests, up to 10 years old, have a diversity of forest structures - fallen logs and dead snags - and a diversity of plant life. They are important habitat for the western bluebird and other birds that prefer open areas, as well as some shrub species. Today, because of intense timber management on private lands, young forests don't get the chance to develop much diversity." OSU. 2001. Press Release: Researchers Assess Forest Sustainability. http://web.archive.org/web/20060914032259/http://oregonstate.edu/dept/ncs/newsarch/2001/Oct01/assess.htm	Preparing an EIS on young complex forests is outside the scope of the project. The project does not disagree on the value of young early successional forests. Project design features that include snag retention and coarse woody debris considerations are intended to maintain the components of structural complexity in the treatment stands. However it is important to note that these quotes are taken out of context. The article was addressing the shortage of early seral forests such as oak savannas, not post-fire event created early seral conditions. The article pointed out that federal management actions focus on creating and maintaining old growth forests, which are expected to increase in the future. Little management focus has been given to younger forest stand conditions. This article does not make any recommendations regarding post-fire salvage or that post-fire conditions are considered early seral forests. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.06 - WL - General	#5873-37	Not surprisingly, concern has arisen over viability of populations that use broadleaf vegetation in early-seral forest, particularly as this habitat type contributes disproportionately to forest biodiversity (Halpern and Spies 1997).	Early-seral broadleaf habitat is generally described in the article titled Thresholds in Forest Bird Occurrence as a Function of the Amount of Early-Seral Broadleaf Forest at Landscape Scales written by Betts and co-authors (2010) as broadleaf vegetation with a quadratic mean diameter of <10 cm. This habitat type could be created by moderate or high fire severity that may consume a portion of a broadleaf tree, but the tree re-sprouted from the base of the tree or possibly along the trunk of the tree. The Westside Fire Recovery Project isn't targeting hardwoods for removal or stand conversion. Areas for reforestation are conifer dominated stands that were identified using step-wise process described in Chapter 3 of the final EIS. Salvage harvest targets conifers and avoids broadleaf tree species. However, fuels treatments that occur in fuel management zones of roadside fuels treatments for example, may remove some small broadleaf vegetation to reduce fuels but the focus of the treatment is to remove small dead woody material.
204.07 - Migratory Birds	#12346-64	The DEIS and Migratory Bird Resource Report contain no actual data or analysis to support the conclusions reached by the agency. The brief description of habitat types does not constitute a hard look and the effects of project implementation on species at the site scale or the regional level. Population trends are ignored and no attempt is made to link forest practices to population levels or reproductive success. Interestingly, the MBRP mentions the "Partners in Flight specific habitat conservation plans for birds" but neglects to analyze or disclose the PIF recommendations regarding Black Backed Woodpecker conservation in post-fire snag habitat.	The analysis focuses on compliance with the Memorandum of Understanding with the U.S. Fish and Wildlife Service regarding migratory birds. Requirements for complying with the memorandum of understanding are discussed on page 2 of the Migratory Bird Report. The effects are disclosed in the Migratory Bird report including the likely effectiveness of project design features to decrease effects.
204.07 - Migratory Birds	#18909-64	The regional decline of migratory birds is a significant issue. Numerous studies have reported local and regional trends in breeding and migratory bird populations throughout North America. These studies suggest geographically widespread population declines that have provoked conservation concern for birds, particularly neotropical. The 2005 report from the Klamath Bird Observatory indicates that several species of songbirds are suffering declining population trends at the regional level. The DEIS states the project would result in up to 21,650 acres of habitat being affected but fails to consider the actual impacts of proposed treatments on neo-tropical migratory birds.	The draft EIS summarized the effects to migratory birds as a result of the project. The effects analysis is detailed in the Migratory Bird report. The effects analysis is focused on meeting the requirements of the Memorandum of Understanding with the US Fish and Wildlife Service.

Code	Comment Number	Comment Text	Response
204.08 - WL - MIS - BBWO	#12346-76	In KS Wild v. USFS, Eastern District of California 2004, (which is binding precedent for this project) the federal district court held that the Klamath National Forest violated its LRMP, and NFMA, by failing to monitor and survey for snag associated MIS species in the illegal Beaver old-growth timber sale. 32 As recognized by the court in KS Wild v. USFS, the KLRMP (at 5-3) clearly states that "population trends of the management indicator species will be monitored and relationships to habitat changes determined." It simply doesn't get much clearer than that. Hence the court in KS Wild v. USFS ruled that in the Beaver Creek timber sale "because the habitat of the Snag Species Association MIS may be appreciably affected, use of habitat as a proxy for population surveys was arbitrary and capricious." Page 163 of the DEIS does reveal that KNF timber planners hope to remove 728 acres of habitat for Hardwood Associate MIS species via the Westside timber sale and a total of 1,318 acres of such habitat when adjacent logging projects are factored in. This comprises 13% of existing hardwood habitat. Yet no attempt is made to analyze or disclose the impacts to Hardwood Associate populations from removal of a significant portion of their total habitat. Instead of analyzing or disclosing the impacts of removing 728 of exiting hardwood habitat on this MIS assemblage, the DEIS and the MISR limit discussion to the potential negative effects of hypothetical future wildfires on this habitat type.	Terrestrial Management Indicator Species (excluding Steelhead and Rainbow Trout) are not required to be monitored on a population level (Chapter 5 of the Forest Plan, page 5-12)). Since these species represent habitat associations such that the amount of habitat that is available on the Forest is monitored. The effects on hardwood habitat are disclosed in the Management Indicator Species report which is summarized and incorporated by reference into the draft EIS. The focus of the analysis is the habitat represented by the Management Indicator Species as directed by the Forest Plan. The logic for this approach is described in the introduction of the Management Indicator Species report.
204.08 - WL - MIS - BBWO	#5873-183	Retain Extra Snags for white-headed woodpecker, black-backed woodpecker The 2001 survey and manage ROD says: "The white-headed woodpecker, black-backed woodpecker, pygmy nuthatch, and flammulated owl will not be sufficiently aided by applying mitigation measures for riparian habitat protection or other elements of the Northwest Forest Plan. These four species occur on the periphery of the range of the northern spotted owl on the east slope of the Cascade Range in Washington and Oregon. Additionally, the white-headed woodpecker and flammulated owl occur in the Klamath Provinces in northwestern California and southwestern Oregon. "To ensure that the distribution and numbers of all four species do not decline on BLM Districts and National Forests within the range of the northern spotted owl, adequate numbers of large snags and green-tree replacements for future snags in appropriate forest types within the range of these four species will be maintained in sufficient numbers to maintain 100 percent of potential population levels of these four species. "Specific application details are relegated to the Management Recommendation... ... Maintain adequate numbers of large snags and green-tree replacements for future snags within the four species' ranges in appropriate forest types. Where feasible, green-tree replacements for future snags can be left in groups to reduce blowdown. Specifically, snags over 20 inches dbh are particularly valuable for these species. Snags over 20 inches dbh may be marked for cutting only after retaining the best available snags (considering size, longevity, etc.) in sufficient numbers to meet 100 percent of potential population levels of these four species. It is recognized, however, that safety considerations may prevent always retaining all snags. Use of standardized definitions of hazard trees is required. For the longer term, provide for sufficient numbers of green trees to provide for the full (100 percent) population potential of each species. "As depicted by Neitro in Management of Wildlife and Fish Habitats in Forest of Western Oregon and Washington (1985), the 100 percent population potential for white-headed woodpeckers is 0.60 conifer snags (ponderosa pine or Douglas-fir) per acre in forest habitats; these snags must be at least 15 inches dbh (or largest available if 15 inch dbh snags are not available) and in soft decay stages, and must be provided in stands of ponderosa pine and mixed pine/Douglas-fir. The 100 percent population potential for black-backed woodpeckers is 0.12 conifer snags per acre in forest habitats; these snags must be at least 17 inches dbh (or largest available if 17 inch dbh snags are not available) and in hard decay stages, and must be provided in stands of mixed conifer and lodgepole pine in higher elevations of the Cascade Range. However, the snag numbers representing 100 percent potential population levels cited from Neitro must be updated as appropriate new references become available. Provision of snags for other cavity-nesting species, including primary cavity-nesters, must be added to the requirements for these two woodpecker species. Site-specific analysis, and application of a snag recruitment model (specifically, the Forest Service's Snag Recruitment Simulator) taking into account tree species, diameters, falling rates, and decay rates, will be required to determine appropriate tree and snag species mixes and densities. If snag requirements cannot be met, then harvest must not take place.	The Forest Service does not refute information documented in Neitro et. al (1985) but this technical publication covers the states of WA, OR. It does not specifically address the state of California or ecosystems found on the Klamath NF. The Wildlife Management Indicator Species report (see section called snag associated species) presents a full analysis of effects and habitat associations within the proposed Westside Fire Recovery Project. The habitat association analysis includes black-backed , and white-headed woodpeckers. See Klamath National Forest Plan Chapter 4 pg.4-31 for species in Mature Pine Association (pygmy nuthatch, and Flammulated owl). The Mature Pine Association is not found within the Westside Fire Recovery Project Boundary. The cited literature provides a general overview of post-fire snag and habitat conditions however it is not specific to the conditions of the Klamath Province. Retention of all of the dead trees now present on the landscape would create an unacceptable fuel load and increased risk of future high severity fire. See Appendix E and EIS Chapter 3, responsible opposing views and agency response. See also response 5873-72 and 5873-170. See response to comment 12346-55 about green trees. Through the habitat assessments of Management Indicator Species documented in the Management Indicator Species Report prepared for the Westside Fire Recovery Project, habitat types affected by the Project are addressed. The species analyzed within the Westside Fire Recovery Project meet the requirements under the National Environmental Policy Act, National Forest Management Act, and Forest Service Manual direction.

Code	Comment Number	Comment Text	Response
204.08 - WL - MIS - BBWO	#5873-184	More information is needed on habitat use, seasonal occurrence, and use of forest age classes and burns, for the black-backed woodpecker." 2001 S&M ROD p 33-34. NFP ROD page C-45 says, “Specifically, the Scientific Analysis Team recommends that no snags over 20 inches dbh be marked for cutting. … Provision of snags for other cavity-nesting species, including primary cavity-nesters, must be added to the requirements for these two woodpecker species. Site-specific analysis, and application of a snag recruitment model (specifically, the Forest Service’s Snag Recruitment Simulator) taking into account tree species, diameters, falling rates, and decay rates, will be required to determine appropriate tree and snag species mixes and densities. If snag requirements cannot be met, then harvest must not take place. ” Although this language was purportedly changed in the January 2001 S&M ROD, there was no analysis of support for the proposed change and the recommendations of the SAT remain the best available science. If the agency chooses to rely on the illegal 2001 ROD that amended the survey and manage rules, then they must conduct the analysis that the 2000 S&M EIS never did (e.g. consider alternatives and environmental consequences), and provide monitoring data to support the assertion that the requirement to retain snags over 20 inches is inappropriate and that maintaining viable populations of white-headed woodpeckers requires less than all the large snags remaining after fires	The Wildlife Management Indicator Species report presents a full analysis of effects and habitat associations within the proposed Westside Project. The habitat association analysis includes black-backed , and white-headed woodpeckers. See comment number 5873-183. See Appendix E and EIS Chapter 3, "Responsible Opposing Views and Agency Response". See also response 5873-72 and 5873-170.Through the habitat assessments of Management Indicator Species documented in the Management Indicator Species Report (see section called snag associated species) prepared for the Westside Fire Recovery Project, habitat types affected by the Project are addressed. The species analyzed within the Westside Fire Recovery Project meet the requirements under the National Environmental Policy Act, National Forest Management Act, and Forest Service Manual direction.
204.09 - WL - post-fire habitat	#13360-1	Please protect the habitat and wildlife of the Klamath-Siskiyou region. Post fire ecology is a beautiful and delicate system and it would be devastating to so many plants and animals for decades to come if this rejuvenating cycle were to be destroyed by logging. I implore you to do the right thing. Deny the logging permit and allow the natural and wild systems to heal on their own. In this era of civilization, we can not afford to hold on to the mistaken belief that nature needs us to help it heal. It is clearly we who need nature. As a trained wildlife biologist (BS from Humboldt State University 2012), wildlife rehabilitator, naturalist, and person who lives in the shadow of the effected area:	This recommendation is considered in Alternative 1. which analyzes the effects of taking no action in the project area.
204.09 - WL - post-fire habitat	#18883-6	If any dead roadside trees are removed they should be less than 18 inches dbh as trees greater than 18 inches dbh will decay very slowly and will remain as habitat for animals for many decades to come. They pose minimal danger to anything.	Hazard trees are danger) tree is defined as a standing tree that presents a hazard to people due to conditions such as deterioration of or damage to the root system, trunk, stem, or limbs or the direction or lean of the tree (29 CFR 1910.266(c); Forest Service Handbook 6709.11, glossary). Only hazard trees identified by this definition will be removed. A tree can be a hazard regardless of its diameter at breast height. In order to meet the project purpose and need for worker and public safety and access and for safe conditions for firefighters performing suppression for community protection all trees meeting the definition and the prescription described in Chapter 2 will be mitigated. The exception is in Modified Alternative 2 where trees with greater than 45 in diameter at breast height will be considered for removal only if they are dead or have greater than 90 percent or greater change of dying in three to five years (See description of Modified Alternative 2 in Chapter 2 of the final EIS).
204.09 - WL - post-fire habitat	#18909-30	Many of the terrestrial wildlife species utilize snag and coarse woody debris. For example, the Pacific fisher and marten utilize cavities for resting and post-fire forests for foraging, the Tehama chaparral snail uses coarse woody debris to regulate temperature, and northern spotted owls have been shown to utilize high-severity patches for foraging. For that reason, many of the impact assessments for various species rely on the snag retention design features to mitigate the project's impacts. The agency should consider an upper diameter limit as well as follow the LRMP per acre snag retention guidelines. The snag retention project design features (PDFs) are unclear, impracticable, or too weak to provide any real mitigation.	The project design features as described in Chapter 2 of the final EIS are intended to follow the Forest Plan Standards and Guidelines for snag retention and coarse woody debris. The snag retention design including size class retention is currently under review by the Regional Ecological Office for compliance with Late Successional Reserve policies. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#18909-32	The Wildlife-12 PDF, page 90 states: "Retain an average of 2 to 8 snags per acre of the largest size class in addition to the riparian reserves within treatment units >100 acres or aggregations of treatment units totaling >100 acres in size." First, we want to raise a potential concern about the PDF clarity. As we understand, the agency would retain 2 to 8 snags in addition to all snags retained with Riparian Reserves. However, not all people understand this PDF similarly. At the Eureka open house sponsored by the Forest Service, Mike Hupp of the Service stated that he understood the PDF to mean that the Service may count trees within the riparian reserves towards the snag retention number. Second, we are concerned that this PDF conflicts with information presented in other environmental impact documents. For example, in the Draft Wildlife BA on page 49 states that "[i]n units less than 100 acres in size, snag retention will occur only in the riparian reserves and will be limited in areas lacking riparian reserves." PDF Wildlife-12 appears to provide that the Service will retain 2-8 snags in addition to the snags that will be left standing in riparian reserves for both units over 100 acres and for other units where aggregated. If the Service counts riparian areas toward the average snag retention, then vast areas of forest-up to 99 acres-could be clearcut. Based on Appendix B of the Silvicultural Report, only 30 of the units are over 100 acres. The rest, the vast majority of the project, are under 100 acres and may be clearcut. Third, please clarify whether "legacy" trees and snags-where they can be discerned-will count towards the average snag retention. It is also not clear what the snag retention would be for the 3,920 acres of logging in unstable and potentially unstable Riparian Reserves.	The snag retention has been incorporated into the salvage harvest description instead of a project design feature to clarify the design and specifications (see Chapter 2 of the final EIS). Analysis of the efficacy of the snag retention design is described in Response 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" Section in Chapter 3 of the final EIS. These changes have been incorporated into the Wildlife Biological Assessment and the Terrestrial Wildlife report amendment (See Sections II and III). Legacy components do and will be counted toward the average snag retention. Snag retention includes inner gorges (unstable lands) since they will not be salvage harvested. Active landslides and toe zones where salvage won't occur will be retention areas as well. There are exceptions that allows salvage on areas mapped as active landslides and toe zones that have no observable signs of re-activation in the recent past (see the Geology report and project design feature table in Chapter 2). Steep, weathered granitic lands do not have any planned retention areas. See the Geology report for benefits to salvage and subsequent planting on landslide processes. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.09 - WL - post-fire habitat	#18909-33	PDF Wildife-12 further states that "ideally" snags will be "clumped and distributed throughout the treatment unit and situated with large, live trees where possible." As the Draft Wildlife BA on page 49 states, without well-distributed snag retention, "large openings will be created that NSO are very unlikely to cross due to a lack of cover for predators and general lack of structure for perching." This logic holds true for other wildlife, including the Pacific fisher and marten, which require well-distributed trees for resting and for avoiding predators. Further, snag retention helps to create complex early seral forests, providing impact structure and complexity during early forest development. The agency may clump all the retained trees at one far corner of a unit and clearcut the rest of the unit. The agency must comply with snag retention guidelines and cannot elect to span snag retention over a 100 area.	See response to number 18909-32. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#18909-34	NSO Use of Post-Fire Habitat for Foraging: Please clarify how and under what circumstances the Service believes that NSO can utilize high- severity post-fire stands. The Service vacillates in its treatment of how NSO use post-fire stands. Page 132 of the DEIS states: "The use of post-fire burned areas for foraging is a point of disagreement in the literature because there is little evidence to support idea (sic) that these areas are actually being used for foraging; although owls have been found in these areas, there is no evidence that they are foraging. For the purpose of this analysis, due to the lack of information on how these burned areas are being use, use of post-fire burned areas for foraging will not be discussed further." As discussed below, the assertion that owls do not use post-fire areas influences the analysis indicators, drastically overstating the impact of the fires of summer 2014 on the spotted owl and understating the impact of the proposed actions on the owl. The Agency's assertion that owls do not utilize post-fire foraging areas is inconsistent with other areas of its analysis. Appendix A to the Wildlife Biological Evaluation (Wildlife BE) provides a review of the scientific literature on spotted owl usage of post-fire landscapes for foraging. Among the findings: * NSO appear to display site fidelity in returning to burned areas that were suitable pre-fire, even if they no longer meet the definition of suitable NSO habitat. * NSO foraging activity in these burned areas is supported in the literature, although nesting in these areas is not. * NSO using these burned areas may utilize standing snags and surviving green trees as perch sites for foraging, particularly along edges where sufficient cover is available. * The likelihood of use of a burned area by NSO may be strongly affected by its distance from suitable forest cover, but a maximum acceptable distance from suitable cover is unknown. * Most studies on NSO use of burned areas examine short term occupancy and use and have been unable to factor in duration or persistence at a site over an extended period time Similarly, the Wildlife Biological Assessment (Wildlife BA), prepared as part of Section 7 consultation with the U.S. Fish and Wildlife Service, reflects that NSO utilize post-fire areas, especially if other structural elements are nearby. For example, on page 23 of the Draft Biological Assessment, KNF states that for the evaluation of project impacts, the Service assumes spotted owls will use areas which once served as nesting/roosting habitat which burned at high severity if that habitat is currently within 500' of suitable nesting/roosting habitat. Further, the Service assumes for the Biological Assessment that pre-fire foraging habitat that burned at both medium and high severity will serve as post-fire foraging habitat if within 500' of suitable nesting/roosting habitat. How and why did the agency make this assertion of 500'? The refusal to consider the habitat value of post-fire areas drastically impacts the environmental impact analysis. For example, in analysis indicator 1, discussed below, the Forest Service concludes the despite logging thousands of acres of suitable habitat, Critical Habitat, Late-Succesional Reserves and within Activity Centers, the preferred alternative would have only minor impacts because all areas which had burned at high and sometimes moderate severity were assumed to lack any habitat potential. Not only is this wrong-by KNF's own admission in the Wildlife BA and BE-but it drastically obfuscates the public's ability to understand and comment on the project. In sum, the Forest Service relies on a belief that owls won't utilize a post-fire landscape despite finding that owls can and do utilize post-fire landscapes for foraging. This discrepancy influences many areas of the agency's analysis. Given the importance of this issue, KNF must rescind the DEIS in order to properly considers the role of post-fire habitat.	Since the DEIS, the Northern Spotted Owl analysis has changed to better incorporate spotted owl use of fire affected habitat as displayed in the terrestrial wildlife section of the FEIS. The FEIS contains more information on relevant research and a better description of suitable habitat and fire affected habitat. In addition, the FEIS provides a table in the terrestrial wildlife section that states the criteria for each category including suitable habitat and fire affected habitat. See response to comment 12346-55.
204.09 - WL - post-fire habitat	#5873-127	BLM's Western Oregon Plan Revision DEIS (p. LII) admits that structurally complex young forests develop old forest characteristics twice as fast as structurally deprived initial conditions. This is a serious indictment of salvage logging.	See response to number 18909-62. Project design features that include snag retention and coarse woody debris considerations are intended to maintain the components of structural complexity in the treatment stands. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-139	Another study found that not enough snags are being retained on private land to support viable wildlife populations, so more snags need to be retained on federal lands to compensate. Ohmann, McComb, & Zumrawi; SNAG ABUNDANCE FOR PRIMARY CAVITY-NESTING BIRDS ON NONFEDERAL FOREST LANDS IN OREGON AND WASHINGTON; Wildl. Soc. Bull. 22:607-620, 1994 http://web.archive.org/web/20041107222037/http://www.fs.fed.us/pnw/pubs/journals/ohmann-snagabundance.pdf	Ohman et al. (1994) assessed patterns of snag abundance among plant communities and stand conditions in managed and natural forests on nonfederal lands in Oregon and Washington states. The document did not address snag abundance in forests of California, nor did it address post-fire snag abundance. The literature showed that snag densities greatly varied between the 4 vegetation communities (temperate coniferous forest, conifer hardwood forest, Ponderosa-pine forest, mixed-conifer forest) and within the communities due to stand conditions. Factors that influence amounts and characteristics of snags and logs include "stand age, disturbance history, live tree density, climate, and site productivity". Ohmann et al. does not state that not enough snags are being retained on private lands to support viable wildlife populations. In particular, the literature states, "nonfederal lands can contribute to maintaining populations of cavity nesters. These forests provide most of the snags on sites of low elevation, moderate climate, and high net primary productivity. Nonfederal lands also provide habitat for, animal movement among some forest habitats on federal lands. Management of snag habitat on nonfederal lands could be influenced by education, financial incentives, and regulation." While the literature does state that "Snag abundance on nonfederal lands was inadequate to support 100% of maximum potential population (MPP) of indigenous species of primary cavity-nesting birds simultaneously in all stand conditions of ponderosa pine, mixed-conifer, and conifer-hardwood forest and in all but old-growth stands in temperate coniferous forest. However, old-growth stands represented only 1% of temperate coniferous forest in nonfederal ownership. " When interpreting Maximum Potential Populations and Snag Recruitment Simulator models, it is important to understand the underlying assumptions made. The literature merely states that if snag retention on non-federal lands is desired then great attention greater attention is needed to retaining large snags and live trees when thinning and regenerating stands. The Klamath Forest Plan snag Standard and guideline (8-25, page 4-30) "says to use tables 4-4 and 4-5 as guidelines in ecosystem analysis and project-level planning. The relative numbers of hard and soft snags in various size classes show the habitat needs of the different cavity-association Forest wildlife species. This table displays the number of snags required per 100 acres to support "good" quality habitat for primary cavity-association species. The number of snags on a given acre will vary, depending on the site and on the number of snags within the landscape". These snags need not be equally distributed. The actual number of snags to be maintained may vary depending on the amount of snags available within the surrounding landscape and the desired condition of that landscape. See Project Design Features in Chapter 2 of the final EIS. The Klamath Forest Plan Coarse Woody Debris Standard and guidelines (6-16, page 4-23) mentions retaining 5-20 pieces of Coarse Woody Debris per acre in various states of decay. The combination of project design features for snags and Coarse Woody Debris, legacy components and riparian corridors will meet or exceed the Forest Plan Standard and Guidelines.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-141	Thus, increasing complexity of the environment through increasing horizontal and vertical heterogeneity in vegetation structure, species diversity in vascular plant composition, and forest-floor structure with coarse woody debris may simultaneously (1) increase multidimensional habitat space (Carey et al., 1999a), (2) reduce frequencies and intensities of interspecies interactions (Grant, 1972; Carey et al., 1980), (3) increase or maintain the already high abundance and diversity of seed fall, fungal fruiting bodies, and invertebrates characteristic of mesic, temperate coniferous forests (Church field, 1990), and (4) allow not only coexistence, but abundance of potentially competing species within communities (Carey and Johnson, 1995, this study). As a result of this complexity, Pacific Northwest forests support the greatest diversity of shrews in North America (Rose, 1994) … … These studies do suggest that management can homogenize and simplify (reduce decadence, amounts of coarse woody debris, variety of tree species, diversity and abundance of understory vegetation, and spatial heterogeneity) forest ecosystems. We found local extirpations of a number of species and particularly absence of G. sabrinus and T. townsendii in multiple plots. These absences raise questions about long-term viability of these species in managed landscapes. Management-induced homogeneity and simplification (1) is a real danger to diversity, resiliency, and susceptibility to invasions of exotic plants (Carey, 1998; Carey et al., 2000; Halpern et al., 1999; Heckman, 1999; Thysell and Carey, 2000), (2) may result in small-mammal communities non-supportive of predators populations (Carey et al., 1992; Carey and Peeler, 1995), … Andrew B. Carey, Constance A. Harrington; Small mammals in young forests: implications for management for sustainability; Forest Ecology and Management (2001) 154(1-2): 289-309; http://www.fs.fed.us/pnw/pubs/journals/pnw_2001_carey003.pdf. Large snags and the structural contributions should be quite abundant in young stands. It is only because of widespread clearcutting and salvage logging that we do not have more large snags in our young stands. Evidence indicates that large snags should be as abundant in young stands (40-80 years) as in old–growth (>200 years). See Spies, T.A., J.F. Franklin, and T.B. Thomas. 1988. Coarse woody debris in Douglas-fir forests of western Oregon and Washington. Ecology 69(6)1689-1702. Hazard tree removal will violate NFP ROD requirements to consider cutting and leaving roadside hazard trees in place. The EIS fails to address the “degree and direction of lean,” even though these are important factors according to OSHA.	These quotes are from Carey and Harrington (2000). These are direct quotes from the Discussion section of this literature. This literature does not address post-fire landscapes and/or the idea that snags and logs should be retained after fire. In particular these quotes are specifically addressing ways to address small mammal diversity and inter species interactions as a result of intensive management of second-growth forest in the Olympic Mountains of the Olympic Peninsula of western Washington. In particular, while this document does address small mammals, it does not focus on spotted owl prey bases. The literature does mention that "G. sabrinus and T. townsendii are indicators of ecological productivity (production of seeds, fruits, and truffles) and are important prey for vertebrate predators in Pacific Northwest conifer forests". However, the literature makes no recommendations on snag or log retention in post-fire landscapes nor provides any insight to small diversity in post-fire landscapes.
204.09 - WL - post-fire habitat	#5873-18	“current state of scientific knowledge, … indicates that [salvage logging] would seriously undermine the ecological integrity of forest ecosystems on federal lands. … This post-fire habitat, known as ‘complex early seral forest,’ is quite simply some of the best wildlife habitat in forests and is an essential stage of natural forest processes. Moreover, it is the least protected of all forest habitat types and is often as rare, or rarer, than old-growth forest, due to damaging forest practices encouraged by post-fire logging policies. While there remains much to be discovered about fire in our forests, the scientific evidence indicates that complex early seral forest is a natural part of historical fire regimes in nearly every conifer forest type in the western U.S. (including ponderosa pine and mixed-conifer forests) …	This is a direct quote from a general public letter written to Congress regarding concerns over HR 1526 and HR 3188, both which were not enacted. The authors urge Congress to consider the value of post-fire landscapes for wildlife species, especially the creation of early seral forest. See EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised for additional discussion.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-185	Salvage logging does not mimic natural disturbance because it removes the vast majority of the habitat structure, such as snags and large down wood, that early seral wildlife depend on. Eighty five percent of vertebtates tied to edges and early seral forest in the western Cascades need dead wood. C. Friesen 2010. Early Seral Forests – A Conservation Conundrum. http://www.ecoshare.info/uploads/ccamp/Early-Seral-Forest-Friesen.ppt; http://ecoshare.info/projects/central-cascade-adaptive-management-partnership/synthesis-papers-tools/ "Key attributes" of high quality early seral habitat include "exceptionally high quantities of large dead wood," a condition that is not provided by commercial timber harvest that exports the vast majority of wood from the site. "[P]rompt reforestation and few legacies is unlikely to approximate the role of naturally generated early-seral conditions" M.E. Swanson Mark E. Swanson, Nichole M. Studevant, John L. Campbell, Daniel C. Donato. 2014. Biological associates of early-seral pre-forest in the Pacific Northwest. Forest Ecology and Management 324 (2014) 160–171. http://www.sierraforestlegacy.org/Resources/Conservation/Biodiversity/BD-Swanson-etal-EarlySeral2014.pdf. The agency must avoid any suggestion that natural disturbance reset stand age to zero, or that regen logging mimics stand replacing disturbance. This is an oversimplification of forest ecology. First of all, forests are products of their history. There really is no such thing as a zero-aged stand, because every forest is a product of disturbance while retaining some memory of its past in the form of legacy structures; surviving organism; onsite and nearby seed banks, seed sources, mycorrhizal inoculum, spores, and propagules, that are genetically "family" to the disturbed forest, etc. If the agency treats disturbed forests as a "blank slate" with no history, then they will effectively be erasing their history and their ecological memory.	The final EIS provides a response concerning tree planting and salvage harvest in Chapter 3 of the final EIS in the sections called "Responsible opposing views and agency's response to issues raised".

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-186	The presence of coarse woody debris is critical for biodiversity conservation. … In general, post-fire forest ecosystems include the presence of large numbers of snags and downed woody debris. This dead material provides important habitat elements for many species of plants and animals, while also storing a great deal of carbon (MacDonald 1993; Fleming and Freedman 1998; Freedman et al. 1996). Clearcut harvesting of natural forests results in the removal of most of the aboveground woody biomass from the site because trees are the commodity being harvested. … Because clearcut harvesting concentrates on the removal of biomass, it fails to produce large-dimension snags and coarse-woody debris in intensively managed forests, … Although both harvesting and wildfire kills trees, only fire leaves them as dead standing biomass. … The fire-killed snags and woody debris cast partial shade, which ameliorates the surface microclimate and may enhance the survival of pine seedlings (Fraser and Farrar 1953; Cayford and McRae 1983; Carleton and MacLellan 1994). … Some studies have suggested that the cover and richness of the understorey vegetation of a natural forest may never fully recover from clearcutting. … Wildfires reduce the presence of some hosts that assist the spread of pests and pathogens while clearcutting may promote them. … [E]xclusion of fire from such ecosystems, along with forestry practices that leaves young infected trees in the residual stand, leads to increased abundance of this parasite. In contrast, fire eliminates Dwarf mistletoe. … Numerous studies have determined the potential removals of nutrients with conventional and whole-tree clearcuts … The data show that clearcutting removes large amounts of biomass and nutrients from the site, and that these are equivalent to a substantial fraction of the site capita of these materials. … During a wildfire, biomass capital of the stand is lost by combustion, as is that of nitrogen through the oxidation of organic compounds and the release of gaseous NO and NH3. In intense wildfires these losses of biomass and nitrogen can be comparable in magnitude to what would be removed by the clearcutting of comparable stands. Unlike wildfire, however, clearcutting also removes large amounts of phosphorus, potassium, calcium, and magnesium contained in the tree biomass; these materials are mostly conserved in situ during a wildfire. … Clearcut harvesting with heavy equipment can cause severe soil compaction along skidding lanes and it can also disrupt soil profiles by churning … Permanent roads are not generally associated with wildfire management or suppression (although temporary access routes may be constructed while fighting some wildfires). An extensive road network is, however, necessary for timber harvesting and subsequent stand management. Roads affect biodiversity in many ways. Roads directly remove natural habitat, alter drainage and stream dynamics, cause erosion, introduce edge effects, fragment contiguous ecosystems, alter species movements, and act as corridors for the introduction of non-native species …. Road density is a useful indicator of ecological threat … [I]t is erroneous to assume that forest harvesting plays the same ecological role as wildfire. D.J. McRae, L.C. Duchesne, B. Freedman, T.J. Lynham, and S. Woodley, 2001. Comparisons between wildfire and forest harvesting and their implications in forest management. Environ. Rev. 9. 223-260 (2001); DOI: 10.1139/er-9-4-223 Modelling by Harris (2000) suggests that 12 or more green trees need to be retained during regen harvest for every snag we want to recruit at any given time during the rotation. Harris, R.B. 2000. Estimating large snag recruitment needs in regeneration timber harvests. Western Journal of Applied Forestry. 15: 140-146. http://www.cas.umt.edu/facultydatabase/FILES_Faculty/1152/Harris%202000%20LargeSnagRecruitment%20Western%20J.%20Appl.%20For.pdf. This paper also highlights the concern that without numerical guides, managers could erroneously assume that they are maintaining adequate numbers of snags across the landscape even though they are retaining too few green trees to achieve that goal. Ohmann, JL, MJ Gregory, HM Roberts, RE Kennedy, Z Yang, J Braaten, SL Powell, WB Cohen, V Kane, J Lutz. 2012. Mapping change in live and dead forest biomass with Landsat time-series, remeasured plots, and nearest-neighbor imputation. ForestSat 2012: Corvallis, OR; September 2012. http://lemma.forestry.oregonstate.edu/export/presentations/ohmann_etal_2012_forestsat.pps	Northern Spotted Owl use of fire affected areas is discussed in the Biological Assessment in the section called “northern spotted owl use of the post-fire landscape". The project does retain sufficient snags and large wood; see responses to comments 5873-72, 12346-55, 12346-56, 5873-67, 17280-3, 17111-23.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-21	The agency must prepare a programmatic EIS to comprehensively disclose and consider: a. the natural range of variability and existing rarity of complex young forests (e.g., young forests that are unsalvaged after disturbances). Since large snags are outside the natural range of variability across the landscape, the agency must retain all large snags to start moving the landscape toward the natural range of variability, or the agency must carefully justify in the NEPA analysis every large snag it proposes to remove. See Jerome J. Korol, Miles A. Hemstrom, Wendel J. Hann, and Rebecca A. Gravenmier. Snags and Down Wood in the Interior Columbia Basin Ecosystem Management Project. PNW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/049_Korol.pdf. This paper estimates that even if we apply enlightened forest management on federal lands for the next 100 years, we will still reach only 75% of the historic large snag abundance measured across the interior Columbia Basin, and most of the increase in large snags will occur in roadless and wilderness areas.	The Forest Service does not refute the conclusions made in Korol et. al (2002). The Interior Columbia Basin EIS covers the states of WA, OR, ID, MT, WY, NV, and UT. It does not specifically address the state of California or ecosystems found on the Klamath NF. On page 654 of the article, it specifically states that "We used snag and down wood amounts based on the vegetation in the historical scenario as the baseline for our comparisons. We present results for only the Forest Service/Bureau of Land Management-administered lands and Interior Columbia Basin as a whole." The article does not provide any information on the historic level of snags within the Klamath Province area and thus does not make any conclusions on the range of availability of large snags within the project area. Korol et. al (2002) states that "Large snags should return to historical levels on Forest Service/Bureau of Land Management lands, but remain at roughly 75% of the historical amount across the Basin. Both small and large down wood amounts should remain above historical levels on Forest Service/Bureau of Land Management lands and across the Basin." The article does not conclude that the increases in large snags will occur in roadless and wilderness areas. The article compares the 3 Alternatives (S1, S2, and S3) and compares how fuels reduction efforts in both Alternatives S2 and S3 should reduce large down wood amounts in actively managed areas. But that this should be offset by increases in late seral forest in unroaded and wilderness areas, creating large down wood levels far above historical conditions. This is outside the scope of the project.
204.09 - WL - post-fire habitat	#5873-30	Hutto, R.L., 2006. Toward Meaningful Snag-Management Guidelines for Postfire Salvage Logging in North American Conifer Forests. Conservation Biology Volume 20, No. 4, 984–993. http://web.archive.org/web/20090310114517/http://avianscience.dbs.umt.edu/documents/hutto_conbio_2006.pdf ("Species such as the Black-backed Woodpecker (Picoides arcticus) are nearly restricted in their habitat distribution to severely burned forests. Moreover, existing postfire salvage-logging studies reveal that most postfire specialist species are completely absent from burned forests that have been (even partially) salvage logged. I call for the long-overdue development and use of more meaningful snag-retention guidelines for postfire specialists, and I note that the biology of the most fire-dependent bird species suggests that even a cursory attempt to meet their snag needs would preclude postfire salvage logging in those severely burned conifer forests wherein the maintenance of biological diversity is deemed important.")	The Westside Fire Recovery Project includes the retention of legacy components such as large fire killed trees and pre-existing snags which will benefit wildlife species, in particular woodpeckers. Preparing an EIS on young complex forests is outside the scope of this project. Preparation of a snag management guide for postfire specialists is outside of the scope of this project. The project BE and Management Indicator Species reports address the effects of the project on woodpecker species.
204.09 - WL - post-fire habitat	#5873-31	h. A recent study of birds that use post-fire mosaics highlighted the importance of resprouting shrubs and forbs on the re-establishment of nesting birds following wildfire. "Of the 39 species for which nests were found, 14 (37%) used cavities and 25 (63%) built open-cup nests.... Species that built cup nests used snags, residual live trees, resprouting hardwoods, and other ground vegetation and downed wood. The associations between the presence of breeding species and forb and shrub cover indicate that these are important components of the early establishment of bird populations following stand-replacing fires. These data suggest that post-fire management of resprouting hardwoods and herbaceous vegetation should consider potential impacts to bird species that nest and forage in burned forests." CFER 2007. Response of Birds to Fire Mosaics. CFER News. Winter 2007. http://www.fsl.orst.edu/cfer/pdfs/Vol7_1.pdf.	The Westside Fire Recovery Project does analyze several wildlife species including the Northern Spotted Owl, Bald Eagle, and Willow Flycatcher, and snag associated species (Management Indicator Species association) that were likely affected by the 2014 fires. Habitat features described in the literature were used in the analysis. Chapter 3 of the final EIS provides a summary of the wildlife reports that describe the methods used in the analysis and the estimated effects. For migratory birds that may use the fire affected areas, the project uses the Memorandum of Understanding between the Forest Service and the U.S. Fish and Wildlife Service to Promote the Conservation of Migratory Birds as described in the Migratory Bird Report. The Memorandum of Understanding provides a series of conservation recommendations to reduce the effects of land management on migratory birds.
204.09 - WL - post-fire habitat	#5873-38	In the northwestern United States, a number of bird species thought to be strongly associated with early-seral broadleaf habitat have declined and are considered conservation priorities (Altman 1999, U.S. Fish and Wildlife Service 2002). Because the PNW represents a substantial portion of the ranges of these species, loss of quality early-seral habitat could increase risk of extinction." M. G. BETTS, J. C. HAGAR, J. W. RIVERS, J. D. ALEXANDER, K. MCGARIGAL, AND B. C. MCCOMB. 2010. Thresholds in forest bird occurrence as a function of the amount of early-seral broadleaf forest at landscape scales. Ecological Applications, 20(8), 2010, pp. 2116–2130. http://www.fsl.orst.edu/flel/pdfs/Betts%20et%20al%202010%20Ecol%20Apps.pdf	See response to comment 5873-37.
204.09 - WL - post-fire habitat	#5873-5	Salvage logging will exacerbate the shortage of snags that will manifest in future decades after many of the snags have fallen and before new large green trees have grown to rebuild the population of snag recruitment trees.	Response number 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" Section in Chapter 3 of the final EIS describes the balance the Westside Fire Recovery project is striking between the retention of snags and coarse woody debris and fire resilience. It also addresses the concern about long-term retention of legacy components on the landscape until the forest is capable of replacing such components. See response to comment12346-55.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-50	Hutto (2005) says: "Personally, I've come to think we need to change our thinking on salvage logging. There are other values in the forest. In fact, a burned area is probably the most sensitive place you could be working in. The public really hasn't caught on to this yet. People still want to get the cut, get the trees they see as wasting away. They want the economic value. We talk about forest restoration after a fire, but it just got restored. That's what fire does. We know that, but we can't seem to get the message out. Until you start thinking like a black-backed woodpecker, you just ain't going to get it." Richard L. Hutto, Ph.D., Director of the Avian Science Center and Professor of Ornithology and Ecology at the University of Montana. richard.hutto@umontana.edu or 406.243.4292 from Birds in the black: Through following avian wildlife, a UM scientist has discovered that burned forests play a critical role in the health and diversity of the Western landscape By MICHAEL JAMISON of the Missoulian August 11, 2005. Hutto and others have been surveying birds in the Black Mountain fire area and nearly 20 other 2003 fire sites from Glacier National Park down to the Bitterroot, some of which have been salvage-logged. Nearly all woodpeckers have proven absent from salvaged areas, Hutto says, and all other bird species are less abundant in those spots than in areas left unlogged following fires. "I can't think of any other land-use practice where it's uniformly negative, at least in terms of birds," Hutto says. "That's why I end up thinking that a burned place should be lower on our priority list for logging—because it's so sensitive." Hutto's research is some of the first post-fire work that's been done in areas broader than one forest or one salvage-logging job, which may help it yield insightful facts for policymakers as they struggle to find a balance for post-fire salvage logging nationwide.	This is direct quote from the Missoulian and the Missoula Independent newspaper. There is no project specific comment for which to respond.
204.09 - WL - post-fire habitat	#5873-51	Jessie McQuillan. 2006. Still life, with woodpeckers. Missoula Independent. 6/22/2006. http://missoulanews.bigskypress.com/missoula/still-life-with-woodpeckers/Content?oid=1137343 "More than 10 years ago, and again two years ago, I joined eight other scientists to explore whether forests might be restored by logging soon after a fire. We had among us a wealth of knowledge across a wide range of fields. We pored over several decades of research but found nothing to show that fire-adapted forests might be improved by logging in the wake of a fire. In fact, we found just the opposite: Most plants and animals in these forests are adapted to periodic fires; they have a remarkable way of recovering – literally rising from the ashes. These forests have evolved with fire. Periodic fires have been part of a normal cycle lasting thousands of years. Logging a burned forest damages the soil, carrying away nutrients, robbing seedlings of moisture and clogging nearby streams. Trees in a burned landscape, both dead and alive, continue to provide homes for wildlife after a fire and form the building blocks of new forests."	This is direct quote from the Missoula news. There is no project specific comment for which to respond.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-54	A review of 116 research articles, dating from 1960 to 2002, which examined bird-forestry relationships in managed forests across North America found that — … The response of birds to forestry practices has been mixed and highly species-specific, but in general, net change in community richness following timber harvest was negligible. Among silvicultural practices, uneven-aged management (e.g., selection harvest) appears to be the most favorable for birds. In contrast, snag removal was highly deleterious, with >80 percent of studies reporting net species loss; net gain was never reported.... … What seems to be particularly detrimental to forest avifauna is removal of snags. When prescriptions involved manipulation of snag densities, either by removing (Kilgore 1971, Scott 1979, Dingledine and Haufler 1983, Scott and Oldemeyer 1983, Schreiber and deCalesta 1992), retaining (Dickson et al. 1983, Zarnowitz and Manuwal 1985, Stribling et al. 1990, Schreiber and deCalesta 1992, Welsh et al. 1992), or creating (McPeek et al. 1987) snags, bird numbers were typically found to be positively correlated with snag density. Unlike even-aged and unevenaged management practices, removal of snags never resulted in more species increasing in abundance than decreasing. The importance of snags to birds is wellknown (Davis et al. 1983 and references therein, Bull et al. 1997, references above), not only to cavity nesters, but also songbirds (Sallabanks et al. 2002) that may use snags for nesting, perching, foraging, singing, and scanning for predators. … Since large remnant snags and “defective” residual green trees provide much of the snag habitat for cavity-nesters in early- to mid-successional stands, particularly on private lands (Ohmann et al. 1994), retention of these structures will be important for maintaining populations of cavity- and snag-using avian species in managed forests. Snag retention and/or creation were the most commonly listed management recommendations from studies included in our review. We concur that leaving snags wherever possible is another important way that foresters can improve or maintain avian habitat quality within managed forest landscapes. Rex Sallabanks and Edward B. Arnett. Accommodating Birds in Managed Forests of North America: A Review of Bird-Forestry Relationships. PSW-GTR-191. http://www.fs.fed.us/psw/publications/documents/psw_gtr191/Asilomar/pdfs/345-372.pdf.	This is a direct quote from an article titled Accommodating Birds in managed Forests of North America: A Review of Bird-Forestry Relationships authored by Rex Sallabanks and Edward Arnett. There is no project specific comment for which to respond. See response to comment 12346-55.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.09 - WL - post-fire habitat	#5873-58	Salvage: Protect all large snags Because large snags last much longer than small snags, large snags are disproportionately valuable as wildlife habitat, nutrient and water reservoirs, soil stabilizers, etc. If the agency chooses to conduct a salvage operation in this fire area, they must use a diameter cap and protect these scarce and valuable forest structures. Since large snags last longest, if large trees are retained, maybe there the temporal gap in snag habitat will be partially mitigated. Everett, Richard et al. 1999. Snag Dynamics in a Chronosequence of 26 Wildfires on the East Slope of the Cascade Range Washington Sate, USA. International Journal of Wildland Fire. 9(4) 223-234 (1999). http://web.archive.org/web/20041101184206/http://www.fs.fed.us/pnw/pubs/journals/snag.pdf	The Forest Service does not refute the importance of large snag retention. Everett et al. 1999 focuses on large soft snag retention. Specifically, it states that snag longevity over time varies greatly as a result of multiple factors including: landscape influences (aspect, slope, topography), species, age, diameter at breast height, height, and physical snag structure (bark thickness, bole size). Snag size (diameter at breast height) alone did not solely correlate to snag longevity. While size did help influence longevity, certain species of snags fell regardless of size (due to influences of bark thickness, height, and decay rate). Snag longevity also varied among species, with certain species having greater longevity (ponderosa pine decayed slightly faster than douglas fir and engleman spruce decayed slightly faster than subalpine fir). Snag height also influenced snag longevity. It was suggested that if snag populations are to be maintained over long periods of time following stand replacement fires, it will be necessary to retain snags greater than or equal to 41cm diameter at breast height of Douglas Fir and Engleman Spruce when possible. The literature also states that both small and hard snags are also important for wildlife and ecological processes such as nutrient cycling. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-60	A study conducted in the Black Hills National Forest found that 1) Wildlife disproportionately forage on large diameter snags; 2) Cavity nesters disproportionately utilized large diameter snags for nesting; 3) Cavity nesters were less abundant (usually absent in this case) in managed forest because of the scarcity of large diameter snags; and 4) Logging and thinning has led to serious shortages of large diameter snags. D.J. Spiering, R.L. Knight. 2005. Snag density and use by cavity-nesting birds in managed stands of the Black Hills National Forest. Forest Ecology and Management 214 (2005) 40–52. http://www.sciencebuff.org/content/files/science-staff/spiering_knight_2005.pdf (Note: "large" snags in this study were >48 cm, or 19" dbh). The agency should consider the significant implications of this study. Large snags are critically important for species viability, yet further loss of large snags (such as that caused by this project) will make a bad situation worse.	The Forest recognizes the importance of snags which is evident by the numerous standards and guidelines in the Forest Plan that describe the need to retain multiple size and decay classes of snags in the landscape. Further, the Forest Plan specifically identified a species association called "snag association" which was designed to capture the potential effects of the Forest's management may have on habitat associated with various bird species that are dependent on snags. The commenter also identified the importance of snags for cavity nesting bird species and cited Spiering and Knight (2005). The authors of this research document provide additional evidence on the need to retain snags for cavity nesting birds, particularly large snags. The authors points out that despite a wide range of snag sizes (3 to 25 inches diameter at breast height), larger snags had more cavities built and used by cavity nesting birds. Larger snags more commonly displayed evidence of foraging than the smaller snags, even though all size classes showed evidence of foraging. Despite the difference in tree species composition between the author's study area and the Westside Fire Recovery Project area, cavity nesting birds still need a diverse size and decay classes of snags and sometimes trees. The Westside Project incorporates the need of a variety of snag sizes and decay classes to meet the needs of a wide array snag associated bird species as described in the Forest Plan. Most of the project area will not receive treatment so these areas will retain all the existing snags that vary in size and decay classes. In addition, salvage harvest units will have snags retained in Riparian Reserves that contain all size classes including the trees/snags >25 inches diameter at breast height. In addition, snag retention areas were created in the salvage harvest units to further increase the number of snags plus legacy trees occurring in the salvage harvest units will be retained. Therefore, the Westside Fire Recovery Project was designed to reduce the effects to cavity nesting birds by providing a variety of snags throughout the project area. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.09 - WL - post-fire habitat	#5873-62	Although rate of biomass input and average piece size generally are thought to increase with succession (Harmon and others 1986), the amount of dead wood can follow a U-shaped pattern if young forests inherit large amounts of dead wood and live trees from preceding stands (Spies and others 1988). The snags in our study—especially large snags—increased with succession in almost all of the habitats. No wildlife habitats exhibited a U-shaped pattern, probably because snags tend to be cut within harvest units, which reduces the density found in early successional forests.... … The lack of a U-shaped successional pattern for snags is not surprising.... Snags also are much more likely than down wood to be damaged or intentionally removed by humans through the course of forest management and harvest activities. … All of the habitats we examined had similar patterns: distributions were non-normally distributed and strongly skewed to the right. A large proportion of the plots did not contain snags or down wood, and a very small proportion of the plots contained extremely large accumulations of dead wood. Janet L. Ohmann and Karen L. Waddell; Regional Patterns of Dead Wood in Forested Habitats of Oregon and Washington; USDA Forest Service Gen. Tech. Rep. PSW-GTR-181. 2002. http://www.fs.fed.us/pnw/pubs/journals/PSWGTR181Deadwood.pdf.	This is a direct quote from the document referenced in the excerpt from the comment letter.
204.09 - WL - post-fire habitat	#5873-63	The Trapper Project on the Willamette NF proposed to retain 30 snags per acre in a project intended to mimic a stand replacing fire event. This is an example of how much wood should be retained in salvage projects. Look at the "Snag Gap" with Open Eyes. One of the most significant and lasting effects of stand replacing disturbance such as fire, wind, or regeneration logging is to bring the process of snag recruitment to a virtual standstill for many decades. Even if snags are not removed by the disturbance, snags created by the disturbance will fall down over time and few if any snags are created. This results in a "snag gap" that has serious adverse consequences for habitat and many other ecological processes. The apparent abundance of large snags after a stand replacing disturbance masks a severe shortage of large snags down the road.	See response to number 18909-32

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-66	1. The agency must recognize the asymmetric nature of snag dynamics after all types of stand replacing disturbance. High rates of snag fall would be expected in the decades following disturbance, while low rates of snag recruitment would be expected in the decades following a disturbance. This unavoidably results in a serious deficit of snags at some point in the future. 2. In order for the NEPA analysis to fully address the snag habitat issue it must look carefully at the snag gap from both ends. a. The snag gap begins when too many of the current snags are gone. So the snag gap is exacerbated on the front end by salvage logging which removes too many large snags. b. The snag gaps ends when the next stand grows to the point that it contains large trees and some of them die, so the snag gap is exacerbated on the back end if there is a significant delay in tree regeneration. 3. The agency has a tendency to focus on the back end of the snag gap which is allegedly mitigated by tree replanting, but this benefit is in the distant future and remains speculative. The agencies tend to ignore the effect of logging on the front end of the snag gap (which is concrete and unavoidable). 4. Logging which retains only enough snags to meet snag requirements after harvest will not meet snag requirements in a few years after those few retained snags fall. 5. Both the RMP and the Northwest Forest Plan (p C-13) require that snags be maintained through time, so our goal must be to manage snags to minimize the time period that there is a deficit of snags. 6. The NEPA analysis must account for snag fall rates and figure out how to minimize the snag gap. Every day that the "snag gap" is lengthened by salvage logging is a violation of the RMP. Models that may be used to analyze snag dynamics can be found here: http://www.for.gov.bc.ca/hre/deadwood/DTmod.htm. 7. There is a strong correlation between the size of the snags and the length of time it is likely to remain standing, so salvage must be designed to retain all the large snag and only remove trees from smaller size classes. 8. Consider this example: Assume that the stands currently have 30 large trees/acre and 24 of those will be removed via salvage logging while 6 trees/acre will be retained for snag habitat. Further assume that in 50 years 2 percent of the large snags will remain standing as snag habitat. Two percent of 6 trees/acre is FAR LESS than 2 percent of 30 trees/acre, so there is a virtual statistical certainty that salvage logging will exacerbate the snag gap. 9. The snag gap is really exacerbated by salvage logging in two ways — first by targeting removal of the large and most persistent component of the snag population, and second by accelerating the rate that remaining snags fall and are lost from the snag population. New science from Idaho reveals that Ponderosa pine snags persist longer in unlogged areas. See Russell, R.E., Saab, V.A., Dudley, J.G., and J.J. Rotella. 2006. Snag longevity in relation to wildfire and postfire salvage logging. Forest Ecology and Management 232 (2006) 179-187. http://www.fs.fed.us/rm/pubs_other/rmrs_2006_russell_r001.pdf ("The predicted half-life of a ponderosa pine snag was 7-8 years in salvage logged plots and 9-10 years in unlogged plots.")	See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. This comment appears to refer to Resource Management Plans (RMPs) which are BLM planning documents. As such it is not responsive to issues related to the Westside Recovery Project. There are about 52,000 acres of moderate and high severity burn areas in the Westside Fire Recovery Project area where most of the trees were killed by the fire. Salvage harvest, even at the highest proposed level (Alternative 2) 85 percent of the moderate and high severity fire area would not have salvage harvest. In the Preferred Alternative, the number is closer to 90 percent. In areas with salvage units, snag retention standards in the Klamath Forest Plan must be met. Regardless of how long snags last, we don't believe there will be a snag shortage in the Westside Fire Recovery Project Area. The comment notes that salvage in LSRs and in particular removal of large trees should be limited and suggest large trees are being targeted.. While the Westside Fire Recovery Project appears to be large, in fact, it affects a small proportion of the LSR that experienced stand replacement fire in 2014. Of the 28,700 acres of LSR that burned at moderate to high intensity (all diameter classes, more than 50 percent of the trees killed) about 3,900 acres or less than 15 percent is proposed for salvage in LSRs (Appendix E, Figure 10). An additional 800 acres of concentrated roadside hazard removal or about 3percent of moderate or severely burned areas within the LSR is proposed (Appendix E, Table 3). Combined an estimated 4,700 acres or about 17 percent of moderate or severely burned areas would be removed between salvage harvest and concentrated roadside hazard removal. That means more than 80% of the stands with moderate or severe fire damage are retained. Concentrated roadside hazard and salvage harvest combined would remove about 6 percent of the 81,200 acres of LSR in all burn severities affected by the Westside Fires.Comments also state that removal of large trees should be limited. When the Eddy Gulch and Seiad LSRs are stratified by stand size using the California Wildlife Habitat Relationship (CWHR) data, there are 29,600 acres of stands with a quadratic mean diameter (QMD) greater than 24 inches in all burn severities in the Eddy Gulch and Seiad LSRs (Appendix E). Of these stands, 8,650 acres of are moderately to severely burned. Using California Wildlife Habitat Relationship data (Appendix E, figure 12) shows that within the Eddy Gulch and Seiad LSRs: • Of the 29,600 acres of stands with a quadratic mean diameter (QMD) greater than 24 inches, in all burn severities, 1,750 acres (6% of the size class) would be removed by the Westside Fire Recovery project in salvage harvest units. An estimated additional 240 acres of stands greater than 24 inches QMD would be removed in roadside hazard cleanup (Appendix E, Table 3) in moderate – high severity burn areas. • With salvage units and roadside hazard combined, approximately 2,000 acres of stands with a QMD greater than 24 inches would be removed within the Eddy Gulch and Seiad LSRs from moderate – high severity burn areas. • Of stands with a QMD greater than 24 inches, this represents about 23 percent of the 8,650 acres of moderate - high severity burn acres and about 7% of the medium / large tree diameter class (29,600 acres) in all burn severities in the LSRs. • Of the stands where the QMD is greater than 24 inches that are in moderate to high severity burn patches, 77 percent would be retained. Overall, in all burn severities, over 90 percent of the stands with a QMD greater than 24 inches in the Seiad and Eddy Gulch LSRs would be retained.From this, we conclude that salvage in the LSRs and removal of large trees is indeed limited, when considered in the context of the scale of the Westside Fires.See response to #5873-68, 5873-2 and EIS Chapter 3, Responsible Opposing Points of View. Snag fall is addressed in EIS Chapter 3 Fuels
204.09 - WL - post-fire habitat	#5873-73	Similarly, the Fremont-Winema NF's Barry Point Fire Salvage EA says: Bull et al. (1997) states current direction for providing wildlife habitat on public forest lands does not reflect the new information available, which suggests that to fully meet the needs of wildlife, additional snags and habitat are required for foraging, denning, nesting, and roosting. Rose et al. (2001) also state that several major lessons have been learned in the period 1979 to 1999 that have tested critical assumptions of earlier management advisory models, including some assumptions used to develop current recommendations in the LRMP Standards and Guidelines. Some assumptions include: • Calculation of numbers of snags required by woodpeckers based on assessing their "biological (population) potential" is a flawed technique (Rose et al., 2001). Empirical studies are suggesting that snag numbers in areas used and selected by some wildlife species are far higher than those calculated by this technique (Rose et al., 2001). • Numbers and sizes (DBH) of snags used and selected by secondary cavity nesters often exceed those of primary excavators (Rose et al., 2001). This suggests the current direction of managing for 100 percent population levels of primary excavators may not represent the most current knowledge of managing for cavity nesters and that these snag levels, under certain conditions, may not be adequate for some species. http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/91686_FSPLT3_1450222.pdf	The Fremont-Wineama National Forest may have used these research documents that are appropriate for the habitat occurring on that Forest, but the Klamath National Forest is using the best information for managing land that occur on the Klamath National Forest. In the final EIS under the heading titled "Responsible opposing views and agencies' responses to issues raised" the second topic called "Whether there is "excess material" that can be removed" provides a detailed description of the various guiding documents used to inform land management and snag retention. See the summary of the Late-Successional Reserve, Appendix E. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-74	Limitations of Existing Approaches for Assessing Wildlife-Dead Wood Relations Models of relationships between wildlife species and snags in the Pacific Northwest typically are based on calculating potential densities of bird species and expected number of snags used per pair. This approach was first used by Thomas et al. (1979). Marcot expanded this approach in Neitro et al. (1985) and in the Snag Recruitment Simulator (Marcot 1992) by using published estimates of bird population densities instead of calculating population densities from pair home range sizes. This approach has been criticized because the numbers of snags suggested by the models seem far lower than are now being observed in field studies (Lundquist and Mariani 1991, Bull et al. 1997). In addition, the models provided only deterministic point values of snag sizes or densities and of population response ("population potential") instead of probabilistic estimates that are more amenable to a risk analysis and risk management framework. In addition, existing models have focused on terrestrial vertebrate species that are primary cavity excavators. Thomas et al. (1979) and Marcot (1992) assumed that secondary snag-using species would be fully provided for if needs of primary snag-excavating species were met. However, McComb et al. (1992) and Schreiber (1987) suggested that secondary cavity nesting birds may be even more sensitive to snag density than are primary cavity excavators. Furthermore, existing models do not address relationships between wildlife and down wood, nor do they account for species that use different types of snags and partially dead trees, such as hollow live and dead trees used by bats (Ormsbee and McComb 1998, Vonhof and Gwilliam 2007), Vaux's swift (Chaetura vauxi) (Bull and Hohmann 1993), American marten (Martes americana) (Bull et al. 2005), and fisher (Martes pennanti) (Zielinski et al. 2004). Bruce G. Marcot , Janet L. Ohmann, Kim L. Mellen-McLean, and Karen L. Waddell. Synthesis of Regional Wildlife and Vegetation Field Studies to Guide Management of Standing and Down Dead Trees. Forest Science 56(4) 2010. http://ddr.nal.usda.gov/bitstream/10113/47366/1/IND44438441.pdf.	This is a direct quote from Marcott et al (2010) and there is no project specific comment for which to respond.
204.09 - WL - post-fire habitat	#5873-78	The potential population models are based on the number of trees needed for nesting cavity-excavator birds, however, “[t]he high value of large, thick-barked snags in severely burned forests has as much to do with feeding opportunities as it does with nesting opportunities they provide birds.” (Hutto. ConBio 20(4). 2006. http://web.archive.org/web/20060904175645/http://avianscience.dbs.umt.edu/documents/hutto_conbio_2006.pdf. The number of snags needed to support bird feeding, escape from predators, and other life functions, is different than, and likely higher than, the number of snags needed to support nesting, so the agencies’ existing “potential population” snag standards are arbitrary and capricious.	The Forest Service does not refute that different species respond differently to different fire severities as described in Hutto et al (2006). This topic is addressed in the project Management Indicator Species Report Part II. The Proposed Action was not designed to - nor would it - eliminate moderate or high severity burn habitat. Effects to other migratory and cavity nesting birds are discussed in Migratory Bird Report and Management Indicator Species Report. Snags and hardwoods will be retained at or above Forest Standard and Guideline levels after treatment. Important habitat components such as large snags will be retained in clumps in salvage treatments to provide for future habitat quality for birds that depend on snags.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-79	There is evidence that retaining more than the minimum number of snags has significant benefits for cavity dependent species. Comparing two sites in Northern California, Blacks Mountain Experimental Forest (BMEF) with little past logging and lots of snags, and Goosenest Adaptive Management Area (GAMA) with lots of logging and fewer snags, the author's found "… three times as many snags (6.38/acre vs. 2.04/acre, respectively) … The use of snags by cavity-nesting bird species was dramatically different between the sites. Thirty-one cavity-nesting pairs from 10 species were detected at BMEF, while only one pair each of two species were detected at GAMA…. This fifteenfold difference is much greater than any measure of snags or cavities reported. …" We feel that forest managers may well be asking a misleading question. "Snags per acre" requirements implicitly assume an equilibrium condition and reflect only one ecological requirement for a given cavity-nesting species. … [C]onsideration of foraging habitat and other ecological requirements must be part of the "snags per acre" management considerations. This is an important, but somewhat daunting proposition, as potential cavity-nesting species are diverse, and each species likely has very different foraging ecologies, as well as other differences in habitat requirements. … [C]avity nesters at BMEF used larger snags on average … [T]he loss of large trees due to logging in eastside pine and other forests, over the past century has major implications for cavity-nesting birds. … [F]orest managers must have a sense of snag recruitment in relationship to snag fall, and the patterns and processes that underlie them, when addressing wildlife needs. … We view the understanding of these complexities to be of primary importance in forest management for wildlife. Steve Zack, T. Luke George, and William F. Laudenslayer, Jr. 2002. Are There Snags in the System? Comparing Cavity Use among Nesting Birds in "Snag-rich" and "Snag-poor" Eastside Pine Forests. USDA Forest Service Gen. Tech. Rep. PSW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/017_Zack.pdf.	The Forest doesn't contest the importance of snags for cavity nesting birds. Throughout most of the project area, the existing snags created by the fires will not be affected by the proposed actions. There are large blocks of fire created snags at various elevations, densities, sizes, and tree species that will not be harvest such the large portion (over 4,000 acres) of the Grider Creek watershed. However, the literature quoted in this comment represents research in pine forests. The project area contains small amount of pine dominate stands outside of the plantations thus the literature presented here is not the best information for the project area.
204.09 - WL - post-fire habitat	#5873-8	Salvage logging will not meet standards & guidelines for snag habitat. Leaving just a few snags after salvage logging will meet standards for just a few years, until those few retained snags fall down and are not replaced. 9. The current snag habitat standards in the Northwest Forest Plan are based on outdated science ("potential population" methodology) and these standards do not provide enough habitat for the diverse life needs of many different species that use snags and dead wood. Meeting ecosystem objectives requires more snags than are called for in current standards, and more green trees are needed to recruit those higher snag levels. The FS needs to follow NEPA and NFMA procedures to consider new science, consider alternative standards, and finally adopt new standards that meet all the needs of wildlife (and other ecological functions) provided by snags and dead wood. Reducing snags on such a grand scale as this (and with such long-term impacts on the snag gap) is not permissible until the FS adopts new standards.	The standard and guidelines presented in the Forest Plan on page 4-30 for snag associated species under the Management Indicator Species category are followed in the development of the project. The Project Design Features as presented in the draft EIS plus the lack of salvage harvest in hydrologic Riparian Reserves are designed to meet snag retention standards and guidelines. See response to comment numbers 5873-72 and 6277-1, and 12346-55. Best available science was used during project design and analysis, as referenced throughout the final EIS and supporting documents.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-80	Another recent science publication asked that the agencies salvage polices be brought up to date with current science. Inadequacy of Current Snag Guidelines Current snag-retention guidelines for most North American plant community types fall between 1 and 8 snags/ha. These guidelines emerged primarily from a consideration of the nesting requirements of cavity-nesting vertebrate species in the now classic Blue Mountains book (Thomas 1979). The retention of 8 snags/ha was judged to support 100% of the maximum population density of any of the woodpecker species that occur in the Blue Mountains area (Thomas 1979: Appendix 22). Bull et al. (1997) concluded that about 10 snags/ha in ponderosa pine and mixed-conifer forests should support viable populations of cavity-nesting birds. Thus, most current U.S. National Forest guidelines generally converge on the recommendation to retain 6–10 trees/ha, as do guidelines for Washington State, the Ontario Ministry of Natural Resources, the U.S. Army Corps of Engineers, and many other land management agencies. It has been acknowledged that snag guidelines should be sensitive to forest type and forest age because “the wildlife species that use snags are influenced by the stage of forest succession in which the snag occurs” and by the breakdown stage of the snag (Thomas et al. 1979). Moreover, snag types, sizes, and densities vary significantly with vegetation type (Harris 1999; Harmon 2002; White et al. 2002). Therefore, it follows necessarily that the desired snag types and densities will differ with both plant community type and successional stage and that we need as great a variety of guidelines as there are community types and successional stages (Bull et al. 1997; Everett et al. 1999; Rose et al. 2001; Kotliar et al. 2002; Lehmkuhl et al. 2003). Unfortunately, we have generally failed to adjust snag-retention recommendations to specific forest age, and nowhere is that failure more serious than for those special plant community types that were ignored in the development of the generic guidelines—recently burned conifer forests. Such forests are characterized by uniquely high densities of snags (Angelstam & Mikusinski 1994; Hutto 1995; Agee 2002; Drapeau et al. 2002), and snag use by most woodpeckers in burned forests requires high snag densities because they nest in and feed from burned snags. These facts have been overlooked in the development and implementation of meaningful snag-management guidelines. Indeed, these guidelines have generally converged toward an average of 6–7 trees/ha because that number was deemed more than adequate to meet the nesting requirements of cavity-nesting wildlife species (Thomas et al. 1979:69). Snag guidelines were not originally developed with an eye toward non-nesting uses of snags or from an attempt to mirror snag densities that typically occur on unmanaged reference stands. Snag guidelines are still much narrower than numerous authors have suggested they ought to be, and we currently run the risk of managing coarse woody debris with uniform standards across historically variable landscapes, which is entirely inappropriate. Instead, we should be managing for levels of coarse woody debris that more accurately mirror levels characteristic of the natural disturbance regime (Agee 2002). Clearly, we need more data on what might constitute meaningful snag targets for all forest types and successional stages, and those targets should be set on the basis of reference conditions from natural post disturbance forests, not from managed forest stands and certainly not from consideration of only a single aspect of an organism’s life history. Newer guidelines that are appropriate for snag dependent species that occupy standing dead forests at the earliest stage of succession are beginning to trickle in (Saab & Dudley 1998; Haggard & Gaines 2001; Saab et al. 2002; Kotliar et al. 2002), and authors suggest that 200–300 snags/ha may better address the needs of wildlife in burned forests. The issue has yet to receive the serious management attention it deserves, but the comprehensive review of habitat needs of vertebrates in the Columbia River Basin (Wisdom et al. 2000) and the recently developed DecAID modeling effort in Washington and Oregon represent important efforts toward providing that kind of management guidance (Marcot et al. 2002).	This is a direct quote from the document titled "Towards a meaningful snag-management guidelines for postfire salvage logging in North American conifer forests" by Richard Hutto (2006). The quoted reference is acknowledge but the commenter failed to describe what about the proposed actions or our analysis needs to be changed in response to this comment. Forest Service policy and Forest Plan direction is outside the scope of this project; however we disagree with the commenter's assertion that snag retention requirements are inadequate. We recognize the importance of snag retention and have incorporated best available science into snag retention into project design and analysis for the Westside Fire Recovery project. See response to comment number 5873-81. This comment provides no evidence to support the argument that the Forest Plan direction to snags and down logs is not adequate. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.. See chapter 1 for a discussion of salvage in Late-Successional Reserves. See the discussion of responsible opposing points of view at the beginning of Chapter 3 of the final EIS. The effects to wildlife are chapter 3 of the final EIS for a discussion of effects.

Code	Comment Number	Comment Text	Response
204.09 - WL - post-fire habitat	#5873-81	Current Postfire Management Decisions Related to Snag Retention The following points regarding management decisions apply to western forest types that experience crown fire as at least a minor component of their fire regimes (and that is virtually all western forest types). (1) The USFS uses fire as a motivation to harvest trees. This is evident because in most cases where postfire logging is proposed they had not already sold green-tree harvests in those particular areas prior to the time of fire disturbance. Even though land managers are becoming more aware of the overwhelmingly negative ecological impacts of postfire salvage logging, the management has not shifted correspondingly toward less salvage harvesting. Instead, the most common justification for such harvests seems to have shifted recently from “salvaging” what economic value there might be to preventing another catastrophic fire (McIver & Starr 2000). Recent modifications of legislation and regulations by provincial governments in Canada (cited in Nappi et al. 2003) and by the U.S. government as well (Healthy Forests Restoration Act) expedite or even provide incentives for salvage logging. Such legislation provides no commitment to meaningful snag retention on burned forest lands. This failure to appreciate the value of burned forests to ecosystem sustainability is exacerbated by the fact that industrial lands (and most state lands) are, and probably always will be, completely salvage logged after fire because the value of those lands to those landowners lies entirely with the potential for short-term economic gain. The onus lies squarely on public land managers to provide the necessary protection of snag resources on burned forest land, and that has yet to happen. (2) The usual agency response to questions about the amount or kind of burned trees to leave is that it does not really matter because they propose taking only a small proportion of what burned, so there must be plenty left for wildlife. Although that could be true, there is no scientific basis for such a conclusion. The volume of burned timber needed to enable populations to expand enough so that they can weather the next hiatus without fire in a particular area is unknown. (3) If a partial salvage is proposed, the level of snag retention is generally based on a gross misapplication of current snag guidelines. In short, meaningful snag management guidelines for burned forests are lacking because the general public and the land management agencies that act on behalf of the public do not recognize the biological value of snags in burned conifer forests. Hutto, R.L., 2006. Toward Meaningful Snag-Management Guidelines for Postfire Salvage Logging in North American Conifer Forests. Conservation Biology Volume 20, No. 4, 984–993. http://web.archive.org/web/20090205212350/http://avianscience.dbs.umt.edu/documents/hutto_conbio_2006.pdf	This comment provides no evidence that the guidelines of the Forest Plan are inadequate. See response to 5873-2. This is a direct quote from Hutto et al (2006) and there is no project specific comment for which to respond. We disagree with the opinion that the agency uses fire to harvest trees. See response to comment number 5873-72 about snag retention. In addition to having an economically viable project and the benefits to the local community, we are salvage harvesting in order to reduce fire risk and restore the landscape; see the project's purpose and need (Chapter 1 of the final EIS). Regulations in Canada are not applicable to how the Klamath National Forest is managed. We appreciate the benefits of burned forests. In fact, prescribed burning is proposed in this project where needed to improve fuels, habitat, and watershed conditions. See chapter 2 of the final EIS for a description of proposed actions. We are not only salvage harvesting a small portion of the project, as mentioned by the commenter, but within the units being salvage harvest there is additional retention areas and mitigation, including the retention of important course woody debris, large snags, and legacy components, as described in the watershed and wildlife project design features in chapter 2 of the final EIS. We acknowledge the importance of fire-killed trees for wildlife habitat, as disclosed in the wildlife section of chapter 3 of the final EIS. We do not refute that different species respond differently to different fire severities as described in Hutto et al (2006).
204.09 - WL - post-fire habitat	#5873-82	The bottom line is that current management at both the plan and project level does not reflect all this new information about the value of abundant snags and down wood. The agency must avoid any reduction of existing or future large snags and logs (including as part of this project) until the applicable management plans are rewritten to update the snag retention standards. See also PNW Research Station, “Dead and Dying Trees: Essential for Life in the Forest,” Science Findings, Nov. 1999 (http://www.fs.fed.us/pnw/sciencef/scifi20.pdf) (“Management implications: Current direction for providing wildlife habitat on public forest lands does not reflect findings from research since 1979; more snags and dead wood structures are required for foraging, denning, nesting, and roosting than previously thought.”) and Jennifer M. Weikel and John P. Hayes, HABITAT USE BY SNAG-ASSOCIATED SPECIES: A BIBLIOGRAPHY FOR SPECIES OCCURRING IN OREGON AND WASHINGTON, Research Contribution 33 April 2001, http://www.fsl.orst.edu/cfer/snags/bibliography.pdf..	The Forest is following the standard and guidelines presented in the Forest Plan. The Forest Plan outlines the wildlife Management Indicator Species (pages 4-30 to 4-33), Forest Service Sensitive species as amended by the Regional Forest Supervisor (4-28), Survey and Manage as amended and referenced to the Northwest Forest Plan standards and guidelines (4-24). For these species, standards and guidelines were developed (referenced for survey and manage species) to reduce effects to these species and these standards and guidelines were either incorporated in the design of the project or Project Design Features. Project Design Features are presented in Chapter 2 of the draft EIS. Management Indicator Species within the snag association is intended to represent a group of species strongly associated with snags and woody debris. Standards and Guidelines are presented in the Forest Plan (4-30) were used to reduce effects to wildlife species associated with snags and woody debris. See response to 5873-82.

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#12346-10	Oregon Natural Res. Council Fund v. Brong, 492 F.3d 1120, 1127 (9th Cir. 2007) Like the BLM in the Brong case, the Westside timber sale is targeting large-diameter snags for removal from the LSR system in order to maximize the economic return to the agency from logging the Reserves. By removing large snags likely to persist until latesuccessional conditions have developed the Forest Service is violating the NW Forest Plan standards and guidelines concerning post-fire logging in the Reserves. Also like the BLM in Brong, the Forest Service is relying on "retention" of snags outside of actual logging areas in an attempt to circumvent substantive LSR snag retention standards. Page 33 of the DEIS indicates that snag retention for the 7,560 acres of LSRs logging units are being calculated by utilizing a total baseline acreage of 11,710 acres that includes adjacent Riparian Reserves and other lands areas outside of actual logging areas as part of "units" in order to avoid retaining large snags that may persist LSR stands that are subjected to logging. Using math tricks to avoid retaining snags in LSR logging units is not permitted by the Forest Plan.	Response number 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" Section in Chapter 3 of the final EIS outlines the snag retention design for the Westside Fire Recovery project. These include hydrologic Riparian Reserves and inner gorges inside of the salvage units as well as snag retention areas and retention of legacy components in the salvage harvest units. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.10 - WL - LSR habitat	#12346-11	As stated by the 9th Circuit in Brong: [T]he amount of large snag retention the BLM claims to be enough to satisfy the NFP is only achieved by averaging salvage and non-salvage areas together across all the areas included in the logging… Thus, the BLM's representation that between eight and twelve large snags per acre will still be standing after the logging occurs is grossly misleading, as over two-thirds of the affected acreage will be completely stripped of all salvageable trees. The BLM's attempt to dilute the effects of its proposed activities by averaging the snag retention over such a wide area is inconsistent with the NFP and improper under our precedent.	See response to number 12346-10. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.10 - WL - LSR habitat	#12346-5	Page 106 of the DEIS acknowledges that an action alternative that focused on hazardous fuels treatments and roadside logging would "meet one part of the purpose and need for this project (to reduce safety hazards to adjacent landowners, the public and forest workers) by including fuels and roadside hazard treatments." But the Forest Service insists upon conducting unit salvage logging in LSRs in order to "obtain the maximum economic commodity and value from burned timber." Ibid. The agency also mistakenly contends that unit salvage logging will "increase the likelihood and speed by which burned forests are restored." Ibid. The Forest Service is not permitted to justify logging the LSRs in order to "obtain the maximum economic commodity and value" from these old-growth reserves. As is shown throughout these comments, and as established by the peer-reviewed literature submitted during the scoping process, unit salvage logging will inhibit, rather than contribute to, restoration of late-successional forest character. Please note the recent 2013 BLM publication entitled the Analysis of the Management Situation for the Resource Management Plans for Western Oregon states that: The 1995 RMPs do not provide management direction in Riparian Reserves or Late-Successional Reserves to salvage after disturbance for economic reasons. Since recent science seems to indicate that an ecological rationale for post-disturbance timber 3 salvage is weak, an opportunity exists to add an economic objective related to afterdisturbance salvage activities to these reserved land use allocations.	We agree that the Northwest Forest Plan does not permit a salvage project in Late Successional Reserves solely for recovering the economic value of the timber alone. However, the Northwest Forest Plan allows the consideration of economic interest in the management of Late Successional Reserves if it provides explanation connecting the economic recovery and the need to protect and enhance late-successional ecosystems. This is explained in C-13-14 “[M]management planning for Late Successional Reserves must acknowledge the considerable value of retaining dead and dying trees in the forest as well as the benefits from salvage activities.” The full line of evidence is in response 3 in the "Responsible Opposing Views and Agency's Response to Issues Raised" in Chapter 3 of the final EIS.

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#12346-7	As described in our scoping comments, the primary architect of the NWFP LSR system has written that: "Salvage logging of large snags and down boles does not contribute to recovery of late-successional forest habitat; in fact, the only activity more antithetical to the recovery process would be removal of surviving green trees from burned sites. Large snags and logs of decay resistant species, such as Douglas-fir and cedars, are critical as early and late successional wildlife habitat as well as for sustaining key ecological processes associated with nutrient, hydrologic, and energy cycles." -Dr. Jerry Franklin, 1/20/04. The DEIS ignores the role that snags and logs play in sustaining wildlife habitat and key nutrient, hydrological and energy cycles that contribute to ecological (rather than economic) recovery in the Reserves. Franklin concluded that "salvage logging of large snags and logs is absolutely antithetical to rapid recovery of late-successional forest habitat." Yet such logging comprises the bulk of the KNF's "recovery" project. MA-5 of the KNF LRMP only allows post-fire logging in LSRs "if it benefits habitat." As acknowledged by both the Forest Service and the BLM in many projects and contexts, salvage logging of LSRs does not benefit habitat. This is particularly true for the silviculture prescription in Westside that calls for new road construction, clearcut logging on steep unstable slopes, and removal of snags and down wood likely to persist over time. FEMAT 1993, p. IV-36 states that "[m]anagement objectives [following natural disturbances in LSRs) should focus on either simulating natural succession or allowing it to occur unimpeded." The DEIS refuses to implement this guidance and commits the agency to removing forest structure in the LSRs and speeding plantation establishment specifically in order to avoid and prevent natural succession within the Reserves. FEMAT directs that: Because of the important role of dead wood in late-successional and old-growth forest ecosystems, and because there is much to learn about the role of dead wood in development of forests, only limited salvage is appropriate in Late-Successional Reserves…The Final Draft Recovery Plan [for the NSO] would allow removal of small4 diameter snags and logs, but would also require retention of snags and logs likely to persist until the new stand begins to contribute significant quantities of coarse woody debris." (FEMAT 1993, p IV-37)	See EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised for a thorough discussion of issues raised in this comment. The comments and opinions of the BLM and Forest Service on other projects are not applicable to this project. See response to comment number 12346-55.
204.10 - WL - LSR habitat	#12346-8	In the Westside Project the Forest Service has taken the exact opposite approach recommended by the NWFP. The agency is proposing extensive (rather than limited) salvage logging across tens of thousands of acres in the Reserves and is proposing to remove large diameter snags from logging units while leaving the least valuable (for wildlife and mills) small diameter snags in the units.	Salvage is permitted within Late-Successional Reserves following the Standards and Guidelines in the Forest Plan. Project design features call for the retention of legacy components and snags to meet the Standards and Guidelines. (See Chapter 2 of the final EIS). This project is under review by the Regional Ecological Office which means there is a review of compliance with Late Successional Reserve requirements under the Northwest Forest Plan.
204.10 - WL - LSR habitat	#12346-9	At 8944 of the 9th Circuit decision in ONRC v Brong the court concluded: [I]t is not surprising the NFP restricts removal of snags in LSRs. In fact, the NFP's salvage guideline no. 3 expressly limits the removal of such snags: Snags provide a variety of habitat benefits for a variety of wildlife species associated with late successional forests. Accordingly, following standreplacing disturbance, management should focus on retaining snags that are likely to persist until late-successional conditions have developed and the new stand is again producing large snags. Late-successional conditions are not associated with stands less than 80 years old. Despite this clear directive against removing large snags (i.e.. those likely to persist until late-successional conditions have developed), the BLM asserts that the Project, which entails the removal of a significant number of large snags in late-successional areas, is nonetheless consistent with the NFP. We disagree, and find the BLM's reasoning lacking in multiple respects.	A discussion of the snag retention design has been incorporated into Chapter 2's description of salvage harvest in the final EIS. The design includes until the next stand is capable of producing such material by retaining legacy trees, not salvaging in hydrologic Riparian Reserves and inner gorges, designating snag retention areas and protecting these features from future wildfire disturbance. Response 2 in the "Responsible Opposing Views and Agency's Response to Issues Raised" in Chapter 3 of the final EIS describes the efficacy of the snag retention design and the balance between leaving legacy components (snags and coarse woody debris) and reducing future fuel loading. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.10 - WL - LSR habitat	#12549-3	The Northwest Forest Plan states that in LSRs living trees in a fire area should be uncut and Klamath Forest Plan requires that snags be retained on a per acre level. The DEIS assumption that moderate fire severity areas no longer support habitat for native plant and animal species is wildly inaccurate. Further, high-severity patches are of greatest importance to ecological integrity as they provide biological legacies that sustain the diversity of plants and wildlife. Post-fire landscapes are not in need of "restoration" because fire itself is a restorative agent.	Areas that were burned with moderate and high vegetation severity were considered as habitat in the analysis of effects (see response to number 18909-62). Snags, coarse woody debris and other wildlife legacy components will be maintained in salvage units (See response to number 12346-10). Much of the fire affected area is being left to naturally recovery (See Table 2-1 and Figure 2-1 in Chapter 2 of the final EIS). Areas that are being treated will meet the purpose and need of the project,

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#17111-11	In summary, general salvage of large snags and logs is clearl y antithetical to the goal of rapid recovery of fully functional late-successional forest habitat and inappropriate within the Late-Succesional Reserves. If large fuels are viewed as a critical fire control issue, then this could be dealt with by creating appropriate Fuel Management Zones or snag-free corridors.	Response 3 in the "Responsible Opposing Views and Agency's Response to Issues Raised" describes the logic behind salvage harvest in Late-Successional Reserves. Forest. The Regional Ecosytem Office of the US Forest Service concurred with the Forest assessment documented in Appendix E that the project was consistent with the Forest Plan and Late-Successional Reserve Assessment (Appendix E of the final EIS).
204.10 - WL - LSR habitat	#17111-19	Planting may be appropriate within LSRs to establish tree seed sources for specific species and locations. However, planting should not be done following traditional approaches, which are directed to establishing uniformly stocked forest stands over large areas. Extensive, uniform plantings -even at the relatively low density proposed for some areas (200 trees/acre) -will not simulate the spatially heterogeneous pattern of natural seedling establishment.	The final EIS provides information concerning tree planting in Chapter 3 of the final EIS in the sections called “Responsible opposing views and agency’s response to issues raised”. In addition, Chapter 2 of the final EIS provides a description of the site preparation and planting in the section called “site preparation, reforestation and release”.
204.10 - WL - LSR habitat	#17111-20	Establ ishment of dense, uniform stands is completel y inappropriate i n LSRs as well as any PAG identified as fire regime types I and I I. We are currently engaged i n major programs of variable density thinning in dense plantations i n existing LSRs in order to accelerate the development of late-successional structure in these overly dense stands; so, why would we set about creating more acreage of these dense unifom1plantations within LSRs? Similarly, establishing uniform stands -even at a relatively low density of 200 trees per acre -on sites characterized by frequent fire is obviously inappropriate; this simply recreates the potential for the next "uncharacteristic" stand replacement fires on these sites!	See comment number 17111-19. See also EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised.
204.10 - WL - LSR habitat	#17111-26	Excepting the proposed roadside salvage, approximately 72% of the proposed salvage logging i n the preferred alternative (#2) is located within LSRs-roughly 4,900 acres out of 6,800 acres total. In part, the logging is justified in the DEIS on the basis that it is needed to assist in rapid re-establish late-successional forest conditions and Northern Spotted Owl habitat with the LSRs. 1 Given the important and well defined ecological role assigned the LSRs in the Northwest Forest Plan (NWFP) I have paid special attention to the scientific rationale offered for the extensi ve salvage logging that is proposed in LSRs. The LSR network was designed as a robust system of ecological reserves, which could accommodate large intense natural disturbances and the natural recovery processes that were expected to follow them. The FEMAT team well understood that salvage operations would interfere with these recovery processes, which is why they recommended that salvage in LSRs should be very limited in the FEMAT report; this conservative direction with regards to salvage in LSRs was incorporated in the NWFP. Salvage logging of large snags and down boles does not contribute to recovery of late successional forest habitat; in fact, the only activity more antithetical to the recovery processes would be removal of surviving green trees from burned sites. Large snags and logs of decay resistant species, such as Douglas-fir and cedars, are particularly critical as early and late successional wildlife habitat as well as for sustaining key ecological processes associated with nutrient, hydrologic, and energy cycles.	Se EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised" for a discussion o f the many points raised in this comment. . The vegetation section of the final EIS reports that if no action is taken to salvage and replant areas suitable for conifer regeneration they will be re-occupied, generally by brush and hardwood species. This compared to the action Alternatives (Alternatives 2, 3,4, 5, modified 2 and modified 3). The vegetation section goes on to say that the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007). There is evidence that under natural regeneration areas that have had high severity fire only had desired stocking levels met around the edges of the fire where a good seed source is still intact (Bonnett, Schoettle, and Shepperd 2005). Salvage is needed before planting to maintain the safety of those planting the trees and to reduce fuel loading in the areas (vegetation section of the final EIS, Alternative 2). Without salvage and planting, areas with high severity fire will likely not regenerate satisfactorily for many decades.
204.10 - WL - LSR habitat	#17111-27	Extensive reforestation by planting is proposed within the LSRs in the Westside Project area. Slow re-establishment of forest cover can be expected after natural stand replacement disturbances in the Pacific Northwest if tree regeneration is allowed to develop naturally. Recent studies of the establishment of natural stands following wildfire has shown that it commonly took 40 to 60 years on average for tree establishment to be completed and closed forest canopies to develop (Freund et al. 2014 and Tepley et al. 2014). This slow natural tree regeneration process contributed positively to sustaining regional forest biodiversity because it allowed shrub dominated habitat to persist for decades, which sustained a large array of early-successional species, many of which are early successional habitat specialists (Swanson et al. 2011).	See comment number 17111-19. See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#17111-4	Limited planting may be appropriate within the LSRs to establish tree seed sources for specific species and locations but this should not be done using traditional approaches, which are designed to create extensive areas of uniformly stocked forest stands. Uniform tree planting over large areas is inappropriate in LSRs even at low densities. Appropriate plantings in LSRs would be limited in area and spatially heterogeneous. The inappropriateness of creating dense uniform stands is apparent from the fact that since the origin of the NWFP we have undertaken major programs in variable density thinning in existing plantations in LSRs	See comment number 17111-19. See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
204.10 - WL - LSR habitat	#17111-9	One of the major motivating factors in conducting salvage logging in the Westside fire area - including the LSRs - seems to be economic and not ecologic (DEIS, 10-11), which is further indicated by the Chief s "Emergency Situation Determination" and the "Alternative Arrangements" secured from the Council on Environmental Quality. The NWFP specifically directs that, "Salvage will not be driven by economic or timber sale program factors" in LSRs (NFP SFEIS F-21). The teams that put together FEMAT and the NWFP specifically wanted the LSRs to be exempted from the pressures of programmed timber harvest, because the primary drivers in LSRs were ecological and not economic. Hence, it would seem that the salvage proposed within LSR segments as part of the Westside Salvage Project is inconsistent with the goals and principles of LSR management.	See response to number 12346-5. See also See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
204.10 - WL - LSR habitat	#17387-11	Plant conifers on a very wide spacing in burned LSRs as seed trees only.	Thank you for your opinion.
204.10 - WL - LSR habitat	#17460-1	In particular, Professor Franklin clarifies a number of points regarding proposed salvage logging in the Late-Succesional Reserves. Those points can be summarized as follows: 1. The LSRs were designed to be ecologically robust, able to accommodate events such as the 2014 fires. 2. Salvage logging does not contribute to recovery of LSR habitat, and is in fact detrimental to natural recovery in the LSRs. 3. According to the Northwest Forest Plan, any potential economic benefits of salvage logging and timber sales in LSRs are not to be driving factors in LSR management. 4. The importance of coarse woody debris in the recovery ofLSRs impacted by catastrophic fire, and its ecological value to a variety of species in the post-fire landscape. 5. The value of "naturally disturbed habitat undergoing natural reforestation" to regional biodiversity. 6. The reasons why new, large plantations proposed within the LSRs are ineffective and counterproductive approach to restoring LSR habitat. Professor Franklin elaborates on all of these points, and provides substantial citations to support them; for brevity, and to avoid redundancy, I refer you to the literature he cited. A great deal of the DEIS deals with the discussion of potential future fire behavior; while this is appropriate for safety considerations in the WUI, it is not a factor that should determine habitat or recovery within the LSRs. Natural recovery should be the preferred alternative. The vast majority of timber salvage units within the LSRs do not lie within the WUI; hazardous fuels treatments within the WUI and roadside treatments are 1 sufficient to reduce dangers to private property; given these treatments, there is no additional benefit to private property by salvage logging in the LSRs.	See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".. The interdisciplinary team found, based on analysis and literature review, that the project is consistent with the Forest Plan goals and objectives for the Late-Successional Reserve. Response 2 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" in Chapter 3 of the final EIS describes the balance the project is striking between the need to retain snags, coarse woody debris and other legacy components on the landscape and reducing the future fire risk. Snag and legacy component retention in salvage harvest units is incorporated into project design as described in Chapter 2 of the final EIS. The appropriateness of reforestation in Late Successional Reserves is discussed in response 4 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" in Chapter 3 of the final EIS. Seventy percent of the Late Successional Reserves in the project area affected by high and moderate severity fire will not be planted, and will proceed unimpeded through a natural succession cycle. . The 30% that will be reforested is expected to be restored to coniferous forests more quickly than the areas not planted. The increase in reforestation and the fuels reduction that will be a result of the site preparation will decrease the wildfire risk in the future. All together the areas that undergo salvage, site preparation and planting are have a higher likelihood of achieving the desired late-successional stand conditions than areas that remain unplanted. Salvage units, combined with strategic fuel breaks are intended to create large blocks where fuels have been reduced. This would reduce the likely severity of future fires and help contain large fires at watershed boundaries. Even if not directly in the WUI, this provides a buffer for many WUI areas.
204.10 - WL - LSR habitat	#18852-27	9) The "Late-Succesional Reserves" (LSR) land designation appears to be improperly applied in the "Westside Recovery" plan which calls for intensive even age salvage timber harvest with site preparation and replanting within this designation	The salvage, site preparation and planting are designed to increase the speed at which desired conditions are met. The focus of salvage and site preparation is the removal of dead or dying trees and planting may include a mix of species including Douglas-fir, sugar pine, ponderosa pine, incense cedar, white fir and red fir (reforestation and release section of Chapter 2 of the final EIS). The project meets Forest Plan Standard and Guideline Management Area 5-30 by retaining snags and coarse woody debris on the landscape. The salvage and site preparation also reduce the fuel loading thereby reducing the threat of future wildfire in the project area (Alternative 2 Direct/Indirect effects of the Fire and Fuels Section of Chapter 3 of the draft EIS). See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
204.10 - WL - LSR habitat	#18857-7	No salvage and no tree planting units in Late-Succesional Reserves.	See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#18870-1	I urge the Klamath National Forest to follow the NW Forest Plan and not log in Late-Succesional Reserves or geologic reserves.	The Northwest Forest Plan does not prohibit salvage logging in any reserve land allocation. See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
204.10 - WL - LSR habitat	#18909-3	The DEIS does not mention the quality or characteristics of the Collins Baldy, Eddy Gulch or the Johnny O'Neil Late-Succesional Reserves nor does it analyze or disclose the effects of fire, fire suppression or the proposed actions within LSRs. It also fails to disclose any information on 100 acre LSRs designated to protect northern spotted owl nest sites. The condition and purpose of LSRs is an important consideration because the existing conditions suggest that they may not be capable of providing long-term, sustainable habitat for imperiled species like Pacific fishers.	There is no requirement to re-assess the condition of Late-Successional Reserves at the project scale. Proposed actions in LSRs are disclosed repeatedly in Chapter 2. See also Appendix E which addresses the Prefererred Alternative's effects in LSRs. The Regional Ecosystem Office reviewed the proposed project and found it consistent with the requirements of the Forest Plan of the Klamath National Forest. 100 Acre LSRs are found in matrix lands. We are not aware of any salvage proposals that affect 100 acre LSRs. Roadside hazard removal is permitted iwthin these areas. The affected environment in the Wildlife reports analyzes the current condition as affected by the 2014 wildfire for the areas in the project area.
204.10 - WL - LSR habitat	#19157-3	In intensely burned Late Successional Areas near ridge tops, roads and locations where future fires can be effectively stopped, salvage logging is extremely important. The gigantic fuel loading of dead timber in these areas will burn again. Salvage the Late Successional Areas now to protect what remains.	Alternatives 2, 3, 4 and Alternative 2 as modified proposes salvage logging in Late-Successional Reserves. Fuels treatments on ridgetops are in all action Alternatives.
204.10 - WL - LSR habitat	#5873-102	Salvage may be undesirable where large diameter snags needed by wildlife are in short supply in adjoining areas. … Many years elapse in high fire severity burns before newly grown large diameter snags can replace the fallen snags, so leaving an ample density of snags following fire can help maintain a minimal snag resource during the 20 to 40 year postfire period when many snags have already fallen. Leaving a high density of snags would require constraints on harvesting. …	This is a direct quote from Brown, J., Reinhardt, E., and Kramer, K. (2003). Coarse Woody Debris: Managing Benefits and Fire Hazard in the Recovering Forest. USDA, US Forest Service. RMRS-GTR-105. There is no project specific comment to respond to.
204.10 - WL - LSR habitat	#5873-128	LSRs provide habitat for cavity dependent species. Diminishment of the habitat for species associated with dead wood will violate the Northwest Forest Plan. The Northwest Forest Plan clearly anticipated that salvage logging within LSRs must be limited to provide quality habitat for Black-backed woodpecker, white-headed woodpecker, and Williamson's sapsucker. To benefit the black-backed and white-headed woodpeckers, and Williamson's sapsucker in the Eastern Cascade Range, potential mitigation measures would be to reduce harvest and salvage in old-growth areas. Because of the strength of Late-Succesional Reserves under the selected alternative, standards and guidelines limiting salvage and thinning in those reserves, and matrix management standards and guidelines that specifically incorporate mitigation for white-headed and black-backed woodpeckers, we conclude that these potential mitigation measures are not necessary. NWFP ROD page 31. Salvage logging will clearly diminish habitat for these three species. If the agencies certainly can't claim to be providing abundant high quality habitat for cavity associated species in the Matrix, so if they don't provide for snag associated species in the reserves, then they really don't provide sufficient habitat for cavity dependent species anywhere, so a new programmatic EIS would be required to rework the regional management framework to provide adequate habitat for viable populations of snag associated species.	Response number 3 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" Section in Chapter 3 of the final EIS addresses the concern about efficacy of salvage harvest in Late-Successional Reserves.
204.10 - WL - LSR habitat	#5873-131	Jerry Franklin has said of salvage logging in LSRs that "Salvage would be completely antithetical to the goals of reestablishing late-successional forest habitat. Retention of the large snags and logs are essential to natural recovery processes and none of this material can be viewed as in excess to ecological needs." Jerry Franklin, Comments on the Siskiyou NF's Biscuit Fire Salvage DEIS, Jan. 20, 2004.	Chapter 3 of the final EIS under the section called "responsible opposing views and agency's responses to issues raised" provide additional response to this comment.

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#5873-145	The Warner Creek LSR salvage project on the Willamette National Forest endeavored to retain trees 20 inches and over. REO found it consistent with the LSR Standards & Guidelines. Consider the following excerpt from the REO review: Snags should be retained when they are likely to persist until late-successional conditions have developed. Complies. The project proposes to remove all dead trees within 1.2 to 2 acre circles in dispersed group selection areas, and all dead trees less than 20" dbh (those less likely to survive as snags during the next 80 to 100 years; i.e., the period of creation of LS/OG conditions) from a 50-foot area around the group selection salvage sites. … The project occurs in an area with nearly 100% tree mortality. The proposal anticipates that within the 492-acre group selection prescription, approximately 98 acres of dispersed openings 1.2 to 2 acres in size would be created. Within the 492-acre group selection, dead trees 20" dbh and larger surrounding these 98 acres of dispersed openings will be retained for snag and coarse woody debris recruitment. REO Review of Warner Creek Salvage. http://web.archive.org/web/20050226202105/http://reo.gov/library/lsr/letters/270lsr.htm	The Regional Ecological Office is reviewing the Westside Fire Recovery project for compliance with Late Successional Reserve policies.
204.10 - WL - LSR habitat	#5873-146	Salvage logging in LSRs must retain typical amounts of large woody debris. Retaining large woody debris is especially important in LSRs because many spotted owl prey species are associated with down wood including flying squirrels, red-backed voles, bushy-tailed woodrat, dusky-footed woodrat, Douglas' squirrel, Townsend's chipmunk. Carey, Andrew B. November 1991. The biology of arboreal rodents in Douglas-fir forests. PNW-GTR-276. Portland, OR. in Huff, Mark H.; Holthausen, Richard S.; Aubry, Keith B., tech. coords.; Biology and management of old-growth forests. http://web.archive.org/web/20030406073837/http://www.fs.fed.us/pnw/pubs/gtr276.pdf. Sztukowski and Courtney. SEI. 2004. Appendix 4: Summary of Prey Biology. in Courtney, Blakesly, et al. 2004. Scientific Evaluation of the Status of the Northern Spotted Owl. http://www.sei.org/owl/finalreport/Appendices.pdf. The Northwest Forest Plan ROD provides Standards & Guidelines for salvage logging in LSRs that include: "Province-level plans will establish appropriate levels of coarse woody debris and decay rates to be used. Levels will be 'typical' and will not require retention of all material where it is highly concentrated, or too small to contribute to coarse woody debris over the long timeframes discussed." Pp C-14 – C-15. The agencies too often provides only minimal amounts of large woody debris in salvage sales and the agencies fail to consider the fact that abundant large woody debris is "typical" after fire and retaining all large wood is necessary to sustain LWD levels over time. "Legacies of snags, logs, and other woody debris are typically very large following an intense natural disturbance …" Dr. Jerry F. Franklin, Professor of Ecosystem Studies, College of Forest Resources, University of Washington, July 15, 2004. TESTIMONY FOR THE RECORD ON OVERSIGHT HEARING ON "RESTORING FORESTS AFTER CATASTROPHIC EVENTS" BY HOUSE COMMITTEE ON RESOURCES, SUBCOMMITTEE ON FOREST AND FOREST HEALTH. (emphasis added). According to Jerry Franklin, after a fire there is no ecological excess of large wood and that if you remove some you are taxing the ecological recovery processes. There is a price to pay and LSRs not the place for that.	The final EIS provides information concerning tree planting in Chapter 3 of the final EIS in the sections called "Responsible opposing views and agency's response to issues raised".

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#5873-182	The salvage recommendations in the Final Draft Recovery Plan for the Northern Spotted Owl (December 1992) provide: 1. "Diseased and damaged trees are key structural components of suitable owl habitat... planning must acknowledge the considerable value of retaining dead and dying trees in the forest" 2. "salvage should not diminish the suitability for owls now or in the future" 3. salvage should be limited to areas with less than 40% canopy closure, and >10 acre disturbances, 4. "Surviving trees provide a significant residual of larger trees in the developing stand... Consequently, all standing live trees should be retained, including those injured (e.g. scorched) but likely to survive." 5. "focus on retaining snags likely to persist until suitable owl habitat has developed and the new stand is again producing large snags," 6. "snag retention guidelines should be developed for each physiographic province based on the general guidance provided in this section... Retention of all 20-inch dbh snags should be a starting point... Snags larger than 20 inches dbh are important to cavity nesters in all provinces, and have relatively slow decay rates. Smaller diameter snags are generally less important to cavity nesters and are less likely to persist until suitable habitat develops. Thus, the salvage of these smaller diameter snags should not impair the development of suitable habitat" 7. "guidelines are intended to prevent negative effects on owl habitat" 8. "because there is much to learn about the development of owl habitat, it seems prudent to allow only conservative quantities of salvage material from suitable owl habitat" 9. "although there is some uncertainty concerning the optimum density of snags to be provided for spotted owls, management to provide maximum likely benefit for owls and their prey is an appropriate strategy" 10. "retain adequate CWD quantities in the new stand so that in the future it will still contain amounts similar to naturally regenerated stands," etc. 11. "In addition to the stand level salvage guidelines, the cumulative effects of any proposed salvage should also be considered at a larger scale. One focus of the analysis should be on spotted owl activity centers known before the disturbance and thought to still be occupied after the disturbance. Where owls are still thought to be inhabit the area to be salvaged, the possible effect of the salvage around their activity centers should be considered. In particular, special consideration should be given to stands that could again provide foraging opportunities for owls in the near future. For example, small disturbances or the edges of large disturbances may provide habitat for owl prey and access to that prey by owls. Also, denser clumps of residual dead trees may offer foraging opportunities by owls. The most current knowledge of prey species should be considered in these cases, and special guidelines developed for these areas. The cumulative impact of salvage in these area should be considered." The final draft recovery plan salvage guidelines are partially excerpted in the Feb 1994 Spotted Owl FSEIS Volume II Appendix B, pages B-75 to B-77. The response to comments in Appendix F (page F-37) of the 1994 FSEIS makes clear that the salvage Standards & Guidelines in the NWFP ROD are derived from the Final Draft Northern Spotted Owl Recovery Plan (1992). The FEMAT report also spelled out the consequences if excessive salvage is allowed in LSRS, that is a. “the short- and long-term contributions of salvaged areas to Late-Succesional Reserves would be decreased. b. “There would be greater risks to watersheds [than if salvage were more limited] c. “There would be high levels of distrust of agency motives.” FEMAT page II-18. These are serious adverse consequences that are not disclosed and considered in the DEIS. Proposed activities, especially commercial log removal, will violate requirements to maintain long-term soil productivity. Soil compaction and erosion, loss of coarse woody debris, and erosion all adversely affect long-term productivity. Removal of a major fraction of the available organic matter through salvage of large trees will adversely affect soil productivity for decades or centuries. All the commercial removal activities will impede development of high quality LSR habitat in violation of the NFP ROD and violate the requirement to focus LSR salvage on long-term LSR objectives. See NFP ROD p. C-14. Salvage logging that removes most of the large material from extensive areas will prevent development of complex young forest reduce options to develop complex old forest. LSRs were set aside primarily for spotted owls and other species associated with late-successional old-growth. Salvage logging will adversely affect spotted owls and their prey. Proposed activities, especially commercial log removal, will violate the requirement to maintain optimal late-successional habitat, (such as by reducing cavity nesting opportunities for spotted owl prey such as flying squirrels and reducing woody debris far below optimal levels for ground-dwelling	Response 2 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" in Chapter 3 of the final EIS describes the balance between maintaining snags and coarse woody material and reducing the future fire risk on the landscape. The Westside Fire Recovery project does not propose to remove all organic material from salvage units. Snag retention, soil cover project design features, and coarse woody debris project design features (See Chapter 2 of the final EIS) are all intended to retain legacy components and soil productivity in salvage harvest units. Response 3 in the "Responsible Opposing Views and Agency's Reponses to Issues Raised" in Chapter 3 of the final EIS argues that as designed in Chapter 2 of the final EIS salvage logging in the Late Successional Reserves is compliant with the requirements and recommendations of the Forest Plan and the Late-Successional Reserve Assessment. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
		spotted owl prey species	
204.10 - WL - LSR habitat	#5873-4	Salvage logging is contrary to the desired objectives for all reserve land allocations, including LSRs and riparian reserves. The Klamath Forest Plan says that the desired condition of LSRs is “Snags are common…” (Klamath LRMP p 4-83) In the decades after fire, snags are NOT common, and salvage logging will make that much worse.	Response number 3 in the "Responsible Opposing Views and Agency's response to Issues Raised" Section in Chapter 3 of the final EIS addresses the concern about efficacy of salvage harvest in Late-Successional Reserves, meeting the Northwest Forest Plan (and therefore the Klamath National Forest Plan) Standard and Guidelines and recommendations in Forest Ecosystem Management Assessment Team.
204.10 - WL - LSR habitat	#5873-6	Salvage logging will remove late successional habitat that LSR were intended to protect. Snags and large logs are key attributes of late successional habitat and these features will help late successional species persist in post-fire landscapes. Salvage logging will remove these late successional features and render the SLR less suitable for the very species that LSR were intended to protect.	The Northwest Forest Plan ROD provides guidelines for salvage harvesting in Late Seral Reserves (Pgs. C-13 - C-16). The guidelines seek to "protect and enhance conditions of late-successional and old-growth forest ecosystem". These guidelines were used during the planning of this project. The project is in compliance with the Standards and Guidelines for salvage in Late-Successional Reserve.
204.10 - WL - LSR habitat	#5873-61	Briefly meeting management plan snag targets is grossly inadequate. Historically, a mosaic of recent and not-so-recent fires, left lots of “snag patches” and patchy accumulations of down wood of various sizes and decay-stages. These snag patches provided tremendous habitat value for a whole host of wildlife species, include birds, mammals, amphibians, insects. 96 species are known to be associated with snags and 86 species are associated with down wood. Most of these species depend upon or prefer large snags and wood. With aggressive salvage policies that continue to this day, these snag patches are an under-represented feature on the landscape. The agency’s snag retention guidelines are based on wildlife needs, but fail to consider or analyze the need to large snags and large down logs for shade, water storage, disturbance (via falling and sliding), nutrient storage, channel forming, sediment trapping, soil conservation, underground processes, etc.	Response number 2 in the "Responsible Opposing Views and Agency's response to Issues Raised" Section in Chapter 3 of the final EIS addresses this concern. Snags and coarse woody debris will be retained to Forest Plan Standard and Guideline requirements which is intended to meet multiple ecological requirements including soil productivity and wildlife and fish habitat. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.10 - WL - LSR habitat	#5873-77	Lessons Learned During the Last Fifteen Years … Several major lessons have been learned in the period 1979-1999 that have tested critical assumptions of these earlier management advisory models: • Calculations of numbers of snags required by woodpeckers based on assessing their 'biological potential' (that is, summing numbers of snags used per pair, accounting for unused snags, and extrapolating snag numbers based on population density) is a flawed technique. Empirical studies are suggesting that snag numbers in areas used and selected by some wildlife species are far higher than those calculated by this technique.226 • Setting a goal of 40% of habitat capability for primary excavators, mainly woodpeckers,369 is likely to be insufficient for maintaining viable populations. • Numbers and sizes (dbh) of snags used and selected by secondary cavity-nesters often exceed those of primary cavity excavators. • Clumping of snags and down wood may be a natural pattern, and clumps may be selected by some species, so that providing only even distributions may be insufficient to meet all species needs. • Other forms of decaying wood, including hollow trees, natural tree cavities, peeling bark, and dead parts of live trees, as well as fungi and mistletoe associated with wood decay, all provide resources for wildlife, and should be considered along with snags and down wood in management guidelines. • The ecological roles played by wildlife associated with decaying wood extend well beyond those structures per se, and can be significant factors influencing community diversity and ecosystem processes. Rose, C.L., Marcot, B.G., Mellen, T.K., Ohmann, J.L., Waddell, K.L., Lindely, D.L., and B. Schrieber. 2001. Decaying Wood in Pacific Northwest Forests: Concepts and Tools for Habitat Management, Chapter 24 in Wildlife-Habitat Relationships in Oregon and Washington (Johnson, D. H. and T. A. O'Neil. OSU Press. 2001) http://web.archive.org/web/20060708035905/http://www.nwhi.org/inc/data/GISdata/docs/chapter24.pdf	This is a direct quote from Rose et al (2001). No project-specific comment for which to respond. We considered snag retention in project design; see wildlife project design features in Chapter 2 of the final EIS. See effects analysis in Chapter 3 of the final EIS. See response to comment 5873-183. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.11 - WL - legacy	#17460-8	The DEIS mentions as project goal of 2-8 snags per acre remaining per acre, but that these snags could be averaged out within units greater than 100 acres, and the retention requirement would not apply on salvage units smaller than 100 acres. In the "Forest Plan Consistency Checklist" published with the Westside project documents, S&G No 8-22 specifies: "Provide for an average of 5 snags per acre, in a variety of size and decay classes, within each landscape. These snags need not be equally distributed The actual number of snags to be maintained in areas managed for timber production may vary from 2 to 5, depending on the amount of snags available within the surrounding landscape and the desired future condition of that landscape. " There is no exclusion given for salvage units smaller than 100 acres to be exempt from snag retention, and while snags may average 5 per acre (although not equally distributed within each acre), clumping groups of snags and averaging them out over 100 acre or more units defeats the purpose of the standards and guidelines given. While clumping snags may provide a minor benefit to fire suppression if a fire is present, does leaving clumped groups of snags provide optimal habitat, versus that of randomly dispersed snags 5 would provide? By leaving clumps, rather than more evenly distributed snags, competition for denning sites between bears, fisher, cats, and nesting sites for birds, and an increased proximity to greater concentrations of different predators would create additional competition for nearby food sources. It also eliminates the flexibility of selecting optimal snags having cavities, complex branching structure, and other desirable features for wildlife where they are randomly distributed through the forest.	A variety of methods for snag retention are being used to produce heterogeneity on the landscape. A discussion of the snag retention design has been incorporated into Chapter 2's description of salvage harvest in the final EIS. The design includes until the next stand is capable of producing such material by retaining legacy trees, not salvaging in hydrologic Riparian Reserves and inner gorges, designating snag retention areas and protecting these features from future wildfire disturbance. Response 2 in the "Responsible Opposing Views and Agency's response to Issues Raised" in Chapter 3 of the final EIS describes how the snag retention design meets the Forest Plan requirements and wildlife needs. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
204.11 - WL - legacy	#18909-31	The DEIS page 90, provides that the KNF will retain "legacy component trees and snags." Legacy trees are "old standing trees that have persisted on the landscape after man-made and natural disturbances" and contain at least one of the following characteristics: "split or broken tops, heavy decadent branching, large mistletoe brooms, otherwise damages to the degree that a cavity may form such as basal fire or lightning scares, or other features that indicate decay and defect." The Service lastly states that "[i]f the legacy component tree or snag must be felled for safety reasons, retain the log whole in the unit." The Service relies on this PDF to mitigate the impact of refusing to retain snags in non-riparian areas in units less than 100 acres in size. Page 49 of the Draft Wildlife BA states that, "all salvage units will retain legacy trees where they occur regardless of unit size, which may help alleviate the effect of a lack of snag retention in areas without riparian reserves." However, if legacy trees are impossible to determine, the legacy tree retention policy will mitigate no effects. In a high-severity area, how will the agency identify legacy trees or snags?	Even in high-severity vegetation burn areas the characteristics of legacy components such as large limbs, broken tops and old fire scars are easily discernable. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
204.11 - WL - legacy	#5873-94	core purpose of this NEPA analysis is to balance the value of retaining snags and down wood spotted owls and other wildlife against the fire hazard caused by retaining snags and down wood. The FEIS fails to acknowledge that balance is best achieved if the agencies retain all large snags because they contribute greatly to habitat value and contribute little to fire hazard, while focusing fuel reduction only on small snags that contribute little to habitat values while contributing disproportionately to fire hazard.	We agree that snags have many benefits, as discussed in the final EIS. While we agree that a balance between retaining snags and downed woody material for fire hazard and resource/wildlife value is needed, this is not a core purpose of National Environmental Policy Act per 40 CFR 1500. In addition, project design features for the Westside Fire Recovery Project help describe this balance (Chapter 2 of the EIS). Snag and down woody retention requirements as it relates to fire hazard and wildlife habitat is described in Chapter 1 of the EIS under the section about salvage in Late Successional Reserves. The Section "Risk Reduction Salvage in Late-Successional Reserves" in Chapter 1 of the final EIS describes how the activities proposed by the project reduce the risk to Late-Successional Reserve objectives and snag retention needs defined in the Forest Plan Standards and Guidelines. Response number 2 in the "Responsible Opposing Views and Agency's response to Issues Raised" Section in Chapter 3 of the final EIS offers reasoning for the treatments prescribed including salvage harvest and how wildlife needs are being met in the project area. This comment provides no evidence that the guidelines of the Forest Plan are inadequate. See response to 5873-2.
205 - Plant	#15479-1	There are so few places left with old growth trees that we need to protect at all costs. These trees often protect the sources of our water as well as contain DNA we should be guarding for future generations.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
205 - Plant	#18857-19	No salvage logging in high elevation sites above 5,500', including mountain hemlock (Tsuga mertiensiana), red fir (Abies magnifica), and white fir (Abies concolor) plant communities. These habitat types are adapted to long fire return intervals and relatively high severity fire effects. Scattered snag patches are natural, and due to the landscape location and short growing season, will recover slowly and create minimal fuels as succession takes place.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The proposed action does include some salvage logging above 5500' in elevation, in areas where white fir and red fir stands have been completely killed by fire. Although the bark of these species can be quite thick on older trees, these habitat types are not adapted to long fire return intervals, as the build-up of fuel from needle cast, diseased limbs, rotten boles with pitchy cankers (in white fir particularly), and general stand decay make these stands prone to adverse effects from fire. There will be no shortage of scattered snag patches on the landscape in areas not proposed for treatment of any kind; these snag patches will remain on site, over and above the fuels generated from the regeneration of the shrub component at this elevation, which is usually snowbrush, and highly flammable in itself, due to the resins in the leaves. The eventual succession of the coniferous species at the higher elevations, will be retarded by the dense shrub component, and lack of available seed source.
205 - Plant	#18926-10	The DEIS indicates on page 176 that the projected actions involved in Alternative 2 may have beneficial and negative effects on Thermopsis robusta in terms of disturbance levels required to increase population viability. There is no explanation of how, specifically, disturbance benefits this species. It is recommended that the specific role of disturbance in benefiting this species be induced in future discussions and is clarified.! !!!	Specifically, disturbance events that scarify (scratch or break) the seed coat of Thermopsis robusta result in germination of the seed. In this case, since the population is largely in a gravel pull-out on the road, the action of vehicles moving gravel that scarifies the seed causes germination. Additionally, disturbance can benefit T. robusta by creating openings in forested areas which may provide suitable habitat. In the case of this population, disturbance may prevent encroaching vegetative establishment therefore maintaining suitable habitat characteristics. In areas where T. robusta populations have been exposed to fire, seed is both scarified and habitat opened from the same event.

Code	Comment Number	Comment Text	Response
205.03 - Plant - FS Sensitive	#17112-3	The DEIS acknowledges that there are no regulations requiring private landowners to protect sensitive plant species or reduce the spread of NNIS species (Chapter 3, p. 179). However, there are no suggestions to integrate private landowners' management activities to align with the Forest Service's goals for this project. It is recommended that guidelines for attempting to gain private landowner cooperation via alignment of management methodology be incorporated into the DEIS.	This suggestion is outside the scope of the analysis for this project.
205.03 - Plant - FS Sensitive	#18878-46	Botany and Non-Native Invasive Species DEIS: Due to the expedited time frame, need to conduct surveys during appropriate times for identification (typically when blooming), and the obligation to assess the condition of known populations, it was unfeasible to conduct unit surveys in search of un-known populations of Sensitive species. (Pg. 170) Comment: While the KNF is refusing to survey previously un-surveyed suitable habitat to locate known sites of Sensitive species, it is re-surveying already known sites in order to remove the protection buffers when possible to facilitate salvage treatments. This is a unique interpretation of the NWFP and the LRMP that does not seem to be protective of culturally 12 of 22 significant and Sensitive species. It seems essential to survey un-surveyed areas to ensure protection and recovery sensitive species and culturally significant species.	The statement, as quoted on page 170 of the draft EIS, is correct. However, the Forest is not "refusing" to conduct surveys. The sentence following the description of surveys for known sites states: "If populations are located within treatment areas and the habitat in its current state is likely to be negatively impacted by the proposed action, a project design feature intended to protect Sensitive species populations from a declining trend in viability (will be applied). For clarification purposes, this sentence should have been prefaced by "Additionally" to clarify surveys that will be conducted in suitable habitat for Sensitive species prior to activities being implemented. Additionally, the Forest plan Standard and Guideline 6-8 (pg. 4-23) states that "if surveys (for Sensitive species) cannot be conducted, project areas should be assessed for the presence and condition of Sensitive species habitat. Past surveys have occurred in all fire areas, which have helped build the Forest's database of known occurrences, and were used when determining where suitable habitat may still be present. Additionally, aerial photographs, RAVG data, treatment unit selection criteria, site visits, and species distribution information were used to determine if suitable habitat for Sensitive species is present within treatment units. Also, on page 171 of the draft EIS, it states: "To be in compliance with Survey and Manage direction pre-disturbance surveys will be conducted for Category A and C species in project activity units where known sites and suitable habitat are still present". Those surveys are currently in progress.
205.03 - Plant - FS Sensitive	#18909-88	Eriogonum hirtellum is restricted to bald serpentine outcrops and gravelly slope and ridges that typically have no overstory cover and little understory vegetation. Due to the open characteristic of E. hirtellum habitat, equipment may be transported through the area, which could potentially damage some individuals within the populations. These effects would have a declining effect on population viability as individuals are impacted. Direct effects to Erythronium hendersonii populations would occur to individuals and portions of the habitat where piles are burned but in the long run may benefit if understory vegetation is controlled. The DEIS provides no real analysis for the possible long-term benefits nor does it describe any actual locations.	E. hirtellum populations that may be affected by project activities occur in rocky, open serpentine outcroppings near Tom Martin Peak in the Happy Camp Complex fire area. Populations slightly overlap with roadside hazard tree removal, helicopter salvage, and site preparation and planting activities. These project activities are almost exclusively focused on the removal of conifers. As previously stated, suitable habitat for E. hirtellum is characterized by open, rocky outcroppings that are often lacking in conifer cover and subsequently project activities are unlikely to occur in areas that currently support or may provide suitable habitat for E. hirtellum. Additionally, the proposed use of helicopter salvage techniques in the overlapping unit would limit the likelihood of damage to suitable habitat from equipment entry. Therefore, affects to these populations are anticipated to be extremely minimal in the short and long-term. This has been clarified in Chapter 3 of the draft EIS. The possible long-term benefits for Erythronium hendersonii would occur after five years, as defined in the draft EIS on page 173. Fuels treatments, as proposed, are likely to provide the benefits of a more open secondary canopy for more than five years. Appendix A of the Botany report indicates unit locations for all species of concern and non-native invasive species infestations.
205.03 - Plant - FS Sensitive	#18909-89	The DEIS claims that there would be no effects to these species because they are not known to occur, but surveys have not been conducted for these species nor has habitat been assessed in the project area in violation of the KNF LRMP. Conifer planting is supposed to benefit sensitive ectomycorrhizal fungi, however the DEIS does not address the benefits of natural regeneration or the benefit of moderate severity fire, the benefit of retained snags and CWD from the creation of favorable micro-climate conditions or undisturbed soils which would all have negative consequences due to the proposed project.	The comment does not specify which species are being referred to in the effects statement. The Forest Plan has not been violated, as habitat assessments have been made for habitat considered suitable on page 180. Since natural regeneration of conifer species in moderate and high intensity burn areas is not likely to happen soon, there are no timely benefits. The benefit of snags and Coarse Woody Debris for microclimate creation has been addressed in Forest Plan Standard and Guideline 6-16, and applied to the project.

Code	Comment Number	Comment Text	Response
205.04 - Plant - S&M	#12346-65	KNF timber planners have elected to simply ignore the NWFP survey and manage protocols that interfere with rapid logging. Page 170 of the DEIS indicates that "[d]ue to the expedited time frame, need to conduct surveys during appropriate times for identification (typically when blooming), and the obligation to assess the condition of known populations, it was unfeasible to conduct unit surveys in search of un-known populations of Sensitive species." While the KNF is refusing to survey previously un-surveyed suitable habitat to locate known sites of Sensitive species, it is re-surveying already known sites in order to remove the protection buffers when possible to facilitate logging. This is an interesting and unique interpretation of the NWFP and the KNF LRMP. 33 The analysis of project effects on S&M and Sensitive species consists of conclusions without data. As stated on page 22 of the Botanical Resources Report, the "[a]nalysis is based on spatial [pre-fire] population records only, field visits to known [and unsurveyed] sites were not conducted prior to analysis."	The statement, as quoted on page 170 of the draft EIS, is correct. However, the Forest is not "refusing" to conduct surveys. The sentence following the description of surveys for known sites states: "If populations are located within treatment areas and the habitat in its current state is likely to be negatively impacted by the proposed action, a project design feature intended to protect Sensitive species populations from a declining trend in viability" (will be applied). For clarification purposes, this sentence should have been prefaced by "Additionally" to clarify surveys that will be conducted in suitable habitat for Sensitive species prior to activities being implemented. Additionally, the Forest plan Standard and Guideline 6-8 (pg. 4-23) states that "if surveys (for Sensitive species) cannot be conducted, project areas should be assessed for the presence and condition of Sensitive species habitat. Past surveys have occurred in all fire areas, which have helped build the Forest's database of known occurrences, and were used when determining where suitable habitat may still be present. Additionally, aerial photographs, RAVG data, treatment unit selection criteria, site visits, and species distribution information were used to determine if suitable habitat for Sensitive species is present within treatment units. Also, on page 171 of the draft EIS, it states: "To be in compliance with Survey and Manage direction pre-disturbance surveys will be conducted for Category A and C species in project activity units where known sites and suitable habitat are still present" Those surveys are currently in progress. The conclusions for the draft EIS analysis were based on the data gathered over many years of survey which resulted in our large data set of known sites. The page numbers associated with the spatial analysis in the comment, are page 8, of the Executive summary, and page 27, under Sensitive species.
205.04 - Plant - S&M	#18909-90	There are 2 known populations of Ptilidium californicum, also known as Pacific fuzz wort, in roadside hazard units, which must be protected. However surveys for this species has not been completed. This is a Category A species, meaning the species is rare and all known sites or population areas are likely to be necessary to provide reasonable assurance of species persistence. The DEIS violates the NFP Survey and Manage Guidelines. Category A species require surveys prior to ground disturbance and requires strategic surveys. It is not clear if strategic surveys have been completed. Page 8 of the 2001 S&M Guidelines state: "Surveys Prior to Habitat-Disturbing Activities: Surveys will be conducted at the project level prior to habitat-disturbing activities, and in accordance with Survey Protocols, to avoid loss of undiscovered sites by habitat-disturbing activities. Species sites found as a result of these surveys will be managed as known sites." There is one population of Albatrellus flettii and one population of Phaeocollybia californica within proposed treatment areas, which are Category B species. The objective for these species is to manage all known sites and reduce the inadvertent loss of undiscovered sites. Strategic surveys are required for Category B species and the objective of strategic surveys in this category is to find additional new sites and to characterize the habitat, improving the ability of the agencies to know where to survey and how to manage and conserve the species. Strategic surveys build upon and incorporate information from previous and ongoing surveys. Species sites found as a result of strategic surveys will be managed as known sites. Strategic survey accomplishments, including completion by province, will be summarized in an annual report. "Old growth" is specified in this standard and guideline to assure retention of what is assumed to be the highest quality potential habitat for Survey and Manage species until strategic surveys are completed or equivalent-effort surveys are conducted. "Province" is specified as the geographic unit in which to assess completion of strategic surveys given that it represents the smallest, logical, well-defined area for which the results of strategic surveys likely could be compiled, analyzed, and presented with meaningful results. The DEIS claims that "flag and avoid" is expected to protect this species, however this project design feature is not guaranteed and has been known in other projects to be ineffective. Eighteen Cypripedium fasciculatum and sixteen Cypripedium montanum populations are present within units. These are Category C survey and manage species. The DEIS at page 180, "to be in compliance with Survey and Manage guidelines populations deemed high priority must be protected. High priority will be given to robust, healthy populations located in areas with intact suitable habitat present following the 2014 fires." However, the DEIS fails to disclose if those high priority areas were adequately designated as required in the S&M Standards and Guidelines. More importantly pre-disturbance surveys have not been completed in direct violation of the NFP Survey and Manage Guidelines. There is one known population of Otidea leporine and one of Tremiscus helvelloides within treatment areas. These are Category D species. The DEIS does not disclose or determine if these sites are high-priority areas. However the S&M Guidelines state that until high-priority sites can be determined, manage all known sites. Two populations of Phaeocollybia olivacea are located within activity units and are	The two known populations of Pacific fuzzwort in roadside hazard units will be protected, per Project Design Feature, Botany-2, noted as "flag and avoid". The commenter states that this project design feature is not guaranteed, and has been known to be ineffective. No project design feature is guaranteed to be effective unless properly implemented, and every effort is made to see that it done in all projects. The draft EIS does not violate the Survey and Manage guidelines for Category A species in roadside hazard units. On page Standard and Guideline 22, of the 2001 S&M Guidelines, in defining habitat disturbing activities, it states: "Routine Maintenance of improvements and existing structures is not considered a habitat-disturbing activity. Examples of routine maintenance include pulling ditches, clearing encroaching vegetation, managing existing seed orchards, and falling hazard trees." Strategic surveys for National Environmental Policy Act documents are required for Category B species only. For Categories A, C, D, and E, strategic surveys are not required for National Environmental Policy Act analysis. Strategic Surveys for Category B fungi are considered complete. The best available science, documenting rationale and results of 12 years of random grid, purposive, strategic, and known site surveys in the Northwest Forest Province was completed in May of 2015 (Hoover, L. et al, 2015). This comprehensive report addresses the four criteria for considering Strategic Surveys complete, as stated on page 30 of the ROD Standard and Guidelines (USDA/USDI 2001). (This response in comments is an update from the following sentence found in the body of the EIS: "In the Assumptions section of the Botany report, on page 172 of the draft EIS, it is stated that Strategic Surveys for Category B fungi are considered complete, pending acceptance of the comprehensive report submitted to Regional Office for approval (this spring).") The designation of high priority sites, on pages 180-181 of the draft EIS, has been clarified in the addendum between draft and final: since high priority sites were not designated to protocol by Regional Ecosytem Office, all sites will be protected.

Code	Comment Number	Comment Text	Response
		a Category E species. It is not clear if strategic surveys have been completed for the A-E as required in the S&M Guidelines.	
205.05 - Plant - Noxious Weeds	#18852-29	11) Non-Native Invasive Species introduction and colonization are anticipated to be "High" as expressed in the DEIS, and exacerbated by the proposed management of Alternatives 2-5. This risk is not adequately addressed, nor mitigating measures over time defined. "Non Native Invasive Species", pose some of the most serious risks to long term ecological health. Resources to ameliorate this risk have not been and will not be forthcoming.	The high risk of introduction and spread of non-native invasive species has been acknowledged, and project design features to mitigate that risk have been included in Table 2-35 in Chapter 2. The commenters statement about resource availability to ameliorate risk makes an un-predictable assumption. Resources, although limited, have been allocated for the prevention and treatment of invasive species.
205.06 - Plant - General, Rare	#12346-46	Page 179 of the DEIS paradoxically claims that there will be no effect to sensitive bryophytes, lichen and fungi from roadside logging of live trees because "no known sites" would be impacted. It would be strange indeed if any "known sites" were impacted given that the agency has refused to survey for these sensitive species. When one chooses not to "look" it is nearly impossible to "know" what is on the landscape that will be impacted by proposed logging activities.	The statement, as quoted on page 170 of the draft EIS, is correct. However, the Forest is not "refusing" to conduct surveys. The sentence following the description of surveys for known sites states: "If populations are located within treatment areas and the habitat in its current state is likely to be negatively impacted by the proposed action, a project design feature intended to protect Sensitive species populations from a declining trend in viability (will be applied). For clarification purposes, this sentence should have been prefaced by "Additionally" to clarify surveys that will be conducted in suitable habitat for Sensitive species prior to activities being implemented. Also, on page 171 of the draft EIS, it states: "To be in compliance with Survey and Manage direction pre-disturbance surveys will be conducted for Category A and C species in project activity units where known sites and suitable habitat are still present" Those surveys are currently in progress.

Code	Comment Number	Comment Text	Response
205.06 - Plant - General, Rare	#18857-13	No salvage in endemic or rare conifer stands and adjacent available habitat. This would include foxtail pine (Pinus balfouriana), Baker's cypress (Cupressus bakeri), and Brewer spruce (Picea breweriana) to allow for natural regeneration.	This comment is suggesting that we do not salvage in rare conifer stands, specifically in foxtail pine, Baker's cypress, and Brewer spruce. This comment is in line with Forest plant standard and guideline 21-57 which directs us to "Maintain a healthy and resilient population of all species, including special interest species such as Pacific yew, Brewer spruce, Port-Orford-cedar, Pacific silver fir, Baker cypress and whitebark pine throughout their native range." The Westside Fire Recovery Project does not propose to salvage log areas that support populations of foxtail pine, Brewers spruce, or Baker's cypress. There are foxtail pine populations within and surrounding the Lake Mountain Special Interest area that may overlap with roadside hazard and fuel break treatments. In order to maintain foxtail pine snags within the Lake Mountain Special Interest Area during implementation of fuels treatments, a project design feature (BOTANY-6) has been included that requires a Forest Botanist be consulted prior treatment in this Special Interest Area. There are two stands of Baker's cypress located within the project area, however these stands are not within any project activity units and thus will not be affected by salvage or other project activities associated with the Westside Fire Recovery Project. There are no Brewer spruce stands located within the Project boundary and therefore this species will not be affected by any activities associated with the Westside Fire Recovery Project.
205.06 - Plant - General, Rare	#18909-87	The DEIS assumes that botanical species of concern located in moderate severity burn areas are extirpated and that all habitat in those fire areas are no longer supports viable populations! While microclimates may have changed in some areas, moderate severity fire is highly variable and may still be providing all necessary elements for growth. Moderate severity fire causes moderate soil heating and occurs where litter is consumed and duff is charred or consumed, but the underlying mineral soil is not visibly altered. The arbitrary and capricious assumptions for rare botanical species and their environs in the DEIS fail to meet the NEPA "hard look" requirement and is contrary the Northwest Forest Plan (NFP) and the Klamath National Forest (KNF) Land Resource Management Plan (LRMP). The DEIS page 170 states that: "Due to the expedited Project time frame, need to conduct surveys during appropriate times for identification (typically when blooming), and the obligation to assess the condition of known populations, it was unfeasible to conduct unit surveys in search of un-known populations of Sensitive species." "Due to the ephemeral appearance of fruiting structures, and the expedited time frame of the Westside Fire Recovery project, surveys for Sensitive fungal species were not practical." The DEIS page 172: "Analysis is based on spatial population records only, field visits to known sites were not conducted prior to analysis." The lack of any information on the actual status of these botanical species fails the "hard look" NEPA requirement. The failure to perform surveys violates the spirit and intent of NFP and the KNF LRMP. Page 173 of the DEIS states, "Modification of the forest structure and composition as a result of fire intensity, duration, and suppression efforts has had a profound effect on microclimate characteristics such as air temperature, relative humidity, and soil temperature and moisture, which could, in turn, result in adverse impacts to native plant communities." (Emphasis added). The DEIS fails to analyze and disclose the actual affect that the fires and fire suppression activities have had on known botanical species of concern and how this affected overall populations. The KNF LRMP at page 4-23, "6-13 Management activities should be designed to maintain or increase population levels of desirable native plant species that currently have low population levels, of desirable plant species with limited habitat distribution and of desirable plant species that have problems with disease." The DEIS proposes to harm rather than protect and maintain sensitive, rare and uncommon native plant species. Genter's fritilary (Fritillaria gentneri) is an endangered lily, which is only known to occur in far northern California and north to Josephine County, OR. Habitat is present in the Beaver Fire area. The DEIS states surveys will be during appropriate times. The flowering season is late March to early April, so surveys should be complete. Please include survey results in the forthcoming NEPA document. Lake Mountain Special Interest Area is special interest area composed of 100 acres and is the northern most known location of Foxtail pine. It is home to at least 6 different conifer species including: western white pine, foxtail pine, Shasta red fir, white fir, mountain hemlock, and Jeffrey pine. Such assemblages of high-elevation conifers are rare throughout California and are restricted to the Klamath-Siskiyou Mountains. While a forest botanist is supposed to be on site, in order to maintain foxtail pine snags within this Special Interest Area it is not guaranteed. The retention of foxtail pine snags is important because it provides an ecological role in stabilizing soils and providing food and habitat for animals. The Lake Mountain foxtail pine population represents the northernmost stand of this species and includes approximately 250 - 300 trees. One tree, cut after it was killed	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The assumptions made for botanical species of concern occurring in moderate fire severity are not arbitrary and capricious. They were made based on field reconnaissance during Burned Area Emergency Reclamation, and previous experience in fire affected landscapes. The commenter may be confusing the terms fire severity for BARC (soil affects) vs RAVG (vegetation). Moderate severity represented in the RAVG data indicates no tree canopy remaining. Prior experience indicates areas where no tree canopy exits for shade, cooling, the maintenance of micro-climate, and production of organic material via litter, no longer provides suitable conditions for growth of species of concern. Regarding actual status and field surveys: The conclusions for the draft EIS analysis were based on the data gathered over many years of surveys of suitable habitat which resulted in our large data set of known sites. While assumptions were made for the analysis using existing spatial data, field surveys are currently being conducted to confirm the accuracy of those assumptions, in various fire severities and activity units. From the Forest Plan, page 4-23, Standard and Guideline 6-8: "If surveys (for Sensitive plant species) cannot be conducted, project areas should be assessed for the presence and condition of Sensitive species habitat." This habitat assessment has been clarified in the addendum between draft and final EIS. The disclosure of the actual affects of the fire on species of concern has been represented, to the best of our ability, in Table 9 in the Botanical Resources Report. The commenter quotes Forest Plan Standard and Guideline 6-13 as referring to herbaceous plants, and the intention of this Standard and Guideline relates to coniferous plant species. Never the less, the draft EIS does not propose to harm Sensitive plant species. The surveys for Fritillaria gentneri, as stated in the draft EIS, have been conducted, and the results were negative. There are no unique (rare) tree species proposed for extraction in any of the Alternatives of the project. The maidenhair fern populations in Cold Creek springs area, will be flagged if necessary, if riparian buffers are not already adequate. The cumulative effects of projects on Sensitive species has been analyzed, and reflected in the species determinations on page 186 of the draft EIS, Chapter 3. Short term trends in population viability may not have long term affects on species viability, which is the basis of the Standard and Guideline. Details of specific populations potentially affected by the project are currently being gathered. Natural regeneration, and the benefits of, have been addressed in the no action Alternative, and will occur in the project area under all Alternatives regardless of the activities proposed.

Code	Comment Number	Comment Text	Response
		in the 1987 fires, was estimated to be between 550-600 years old. Please detail if any of these rare tree species is proposed for extraction during any of the treatment activities. The Cold Creek springs area within the Happy Camp area is an important resource for maidenhair fern (Adiantium aleuticum), which is frequently utilized by the Karuk tribe for basket weaving and botanical remedies. The KNF Forest Plan Standard and Guidelines require the maintenance and perpetuation of cultural botanical resources. There are 6 units located in the Cold Creek springs area that may affect the continued viability of this resource. Flagging these areas on the ground are supposed to protect this plant, however the agency and logging contractors have been known to enter flagged areas with heavy equipment. Suitable habitat and/or confirmed populations of 3 Sensitive species and 17 Fungi, Lichen and Bryophyte Survey and Manage species are present in the area. The cumulative effects of multiple projects on Sensitive species are expected to cause a short-term declining trend in population viability as individuals are lost. The DEIS assumes that some activities would benefit populations in the long-term but fails to perform required surveys or account actual details of specific places or populations or the benefits of natural regeneration or how retained snags and Coarse Woody Debris (CWD) effects botanical species of concern.	
205.06 - Plant - General, Rare	#18909-91	The project has a high risk potential for the introduction and spread of non-native invasive species, which are likely to persist long term. This is due to the high level of ground disturbing activities and increased vectors. There are 995 acres of known non-native invasive plant populations for 12 different species in the project area. A non-native invasive plant project design feature would require removal of the top few inches soil on approximately 24 landings, resulting in major decreases to soil organic matter on landings. Cumulatively there are 8 grazing allotments that overlap treatment units and may contribute to the long-distance dispersal of infestations in the project area. The Forest Service has a duty to reduce and eliminate noxious weeds on our public lands and proposed project is contrary to this requirement. The DEIS does not fails to consider or analyze the long-term impacts to our watersheds and native plant species.	See response to number 18926-19.

Code	Comment Number	Comment Text	Response
205.06 - Plant - General, Rare	#18909-92	The project has a high risk potential for the introduction and spread of non-native invasive species, which are likely to persist long term. This is due to the high level of ground disturbing activities and increased vectors. There are 995 acres of known non-native invasive plant populations for 12 different species in the project area. A non-native invasive plant project design feature would require removal of the top few inches soil on approximately 24 landings, resulting in major decreases to soil organic matter on landings. Cumulatively there are 8 grazing allotments that overlap treatment units and may contribute to the long-distance dispersal of infestations in the project area. The Forest Service has a duty to reduce and eliminate noxious weeds on our public lands and proposed project is contrary to this requirement. The DEIS does not fails to consider or analyze the long-term impacts to our watersheds and native plant species.	See response to number 18926-19.
205.06 - Plant - General, Rare	#3678-22	Botanical Species – No Action direct and indirect effects Sensitive Bryophytes, Lichens, and Fungi "Heavy fuel loading from the accumulation of dead, burnt snags and debris from the 2014 fires is likely to have an indirect negative effect on potential habitat for Sensitive bryophyte, lichen, and fungal species by creating conditions conducive to high severity wildfire in the future." Survey and Manage Vascular Plants, Bryophytes, Lichens and Fungi "Accumulation of dead trees would generate high fuel loads creating conditions conducive to high severity wildfire which would cause a negative indirect effect to Survey and Manage species."	General comment. Quotes in the comment were taken directly from the draft EIS.
206 - Fish	#17322-2	These areas are important for the threatened salmon and are too vulnerable to be exposed to the massive logging and road building plans proposed in this Project.	Fisheries biologists analyzed and disclosed the likely effects of the project on salmon and their habitat as shown in the Aquatic Resources section of Chapter 3 of the EIS and in the Biological Assessment and addendum for Threatened, Endangered, and Proposed Fish Species. Fisheries biologists worked with the interdisciplinary team and Deciding Official to minimize potential negative effects to fish and their habitat. The Forest Service consulted with National Marine Fisheries Service and agreed that all action Alternatives May Affect but is Not Likely to Adversely Affect Endangered Species Act-listed Coho salmon. Table 24 of the Aquatic Resource Report for the final EIS describes the effects to other aquatic species.
206 - Fish	#17349-10	Water and Fish -Tributary streams involved in the fires such as Grider Creek, Walker Creek, Elk Creek, etc. will need to be monitored over time for excessive accumulations of logs and other debris. We advocate that streams with significant spawning populations of anadromous fish receive periodic treatment to remove blockages which left untreated will likely reduce their reproductive capacity for long periods of time. In the near term, first through the third winters sediment production from the fires will be high but by year 4 natural compaction and vegetation growth should begin to reduce sediment each succeeding year. Adequate road maintenance during the nearterm should pay good dividends in reducing sediment production.	The Forest Service, and partners, monitor fish habitat in the creeks mentioned regularly as part of spawning and juvenile surveys. The concern for maintaining fish passage in creeks with substantial spawning populations is acknowledged.
206 - Fish	#17375-2	Theh impact on water quality, including water temperature which as it rises is lethal to threatened salmon, is directly linked to logging of big trees, especialaly near streams.	Project-specific Best Management Practices and project design features were developed to reduce potential negative effects and meet the requirement of the Forest Plan (p. 4-106) to prohibit and regulate activities in Riparian Reserves that can retard or prevent attainment of the Aquatic Conservation Strategy Objectives. See the analysis and conclusions in the Aquatic Conservation Strategy Report, especially for Objective 4.
206 - Fish	#17393-1	I'm deeply concerned how over the years what was once one of the West Coast's premier salmon and steelhead fisheries has declined due to habitat degradation from a variety of factors.	Procedural statement. See response to comment number 18918-22.The soil report for this project describes impacts to soil stability and surface organic matter indicators. Chapter 3 of the EIS summarizes the soils effects analysis. When the soil stability indicator is not met, ground cover is likely to be insufficient for erosion control. Project Design Feature Watershed-30 would require additions of mulch to provide for erosion control on approximately 40 acres. The Proposed Action and Alternatives comply with requirements under the Aquatic Conservation Strategy and include protection measures, called Project Design Features to prevent significant negative impacts to salmon and steelhead habitat. See the evaluation of compliance with Objective 1 in the Amendment of the Aquatic Conservation Strategy Report. Also see the Aquatic Species Resource Report for a detailed assessment of impacts to aquatic species, especially the "Summary of Effects" and Table 24. The fish and watershed scientists on the Klamath NF evaluated the effects of the Proposed Action and Alternatives on aquatic species, which is summarized in Table 24 of that report. The Forest Fisheries biologist consulted with the National Marine Fisheries Service staff to ensure significant effects to fish or fish habitat listed under Endangered Species Act and defined as EFH, would not occur. The determination for effects to fish are: The Proposed Actions and Alternatives "May affect individuals, but is not likely to lead to a trend towards listing [under the Endangered Species Act], and/or May affect individuals, but is not likely to lead to a decreasing population trend (for Management Indicator Species).

Code	Comment Number	Comment Text	Response
206 - Fish	#17458-1	As a fly fisher, I am very concerned about the Project's potential impact on water quality and threatened salmon and other fish species.	Fisheries biologists and hydrologists analyzed the effects of project activities, see Fisheries BA, specialist reports on fisheries and hydrology, and EIS Chapter 3, Aquatic Resources and Water Quality sections.
206 - Fish	#18852-31	14) Fisheries considerations, particularly that of coho salmon, Chinook salmon and steelhead populations affected by management may not be completely understood within the proposed management framework for the "Westside Recovery" project. Disturbance resulting from pre and post-fire management and harvesting is likely to result in deteriorating watershed conditions, this must be fully acknowledged as the aquatic and anadromous species of the "Klamath River Basin" are of paramount concern.	Fish and water scientists analyzed the effects of project activities, see Fisheries BA, specialist reports on fisheries and hydrology, and EIS Chapter 3, Aquatic Resources and Water Quality sections. The project hydrology analysis discusses watershed condition pre and post project in detail. Watersheds were highly disturbed by the 2014 wildfires and the project adds a relatively low level of ground disturbance while planting to speed reforestation and thus slope stability. The fisheries analysis documents, including the National Marine Fisheries Service letter of concurrence, conclude that the project May Affect but is Not Likely to Adversely Affect Coho salmon.
206 - Fish	#18852-48	32) Fisheries will be detrimentally affected by this proposal which includes logging of large contiguous areas within key salmon bearing watersheds.	Fisheries and water scientists analyzed the effects of project activities and developed Project Design Features to protect riparian and aquatic resources. See Aquatic Conservation Report, Biological Assessment for Fish, EIS Chapter 3 - Aquatic Resources section, and the Aquatic Resource Report and addendum for the final EIS. If no action is taken, the watersheds with a high risk of temperature regime alterations, without artificial regeneration that is proposed in the action Alternatives, will have an extended duration of elevated risk. Natural regeneration will occur, but in general it will be more than 80 years to get trees with 10 inch diameters at breast height in areas burned with high and moderate severity (draft EIS page 202-203). The proposed action has beneficial effects to aquatic species, and to the connectivity of aquatic habitat, at the three sites that will have crossings upgraded with bottomless arches. These sites are in the lowest reaches of Twin Creeks and Malone Creek, just upstream of their confluence with Elk Creek (just upstream of confluence of Elk and East Fork Elk Creeks), and in upper East Fork Elk Creek (see project maps). These structures will allow for free movement of special status fish and amphibian species under these road crossings where passage has been blocked for many years during most or all flows.
206 - Fish	#18858-8	It also must address the impacts to aquatics in ways other than vague, broad-scale terms about miles of streamcourses and so forth-that is, in a site-specific manner, as NEPA requires.	The fisheries analysis includes site specific information about where stream habitat may be affected including for actions that would occur in Riparian Reserves which include hazard tree removal, temporary roads and landings, water drafting, and hand treatments to lop and scatter. The EIS Chapter 3, Aquatic Resources section and fisheries Biological Assessment analyses describe where and how effects to stream habitat may occur. See response to comments number 18852-48 as well as the maps and Checklists for Documenting Environmental Baseline and Effects in the Appendices for the Biological Assessment for Fish that provides details as to where actions are proximate to occupied fish habitat. According to the site specific assessments, impacts to fish and fish habitat are not determined to be "discountable", that is to be so minimal that impacts are not meaningfully measured.
206 - Fish	#18872-11	The fisheries are also an integral part of the eco system that is impacted by the fires within the Westside Fire Recovery Project. Wild land fires do have minimum effect of erosion on the Klamath Scott and Salmon River Westside Fire Recovery project. The Shastas as well as the California Fish and Wildlife has noted record fish runs and recovery in the previous several years on these rivers. Natural disturbances in the eco system do provide additional food source to all species in the rivers. Absolutely pure pristine waters offer little nutrients to fish to survive in large numbers.	Comment is a statement of opinion that does not request a change in proposed actions, clarification, or more information. For clarification, as described in the Aquatic Conservation Strategy Report, Klamath NF scientists determined that for many watersheds, "Based on Cumulative Watershed Effects modelling, conditions created by the fire are likely to affect water quality, notably sediment delivery, far more than any of the action Alternatives."

Code	Comment Number	Comment Text	Response
206 - Fish	#18872-15	The Tribes on the lower reaches of the rivers of North America allowed three days of the run to pass upstream to spawn and then they fished, future runs were preserved in this way.	Comment provides information that does not require a change in proposed actions, clarification, or additional analyses.
206 - Fish	#18926-37	The DEIS is supposed to be in plain language however it waters down any real effects by stating that activities are not directly in the streams and rivers, except water drafting, new landings, temporary road construction and 14 new stream crossings, which are outside of and at least 350 feet above fish critical habitat for Coho salmon. The DEIS relies on unreliable mitigations (Best Management Practices and Project Design Features) and the treatment of 150 out of the 953 legacy sites (at-risk sites or chronic sediment sources mostly associated with roads) as an offset to any effects to aquatic species and calls negative effects discountable. Throughout the aquatics section, the DEIS continually states that treatments are outside Riparian Reserves, however it fails to consider the! 13,215 acres of treatment within steep unstable and potentially unstable areas on decomposed granite soils recognized as Riparian Reserves.! ! This summary is based on the findings in the DEIS, as with wildlife, the Fish Biological Assessment is inconsistent with the DEIS.! ! Roads, Landings and Water Drafting! The DEIS states there would be moderate short-term negative effects to aquatic species and sediment production, due to construction/reconstruction of temporary roads, installation and removal of stream crossings, and new landings in Riparian Reserves. The temporary road actions include fourteen stream crossings (4 perennial and 10 intermittent streams): Doggett Creek, Buckhorn-Beaver Creek, Grider Creek, O'Neil Creek, Kuntz Creek, China Creek, Caroline Creek-Klamath River and Whites Gulch. New temporary roads and stream crossings have a high risk for affecting aquatic species because of their impacts on sediment regimes and drainage networks. Re-opening the 46N62 road in Caroline Creek would require the reinstallation of stream crossings and widening the road on an active landslide, which could reactivate. ! ! It is not clear in the DEIS when or how much water would extracted from numerous streams to fill water tank trucks, which can hold over 4,000 gallons per load during the proposed implementation. Given that the project area is over 200,000 acres and that there would be over 650 miles of roads needed for dust abatement, water drafting could have a significant effect on water quantity and temperature during hot summer months.! !	The Westside Fire Recovery Project Aquatic Resources analysis and Biological Assessment provides transparency with regard to analysis methods (refer to Methodology sections in each document) and is based on reliable and accepted methods of analysis including the following: review of existing information, post-fire field reviews of proposed treatment units, Riparian Reserves and stream channels; analysis of the biological requirements of aquatic species; use of habitat indicators from the Analytical Process (USDA-USDOC-USDI 2004) to determine effects of actions. Integration of upslope watershed dynamics was included where they could generate or impact physical habitat for aquatic species. Fish biologists worked with watershed and geology specialists to minimize effects of the Project on watershed hillslope erosion processes and stream habitat. They worked together to identify and field-review sensitive watershed areas such as active landslides, active surface erosion, stream channels and Riparian Reserves and developed meaningful Project Design Features for the protection of aquatic resources within the Analysis Area. Modified Alternative 2 dropped the Caroline Creek road from the list of proposed actions precisely because of watershed specialists review and input. See Response to comment 18912-1 regarding water drafting. There is no change in landslide risk compared to current conditions for any Alternative (Geology Report, page 18). Also see the Aquatic Conservation Strategy Report for more information. For example, effects are explained in the short and long term: "Within this [Beaver] watershed there are two locations where temporary road actions involve stream crossings, and thus where site-level short-term effects are expected. The stream involved is a non-fish bearing intermittent face drainage to Beaver Creek which is crossed at two locations by an existing roadbed that is proposed for use as a temporary road; the crossings are in relatively close proximity to each other in the upper part of the drainage and downstream the creek flows through private timber land that is currently being salvage logged. Short-term sediment-related impacts over about one mile of stream are expected during the time when the existing roadbed is prepared for use as a temporary road, used, and then hydrologically stabilized. Effects may occur during storms throughout the first few years post-project as the road prism readjusts. Long-term benefits to this drainage are expected because the condition of the roadbed will be improved post-project by out sloping and pulling fills at crossings and appropriately treating the current legacy sediment site."
206 - Fish	#18926-38	Short-term negative effects to aquatic habitat may occur in several stream reaches due to grazing allotments, private timber harvest and Forest Service timber sales, Thom Seider and Eddy LSR, which are expected to contribute sediment delivery to streams. Private land logging would contribute to elevated sediment inputs to the Klamath River, which is admitted in the DEIS but is in violation of the law.! ! Management Indicator Species (MIS)! River/Stream associated species include steelhead, resident rainbow trout, tailed frog, and cascades frog. There are 802 miles of perennial stream habitat and 1,012 miles of intermittent stream habitat. Resident trout may occur in approximately 338 miles and steelhead in approximately 224 miles. Cascades frogs may occur in about 314 miles and tailed frogs may occur throughout all perennial streams. The western pond turtle is associated with marsh, lakes and ponds. The project area contains about 802 miles of stream habitat and 362 acres of lentic habitat that defines western pond turtle habitat.! ! The DEIS assumes that high quality riparian and aquatic habitat does not occur in areas of moderate/high fire intensity, and aquatic habitat in streams downstream of these areas is likely also experiencing negative effects such as increases in sedimentation, water temperature and peak flow events. The quality of MIS ! habitat is expected to be reduced along stream reaches associated with 14 sites where road crossings and landings are constructed. However the DEIS claims, again, that mitigations will reduce or eliminate harm and that the treatment of a fraction of legacy sediment sites will improve habitat.! !!!	Through detailed analyses that is documented in the EIS and supporting reports, this project has been found to meet the Standard and Guidelines in the Forest Plan, including those related to aquatic resource management (Management Area 10). The EIS Aquatic Resources Report analyzes short-term, long-term and cumulative effects including from grazing allotments and timber harvest on private lands, and determined that the Project would not add measurable incremental impacts to these other actions. The Project Aquatic Resources analysis and Biological Assessment provides transparency with regard to analysis methods (refer to Methodology sections in each document) and is based on reliable and accepted methods of analysis including the following: review of existing information, post-fire field reviews of proposed treatment units, Riparian Reserves and stream channels; analysis of the biological requirements of aquatic species; use of habitat indicators from the Analytical Process (USDA-USDOC-USDI 2004) to determine effects of actions. Integration of upslope watershed dynamics was included where they generate or impact physical habitat for aquatic species. Aquatic Resources analysts worked with watershed and geology specialists to minimize effects of the Project on watershed hillslope erosion processes and stream habitat. They worked together to identify and field-review sensitive watershed areas such as active landslides, active surface erosion, stream channels and Riparian Reserves and developed meaningful Project Design Features for the protection of aquatic resources within the Analysis Area. Finally, the Forest Cumulative Watershed Effects were used to assess potential additive effects of the Project to aquatic species, including MIS species. The Forest Cumulative Watershed Effects model is standardized and utilizes the Equivalent Roaded Area, Universal Soil Loss Equation and Mass Wasting models to assess effects of past, present, and reasonably foreseeable activities includes other projects in the action area. The Cumulative Watershed Effects models reflected that there would be no measurable increase in disturbance at the 5th-field watershed scale, and minimal increase at the 7th field watershed scale. Therefore, the cumulative impacts from adding the effects of the proposed action to present and reasonably foreseeable future actions on aquatic resources were determined to be insignificant. Treatment of legacy sites in the Elk Creek watershed was determined to be a top priority and were included in the Project.

Code	Comment Number	Comment Text	Response
206 - Fish	#19076-1	We are very concerned about the Project's potential impact on water quality and threatened salmon.	Comment is a statement of concern that does not request a change in proposed actions, clarification, or more information. The Forest fish and water scientists coordinated with regulatory agencies (National Marine Fisheries Service and Water Quality Board), conducted and documented intensive analysis and field work, and coordinated with other specialists to plan project activities and provide protection measures to meet law, regulation, and policy associated with riparian and aquatic resources. Through coordination with the regulatory agency for species listed under Endangered Species Act, monitoring plans were developed and a determination of, "May Affect, Not Likely to Adversely Affect" Coho salmon was made. See Chapter 3 of the EIS for a disclosure of effects by resource area and Alternative.
206 - Fish	#19076-12	We are most concerned with EFH for UKT (Upper Klamath Trinity) Chinook. Recovering stocks of wild salmon on the South Fork Trinity River must enter at the mouth of the Klan1ath and the young return to the ocean there.	Essential Fish Habitat (EFH) was considered for both Coho and Chinook salmon, with consultation occurring under 305 (b) (4) (A) of the Magnuson-Stevens Fishery Conservation and Management Act. The Biological Assessment for Fish and the Aquatic Resources analysis used habitat indicators from the Analytical Process (USDA-USDOC-USDI 2004) to evaluate effects to watershed condition at the site, 7th, and 5th field watershed scales. As shown in the Checklists in the Biological Assessment, all fish-related habitat conditions are maintained or improved at the 5th field watershed scale. Therefore, fish habitat conditions, including EFH, in the main stem and mouth of the Klamath River would not be affected.
206 - Fish	#19076-3	The water drafting proposed for the project is not acceptable with such low water, since; it would require using the only pools available for fish since those are the only ones deep enough. Using screening of the required size or dependi.ng on the fishes to swim away to avoid drafting equipment may work in more abundant water years.	See response to comment number 18912-1.
206.01 - Fish - Coho Salmon	#12364-2	Last year those harsh conditions included up to 100% of the juvenile salmon migrating down the Klamath River, including ESA listed Coho salmon, to be infected with one or multiple fish diseases. Only 15% of juvenile Klamath River salmon fitted with radio transmitters made it to the estuary. That is an unprecedented disease epidemic and a significant threat to ESA-listed SONC Coho salmon. Your proposed Project will likely result in "jeopardy' for Klamath River Coho.	"Jeopardy" is a formal term described under the Endangered Species Act. When an action is Likely to Adversely Affect a species, further analysis is conducted to determine if an "Adverse Effect" will jeopardize the continued existence of the species. The regulatory agency in charge of compliance with the Endangered Species Act confirmed that the proposed actions will not adversely affect the Coho salmon, therefore additional analyses for Jeopardy is not completed. See the "Consultation to Date" section in the March 13, 2015 Biological Assessment for Fish and the June 19, 2015 addendum to the Biological Assessment for Fish.
206.01 - Fish - Coho Salmon	#12364-4	Do not put Coho and other Klamath Salmon at more risk during this drought.	See response to comments 17393-1 and number 18852-48. Taking No Action has negative consequences for fish and watershed conditions also. Page 16 of the Hydrology Report states, "Over the long-term, the fuel load conditions will lead to fire intensity and flame lengths that are conducive to major fire runs, crown fires, and spotting. The large fuels component (greater than 3 inches) will lead to an elevated fire intensity and duration of fire on the landscape if it should re-burn. In 10 years, the conditions under Alternative 1 will lead to nine percent of the area having flame lengths greater than 11 feet. Sixty percent of the treatment area is likely to experience flame lengths between 4 and 11 feet and thirty-one percent is likely to have flame lengths of less than 4 feet. (See fire and fuels report). High flame lengths are associate with high severity fire and will contribute to accelerated sediment delivery(DeBano et al. 2005), increased stream temperatures (Pabst and Spies 2001)and stream flows (Neary, et al. 2005a)and increased potential for the introduction of toxic chemicals from fire retardant application during future fire suppression efforts(Neary, et al. 2005b)." Alternative 1 will allow for passive recovery of vegetation in the watersheds which will be slower than if treatment, including planting, would occur. The extended duration of decreased interception, use of water by plants, and ground cover will extend the risk to channel morphology over the long-term.
206.01 - Fish - Coho Salmon	#18849-2	Burned and unattended fuels that remain in the forest threaten immediate impacts to drainage, runoff, and roads that will impair waters upon which all salmon, including the threatened coho, depend,	The EIS Chapter 3 Aquatic Resources analysis stated that taking no action could indirectly affect sediment regimes in the Analysis Area. When future wildfires occur there could be increased potential for severe fire effects as mentioned in the comment because fuels were not reduced and because the abundance of burned trees within the fire areas would make fire suppression difficult if not impossible in some areas. This project attempts to balance multiple resource concerns, as well as short and long term impacts with reducing impacts from future wildfires.
206.01 - Fish - Coho Salmon	#18859-9	Burned and unattended fuels that remain in the forest threaten immediate impacts to drainage, runoff, and roads that will impair waters upon which threatened Coho salmon depend,	See response for comment number 18849-2.

Code	Comment Number	Comment Text	Response
206.01 - Fish - Coho Salmon	#18909-83	The rivers in the Westside project are home to some of the most productive fisheries habitat in the world outside of Alaska. They are vital to salmon survival. There are eleven larger watersheds in the project area and seventy-five sub-watersheds. Coho (Oncorhynchus kisutch) salmon are listed as threatened under the Endangered Species Act. The project area contains over 101 miles of Coho Critical Habitat and the Salmon River is the last stronghold for native spring Chinook salmon. The project would cause negative effects to habitat for the following special status aquatic species: resident trout and tailed frog (Management Indicator Species); foothill yellow-legged frog, Cascade frog, and western pond turtle (Forest Service Sensitive). Habitat for Coho Salmon (Threatened), Chinook salmon, steelhead, Pacific lamprey, and Klamath River lamprey (Forest Service Sensitive) may also be negatively affected. The DEIS is supposed to be in plain language however it waters down any real effects by stating that activities are not directly in the streams and rivers, except water drafting, new landings, temporary road construction and 14 new stream crossings. The DEIS relies on unreliable mitigations (Best Management Practices and Project Design Features) and the treatment of 150 out of the 953 legacy sites as an offset to any effects to aquatic species and calls negative effects discountable. Throughout the aquatics section, the DEIS continually states that treatments are outside Riparian Reserves, however it fails to consider the 13,215 acres of treatment within steep unstable and potentially unstable areas on decomposed granite soils recognized as Riparian Reserves. The DEIS fails to consider the cumulative effects of the increased sediment, turbidity, temperature and loss of shade combined with future climate conditions such as increased drought conditions and chance of floods on salmon species. Salmon depend on the cool water at the mouths of creeks where juvenile Chinook and Coho salmon seek refuge from the inhospitable conditions in the Klamath River and Salmon River systems. The proposed action would diminish cold water refugia. Last year up to 100% of migrating juveniles tested were diseased. This is an unprecedented disease epidemic and a significant threat to ESA-listed SONC Coho salmon. Thousands of salmon, including juveniles continue to die from two gill rot diseases known as ich and columnaris, fish disease infection rates go up as flows and water quality diminish and as water temperature rises. The DEIS fails to analyze or disclose the increased risk of disease in combination with climate change and the cumulative effects the project activities.	The aquatic Resources analysis, Biological Assessment for fish, and the Geology Report describes standard analysis methods (refer to Methodology sections in each document) to assess direct, indirect and cumulative effects including the following: review of existing information, post-fire field reviews of proposed treatment units, review of Riparian Reserves and stream channels; analysis of the biological requirements of aquatic species; use of habitat indicators from the Analytical Process (USDA-USDOC-USDI 2004) to determine effects of actions; Cumulative Watershed Effects modeling and analysis that integrates disturbance coefficients from other past, future and reasonably foreseeable projects in the action area. The analysis approach used for fish species listed under Endangered Species Act is dictated by the National Marine Fisheries Service. Fisheries Biologists worked with watershed and geology specialists to minimize effects of the Project on watershed hillslope erosion processes and stream habitat. They worked together to identify and field-review sensitive watershed areas such as active landslides, active surface erosion, stream channels and Riparian Reserves and developed meaningful Project Design Features (project design project design features) for the protection of aquatic resources within the Analysis Area. In addition, integration of upslope watershed dynamics was included where actions could generate or impact physical habitat for aquatic species. Best Management Practices is a system developed in coordination with the California State Water Quality Controlled Board that includes standardized monitoring throughout California. There is no change in landslide risk compared to current conditions for any Alternative (Geology Report, page 18).
206.01 - Fish - Coho Salmon	#18909-85	The biological assessment contains the following finding, at page iv: "The Westside Fire Recovery Project may adversely affect EFH for Coho and Chinook salmon, specifically EFH for Southern Oregon/Northern California Coasts Coho salmon and Upper Klamath-Trinity Rivers Chinook salmon." Later in the BA, it states that, "The effects analysis considers effects to Pacific salmonid habitat in general; and since habitat requirements for Coho and Chinook salmon are similar, the effects of the Project as described above for Coho salmon CH are similar for EFH." The finding for effects to Coho salmon and their CH is "may affect, not likely to adversely affect." Please explain this inconsistency. As you may know, under the Magnuson Stevens Act, a "[t]he trigger for EFH consultation is a Federal action agency's determination that an action or proposed action, funded, authorized or undertaken by that agency may adversely affect EFH. If a Federal agency makes such a determination, then EFH consultation is required." (EFH Consultation Guidance, 1.1). Please explain whether KNF will undergo consultation with NOAA Fisheries because of the "may adversely affect" finding stated in the BA.	Thank you for catching this error. The Forest determination for EFH is correctly stated in the Biological Assessment on page iv and is incorrectly stated in the Aquatic Resource Report in Table 24. The Klamath NF will undergo consultation with National Marine Fisheries Service. The determination in the Aquatic Resource Report for the Westside Fire Recovery Project will be corrected after National Marine Fisheries Service provides the Klamath NF with its final assessment. The analysis for effects under Endangered Species Act follows the interagency agreed upon "Analytical Process" as described in the Biological Assessment for this project. That analysis also provides the information to evaluate EFH. Different from procedures for Endangered Species Act determinations, there are only two possible determinations under MSA: No Effect or Adverse Effect. National Marine Fisheries Service conducts an independent analysis on EFH and has an opportunity to make Conservation Recommendations for projects that may cause Adverse Effects to EFH. But, the criteria to meet Adverse Effects under Endangered Species Act are not the same for EFH. For example, in the February 28, 2012 letter from National Marine Fisheries Service, National Marine Fisheries Service determined that under the MSA, the creation of an off-channel pond to improve winter and summer rearing habitat for juvenile Coho salmon adjacent to O'Neil Creek (a tributary to the mid-Klamath River) would adversely affect EFH for Chinook salmon and Coho salmon. However, due to implementation of Project Design Features and Best Management Practice, National Marine Fisheries Service did not have any EFH Conservation Recommendations... For this same O'Neil Creek Pond Project, project, National Marine Fisheries Service concurred with the Forest that the Project may affect, but is not likely to adversely affect federally threatened SONCC Coho salmon or their designated critical habitat.

Code	Comment Number	Comment Text	Response
206.01 - Fish - Coho Salmon	#18912-1	Being a Freshwater Fisheries Science student at Humboldt State University I first read the Aquatic Resources reports and some of the Watershed reports, and I have a few items to discuss. The first is water drafting. I don't feel that the regulations put forth on water drafting from some of these low order streams takes into account all of the combined effects on fish and wildlife that they can have. As I'm sure you are aware the Upper-Scott and Salmon Rivers, as well as many of the larger tributaries to be salvage logged within the Beaver Fire complex, are thermally limiting to juvenile fish (including Coho salmon). Coho and other fish rely on these cold-water refuges for summer and fall rearing when the main Klamath and Lower parts of the rivers can be dangerously warm. I think that water drafting, even by the regulations laid down in the proposal, could have a terrible effect for these species. Removing water during the summer and fall (presumably when harvest will be safest), will mean drafting from these cold water streams at the critical time. Even if these streams are outside of anadromous reaches, they will warm more quickly from decreased flow. Also, the proposal lays down no regulation on drafting from multiple streams in the same watershed simultaneously, that could result in a compound effect on the higher order (perhaps anadromous fish holding) downstream reaches.	National Marine Fisheries Service water drafting specifications (2001) and Forest Service Best Management Practices and project design project design features (such as project design feature Watershed-55) will be implemented to minimize effects of water drafting including during periods of low water flow. project design feature watershed-34 was refined during consultation with National Marine Fisheries Service and Karuk Tribe and specifies that certain areas (lower reaches of cold tributaries) across the project area and several specific creeks are to be avoided during late summer and fall water drafting. Aquatic species within the Happy Camp Fire area, including Coho salmon, will be provided increased protection from water drafting, particularly within the following creeks: Tom Martin Cr, O'Neil Cr, Little Horse Cr, and China Cr. These increased protection measures further reduce the chance that water drafting would have measurable negative impacts to fish that are utilizing thermal refugia. This modified project design feature helps to avoid reducing cold water inputs to the Klamath River, which is critical to aquatic species when extended drought conditions persist. The June 19, 2015 addendum to the Biological Assessment for Fish states, "As part of the Project consultation, the Forest, National Marine Fisheries Service, and Karuk Tribe jointly developed a strategy to monitor implementation of Project elements that have the greatest likelihood of impacting SONCC Coho salmon and other salmonids. Pre Project, the group will monitor the hazard tree mark where it is proposed near SONCC Coho salmon CH; during the Project (especially June-Sept) all parties will share information about where Project water drafting is occurring, jointly monitor those water drafting actions, and help Forest Service Representatives decide where to shift Project water drafting so that impacts to SONCC Coho salmon and its CH are not adverse. Also see pages 11-13, 37-38, and 64 in the April 13, 2015 Biological Assessment for Fish for additional information on drafting requirements and locations.
206.01 - Fish - Coho Salmon	#18913-1	We are concerned that the Klamath National Forest's Westside Fire Recovery Project threatens water quality and coldwater fish habitat in watersheds that currently support sensitive fish species, specifically the federally threatened coho salmon. The scale of old growth logging and miles of road building - some permanent - is unacceptable in a time when coldwater fishes in the Klamath River watershed are already fighting for survival during unprecedented drought conditions. State and federal recovery plans for these imperiled fish call for better habitat and less sediment, which this project currently ignores.	The EIS Chapter 3 Aquatic Resources Report, fisheries biological assessment, and the EIS Chapter 3 Hydrology section specifically addresses the Project's potential for effects to sedimentation and water quality - findings indicate that impacts to sediment and aquatic habitat will be insignificant. As a result of project design, existing Forest Plan land allocations that protect Coho salmon and their habitat on Forest lands (Riparian Reserves and others), consideration of cumulative effects, and action-specific effects minimization measures, fisheries biologists determined that the Project May Affect but is Not Likely to Adversely Affect Coho salmon. Our analysis did not lead logically to a finding of adverse effects, even when considering cumulative effects using a deliberative, quantitative approach. Permanent roads will not be constructed in this project. Burned trees will be salvaged, but not viable old growth trees.
206.01 - Fish - Coho Salmon	#18941-1	Though I do not live in the immediate area of the Klamath, events such as the fires experienced in 2014 have far reaching impacts. While people in the Klamath River watershed in Oregon are asked to sacrifice their access to critically vital water in order to support salmon runs in the lower river, science has shown that catastrophic wildfires such as occurred this past year produce far more dirty runnoff and silt, remove shade from the water and ultimately cause more harm than any well planned salvage harvest or restoration activities could ever do.	Comment is a statement of opinion that recognizes the potential impacts of catastrophic wildfires. As described in the Aquatic Conservation Strategy Report, Klamath NF scientists determined that for many watersheds, "Based on Cumulative Watershed Effects modelling, conditions created by the fire are likely to affect water quality, notably sediment delivery, far more than any of the action Alternatives."
206.01 - Fish - Coho Salmon	#19078-1	I wish to express my disapproval of the Westside Timber Sale due to impacts to the Klamath River's key salmon refugia, cumulative impacts to forest and watershed, and violations of the Clean Water Act, the Endangered Species Act, NEPA and California's Porter Cologne law. I incorporate by reference the comments of the Klamath Siskiyou Wildlands Center, the Center for Biological Diversity, the Karuk Tribe and the Environmental Protection Information Center and the Klamath Forest Alliance.	See the Summary of Effects in the Aquatic Species Resource Report for the final EIS. The action Alternatives add no incremental increase at the 5th-field watershed scale and only a slight incremental increase at the 7th-field watershed scale in some watersheds, an increase that is determined to be discountable or insignificant (effects may occur but they are not expected to be to a level that can be meaningfully measured or detected). At the site-scale, all of the action Alternatives except Alternative 4 pose a risk to the watersheds identified as being "at risk" post-fire. The impacts are limited to where they occur (at the site) and are associated with temporary roads, stream crossings and landings within Riparian Reserves. Implementation of all of the action Alternatives will allow for a quicker recovery of conifer stands in these burned watersheds. Alternative 4 most fully minimizes impacts at the site and watershed-scale and would have discountable effects to habitat indicators in "at risk" watersheds at both scales. With Alternative 4, the number of acres made safer for fire fighting, community protection, and fire resiliency is reduced by 900 acres and there is a reduction in social benefits such as income and jobs (Table 2-32, draft EIS). All of the action Alternatives include effects minimization measures that will help protect fish habitat. The hydrologist has determined that the effects to watershed conditions from action Alternatives will be indistinguishable from effects from the 2014 wildfire, reforestation will be slower if No Action is taken, and the watershed restoration that is proposed will be delayed. See response to comment number 19076-1 and responses to comments made by Klamath Siskiyou Wildlands Center, the Center for Biological Diversity, the Karuk Tribe and the Environmental Protection Information Center and the Klamath Forest Alliance.

Code	Comment Number	Comment Text	Response
206.03 - Fish - General habitat	#12346-22	The Westside timber sale proposes actions that will further degrade at-risk, Key and sensitive post-fire watersheds and degrade water quality necessary to support healthy riparian, aquatic and wetland ecosystems. Page 219 of the Westside DEIS indicates that "[l]andings located within Riparian Reserves, especially new landings, have a high risk of effects to habitat indicators and aquatic species because landings will disturb soils and vegetation in close proximity to streams." Page 218 of the Westside DEIS acknowledges that "[n]ew temporary roads, particularly temporary road stream crossings, have a high risk for affecting aquatic indicators at the site scale because of their impacts on sediment regimes and drainage networks." Please note that all of the Forest Service action alternatives involve new road construction to facilitate logging activities.	General comment referencing the draft EIS. Chapter 1 Proposed Action talks about landings as does Chapter 2 Alternatives , including the Refined Proposed Action. The Aquatic Resources analysis identified those actions that had the potential to degrade habitat quality including in Key Watersheds and sensitive watersheds, and analyzed the proposed actions in the context of minimization measures that would be implemented to maintain or restore water quality, riparian, aquatic and wetland ecosystems. Landings and temporary roads were identified to pose the highest risk to aquatic resources and the project was designed to minimize adverse effects from these higher risk actions. For example, existing old road beds will be used where ever possible and temporary roads will be hydrologically restored. Landings were kept out of Riparian Reserves except where existing open areas could be used to provide less impact than creating a new landing upslope. The Biological Assessment for Fish on page 65, says: All proposed new landings in Riparian Reserves were reviewed in the field. The magnitude of potential effects is limited in scope to landing number DZ03, DZ10, DZ23, L043, L044, and L090. The criteria for use of existing landings are: existing landings in Riparian Reserves will not be expanded towards stream channels, or on to active landslides, or where vegetation that provides shade to a stream would need to be cut. Existing landings in Riparian Reserves will be shaped and treated for erosion control at the end of each season of use, and hydrologically restored at project completion (including subsoiling and covering with slash/mulch as needed). Reused landings in Riparian Reserves will have site specific erosion control measures to reduce risk of sediment delivery into streams. Site review of all new landings proposed within Riparian Reserves confirmed that these criteria (project design feature Watershed-23) and other project design project design features, along with proper implementation of Best Management Practices, would be sufficient to avoid any meaningful negative effect(s) to anadromous fish habitat. Project Design Features were formulated to protect key indicators of aquatic habitat quality including sedimentation, water temperature and large wood. Soil disturbance associated with temporary roads and landings was addressed through project design project design features as well. The EIS Aquatic Resources analysis and biological assessment considered the status of species and habitat in the action area, the proposed actions, location and extent, and all minimization measures proposed and concluded that effects would be insignificant and not measurable.
206.03 - Fish - General habitat	#12346-23	Page 218 of the DEIS states that implementation of the Forest Service proposed action "would have moderate short-term negative effects to habitat indicators (primarily sediment) and aquatic species at the site scale within these vulnerable drainages, due to construction/reconstruction of temporary roads, installations and removal of stream crossings, and new landings in Riparian Reserves." Please note that all of the agency's action alternatives involve road construction and establishment of new log landings in 303(d) CWA listed watersheds.	The Klamath National Forest prepared the draft EIS in compliance with the National Environmental Policy Act and other relevant federal and state laws and regulations. Direct, indirect, and cumulative effects to wildlife, watershed, soils, fuels, sensitive plants, and aquatic species, among other resources, as well as management requirements to minimize adverse effects, are addressed in the Chapter 3 of the EIS, with appropriate references to the scientific literature. The Forest is also working up-front with the North Coast Regional Water Quality Control Board regarding compliance with the Clean Water Act. All streams in the project area are currently included on the state 303d list as water quality impaired, and the Klamath, Scott, and Salmon Rivers all have approved Total Maximum Daily Load analyses. Any project action Alternative will include a legacy sediment site inventory and treatment plan as part of the application to the North Coast Regional Water Quality Control Board for enrollment of the project in the waiver of waste discharge program. Enrollment in this program through treatment of watershed legacy sediment sites is in order to implement the established Total Maximum Daily Loads and thereby comply with the Clean Water Act. The Aquatic Resources analysis identified those actions that had the potential to degrade habitat quality including in Key Watersheds and sensitive watersheds, and analyzed the proposed actions in the context of minimization measures that would be implemented to maintain or restore water quality, riparian, aquatic and wetland ecosystems. Landings and temporary roads were identified to pose the highest risk to aquatic resources and the project was designed to minimize adverse effects from these higher risk actions. For example, existing old road beds will be used where ever possible and temporary roads will be hydrologically restored. Landings were kept out of Riparian Reserves except where existing open areas could be used to provide less impact than creating a new landing upslope. Project Design Features were formulated to protect key indicators of aquatic habitat quality including sedimentation, water temperature and large wood. Soil disturbance associated with temporary roads and landings was addressed through project design project design features as well. The EIS Aquatic Resources analysis and biological assessment considered the status of species and habitat in the action area, the proposed actions, location and extent, and all minimization measures proposed and concluded that effects would be insignificant and not measurable.
206.03 - Fish - General habitat	#17403-1	It is vitally important that the decisions around forest restoration give top priority to mitigating siltation in the creeks and rivers upon which the migratory fish depend. As the EIS reports, there will be a major impact from erosion related to the forest and logging road system. Don't choose alternatives that might create any more erosion!	The action Alternatives add no incremental increase in sediment at the 5th-field watershed scale and only a slight incremental increase at the 7th-field watershed scale in some watersheds, an increase that is determined to be discountable or insignificant (effects may occur but they are not expected to be to a level that can be meaningfully measured or detected). The impacts are limited to where they occur (at the site) and are associated with temporary roads, stream crossings and landings within Riparian Reserves. All of the action Alternatives include effects minimization measures that will help protect fish habitat. The hydrologist has determined that the effects to watershed conditions from action Alternatives will be indistinguishable from effects from the 2014 wildfire, reforestation will be slower if No Action is taken, and the watershed restoration that is proposed will be delayed. See the hydrology and aquatic resources sections in Chapter 3 of the final EIS.

Code	Comment Number	Comment Text	Response
206.03 - Fish - General habitat	#17910-7	In its appeal of the decision notice and EIS Statement approving the LRMP for the Klamath National Forest, it states on p.72: "To adequately protect water quality and fishery habitat, the Management Plan and its FEIS must evaluate the causes of past and continuing sedimentation in order to realistically anticipate and prevent watershed impacts from management activities. According to professor Robert Curry, "methodology exists to conduct such an evaluation, utilizing channel surveys, sediment sampling and analysis, and assessment of resident and anadromous fish requirements." In addition, Dr. Curry warned that an assessment of management activities MUST ALSO ADDRESS THE POTENTIAL IMPACT OF A SIGNIFICANT STORM EVENT. (This year is the 50th anniversary of the '64 flood.)	Approval of the Forest Plan decision or any appeals of it are outside the scope of this analysis. The ROD for the Forest Plan was upheld and serves are direction for project-level analysis. The project is consistent with the Forest Plan. Comment references an apparent appeal to the Forest Plan, and in particular that the assessment of [potential effects of] management activities must consider the potential impact of a significant storm event. An appeal of the Forest Plan is outside the scope of this project-level National Environmental Policy Act analysis. The project is consistent with the Forest Plan, as required. Any project action Alternative requires enrollment of the project in the North Coast Regional Water Quality Control Board's Waiver of Waste Discharge program. Coverage by the waiver requires that Forest inventory, prioritize, and schedule for treatment existing legacy sediment sites in the project area. The legacy sediment site plan for the Westside Fire Recovery project proposes a schedule to treat all legacy sites in the Elk Creek 6th field watershed. Through this treatment the Elk Creek watershed and the Klamath River will benefit from reduced risk of adverse effects to water quality from road-related erosion and sedimentation that is often manifest during large storm events. The EIS Aquatic Resources Report and Biological Assessment assess potential effects using standard and accepted methodologies including channel survey data, results of cumulative watershed effects modeling and assessment of resident and anadromous fish effects (see Appendix D of the Biological Assessment for Fish). Past and continuing sedimentation is calculated in the cumulative watershed effects modeling. Storms, like droughts, are not predictable but can evaluated if significant changes occur where actions are proposed. The EIS Aquatic Resources Report and Biological Assessment assess potential effects using standard and accepted methodologies including channel survey data, results of cumulative watershed effects modeling and assessment of resident and anadromous fish effects. Past and continuing sedimentation is calculated in the cumulative watershed effects modeling. Storms, like droughts, are not predictable but can evaluated if significant changes occur where actions are proposed.
206.03 - Fish - General habitat	#18912-3	These combined effects of less, warmer and more abrasively sediment-bearing water could be a deadly cocktail for those over summering juvenile fish. But not only juvenile fish, but also declining summer-run Steelhead in the Scott and Salmon as well as the highly diminished Salmon River's spring-run Chinook salmon, may suffer greatly from these changing conditions. To my understanding, the report does not address these effects in tandem, but independently, and I think that they should recognize, address and adjust management based on these effects together.	The EIS Aquatic Resources report and biological assessment reflect interdisciplinary discussions (including water quality, hydrology and geology) and methodologies that consider a suite of key habitat indicators for salmonids including sediment, water temperature and large wood. In addition, environmental baseline information was considered for each watershed to understand the pre-project habitat conditions (refer to Checklists in appendices of the Aquatic Resources Report and biological assessment).
206.03 - Fish - General habitat	#19076-3	The water drafting proposed for the project is not acceptable with such low water, since; it would require using the only pools available for fish since those are the only ones deep enough. Using screening of the required size or dependi.ng on the fishes to swim away to avoid drafting equipment may work in more abundant water years.	See response to comment number 18912-1.
206.03 - Fish - General habitat	#3678-24	Aquatic Resources (including fish) – No Action direct and indirect effects "Management Indicator Species (River/Stream Association) Indirect Effects "Failing to salvage and reforest moderate to high severity stands that were burned in 2014 would have no effect on stream temperature, sediment, or large wood over the next one to five years as postfire conditions include reduced surface fuel loading across the landscape. From five to10 years out, failing to salvage and reforest moderate to high severity stands, and conduct fuels treatments, increases the potential for a wildfire that spreads and is likely to cause adverse impacts to Riparian Reserves and aquatic habitat. As large trees fall and brush accumulates, it becomes more unsafe to fight fires directly and, therefore, fires are likely to burn across more drainages causing more negative effects to aquatic habitat."	Not a substantive comment; the quote is a copy of text from the draft EIS.

Code	Comment Number	Comment Text	Response
206.04 - Fish - General, rare	#12364-1	By opening and using decommissioned roads, constructing new temporary roads, and by logging riparian areas the preferred alternative will increase sedimentation and raise stream water temperatures significantly. This will create great risk of catastrophic storm damage to streams as we saw in the 1997 storm event. Implementing that alternative will also impact conditions in the Klamath River, reducing or even eliminating the cold water refugia at the mouths of creeks which juvenile Chinook and Coho salmon rely on to escape from harsh conditions that occur in the Klamath River.	The preferred Alternative for the final EIS is modified Alternative 3, which incorporates component of Alternative 4 by including less road construction than Alternative 2 (the preferred Alternative in the draft EIS). The Forest acknowledges that Alternative 2 of the Westside Fire Recovery project proposes reopening and use of previously decommissioned roads, and construction of some new temporary road segments. There is no salvage harvest proposed for hydrologic Riparian Reserves under any project Alternative. Road activities are almost entirely proposed for areas outside of hydrologic Riparian Reserves under all project Alternatives. Table 8 of the Aquatic Conservation Strategy Report indicates that there are 0.2 and 0.3 miles of reopening of decommissioned road and new temporary road, respectively, proposed in Alternative 2. This limited amount of road activity in hydrologic Riparian Reserves is not expected to produce adverse effects to water quality resulting from sedimentation or increased stream temperatures. In addition, implementation of any project action Alternative requires enrollment of the project in the North Coast Regional Water Quality Control Board's Waiver of Waste Discharge program. Coverage by the waiver requires that Forest inventory, prioritize, and schedule for treatment existing legacy sediment sites in the project area. The legacy sediment site plan for the Westside Fire Recovery project proposes a schedule to treat all legacy sites in the Elk Creek 6th field watershed. Through this treatment the Elk Creek watershed and the Klamath River will benefit from reduced risk of adverse affects to water quality from road-related erosion and sedimentation. The effects to stream temperature are considered "discountable negative effects", with no effect from salvaging burned trees. As stated in the Aquatic Conservation Report, Klamath NF scientists determined that for many watersheds, "Based on Cumulative Watershed Effects modelling, conditions created by the fire are likely to affect water quality, notably sediment delivery, far more than any of the action Alternatives." Replanting salvage areas is expected in speed up forest recovery to mature stands in 40-60 years rather than 80 years with No Action, and that should lead to slope stabilization and reduced sediment delivery. reopening decommissioned roads was a concern for aquatic specialists and therefore the extent was minimized during project design and Alternative development, to the extent possible, while still meeting the purpose and need of the project. Alternative 2 proposed about 9 miles of decommissioned road to be re-opened. Through the analysis process it was determined that the Caroline Creek road would not be re-opened, thus the miles of re-opened decommissioned roads was reduced to 5.6 miles in Modified Alternative 2. Throughout the design and analysis of the project, watershed and fisheries specialists on the interdisciplinary team focused on road actions since roads can have a major impact on sediment and the drainage network. As a result, all but about 3.6 miles of the temporary roads will be placed upon existing roadbeds, which will not increase the drainage network, and stream crossings were limited to seasonal drainages outside of fish habitat. To further reduce the effects of roads, all temporary roads will be hydrologically stabilized after use - this includes constructing waterbars, outsloping road prisms if appropriate, and obliterating access to the road. Disturbance associated with temporary roads were accounted for in the Cumulative Watershed Effects analysis: at the 5th- and 7th-field watershed scale, disturbance including roads and harvest, will only add slight or insignificant levels of disturbance to the baseline conditions that includes the 2014 fires. At the watershed scale, based on the Cumulative Watershed Effects analysis, and because temporary roads will be hydrologically stabilized and closed post-project, and because there will be no net increase in road density or drainage network after the project is complete, and based on implementation of Watershed project design project design features (20, 21 and 25) we determined that temporary roads will have discountable insignificant effects to sediment and minor effects to aquatic species. Salvage harvest was excluded from Riparian Reserves. While hazard tree abatement may occur within Riparian Reserves, large trees that are felled must be left on site to protect near-stream large wood. Stream temperatures will not be affected by tree removal since no salvage will occur within Riparian Reserves. Fisheries biologists reviewed the hazard tree abatement areas within Riparian Reserves and determined that the extent or scope of hazard tree abatement was not concentrated and was focused on burned trees, and will not affect stream temperatures. The interdisciplinary team is aware of the important role that the project area streams play for fish migrating through the Klamath River and measures were included to minimize sediment from all aspects of the project so that access to thermal refugia would not be changed as a result of the project. Addressing legacy sediment sites in Elk Creek and other road fixes that will occur as part of the project, will reduce ongoing sediment sources.

Code	Comment Number	Comment Text	Response
206.04 - Fish - General, rare	#18909-86	River/Stream associated species include steelhead, resident rainbow trout, tailed frog, and cascades frog. There are 802 miles of perennial stream habitat and 1,012 miles of intermittent stream habitat. Resident trout may occur in approximately 338 miles and steelhead in approximately 224 miles. Cascades frogs may occur in about 314 miles and tailed frogs may occur throughout all perennial streams. The western pond turtle is associated with marsh, lakes and ponds. The project area contains about 802 miles of stream habitat and 362 acres of lentic habitat that defines western pond turtle habitat. The DEIS assumes that high quality riparian and aquatic habitat does not occur in areas of moderate/high fire intensity, and aquatic habitat in streams downstream of these areas is likely also experiencing negative effects such as increases in sedimentation, water temperature and peak flow events. The quality of MIS habitat is expected to be reduced along stream reaches associated with 14 sites where road crossings and landings are constructed. However the DEIS claims, again, that mitigations will reduce or eliminate harm and that the treatment of a fraction of legacy sediment sites will improve habitat.	The EIS Aquatic Resources Report analyzes short-term, long-term and cumulative effects to aquatic resources including Management Indicator Species . The Project Aquatic Resources analysis and Biological Assessment is based on a review of existing habitat information, post-fire field reviews of proposed treatment units, Riparian Reserves and stream channels; analysis of the biological requirements of aquatic species including Management Indicator Species; use of habitat indicators from the Analytical Process (USDA-USDOC-USDI 2004) to determine effects of actions; integration of upslope watershed data, with a focus on where actions could generate or impact physical habitat for aquatic species, including Management Indicator Species. Forest scientists worked together to identify and field-review sensitive areas such as riparian areas and water features, active landslides and surface erosion, and stream channels. Project Design Features (project design project design features) were developed for the protection of aquatic resources within the Analysis Area. Finally, the Forest Cumulative Watershed Effects were used to assess potential additive effects of the Project to aquatic species, including Management Indicator Species . When assessing landscapes it is necessary to prioritize treatments since it is not possible to treat every issue or area at one time. Treatment of legacy sites in the Elk Creek watershed were determined by watershed specialists to be a top priority and thus were included in the Project.
207 - Forest Health, Regeneration	#12346-49	Quoting directly from Shatford: 19 "[O]ur findings suggest that the prognosis for achieving reasonable conifer densities [from natural regeneration] are fair to excellent, even on sites with high cover of broad-leaved shrubs and hardwoods. Although conifer growth may be delayed by competition over the short term, benefits in terms of wildlife habitat and site fertility should be considered. Viewing ecosystem recovery as a variable and dynamic process highlights the limitations of short-term studies that provide an incomplete picture of the regeneration process. In addition, assertions that burned areas, left unmanaged, will remain unproductive for some indefinite period seem unwarranted." It is also telling that the DEIS simply omits reference to findings such as those by Noss et al in 2006 indicating that naturally disturbed, un-salvaged, early successional forests are often the most biologically diverse of all forest conditions and are both more rare and more imperiled than old-growth forests in many regions.2 Noss, R. F., J. F. Franklin, W. L. Baker, T. Schoennagel, and P. B. Moyle. 2006. Ecology and management of fire-prone forests of the Western United States. Society for Conservation Biology Scientific Panel on Fire in Western U.S. Forests. Society for Conservation Biology, North American Section, Arlington, Virginia. Also available from www.conbio.org/sections/namerica/napolicy.cfm.	The No Action Alternative is responsive to the concerns expressed. The Joint Fire Science Program Final Report was considered in the Environmental Consequences section, Chapter 3 of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009)." Noss et al. (2006) is a general fire ecology paper that is not specific to the Project area, however the EIS acknowledges the value of early seral plant communities in the vegetation and wildlife sections of Chapter 3. See also Chapter 3, Responsible Opposing Views and Agency's Responses and Appendix E, Proposed Activities in Late-Successional Reserves. We do not agree that early seral plant communities are "imperiled" in the Klamath Province. Since the inception of the Northwest Forest Plan, monitoring has shown that over 150,000 acres of late successional forest in the Klamath Province has experienced stand replacement fire. Across the total Westside Fire area considering all land allocations, approximately 10,800 acres of existing plantations, natural stands and proposed salvage units would be site-prepped and planted in Alternative 3 Modified. This represents about 21% of the estimated 52,000 acres of moderate to high severity fire; over 40,000 acres or nearly 80 percent of moderate and high severity fire in all land allocation would not be planted and would experience the long early seral plant succession cycle described by the commenter (EIS Chapter 3, Vegetation; Appendix E). See also EIS Chapter 3, Responsible Opposing Views and Agency's Responses.
207 - Forest Health, Regeneration	#12354-7	3. Natural insect controls - has the rush to salvage log prevented natu ral predation? (Woodpeckers - cavity-nesting birds, and some other insectivores alsocan assist controls) In he case of natu ral insect controls, what effects may favor natu ral predation? Does salvage logging prevent Histeridae from suppressing increased release of the damaging species - denying development of at species controlling Douglas-Fir Beetle (Dendroctonus Pseudotsugae), Scolytus monticolae and Douglas-fir pole beetle (Pseudohylesinus nebulosus), mountain pine beetle (MPB) Dendroctonus ponderosae? Clown or hister beetles, histeridae, may be predacious, but their effects on Dendroctonus are little studied. Here's an introductory look: Shepherd, William P. "Biology and host finding of predaceous hister beetles (Coleoptera: Histeridae) associated with Ips spp.(Coleoptera: Scolytidae) in loblolly pine (Pious taeda L.)." Ph D diss., Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy in The Department of Entomology by William P. Shepherd BS, Washington and Lee University, 2004.	In Chapter 3 of the EIS the potential for insect effects are provided: "The likelihood and time required for conifer regeneration is affected by bark beetle infestations. Alternative 1 has a sizeable risk of bark beetle population increases, primarily because all stressed trees remain. This results in the maximum potential habitat source for beetles, and the maximum potential loss of living trees as the insect population moves into lightly burned areas and adjacent green stands. Lesser levels of mortality are anticipated in stands outside the fire-affected area than in the project area but some increase in beetle infestation is expected among live trees. Experience from previous wildfires indicates that an outbreak can be intense for the one to two years post-fire." There will be some level of natural predation of insect populations anticipated, but the scale of adverse effects of the Fires relative to the scale of proposed treatments is likely minimal.

Code	Comment Number	Comment Text	Response
207 - Forest Health, Regeneration	#17280-2	On p. 13, this need is further clarified "The long-term desired future condition for the project area is a healthy forested landscape with diverse ecosystem conditions reflective of historic vegetation and the ecological capability of the landscape." As Dr. Jerry Franklin,a national expert in forest ecosystem process, and Joseph Wadell, of the Yurok Tribe, (historic managers of these forests), both point out, the mixed ecosystems resulting from periodic mixed-severity fires are the historic vegetation in this area (Project public reading room, Franklin letter 4/21/15, Wadell letter 11/14/2015) . "Restoring" them by creating high-density conifer plantations is not restoration in any real sense of the word. This issue is particularly problematic in the areas designated "Late Seral Reserves", which were, as Dr. Franklin points out, specifically set aside to allow for natural processes such as fire to operate on the landscape. Large snags are critically important for many late-seral-dependent wildlife species, and removing those snags endangers the survival of the species the reserves were set aside to protect.	The description as noted is a general, but accurate statement of our objectives, but we have added text to clarify this in the final EIS. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See also Chapter 1 of the EIS for a discussion of historic fire regimes in the Klamath Province. Thompson et al. (2007), in an important study of reburns in the Biscuit fire in southwest Oregon concluded that: “reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved.” That is precisely the objective of the salvage units in the Westside Fire Recovery Project, and the reason that leaving all of the dead wood now present on the landscape would not meet the Project objectives. There is no intention to create dense plantations. We agree that extensive uniform planting would not create the heterogeneity that we seek to reestablish on the landscape; trees will not be planted uniformly as the comment suggests. The reforestation stocking objective after planting in the Westside Fire Recovery Project is a stand of 75 to 225 variably spaced young trees with treated, discontinuous activity fuels, not densely stocked regularly spaced plantations that form continuous fuel beds. Stand density would vary with slope position and aspect with lower stocking on upper slopes and south and west aspects and higher stocking on north and east aspects that would form a closed canopy on lower slopes. Hardwoods would be included in the target stocking levels so the number of conifers would be less where hardwoods occur. Most reforestation units in the Westside Fire Recovery would be planted at lower densities as most of the units are on upper slopes. We also anticipate there would losses from future fires that would further reduce stand density. Our long term objective is 30-50 large, variably spaced, fire resilient trees per acre with openings as described by Taylor and Skinner (1996). The final EIS and supporting documents incorporate best available science.
207 - Forest Health, Regeneration	#17910-5	REGENERATION: On p. 11, you state “Salvage logging will promote ecosystem sustainability by increasing the likelihood and speed by which burned forest areas are regenerated, while greatly reducing the accumulation of dead/downed fuels in the future.” This is an assumption that flies in the face of both our experience and the science accumulated on the subject to date. The studies show that natural regeneration in areas that are not subject to salvage sales is often significantly higher than those that are salvage logged.	In Chapter 3 in the Vegetation Environmental Consequences section of the EIS the effects of no action and action Alternatives are described in detail. The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."
207 - Forest Health, Regeneration	#18852-54	-"Journal of Forest Ecology: "Conifer Regeneration after Forest Fire in the Klamath - Siskiyous: How Much, How Soon?" ; J.P.A. Shatford, D.E. Hibbs, and K.J. Puettmann; 2007 Society of American Foresters." Today, many post fire action plans regard tree planting and vegetation control as a relatively straightforward and effective solution to the problem of forest renewal (Lindenmayer 2006). Little is known about how burned areas will recover on their own, how they might differ from stands managed after fire, or how these differences relate to the rate of forest recovery after fire over the short term (1-2 years) or longer (1-2 decades) time frames. The lack of information concerning ecosystem recovery, specifically natural conifer regeneration after wildfires, has allowed speculation on complex ecological processes. We report here on the abundance of natural regenerating conifers occupying sites 9 -19 years after stand-replacing wildfires in northern California and southwest Oregon. Our findings redefine concepts of the role and reliability of natural regeneration in high fire frequency systems in the context of ecosystem management (Christensen et al. 1996). Additionally, they highlight the role of temporal and spatial variation as an inherent feature of forest development. Forest managers relying on natural regeneration should feel increased confidence and need to develop plans that can accommodate high levels of variation and accept the prolonged time line of the regeneration process. Our study advances an understanding of natural forest development after wildfire in the diverse Klamath - Siskiyous region (Minore and Laacke 1992). Clearly, natural regeneration of conifers is an intrinsic response to fires in most locations (Turner et al. 2003), and forests are recovering across the entire range of forest types we investigated and at considerable distances from seed sources. In contrast with previous observations (Hayes 1959, Stein 1986), our findings suggest that the prognosis for achieving reasonable conifer densities are fair to excellent, even on sites with high cover of broad-leaved shrubs and hardwoods. Although conifer growth may be delayed by competition over the short term, benefits in terms of wildlife habitat and site fertility should be considered. Considerable evidence from fire scars, tree ages, and tree growth patterns suggests that frequent low and moderate severity fires have been common in the Klamath - Siskiyous (Agee 1993, Taylor and Skinner 1998), resulting in low-density, multi-aged stands (Sensenig 2002). Fire suppression efforts during the 20th century have altered the fire regime and have led to changes in forest structural characteristics (Agee 1993, Sensenig 2002). Highseverity, stand-re- placing fires also have been known in this region,	In Chapter 3 in the Vegetation Environmental Consequences section of the EIS, the effects of natural regeneration and site preparation and planting are discussed. "If fuels are treated effectively, and the area is planted, the amount of time needed to restore the site to a sustainable coniferous forest may be reduced. Removing large trees by salvage alone is not sufficient fuel treatment. Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less intensity or not at all (Thompson, Spies and Ganio 2007; Weatherspoon and Skinner 1995). Therefore, effective fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et al. 2008). The reduction of residual fuels will be necessary to prevent future fire events from becoming stand-replacing fires that destroy planted seedlings. Research has shown fuel treatments increase the likelihood of the planted trees surviving future fires (Weatherspoon and Skinner 1995, Omi and Kalabokidis 1991). Heavy residual fuels need to be reduced substantially to help assure sustainability of plantations. Follow-up reforestation surveys will be completed to assure that the reforestation objectives are achieved."The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)." See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".

Code	Comment Number	Comment Text	Response
		where complex topography and fire behavior typically resulted in a patchy distribution of canopy openings, intact stands, and scattered surviving trees (Wills and Stuart 1994, Alexander et al. 2006).	
207 - Forest Health, Regeneration	#18878-23	DEIS: In addition to using professional judgment and visual cues during site visits, the 1944 Wieslander vegetation mapping was used to assess historic species composition and conifer dominance throughout the project area (Kelly et al. 2005). (Pg 109) Comment: From our scoping comments we suggested using the Wieslander vegetation maps and 1944 Aerial Photos. It would seem difficult for the specialist to utilize "1944 Weislander vegetation mapping" when the efforts of Weislander and other were accomplished in the1920-1930s.	As described in Chapter 2 of the EIS "Were identified as areas determined to have been historically dominated by conifers, as determined by the 1945 Wieslander Vegetation mapping (Kelly, M.B. et. al 2005) in addition to visual cues based upon Forest Service professional judgment"
207 - Forest Health, Regeneration	#18878-29	DEIS: Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed-conifer associations were not sampled in the Shatford et al. study (Pg. 112) Comment: The Shatford et al study concluded the natural establishment of conifers post fire to be "highly variable from year to year, and place to place, resulting in high variation in tree density and size." This conclusion would seem to suggest a complex un-even aged tree stands, which would be more conducive to Late-Succesional Reserves rather than an evenaged stand matrix as proposed in the Refined Proposed Action. Furthermore the sampling plots seem to have encompassed a broad range of sites. "Thirty five plots were established across a broad gradient of productivity and forest types. Our sampling encompassed three broad forest types (hereafter plant series) ranging from dry to wet (Atzet et al. 1992). Within the Douglas-fir series, sites ranged from dry, low-elevation interior valleys occupied by the Douglas-fir/ponderosa pine series to more mesic, transitional, and inland sites within the Douglas-fir/tanoak series." Without further explanation as to what the author is referring to as a pine and mixed-conifer association it is unclear as to why the concluding sentence was added.	The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."

Code	Comment Number	Comment Text	Response
207 - Forest Health, Regeneration	#18878-32	DEIS: If fuels are treated effectively, and the area is planted, the amount of time needed to restore the site to a sustainable coniferous forest may be reduced. Removing large trees by salvage alone is not sufficient fuel treatment. Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less intensity or not at all (Thompson, Spies and Ganio 2007; Weatherspoon and Skinner 1995). Therefore, effective fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014) (Pg 114) Comment: This seems to be contrary to the following statement in the Fire and Fuels Section, "A key finding observed by Ritchie, Knapp and Skinner (2012) found no support for the debate that post-fire salvage logging necessitates subsequent fuel treatment for elevated fuels". (Pg. 123) please clarify for reviewer.	We agree with the findings from the commenter. The sentence in the fuels section of Chapter 3 of the final EIS has been updated to clarify the reference to Ritchie, Knapp, and Skinner (2012).The findings from Ritchie, Knapp and Skinner (2012) of the commenter and the Fire and Fuels report relates to whole tree yarding for ground based units. Whole tree yarding is one form of slash disposal, but it's use is restricted to ground skidding units by feasibility and yarding systems. We acknowledge that where whole tree yarding is not used, that follow-up fuels treatments will be necessary to reduce activity fuels. Resultant fuels conditions of post-treatment logging slash and high fuel loading are not be desired conditions of the project. Within the salvage harvest and hazard tree abatement, follow-up fuels treatments are proposed to reduce post-harvest fuel loading. See comment 18878-16 for a discussion of economics and funds available to accomplish necessary follow-up slash treatments. See Fire and Fuels and Vegetation Reports for further analysis.
207 - Forest Health, Regeneration	#18878-78	Another broad statement in the Purpose and Need for Action section which needs further explanation and justification is "Following a high severity wildfire, heavy fuel loading predisposes an area to higher intensity and higher severity wildfires in the future". Current available best-science suggests that the combined influence from a pulse input of surface fuels resulting from salvage-logging (Mciver et al 2007), Donato et al 2006) followed by the establishment of uniform young plantations may increase susceptibility to severe reburns in the early stages of forest development. A similar conclusion is areas that were salvage-logged and planted after the initial fire burned more severely than comparable unmanaged areas, suggesting that fuel conditions in conifer plantations can increase fire severity despite removal of large woody fuels (Thompson et al 2007). Lastly, a Literature Review of post-fire logging studies, completed by the Forest Service's Pacific Northwest Research Station in 2000, "found no studies documenting a reduction in fire intensity in a stand that had previously burned and then been logged." (Mciver and Starr, 2000). The explanation and justification of this statement should demonstrate a strong scientific ecological basis for using post-fire salvage logging as a tool for wildfire prevention, post-fire "recovery" objectives, or ecosystem restoration objectives.	A significant consideration in comparing past studies to the Westside fire recovery rests in the details regarding activity undertaken after the harvesting of commercially valuable material. While McIver and Ottmar (2007) and Donato et al. (2006) suggest that post fire salvage logging can result in a pulse of fine fuels that can increase fire intensity and severity in the short term, none of these studies undertakes to explain the results in a scenario where post logging slash is treated in all harvested areas. Post-harvest treatment of slash is proposed in all Alternatives (see Chapter 2 of the EIS for full discussion of proposed Alternatives), and the predicted effects of this post-harvest treatment is a significant reduction both fine and coarse woody debris, as noted in Chapter 3 of the EIS. This type of treatment for post-salvage fuels is called for by Donato et al. (2006) when they sate "Our study underscores that, after logging, the mitigation of short-term fire risk is not possible without subsequent fuel reduction treatments." In addition, fire severity predicted in post-salvage areas in the McIver and Ottmar study from 2007 is based on flame length, and does not account for additional soil, cambium and fine root heating that are associated with large concentrations of large down wood during a fire event. In fact, this study found that there would be at least double the large wood debris in stands that are not salvaged 50-100 years following the initial high severity wildfire event. This is something that is not accounted for in their re-burn modeling, and it is this long heat residence time and resistance to control (as noted in Chapter 3 of the EIS) that we aim to avoid with our salvage treatments. Additional attention must be paid to the second post-harvest activity that can confound results in re-burn studies of both empirical and modeled evidence. We agree that densely planted, uniformly spaced plantations are highly susceptible to high severity fire, even if the fire itself is of low intensity. In fact, this was a pivotal piece of the results found in two of the studies cited here (Thompson et al. 2007, McIver and Ottmar 2007). Thompson et al. (2007) noted that the plantations they studied in the re-burn of the Silver fire by the Biscuit fire, stem density averaged 240-440 trees per acre; McIver and Ottmar (2007) modeled stands with 388 trees per acre. The trees per acre level used in these studies is likely to have contributed to the severity and intensity observed and modeled respectively. Our proposal does not include trees at his high stocking level, thus resulting in a lower likelihood of such high severity re-burn in the Westside fire footprints. See response to number 17910-2 for further discussion planting density as it relates to this topic. Although McIver and Starr (200) “found no studies documenting a reduction in fire intensity in a stand that had previously burned and then been logged” the question is far from decided. They go on to state “In general, logging of large-diameter material in green tree stands will lead to decreases in total fuel accumulations over the intermediate term but increases in fine activity fuels over the short term (Brown 1980). Logging in post fire stands, however, would be expected to produce less fine activity fuel because the fine material burned, and one would expect removal of large-diameter material to have an intermediate-term effect similar to green tree stands. Retrospective studies that look at twice-burned stands in which different levels of fuel reduction were undertaken after the first fire would possibly shed light on the issue of post fire logging, fuel reduction, and re-burn intensity.” To our knowledge, the only such study conducted in the intervening time since publication, is the previously mentioned Thompson et al. study from 2007, where post salvage fuel treatments are incomplete and post-harvest planting levels far exceed the stocking proposed in the Westside Fire Recovery. See response to comment12346-55 about green trees.

Code	Comment Number	Comment Text	Response
207 - Forest Health, Regeneration	#18878-84	Accountability Office (GAO) report commissioned by Congress confirmed that the Forest Service in Regions 5 and 6 (California and Oregon) failed to move beyond outdated management standards for reforestation (GAO 2005). According to one regional official, the Forest Service's history of timber production permeates current thinking, and many procedures do not reflect the current management emphasis on ecosystem health. The GAO reported that regional culture emphasized planting - the most expensive approach - to reforestation projects. A more economical approach would be allow natural processes to occur and for the forest to revegetate naturally. Any reforestation plans should at least meet the following criteria: 1. Consider all vegetation cover in stocking estimates (not just conifers) including grass, shrubs, other herbaceous plants, and hardwood tree species; 2. Plant conifers only where there is an historical basis (Pre-USFS) for establishing a forested landscape; 3. Encourage natural regeneration and succession whenever possible; 4. Count natural hardwood regeneration in stocking requirement goals; 5. Review 1944 aerial photos and Wieslander maps to ascertain historic vegetation to shape desired condition; 6. Minimize the connectivity of fuels throughout the development of the planted stand; and 7. Facilitate the application of cultural burning practices throughout the development of the planted stand. Donato DC, Fontaine JB, Campbell JL, Robinson WD, Kauffman JB, Law BE (2006) Science 311:352. Lindenmayer, D. B, Burton, P., and Franklin, J. 2008. Salvage Logging and Its Ecological Consequences. Island, Press. 227 pgs. Mclver JD, Ottmar R 2007. Forest Ecology Manage 238:268-279. Mclver JD, Starr Lynn 2000. Environmental Effects of Postfire Logging: Literature Review and Annotated Bibliography General Technical Report PNW-GTR-486 January 2000 Jonathan R. Thompson, Thomas A. Spies, and Lisa M. Ganio 2007. Reburn severity in managed and unmanaged vegetation in a large wildfire USDA Forest Service 2001a. Sierra Nevada Forest Plan Amendment, Final Environmental Impact Statement. Pacific Southwest Region. January 2001.	General comment, opinion, or position statement. See Chapter 2 of the EIS for a description of what is being proposed in terms of planting, which incorporates the suggestions provided in this comment.
207 - Forest Health, Regeneration	#18883-24	There should be a half mile no disturbance zone outside the boundary of all Wilderness, Backcountry, Research Natural Areas, Recommended Wild Rivers, and Inventoried Roadless Areas to protect the scenic beauty and allow for natural regeneration of natural forest conditions.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This comment reflects the opinion of the author, not the requirements of the Forest Plan. The commenter has recommended a no disturbance zone around areas of special concern that is not consistent with the Forest Service Manual 2320.3(5) which does not require buffers around wilderness. For other areas, this recommendation is not in line with the Forest Plan final EIS; none of the Alternatives, including the one selected for the Forest Plan, include blanket requirements to buffer reserves (Forest Plan final EIS, Appendix K, page K-36). No site-specific amendment to the Forest Plan is considered for the Westside project.
207 - Forest Health, Regeneration	#18909-109	Recent data shows that the highest biomass and carbon levels are maintained by periodic high-intensity fire, due to the combined biomass of the snags and logs from the previous fire and the vigorous natural tree regeneration spurred by the fire and the nutrient cycling resulting from the fire. Vigorous natural conifer regeneration is the rule, not the exception, in high-intensity fire areas in Northern California. Undisturbed complex early successional post-fire forests are often the most biologically diverse of all forest conditions and are both more rare and more imperiled than old-growth forests in many regions. Although tree regeneration after disturbances is important, a narrow view of this issue ignores ecological lessons, especially the role of disturbances in diversifying and rejuvenating landscapes. High-severity patches are of greatest importance to the ecological integrity of a large burn area as they provide a unique pulse of biological legacies that sustains the diversity of plants and wildlife. Post-fire landscapes are not in need of "restoration" because fire itself is a restorative agent. Public lands may be the last stronghold for maintaining these unique ecosystems. Please see more information on natural regeneration in the vegetation section of these comments page 7.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

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207 - Forest Health, Regeneration	#18909-113	Without going into specific detail of all the agency responses, we would like to highlight one article that the Review of Publically Provided Literature references at least a dozen times. That is Sessions et al. 2003. The agency does not provide a full citation. Was the agency referencing Sessions, et al. 2003, The Biscuit Fire: Management Options for Forest Regeneration, Fire and Insect Risk Reduction and Timber Salvage, OSU College of Forestry, 8 July? If so, this report ,which was not scientifically sound or written by biologists, was central to the controversy surrounding the Biscuit Fire Salvage project. Please see, Mechanisms Of Policy Change- An Analysis of Salvage Logging on Federal Lands Including a Case Study of the Biscuit Fire Salvage Sales a Thesis by Jothan Kelvyn McGaughey. Pertinent quotes from the study are highlighted below. The report concluded that 2.5 billion board feet was economically salvageable from the Biscuit area (R. Fairbanks, personal communication, May 16, 2009; Sessions et al., 2003). The increase in volume was accomplished by including environmentally sensitive areas for salvage that had originally been excluded for consideration because of their importance to the biodiversity of the region. Mr. Fairbanks called into question some of the timber used to arrive at the 2.5 billion board feet: Of course when you look at the tables in the back of his report [Sessions Report] you found out he was counting dead tan oak. There's very little market for live tan oak, none for dead tan oak. What was he talking about? Dead tan oak was part of his 2.5 billion board feet. It was nonsense. (R. Fairbanks, personal communication, May 16, 2009, appendix H, p. 290). It (Sessions report) allowed wildly overestimated timber volumes available for salvage harvest to seem like legitimate and moderate judgments. Fairbanks was far from the only person who found problems with the Sessions Report. Professor Agee had this to say about the report: "It was not well thought out and it didn't have a very good sense of place." (J. K. Agee, personal communication, May 8, 2009, appendix G, p. 274). Sessions reasoned that the severity of the burn would prevent tree regeneration (Sessions, et al., 2003). This assumption was later proven false by a scientific study that found that salvage logging in the Biscuit fire area had hindered tree regeneration and had actually increased the short-term fire risk (Donato et al. 2006). There are several serious flaws in logic within the Sessions report, due to its weak assumptions and comparisons. One is the comparison of the Biscuit area with a salvage operation in Arizona that was extensively logged. The Arizona fire was not in a roadless area, was of an entirely different fuel type and had major differences in its ecology. Eighty-four percent of moderate to high burn severity areas of the Biscuit burn were within 200 meters of potential natural seed sources (Strittholt and Rustigian, 2004). Recent studies have established that the Biscuit burn was capable of natural regeneration (Shatford, Hibbs &Puettmann, 2007). The point here is that very sloppy science was used to help justify an extremely harmful series of events on an environmentally unique and sensitive landscape. The predominant trend in ecological research clearly reveals that salvage logging is environmentally detrimental and does not reduce fire risks (Donato et al. 2006; Beschta et al. 1995; Lindenmayer et al. 2008). Of note is the one million dollars given to Oregon State University's College of Forestry by the wife of the founder of Columbia Helicopters after the Sessions report came out (Pope, 2006; Fairbanks, 2006). Although the Sessions report was used to justify the major increase in board feet harvested, its "environmental friendly" rational of creating healthy forest regeneration had been switched to economic reasons by the time policies were written pertaining to salvage operations on the Biscuit Fire area. That economic reasoning, at least for the Biscuit sales, turns out to be just as flawed as the scientific reasoning. The real world economics of salvage logging are extremely opaque, mainly due to the complicated record keeping of governmental agencies involved (U.S. Government Accountability Office, 2006). There are many factors that influence the end result, not least of which is who actually does the accounting. The GAO Report for the Biscuit Fire is relevant to the Westside project. Please see the "Social, Economic And Community Costs And Impacts" on page 57 of these comments.	The reference to Sessions 2003 appears to be a typographic error. Following is the correct citation for Sessions, 2004 as used in the Silviculture Report. This appeared in The Journal of Forestry, a peer reviewed professional journal. This does not appear to be the article questioned by the commenter. Sessions, J., P. Bettinger, R. buckman, M. Newton and J. Hamann. 2004. Journal of Forestry. April/May 2004: Abstract: Over 54 days in 2002, the Biscuit Fire, the largest fire in recorded Oregon history, burned morethan 400,000 acres. Much of the burned land was being managed under the federal NorthwestForest Plan to provide habitat for species that live in complex, older conifer-dominated forestsas well as for recreation purposes. Only a narrow window of opportunity exists to hastenconifer restoration to complex forest conditions in a cost-effective manner, to reduce risks ofinsect epidemics and future fires, and to capture some economic value that could offsetrestoration costs. Delays in decision-making and implementation will likely destine much of themost intensely burned area to cycles of shrubs, hardwoods, and recurring fires for manydecades. This is the opposite of what current management plans call for—maintenance ofmature forests.

Code	Comment Number	Comment Text	Response
207 - Forest Health, Regeneration	#18909-18	The DEIS at page 112 states: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009). Pine and mixed-conifer associations were not sampled in the Shatford et al. study." Shatford et al 2007 page 141, states: "Within the Douglas-fir series, sites ranged from dry, low- elevation interior valleys occupied by the Douglas-fir/ponderosa pine series to more mesic, transitional, and inland sites within the Douglas-fir/tanoak series (Atzetet al. 1992)." Although the agency's interpretation of the Shatford et al 2007, study seems incorrect, that pine and mixed conifer forest types were not sampled. Further, it may be a moot point given that the project area is within mixed conifer forests and not pine dominated forest types. The study of post-fire natural regeneration took place across a range of forest types throughout southwest Oregon and northern California. The focal region was the Klamath National Forest in northern California, primarily the Happy Camp/Oak Knoll Ranger District (RD) from Yreka to the Siskiyou Wilderness west of Happy Camp, Ca., which is were a majority of the Westside project is proposed.	The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."
207 - Forest Health, Regeneration	#18909-21	The DEIS at page 113 states: "Although post-fire observations may indicate surprisingly prolific regeneration, even on severely burned sites, natural regeneration establishment in local wildfires in the past led to desired stocking levels typically only being met around the edges of the fire where a good seed source is still intact (Bonnett, Schoettle, and Shepperd 2005)." The Bonnet et al. 2005 study looks at ponderosa pine forests in South Dakota. Nonetheless, there are very good points in the document at page 37-38: "Large-scale disturbances such as wildfire and small-scale disturbances such as lightning, tree falls, and diseases contribute to forest ecosystem structure and functioning. These disturbances create macro- and micro-environmental heterogeneity that affects population and community spatial distributions. Microenvironments are particularly important for tree seedling establishment in harsh environments. Habitats suitable for seed germination and seedling establishment, called 'safe sites' by Harper et al. (1961), are created by processes at the macro- and micro-scales. Understanding at multiple spatial scales the complexity of factors controlling tree regeneration and distribution constitutes one of the fundamental goals of forest ecology." (References omitted) At page 42 of Bonnet et al 2015: "Relative germination success was highly positively correlated with scorched litter on burned mineral soil (r = 0.136), high cryptogam cover (r = 0.070), and high cover of tall trees with greater than 50% of their crowns burned (r = 0.040)." At page 43: "Scorched needles on the surface of burned mineral soil, which are conditions most favorable for seedling occurrence, reduced soil temperature variation during the day." At page 45: "The abundance of mosses, lichens, and trees with burned crowns was also highly correlated with seedling occurrence, whereas high herbaceous and total vegetation covers negatively affected seedling incidence at the plot level (2 m Å~ 6 m). Evans and Johansen (1999) demonstrated the enhancement of seed germination and seedling survivorship through mechanical protection by microbiotic crusts. The protection of seeds by lichen crusts is particularly effective in extreme systems such as xeric (Houle and Phillips 1989) or high-elevation habitats (Moir et al. 1999)."	The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."The action Alternatives would remove primarily dead vegetation and may damage live trees or plants during harvest operations, but the extent of damage would be localized and long term effects to vegetation would be negligible. See response to 12346-55.The range, sensitive plants, soils, watershed and wildlife sections disclose any localized effects on specific vegetation. While studies following wildfire indicate that regeneration tends to be highest in low to moderate severity patches (Lentil et al. 2005), Bonnet et al. (2005) found that seedling establishment was very successful in patches of high severity that were within 39.4 ft. (12 m) of unburned forest canopy. The ability of a forest to regenerate on its own after a stand replacing fire is highly dependent upon available seed sources. As patch sizes increase, the distance to the nearest seed source increases and seed availability drops off at an exponential rate (Bonnet et al. 2005).
207 - Forest Health, Regeneration	#18914-2	When sprouting hardwoods are found within FMZs, select the most vigorous sprout for retention. Removing all sprouts will only serve to exacerbate the fuel loading over the long term. As stated in my initial scoping letter, hardwood trees add a lot of resilience to our landscape and should be highly regarded in any fire landscape restoration strategy.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Fuel management zones will be treated with a variety of treatments to address fuels conditions, including selective thinning, mastication, and underburning. See Chapter 2 of the EIS under fuels treatments for details.
207 - Forest Health, Regeneration	#18914-3	For restocking needs assessment, hardwoods should have equal weight as a conifer.	Growth of existing hardwoods will be encouraged; hardwoods will be included in the target stocking for units in areas where they exist. See Chapter 1 (changes to the proposed actions) and Chapter 2 under site preparation, planting and release for details about what is being proposed.

Code	Comment Number	Comment Text	Response
207 - Forest Health, Regeneration	#18926-22	Forest Carbon - The Karuk Alternative or # 6 adds the least amount of carbon to the environment as compared with the other action alternatives - #2, #3, #4, or # 5. ! ! Retention of Hardwoods and Softwoods! The current Forest Service policy related to fire- safing areas by removal of all softwood trees up to 9 inches and all hardwood trees up to 7 inches. Removal of the hardwood trees, some of which might have taken 50 years or more to reach this size, impacts severely the food sources for deer, squirrels, birds, and other creatures. Further, the hardwoods represent a far lesser fire hazard than the conifers. The hardwoods should be left for the future to provide shade quicker too and they may be forest of the future. ! !	As described in Chapter 2 of the EIS "Growth of existing hardwoods will be encouraged; hardwoods will be included in the target stocking for units in areas where they exist." See Chapter 1 (changes to the proposed actions) and Chapter 2 under site preparation, planting and release for details about what is being proposed.
207 - Forest Health, Regeneration	#18934-16	Re-vegetation Science is clear that salvage logging followed by plantation establishment will increase future fire hazard and inhibit forest recovery. According to Jerry Franklin's Westside comments (incorporated her by reference), "Salvage activities proposed within LSRs as part of Westside Fire Recovery Plan are inconsistent with NWFP intent and direction for management of LSRs, including their treatment following a major disturbance. Salvage will make no positive contribution to the reestablishment of late-successional forest habitat for NSO prey species, among many others. Retention of large snags and logs are critical parts of the natural recovery processes and none of this wood legacy can be demonstrated as being in excess to ecological needs on moist forest sites; indeed, all of the scientific evidence is to the contrary." In order to meet the need for restored and fire-resilient forested ecosystems, re-vegetation should not hinder prescribed fire within the fire footprints within the next 5-10 years. The current modeling on 30 year fire return interval for plantation success of even the most progressive planting methods proposed, is not adequate, these high severity landscapes need fire on the ground within 10 years to begin to reestablish a healthy fire regime, create a heterogonous forest and not be reburned at high intensity. Re-vegetation, if implemented at all should be based on pre-fire suppression vegetation for the site, using variable density, and be either easily defensible for Rx Fire or inconsequential if/when they burn up. A possible alternative approach could be to wait to replant until after the area gets fire back in for the first time in the next 5-10 years, then replant where appropriate with pre-fire suppression species mixes. The fire prescribed fire will reduce fuel loading as well as brush competition for young trees, help to prep the sites for planting, and the time lapse and burn results will illuminate where natural regeneration is taking place. We also recommend retaining and giving preference to hardwoods with a potential for bole sprouting, especially on south, west, and east facing slopes; giving preference to sugar pine and cedar where appropriate when planting; and counting natural hardwood regeneration in stocking requirements	We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). We do not agree however that salvage logging followed by reforestation will inhibit forest recovery. Retention of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). See EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised.We also agree that reforestation should not preclude the application of prescribed fire to the landscape. Dense plantations of continuous fuels such as those noted by Thompson et al. (2007) would be at risk of being consumed in future fires, and can in fact help propagate high intensity fire. We know that when dense young stands are combined with untreated, or inadequately treated logging slash, the result is a volatile mix that is prone to high severity fire. In the Westside Fires, 70 percent of plantations exposed to fire survived. The common denominator in plantations that survived was treated activity fuels (Varak, personal communication). This is consistent with findings of Weatherspoon and Skinner (1995). In the Westside Fire Recovery, we propose to treat the activity fuels (slash) from salvage logging, and plant at lower densities and variable spacing to create stands with discontinuous fuel that would be resilient to fire and could tolerate low to moderate severity fires typical of the Klamath Province. Thompson et al (2007) note that “reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved.” That is exactly the objective of the Westside Fire Recovery Project in salvage harvest units. The reforestation stocking objective after planting in the Westside Fire Recovery Project is a stand of 75 to 225 variably spaced young trees with treated, discontinuous activity fuels, not densely stocked regularly spaced plantations that form continuous fuel beds. Stand density would vary with slope position and aspect with lower stocking on upper slopes and south and west aspects and higher stocking on north and east aspects that would form a closed canopy on lower slopes. Hardwoods would be included in the target stocking levels so the number of conifers would be less where hardwoods occur. Most reforestation units in the Westside Fire Recovery would be planted at lower densities as most of the units are on upper slopes. We also anticipate there would losses from future fires that would further reduce stand density. Our long term objective is 30-50 large, variably spaced, fire resilient trees per acre with openings as described by Taylor and Skinner (1996). Text has been added to Chapter 2 of the EIS and silvicultural prescriptions to make this point clear. Although future management of plantations is beyond the scope of this document, our goal is to create stand conditions where low intensity fire can be reintroduced at an early age and fuel discontinuity maintained. The Forest Plan for the Klamath National Forest specifically provides for the reintroduction of fire to accomplish this objective (Forest Plan 4-8). The comment recommends delaying replanting, burning five years or so from now and then planting. This not likely to succeed. The longer we delay site preparation, the less likely the likelihood of successful reforestation. Fire-scarified seed species, including many of the Ceanothus spp. species, which are likely to be primary competitors with the conifer seedlings are able to re-occupy a broader and deeper portion of the available water-holding capacity (AWC) of the soil profile. AWC is the limiting factor in successful conifer regeneration in our Mediterranean climate, including the Klamath NF. The future fire event would need to be of such intensity that the fire-scarified competing vegetation would need to be almost completely controlled, but soon enough that the competing vegetation not be old enough to root-crown re-sprout for even swifter soil profile re-occupation. In time, the primary future fire carriers, the fine fuels would substantially decrease, and the live-fuel moisture would dramatically increase, requiring a more intense fire event to control competing vegetation. Controlling competing vegetation is the key to successful conifer regeneration, and the longer the delay, the more fully the competing vegetation can exploit the soil profile and available water. Without planting, trees will slowly become reestablished over a period of 10-50 years in severely burned areas, but the probability of a late-successional coniferous forest becoming established is low because of probable reburns. It is probable that areas where fuels are not treated will

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			go through several cycles of stand replacement fire until surface fuels have been reduced to the point that a low to moderate fire severity regime has been reestablished. This would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions.See also comment 17111-1, which addresses the concept of "excess" wood, and persistence of snags and down wood on the landscape and Appendix A, which has been developed to address issues related to salvage in Late Successional Reserves and compliance with Standards and Guidelines for activities in Late Successional Reserves. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
207 - Forest Health, Regeneration	#5873-111	Similarly, Dan Donato, looked at the effects of salvage logging at the Biscuit fire in SW Oregon and found that cutting down dead trees and hauling away logs killed 71 percent of the naturally established seedlings which were abundant after the fire but scarce after logging. D. C. Donato, J. B. Fontaine, J. L. Campbell, W. D. Robinson, J. B. Kauffman, B. E. Law. Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk. www.sciencexpress.org. 5 January 2006. Shatford and Hibbs recently found similarly encouraging results of natural regeneration. Over the 2005 field season, natural regenerating conifers were sampled in 38 plots within 11 historic fires in the Klamath-Siskiyou Region … Years since stand replacing wildfire ranged from [18 years to 9 years] … The density of natural regenerating conifers ranged over three orders of magnitude … Although the abundance of natural regeneration was frequently high, the age and size of saplings ranged considerably … Frequently, the regenerating saplings were overtopped by shrubs and hardwoods. There was no evidence of recent conifer mortality (i.e. no dead or dying saplings) caused by competition … Saplings were generally in good condition with dominant trees having live crown ratios of 50% or greater.	Response to: "Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk" The review of Donato et al 2006 by Newton et al 2006 (M. Newton, S. Fitzgerald, R. R. Rose, P. W. Adams, S. D. Tesch, J. Sessions, T. Atzet, R. F. Powers, C. Skinner) is applicable to Westside Resource Recovery Project EIS reforestation circumstances. As per the findings of Newton et al in the review of Donato et al, they noted the following: "Donato et al. (1) recently concluded that logging 2 to 3 years after wildfire kills natural regeneration and increases fire risk. The research may make a valuable contribution, but the study lacks adequate context and supporting information to be clearly interpreted. Here, we discuss the papers methods and conclusions in the context of relevant management objectives and the forestry knowledge base concerning natural regeneration processes, mortality from logging, and fuel accumulations in southwestern Oregon and northwestern California. Donato et al. (1) made inferences about natural regeneration processes, mortality from logging, and fuel accumulations without presenting key information regarding (i) agency postfire management directives for reforestation or downed wood levels (2), (ii) implications of delays in postfire plan implementation, or (iii) important environmental and disturbance descriptors such as plant associations, fire intensity, seed tree proximity, and weather patterns. Results from their study cannot be readily extrapolated because it was a short-term observational study of site-specific forest operations governed by agency management objectives. Other management plans, operations, or conditions could yield different results (3). In the case of the 2002 Biscuit Fire, logging was postponed for 2 years, allowing more seeds to germinate and increasing seedling exposure to injury during logging (4). Donato et al. cite a lack of scientific data regarding the management of public forests after large fires. However, it should be noted that conifer reforestation (planted and natural) and vegetation ecology have been widely studied in the region. Studies show variable responses with plant association, competing vegetation, local climate, soils, and other factors (5, 6). Hobbs et al. (5) provide a synthesis of 13 years of research in southern Oregon and northern California. Fewer studies have examined reforestation after wildfire, especially over longer periods (4, 7–9), but damage to natural regeneration after delayed salvage logging was reported more than 50 years ago (4, 8)…"
207 - Forest Health, Regeneration	#5873-112	Shatford, J., Hibbs, D.E. 2005. Predicting Post-fire Regeneration Needs: Spatial and Temporal Variation in Natural Regneration in Southwestern Oregonadn Northern California. Pp 29-32 in Cooperative Forest Ecosystem Research Program (CFER) 2005 Annual Report. http://www.fsl.orst.edu/cfer/pdfs/CFER_ar05.pdf. This data reveals that natural regeneration is not only demonstrably successful but also species diverse and variable both spatially and temporally. All of these attributes are highly beneficial in terms of both wildlife habitat and fuel hazard	The findings of Shatford et. al. 2007 have been considered in the Vegetation Environmental Consequences in Chapter 3 of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)."
207 - Forest Health, Regeneration	#5873-113	The adverse effects of salvage logging on vegetative recovery described by Sexton are not unique to the Ponderosa pine forest type. The results are in fact quite consistent with the results found by Michael Grifantini et al after salvage logging in Douglas fir forests in northwestern California. Grifantini, M.C., Stuart J.D., and L. Fox III, 1992. "Deer Habitat Changes Following Wildfire, Salvage, Logging and Reforestation, Klamath Mountains, California," Proceedings of the Symposium on Biodiversity of Northwestern California, Oct 28-30, 1991, Santa Rosa, CA. UC Wildland Resource Center Report 29. December 1992. The adverse effects described by Sexton appear to be long lasting. Busse at al 1996 found that the annual growth rate of pines was reduced by almost 20% where understory vegetation had been removed thirty years earlier. In addition, research has shown a direct relationship between the level of on-site coarse woody debris and the amount active ectomycorrhizal root tips. Graham, R. T., Harvey, A. E., Jurgensen, M., F., Jain T. B., Tonn, J. R., and Page-Dumroese, D. S. 1994. Managing coarse woody debris in forests of the Rocky Mountains. Res. Pap. INT-RP-477. Ogden, UT: U. S. Department of Agriculture, Forest Service, Intermountain Research Station, 13 p. See also Russell T. Graham, Theresa Benevidez Jain, and Alan E. Harvey FUEL: LOGS, STICKS, NEEDLES, DUFF, AND MUCH MORE. The Joint Fire Science Conference and Workshop http://web.archive.org/web/20060829024013/http://jfsp.nifc.gov/conferenceproc/T-	The proposed action provides for retention of coarse woody debris and other habitat and soil elements, as described in detail in the Project Design Features section of Chapter 2 of the EIS.

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		10Grahametal.pdf	
207 - Forest Health, Regeneration	#5873-167	Prepared under contract for USFS, Central Cascades Adaptive Management Partnership. Here are some relevant excerpts: "… disturbances create snags and down woody debris (Harmon et al. 1986), volatilize nutrients and biomass (Campbell et al. 2007), and open growing space for the establishment of new cohorts of shrubs, trees, and forbs (Oliver and Larson 1996)." (p 2) "Wind as a disturbance agent tends to superimpose a fine-scale mosaic pattern (Lertzman et al. 1996), frequently on a coarser mosaic created by large fire-created patches (Spies and Franklin 1989)." (p 2) "An important operation of most types of natural disturbance is that biological legacies are created or retained in the disturbance phase, and these enrich the developing stand (Franklin et al. 2000, Franklin et al. 2002)." (p 4) "The percentage of the regional landscapes of the Pacific Northwest in early succession was a highly variable parameter, …" (p 4) "Time to crown closure (and therefore the cessation of the early seral phase) is highly variable in Northwestern forests (Franklin et al. 2002). Assuming a very conservative low-end estimate of 30 years to crown closure (see Tappeiner 1997 and Poage et al. 2009 for context on this assumption), this would suggest that at any one point in recent history, 5-20% of a given landscape would have been in an early seral condition.: (p 4) "Even following clearcutting, burning, and planting with a commercial conifer tree species such as Douglas-fir, there may be a period of enhanced shrub and forb cover. On clearcut sites in the western Oregon Cascades, Schoonmaker and McKee (1988) identified a peak in cover at stand age 10-20 of ecologically important shrubs…" (p 7) "Many of these are important for nutrient fixation or cycling (e.g., nitrogen fixation by Ceanothus), forage (Ceanothus, Bromus, Salix, Rubus), and other values (e.g., nectar provision to pollinators by E. angustifolium). … Many of the shrubs and forbs, especially, are important fruit and forage producers. … Provision of food resources via fruit and seed production is a very important role of early seral forest ecosystems." (p 8). "Biological legacies, living or dead residual structures from the pre-disturbance ecosystem (Franklin et al. 2000), are crucially important to early seral functionality." (p 8) "Down woody debris and snags are key structural elements of highly functional early seral forest ecosystems (Swanson et al. 2011). The early seral phase following disturbance often represents a period of peak volumes for down wood and snags (Harmon et al. 1986); …" (p 8)	The comment provides general citations, but does not provide any information that is specific to the Westside Recovery Project, or show how the Westside Recovery Project is inconsistent with these papers. It should be noted that the conditions of the Central Oregon Cascades are not typical of the conditions in the Klamath Province. The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of snags and coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006), not "stand-replacement or mixed" that is typical in the Coast Range and western Oregon and Washington Cascades. This affects structure and amounts of snags and coarse woody debris. See Response 5873-171 for a discussion of early seral plant communities. See Response 5873-72 for a discussion of snags and coarse woody debris. See EIS Chapter 3 "Responsible Opposing Views and Agency's Response to Issues Raised".
207 - Forest Health, Regeneration	#5873-168	"Over longer time periods, spatially irregular development initiated early in succession, accompanied by a diversity of life-forms, may lead to structurally complex forests (Zenner 2005). Furthermore, the recently proposed 'precocity' pathway (Donato et al. 2011) states that diverse structure and spatial heterogeneity in early seral stands may actually accelerate the onset of structural and compositional attributes associated with late seral forests." (p 9) "It is fitting to note that few species are absolutely obligate in early seral communities, but robust populations of many species are primarily found in early seral communities." (p 9) "Many birds are characteristic of early seral habitats (Hagar et al. 1997). In the northern Rockies, Hutto (1995) found fifteen bird species occurring primarily in recently burned areas, with one species, the black-backed woodpecker (Picoides arcticus), relatively restricted to early seral post-fire environments. He also found that many species are relatively more abundant in post-fire	The comment provides a number of general literature citations but does not show how those are applicable to the conditions of effects of the Westside Fire Recovery. About 52,000 acres burned with moderate to high severity where most of the trees were killed. Over 80% of that area would remain untreated ascollectively described in the citations. Areas where salvage harvest would not occur includes all forested high mortality burn patches that are less than 20 acres in size and all areas that are less than 50 percent mortality. Retaining these areas maintains the complex fire mosaic pattern created by the Westside Fires and heterogeneity more closely resembles the habitat needs of northern spotted owls species described by Franklin et al. (2000) and other species. Areas that would not be planted also include multiple large patches ranging in size from a few hundred acres to well in excess of 1000 acres of fire-killed older trees in the Grider Creek Inventoried Roadless Area. Thus all patch sizes from very small to very large are represented in areas where no salvage harvest or site preparation and planting occurs. This contributes to the heterogeneity described by Franklin et al. (2000). The combined effect of these snag retention and recruitment measures will result in a mosaic of

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		environments, although they may not specifically select for them. Woodpeckers, especially, often have a limited period of high abundance during the first few years following severe wildfire (Covert-Bratland et al. 2006). Bosakowski (1996) examined breeding birds in relation to stand types and ages on an industrial forest landscape in southwest Washington. From a total of 78 species observed, he identified eight birds associated with early seral conditions that declined as harvested stands matured: white-crowned sparrow, song sparrow, rufus-sided towhee, willow flycatcher, black-headed grosbeak, orange-crowned warbler, yellow-rumped warbler, and American kestrel." (p 10) "Insects contribute tremendously to species diversity in ecosystems worldwide (Wilson). In the Pacific Northwest, a number of insects are associated with early seral habitats." (p 12) "The western bluebird (Guinan et al. 2008) and the black-backed woodpecker (Hutto 1995) are bird species almost emblematic of early seral habitat, and are on several state-level conservation lists. … A significant number of state-listed organisms associated with early seral habitats are lepidoptera (butterflies and moths), since their larval stages depend on herbs, shrubs, or broadleaf trees that occur primarily in early seral habitats, and adults may require floral nectar as a food source." (p 12) "Disturbances of greater spatial extent cover a wider range of edaphic and topographic conditions, engendering diverse recovery pathways in ways a smaller opening could not. Turner and Dale (1998) emphasize that large disturbances have persistent effects on ecosystems, present tremendous internal heterogeneity …" (p 14) "Smaller disturbance patches tend to fill in more rapidly, since dispersing plant propagules (especially from trees) can access most or all of the disturbed area, decreasing time to recovery (Foster et al. 1998). Furthermore, small patches are generally still under the microclimatic control of the adjacent forest, and experience an array of biotic and abiotic edge effects. However, they may still generate substantial ecological benefits associated with early seral habitats. Hagar (2007) indicates the need to conserve non-conifer vegetation in forest understories, including in gaps across a broad range of sizes. Maintenance of areas of low tree density in young plantations may promote persistence of shrubs into later seral stages. … In general, thinning and gap creation are important for revitalizing or initiating understory development (Bailey and Tappeiner 1998, Chan et al. 2006) and creating certain types of wildlife habitat (Hayes et al. 1997), especially when accomplished in a spatially variable manner (Carey 2003). However, for many processes and organisms, these activities do not substitute for the physical and biological changes engendered by a large disturbance that creates a spatially heterogeneous template for ecosystem development. " (p 15) "The early seral habitat produced by clearcutting is highly variable in its resemblance to naturally occurring early seral conditions. Woody debris and snags in clearcuts is frequently less abundant than in legacy-rich forest (Pedlar et al. 2002), with attendant consequences for wildlife. Clearcutting can recreate some of the natural processes associated with fire, but is not a functional substitute with regard to many ecosystem attributes (Means et al. 1996). … However, even retention approaches may not provide the functionality of naturally-created early seral habitats." (p 16) "Salvage logging can result in reductions in available habitat structure, increased erosion, and other negative effects (Lindenmayer and Noss 2006, Lindenmayer et al. 2008). Salvage, especially when followed by dense replanting of conifers, can substantially curtail the early seral phase. … In a very substantial review, Russell et al. (2006) found that salvage logging tends to reduce snag longevity." (p 16) "Compositional simplification of young stands via pre-commercial thinning and herbicide application can reduce or eliminate ecologically important processes." (p 16) "Potential management responses may include: • Deferring salvage and dense replanting across all or parts of major disturbed areas (Lindenmayer and Noss 2006, Lindemayer et al. 2008)) • When salvaging, practice variable retention to retain significant structural elements such as large-diameter live trees, snags, and down woody debris (Franklin et al. 1997, Eklund et al. 2009). • Avoiding reseeding with exotic plant species such as perennial ryegrass (Lolium perenne) following fire or volcanic eruption (see Dale et al. 2005b). • Attempt to incorporate elements of natural disturbance regimes into landcape-scale management (Lindenmayer and Franklin 2002) • Deliberate creation of large, early seral areas via silviculture (Swanson 2010)." (p 17) "It is hoped that the diversity and value of early seral conditions, from clearcuts to structurally and compositionally complex early seral habitat, will come to be recognized and widely incorporated into contemporary land management." (p 18)	areas with low to high densities of snags, consisting of a variety of sizes, and occupying the project area both in the present and future. The proposed action provides for retention of coarse woody debris and other habitat and soil elements as described in detail in the Project Design Features section of the EIS. See also EIS Chapter 3, Responsible Opposing Views and Agency Response.

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207 - Forest Health, Regeneration	#5873-27	"[T]here's a looming shortage of diverse young forests - where seedlings intermingle with fallen logs, standing dead snags, and shrubs - that provide specialized habitat for certain animals and plants. … there's a looming gap in diverse, young, early-successional conifer forest, the type of forest that once came in naturally after forest fires. These young forests, up to 10 years old, have a diversity of forest structures - fallen logs and dead snags - and a diversity of plant life. They are important habitat for the western bluebird and other birds that prefer open areas, as well as some shrub species. Today, because of intense timber management on private lands, young forests don't get the chance to develop much diversity." OSU. 2001. Press Release: Researchers Assess Forest Sustainability. http://web.archive.org/web/20060914032259/http://oregonstate.edu/dept/ncs/newsarch/2001/Oct01/assess.htm. According to the CLAMS project: "Diverse young forests: also rare but receiving less attention. Legacy tree habitat: uncertain future.." Ohmann, Spies, Gregory, Johnson. 2002. Vegetation Biodiversity in the Oregon Coast Range. http://www.fsl.orst.edu/clams/download/presentations/j02s_ohmann_10june02.pdf (slide 24).	While this quote is informative, it does not provide a substantive comment on the Westside Fire Recovery Project proposed actions or analysis. Project design features as detailed in the EIS are designed to contribute to stand structural diversity.
207 - Forest Health, Regeneration	#5873-32	i. BLM's Western Oregon Plan Revision (WOPR) DEIS (p. LII) admits that structurally complex young forests develop old forest characteristics twice as fast as structurally deprived initial conditions.	While this is informative, it does not provide a substantive comment on the Westside Fire Recovery Project proposed actions or analysis. Project design features as detailed in the EIS are designed to contribute to stand structural diversity.
207 - Forest Health, Regeneration	#5873-35	"Leaving a damaged forest intact means the original conditions recover more readily," says David Foster, … director of the NSF Harvard Forest LTER site. "Forests have been recovering from natural processes like windstorms, fire and ice for millions of years. What appears to us as devastation is actually, to a forest, a natural and important state of affairs." 10-16-2012 Press Release 12-198, In Blown-Down Forests, a Story of Survival To preserve forest health, the best management decision may be to do nothing. http://www.nsf.gov/news/news_summ.jsp?cntn_id=125744; Audrey Barker Plotkin, David Foster, Joel Carlson, and Alison Magill 2013. Survivors, not invaders, control forest development following simulated hurricane. Ecology, 94(2), 2013, pp. 414–423. http://harvardforest.fas.harvard.edu/sites/harvardforest.fas.harvard.edu/files/publications/pdfs/BarkerPlotkin_Ecology_2013.pdf	While this is informative, it does not provide a substantive comment on the Westside Fire Recovery Project proposed actions or analysis. Alternative 1, the no action Alternative, is considered in detail in the EIS.
207 - Forest Health, Regeneration	#5873-36	"Unmanaged early-seral stages of forest development are now considered to be among the most threatened habitat types in coniferous regions of the western United States (Noss et al. 2006, Thomas et al. 2006).	While this is informative, it does not provide a substantive comment on the Westside Fire Recovery Project proposed actions or analysis.

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207 - Forest Health, Regeneration	#5873-40	The agencies should not conduct any more salvage logging until they have fully disclosed and considered these issues.New synthesis on early seral forest A few things to consider before conducting salvage logging or regen harvest to enhance early seral forest: a) we might already be on a trajectory to restore early seral habitat via natural disturbance alone, accompanied by increase in fire (and insects) due to climate change. b) early seral species tend to be generalists/opportunists, and that few early seral obligate species are truly at risk, c) the great abundance of low quality early seral habitat resulting from clearcutting on non-federal lands at least partially mitigates for the lack of high quality early seral resulting from fire suppression; d) there are opportunities to enhance early seral habitat by modifying non-federal forest practices, such as legacy retention, tolerating more vegetation diversity and longer periods of conifer re-establishment; e) there are opportunities to harmonize the goals of restoring both young and old forest by including structure rich gaps in variable density thinning projects and experimenting with variable regen in a portion of the young stem-exclusion stands which are over-represented relative to the historic range; and f) the historic extent of early seral habitat was artificially increased by cultural burning practices. The Forest Service recently commissioned a science synthesis on early seral forests: Swanson, M.E., 2012. Early Seral Forest in the Pacific Northwest: A Literature Review and Synthesis of Current Science. http://ncfp.files.wordpress.com/2012/06/swanson_20120111.pdf.	This is a general comment that expresses the opinion of the commenter, and includes general literature citations, but does not provide information specific to the Westside Fire Recovery Project as to why early seral communities would not occur. We agree that early seral habitats are valuable, however those habitats do not appear to be in short supply. Monitoring of the Northwest Forest Plan shows that about 150,000 acres of northern spotted owl nesting and roosting habitat has been converted to early seral forest by stand replacement fire in the Klamath Province of northern California. Since the inception of the Northwest Forest Plan (Davis et al 2015). As noted by Skinner et al (2006), “The extent of recent high-severity burns appears to be different than historic burning patterns. More area is burning at higher intensity, and this is related, in part, to higher quantities and more homogeneous fuels caused by accumulation during the fire-suppression period." Considering climate change scenarios, most fire scientists expect that high severity fire will continue to increase in size, frequency etc. There is not likely to be a shortage of early seral habitats in the future either given the fuel conditions created by fire suppression and the effect of likely climate change. On the Klamath, the Westside Fires burned over 50,000 acres at a level of intensity and severity that create early seral conditions. Proposed Salvage and site preparation and planting affect about 20-25% of that area. That means that 75-80% will go through an unimpeded early seral stage as recommended by the commenter. As a practical matter, the areas that are site prepped and planted will also go through an early seral plant community phase, although it likely won’t be as long as that where reforestation does not occur. There are areas in the Westside Fires where very large patches of forest burned. Most of the proposed salvage actions occur in these large patches. Breaking up these large patches with some areas that have been reforested would provide a more heterogeneous landscape over time such as that described by Franklin (2000). See also EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised.
207 - Forest Health, Regeneration	#5873-47	“There has been a loss of diverse young forests on all ownerships. … Conservation of diverse young forests has received little attention in forest policy.” Janet Ohmann; Science Findings, Issue 56; Seeing the trees for the forest: mapping vegetation biodiversity in coastal Oregon forests; (September 2003). http://www.fs.fed.us/pnw/sciencef/scifi56.pdf.	General comment and quote not specifically associated with this project. Forest Service policy is beyond the scope of this project's analysis. We acknowledge the need for early seral forests; this project is only salvage harvesting and planting a fraction of the burned areas, leaving a majority of the area for natural regeneration and early seral stages.
208 - Forest Health, likelihood to persist	#19146-3	I honestly would have liked more of the burned area to be treated, and salvageable wood to be recovered, but hopefully, this can be an initial step to the long term improvement in our forest's health, survivability and productivity.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest is strategically treating areas in most need of treatment within the sidebars of forest plan and other laws, including but not limited to the Endangered Species Act.
208 - Forest Health, likelihood to persist	#5873-130	This much is clear: Traditional salvage logging results in a 100% probability that large snags will NOT persist and will not contribute to current habitat or future development of late successional habitat. On the other hand, retaining all large snags will result in a >>0% chance that they will dodge the bullets of decay and reburn. Traditional salvage logging clearly removes snags that have a >>0% probability of persisting, and therefore, even in the event of reburn, logging large snags "diminishes" this important component of late-successional old-growth habitat.	The commenter fails to provide evidence of these statements. The proposed action provides for retention of snags, coarse woody debris and other habitat and soil elements as described in detail in the Project Design Features section in Chapter 2 of the EIS.
208 - Forest Health, likelihood to persist	#5873-59	The Siskiyou National Forest’s Biscuit Fire FEIS admits that up to 53% of small Douglas-fir snags (10-30” dbh) and up to 85% of large Douglas-fir snags (>30” dbh) are likely to remain standing for 50 years or more. Even after 100 years, up to 63% of the large Douglas-fir snags may remain standing. In a natural ecosystem these snags play critical roles as habitat and microclimate modifiers. If they are salvaged or knocked down for safety reasons they are not able to fulfill these purposes. Biscuit FEIS Appendix G-9 http://web.archive.org/web/20040610234842/http://www.biscuitfire.com/proj_plan_index.htm.	The Biscuit Fire project's analysis is outside the scope of this analysis. This project includes the retention of snags and legacy components; see project design features under wildlife in Chapter 2 of the final EIS. From the project design feature table in Chapter 2, "Legacy trees or snag size will vary depending on site condition, but are usually disproportionately large diameter trees that are often remnants of the previous stand on a given site. They are old standing trees that have persisted on the landscape after man-made and natural disturbances. For example, large trees containing one or more of the following characteristics: split or broken tops, heavy decadent branching, large mistletoe brooms, otherwise damaged to the degree that a cavity may form such as basal fire or lightning scars, or other features that indicate decay or defect. If the legacy component tree or snag must be felled for safety reasons, retain the log whole in the unit." From Chapter 1 of the final EIS, "Few forested regions have historically experienced fires as frequently and with such high variability in fire severity as the Klamath Mountains Bioregion (Skinner 2006). The fire regime of the forests of the Klamath Mountains differs from the more mesic old-growth Douglas-fir dominated forests of Oregon and Washington (described in Franklin et al. 1981) in fire frequency, fire severity and structural attributes such as the amount

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			and persistence of snags and coarse woody debris (Taylor and Skinner 1997)."
208 - Forest Health, likelihood to persist	#5873-68	The BLM has previously admitted that a "high proportion" of snags "are expected to persist for at least 50 years." Roseburg BLM 2009, Little Wolf 3 Density Mgt EA. http://www.blm.gov/or/districts/roseburg/plans/files/LittleWolf3EA.pdf. This means that salvage logging can exacerbate the snag gap the front end by at least 50 years.	There are about 52,000 acres of moderate and high severity burn areas in the Westside Fire Recovery Project area where most of the trees were killed by the fire. Salvage harvest, even at the highest proposed level (Alternative 2) 85 percent of the moderate and high severity fire area would not have salvage harvest. In the Preferred Alternative, the number is closer to 90 percent. In areas with salvage units, snag retention standards in the Klamath Forest Plan must be met. Regardless of how long snags last, we don't believe there will be a snag shortage in the Westside Fire Recovery Project Area. Other locations like Roseburg BLM may have different snag longevity because of location, species mix, tree size, fire history etc. We note that Roseburg, OR is in an infrequent fire, high fire severity environment where the period between fires is much longer than the Klamath. That certainly affects snag longevity. Our assessment is that over the next 10-30 years, most of the fire killed trees from the 2014 fires will break off or fall and become ground fuels. Some, but by no means the majority, will last longer than that, and a very few may last until the next stand is capable of producing large snags. In a recent study in Black's Experimental Forest on the Lassen National Forest, eight years after the Cone Fire, most of the ponderosa pine snags had fallen. Only 16% of pine snags between 30 and 45 cm and 41% greater than 45 cm were still at least partially intact (Ritchie et al, 2012). In their snag fall model, Harrod et al. choose 45 years as the time when all snags have fallen, which they term as "generous". The literature summarized by Harrod et al. 1998 shows most snags don't last more than 20-25 years. Occasionally, large snags in sheltered locations may persist until the next stand is producing large material, but this is likely rare in the frequent fire environment of the Klamath. As noted by Skinner (2002) dead wood does not last long enough to decompose in the Klamath Province because of fire history. As previously noted, retaining all of the fire-killed trees, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; EIS Chapter 3 – fuels; Appendix E Figure 7). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 1998; Skinner 2002) without effective reduction of the amount and continuity of surface fuels. Even with fuel reduction from salvage and activity fuel treatment, it is possible that much of the dead wood now present could be consumed by future fire (EIS Chapter 3 – Fuels). Within salvage units the Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by: • Retaining large "legacy" green trees wherever they occur. By virtue of their location and / or inherent resistance to fire, large green trees are more likely to persist until the next stand can develop large structures than snags. We are also marking dead legacy trees for retention however it is not likely that many of these dead trees will persist for 80-100 years (Harrod et al. 1998) because of fire history, however we acknowledge the contribution these trees make while they are on the landscape. • Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in Alternative 3 Modified in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity. • Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels and fuel continuity, the risk of future high severity fire affecting remaining snags and down wood is reduced (Appendix E, Figure 7).

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			• Treating small fuels in Riparian Reserves and snag retention areas by allowing fire to back into these areas at the time that activity fuels are burned. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm larger snags because they would not yet have developed the partially decomposed surface that is receptive to embers. See response to comment no. 5873-59. See also EIS Chapter 3, Reasonable Opposing Points of View and Agency Response. .
209 - Snag Retention (general, non-WL)	#17280-3	Removal of snags in other areas is also problematic, particularly in the Beaver fire area, where most of the snags on adjoining private property have already been removed, so snag-dependent species are more dependent on the remaining snags on Forest Service land. In addition to the loss of snags and the interference with natural regeneration processes, Alternative 2 would also result in damage to critical fish habitat due to roadbuilding and ground disturbance on unstable slopes. Alternative 4 is supposedly designed to reduce those effects, however, that alternative still includes 10, 221 acres of salvage harvest and 7907 acres of planting (DEIS p. 438), with all of the problems listed above. Therefore, it also would not produce a "healthy forested landscape with diverse ecological conditions reflective of the ecological capability of the landscape."	Alternative 3 and 3 Modified have no proposed salvage harvest in the Beaver fire area for the reasons noted in the comment. The no action Alternative is also responsive to concerns expressed. We recognize the importance of large snags and logs on natural recovery processes. The project is required to meet standards in the Forest Plan for snag retention and coarse woody debris. We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that could persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation. Removal of large wood within recruitment zones for streams was analyzed in the EIS Aquatic Resources Report and biological assessment. Salvage harvest was excluded from Riparian Reserves to avoid reducing wood available for recruitment to streams. Hazard tree removal proposed along roads was mitigated through a project design feature that required all large trees be left on site within Riparian Reserves to maintain wood in the recruitment zone and for soil productivity. Project design features, Best Management Practices and Watershed project design project design features would be implemented to avoid unstable areas and minimize potential adverse effects to sediment from roads and at stream crossings during project implementation (see EIS Aquatic Resources Report Environmental Consequences section). project design project design features would protect unstable and potentially unstable areas from ground disturbance including through the prohibition on using skid trails in unstable areas. Temporary roads (re-opened and new) that were hydrologically linked via stream crossings were of greatest concern as were log landings (re-opened and new) in Riparian Reserves, and unstable areas crossed by roads. These features were analyzed by watershed specialists on a site-specific basis using GIS data and field surveys to determine if minimization measures would be adequate. Based on project design and implementation of effects minimization measures, we believe the project is consistent with Forest Plan. See the EIS Chapter 3- Aquatic Resources and Aquatic Conservation Strategy Assessment in the Appendices for additional information. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
209 - Snag Retention (general, non-WL)	#18852-25	7) Snag and roadside salvage of hazard tree and live trees with .7 percent probability of mortality prescription is not based on the best science nor ecologically justifiable. Retention of old growth snags and partially living large diameter trees should be emphasized for habitat values.	Salvage harvest treatment will identify trees for harvest using the Report #RO-11-01 “Marking Guidelines for Fire-Injured Trees in California” (Smith & Cluck, 2011). Treatment in salvage harvest units is limited to moderate to high severity areas (>50% mortality) outside of Riparian Reserves. Fire-damaged green trees with a 70 percent or higher probability of mortality in the next three to five years were included in the salvage harvest proposal. See response to comment number 12346-55.Please see snag retention project design features in the Project Design section of the draft EIS. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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209 - Snag Retention (general, non-WL)	#18852-46	30) Consider upper diameter limits for timber harvesting of 50" DBH, larger trees have been shown to have greater habitat value as downed wood or standing snags. Snags leaning away from the road prism should be considered for retention as the hazard value is significantly reduced. The role of large woody debris within the Klamath mountain ecosystem should not be underestimated, nor the risks of retention during future fires be exaggerated.	Within Riparian Reserves, the upper limit of dead tree removal was reduced from 16 to ten inches diameter at breast height. Within salvage harvest units, which are outside of hydrologic Riparian Reserves, no diameter limit is proposed. That being said, general snag retention areas within salvage harvest units is proposed in addition to the retention of legacy components, as described in Chapter 2 of the EIS under the wildlife project design features. We acknowledge the importance of coarse and large woody debris, which is already being retained sufficient to meet or exceed Forest Plan direction; see Chapter 2 of the EIS under project design features. The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of coarse woody debris (Taylor and Skinner 1997). See the salvage in Late-Successional Reserve section in Chapter 1 of the final EIS and the responsible opposing views at the beginning of Chapter 3 of the final EIS. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
209 - Snag Retention (general, non-WL)	#18857-18	Maintain adequate snag fields and forested sites impacted by high severity fire across the landscape. The biological legacies present and complex early seral habitats are necessary for the maintenance of biodiversity and landscape heterogeneity.	General snag retention areas within salvage harvest units is proposed in addition to the retention of legacy components, as described in Chapter 2 of the EIS under the wildlife project design features. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
209 - Snag Retention (general, non-WL)	#18859-7	Critics of this project will say that the removal of dead trees will negatively impact certain species such as fisher and spotted owl. I disagree. The fact that the project covers such a small portion of the areas burned in 2014 (4%) means that even if every tree was removed from these areas there would only be a 4% reduction in the number of available snags to these species. A 4% reduction in snags over such a large area is inconsequential to these species. The greater long term threat is not restoring these forests, thus preventing them from becoming suitable habitat for these species in the future. The fact is, even in the areas proposed for restoration not all the trees will be removed. Project Design Features Wildlife 3, 4 and 5 will ensure that adequate number of snags will remain in the treated areas. Additionally, there will be sufficient numbers of damaged live trees remaining in these areas to provide for all the life requisites of species that require decadent forest conditions. These scattered snags and legacy trees will provide more than adequate foraging perches for spotted owls in the burned treated areas.	Thank you for your comments on the Westside Fire Recovery Project. We agree and acknowledge that we are salvage harvesting a small portion of the project area, and within the areas being harvested, that we are retaining sufficient amounts of snags and legacy components.
209 - Snag Retention (general, non-WL)	#5873-102	Salvage may be undesirable where large diameter snags needed by wildlife are in short supply in adjoining areas. … Many years elapse in high fire severity burns before newly grown large diameter snags can replace the fallen snags, so leaving an ample density of snags following fire can help maintain a minimal snag resource during the 20 to 40 year postfire period when many snags have already fallen. Leaving a high density of snags would require constraints on harvesting. …	The Klamath Forest Plan snag Standard and guideline (8-25, page 4-30) "says to use tables 4-4 and 4-5 as guidelines in ecosystem analysis and project-level planning. The relative numbers of hard and soft snags in various size classes show the habitat needs of the different cavity-association Forest wildlife species. This table displays the number of snags required per 100 acres to support "good" quality habitat for primary cavity-association species. The number of snags on a given acre will vary, depending on the site and on the number of snags within the landscape". These snags need not be equally distributed. The actual number of snags to be maintained may vary depending on the amount of snags available within the surrounding landscape and the desired condition of that landscape. See Project Design Features in Chapter 2 of the final EIS. The Klamath Forest Plan Coarse Woody Debris Standard and guidelines (6-16, page 4-23) mentions retaining 5-20 pieces of Coarse Woody Debris per acre in various states of decay. The combination of project design features for snags and Coarse Woody Debris, legacy components and riparian corridors will meet or exceed the Forest Plan Standard and Guidelines. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate. See EIS Chapter 3, Responsible Opposing Viewpoints and Agency Response.

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209 - Snag Retention (general, non-WL)	#5873-147	"[T]he only way to mimic natural snag densities for harvests that seek to mimic the very earliest stage of succession (immediately after a fire) would be to leave close to the same number of burned trees per unit area that would occur through a stand-replacement disturbance event." Hutto, R.L., 2006. Toward Meaningful Snag-Management Guidelines for Postfire Salvage Logging in North American Conifer Forests. Conservation Biology Volume 20, No. 4, 984–993. http://web.archive.org/web/20090310114517/http://avianscience.dbs.umt.edu/documents/hutto_conbio_2006.pdf	The cited literature provides a general overview of post-fire snag conditions however it is not specific to the conditions of the Klamath Province. Retention of all of the dead trees now present on the landscape would create an unacceptable fuel load and increased risk of future high severity fire. See Appendix E and EIS Chapter 3, responsible opposing views and agency response. See also response 5873-72 and 5873-170. See Also: Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95 Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122 Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91 Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada. Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA. Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID. Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.
209 - Snag Retention (general, non-WL)	#5873-148	The Trapper Project on the Willamette NF proposed to retain 30 snags per acre in a project intended to mimic stand replacing fire event. This is an example of how much wood should be retained in salvage projects. Although in lodgepole forest types the number may need to be much larger.	Comment provides no evidence why the standards of the Trapper Project should be applied to the Westside Project other than their opinion. See response to comment number 5873-72 about the concern of snag retention not being adequate.

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209 - Snag Retention (general, non-WL)	#5873-169	Since this project involves post-fire commodity extraction (also often referred to erroneously as "salvage" logging) please carefully analyze, consider, and disclose the site-specific analysis of the many reasons NOT to do post-fire commodity extraction, including but not limited to: • adverse impacts to soil, such as erosion, compaction, displacement, litter disturbance, nutrient depletion; loss of chemical buffering; loss of soil organic matter; loss of burrowing wildlife that help aerate soils; reduction of nitrogen fixing plants that boost soil fertility; loss of slope and snow stabilizing effects which could lead to mass wasting or eliminate mechanisms that may mitigate mass wasting; • loss of down wood functions s such as trapping sediment and aiding water infiltration, and creating microsites favorable for germination and establishment of diverse plants, and habitat for diverse wildlife; • loss of decaying wood and depletion of the "savings account for nutrients and organic matter" which affects site productivity through the removal of dead trees which store nutrients and slowly release them to the next stand. Marañón-Jiménez, S., Fernández-Ondoño, E., and J. Castro. 2013. Charred wood remaining after a wildfire as a reservoir of macro- and micronutrients in a Mediterranean pine forest. International Journal of Wildland Fire. http://dx.doi.org/10.1071/WF12030 ("Partially charred wood represented a considerable pool of nutrients, due to both the relatively high concentrations and to the great amount of biomass still present after the fire. Potential contributions of the charred wood were particularly relevant for N and micronutrients Na, Mn, Fe, Zn and Cu, as wood contained 2–9 times more nutrients than the soil. Post-fire woody debris constitutes therefore a valuable natural element as a potential source of nutrients, which would be lost from ecosystems in cases where it is removed") • Recent studies indicate that wood may release nutrients more rapidly than previously thought through a variety of decay mechanisms mediated by means other than microbial decomposers, i.e. fungal sporocarps, mycorrhizae and roots, leaching, fragmentation, and insects; • loss of nutrients from live trees that are determined to be "dying." Live trees produce serve as refugia for animals, invertebrates, and mycorrhizae; produce litter fall; and help cycle nutrients which are all extremely valuable in the post-fire landscape; • loss of wood that serves to buffer soil chemistry and prevent extreme changes in soil chemistry; • water quality degradation; • loss of water storage capacity in down logs; • altered timing of storm run-off which could lead to peak flows that erode stream banks and scour fish eggs; • delaying the pace of vegetative recovery and reducing the quality/diversity of the vegetation community; • dead trees serve as a natural fence that protects young seedlings from browse by cattle and big game. This is one way that young aspen and other valuable species can get their start; • spread of invasive weeds through soil disturbance and extensive use of transportation systems; • loss of legacy structures that can carry species, functions, and processes over from one stand to the next; • loss of terrestrial and aquatic habitat (mostly snags and down logs) potentially harming at least 93 forest species (63 birds, 26 mammals, and 4 amphibians) that use snags for nesting, roosting, preening, foraging, perching, courtship, drumming, and hibernating, plus many more species that use down logs for foraging sites, hiding and thermal cover, denning, nesting, travel corridors, and vantage points for predator avoidance; • Depletion of large wood structures in streams that can cause: 1) simplification of channel morphology, 2) increased bank erosion, 3) increased sediment export, 4) decreased nutrient retention, 5) loss of habitats associated with diversity in cover, hydrologic patterns, and sediment retention; • commercial salvage usually removes the largest trees, but this will disproportionately harm wildlife because: (1) larger snags persist longer and therefore provide their valuable ecosystem services longer and then serve longer as down wood too, and (2) most snag-using wildlife species are associated with snags >14.2 inches diameter at breast height (dbh), and about a third of these species use snags >29.1 inches dbh. • Truncation of symbiotic species relations and loss of biodiversity. Sixteen species are primary cavity excavators and 35 are secondary cavity users; 8 are primary burrow excavators and 11 are secondary burrow users; 5 are primary terrestrial runway excavators and 6 are secondary runway users. Nine snag-associated species create nesting or denning structures and 8 use created structures.	This comment is addressed in the analysis of the No Action Alternative (Alt. 1) in the draft EIS. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

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209 - Snag Retention (general, non-WL)	#5873-170	• Reduced avian and terrestrial species diversity which affects plant and invertebrate diversity. Since different wildlife help disperse different sets of seeds and invertebrates, reduced wildlife diversity can significantly affect pace of recovery and the diversity of the regenerating stand. Snag- associated wildlife play a greater role in dispersal of invertebrates and plants, while down wood-associated wildlife play a greater role in dispersal of fungi and lichens. Down wood-associated species might contribute more to improving soil structure and aeration through digging, and to fragmenting wood which increases surface area encouraging biological action that releases nutrients. • loss of partial shade that helps protect the next generation of forest; • loss of cover quality and fawning areas for big game; • loss of future disturbance processes such as falling snags that help thin and diversify the next generation of forest; • increased human activity and human access that can increase fire risk; • increased fine fuels on the forest floor that can cause an increase in fire hazard; • loss of seed sources, and • loss of diversity of vegetation and microsite conditions. • The fact that regional standards for snags and down wood fail to incorporate the most recent science indicating that more snags and down wood (especially large snags and logs) are required in order to maintain species viability and sustain site productivity. • Arguments in support of the “reburn hypothesis” are specious. (1) partial reburn may be completely natural and desirable in some cases to consume some fuel and diversify the regenerating forest, and (2) salvage logging will cause a pulse of fine fuels on the ground and actually increase the reburn risk/hazard above natural levels, and (3) fuels that fall to the ground over time will to some extent decay as they fall. • Uncertainty calls for a cautious approach. Compare these adverse impacts of salvage logging to the few scant reasons to salvage (e.g., economic recovery of fiber	We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material left over time would serve an ecological function because there is no “excess” in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Klamath Forest Plan (page 4-87; MA 5-30) although the fire history of the Klamath Province makes that goal unrealistic without fuel reduction. However, retention of all of the dead wood now present on the landscape from the 2014 fires would create an undesirable risk of future high-severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late-successional stand conditions in Late Successional Reserves (Fuels section of this Chapter of the final EIS; Appendix E). We do not agree that all fire-killed trees, or all large fire killed trees, must be retained. To determine how much dead wood should be retained on the landscape, we use the guidelines provided by the Forest Plan for snags (page 4-30, Table 4-4) and coarse woody debris (page 4-23). The forest-wide Late Successional Reserve Assessment (Late-Successional Reserve Assessment, pages 1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan (Appendix E). These metrics were developed from studies of late-successional and old-growth forests. Since the Forest Plan was published in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape, would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed trees and snags is likely to create fuel loading that would actually increase the probability of future high-severity fire that would consume snags and down wood (Skinner et al. 2006; Figure 7 of Appendix E; Fuels section of this Chapter of the final EIS). Because of fire frequency in the Klamath Province, it is highly unlikely that any dead wood could persist for 80 to 100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by:• Retaining large “legacy” green trees wherever they occur. By virtue of their location and/or inherent resistance to fire, large green trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian Reserves. This has the effect of retaining the larger trees, on average, on the landscape in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity-fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7 of Appendix E). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm most of the larger snags because they will not yet have developed the surface that is receptive to embers.Peterson et al. (2015) observed that: “…post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels and restoring low and mixed severity fire regimes in dry coniferous forests of western North America and other fire-prone forest types.”Leaving all of the dead wood created by the 2014 West Side Fires is:• in excess of amounts typically found in the Klamath Province (see response to issue 1 above); • in excess of amounts required in the Forest Plan; and• likely to create unacceptable fuel loads in the future. The Westside Fire Recovery project has a higher probability of retaining large structures until the next stand is capable of producing them than does taking no action (Alternative 1) because salvage of fire-killed trees reduces the severity of future fires that would likely kill surviving green trees and consume snags and down wood present on the landscape (Fuels and Vegetation sections of this Chapter of the final EIS; Appendix E)See response 5873-72, EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised and Appendix E.See Also:Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag

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			longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada.Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA.Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID.Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301
209 - Snag Retention (general, non-WL)	#5873-67	The agency often compares their proposed snag retention levels to the average number of snags across the landscape, without recognizing that after a significant disturbance such as fire "the rate of input [of snags] to the CWD pool is 100-1000x the rate expected for an unburned steady-state forest (Harmon et al 1986). Even afterwards, in the next 5 or 6 years, the rate of input is still 5 or 10 or even 100 times that steady-state rate." http://web.archive.org/web/20050428020846/http://www.brownandbrown.tv/warner-presentation-2002-05-14b.pdf	This comment appears to equate the snag and down wood trajectories of the fire regime of the Klamath Province with that of more mesic areas of the Northwest Forest Plan. That is not correct (See Background, EIS Chapter 1; Appendix E). The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of snags and coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006), not "stand-replacement or mixed" that is typical in the Coast Range and western Oregon and Washington Cascades. With frequent fire, surface fuels are maintained at low levels – too low for intensity sufficient to produce much stand-replacement fire, except under unusual circumstances. Also, as noted by Taylor and Skinner (1997) and Skinner (2002), dead wood in the Klamath province rarely lasted long enough, even in a low to moderate fire severity environment, to actually decompose because snags and down logs are receptive to embers, and once partially rotted, are easily consumed by fire. In a fire regime dominated by low to moderate severity effects, tree mortality with wildfire is by definition generally low. In the Klamath Mountains, patches of moderate to high severity fire, when they did occur historically, were more likely on upper slope positions and on south and west-facing aspects (Skinner et al. 2006). Patches of high severity would produce a pulse of snags and then eventually down logs, until those logs were consumed by subsequent fires. Because frequent low-moderate severity fires consume wood, it is unlikely that coarse woody debris accumulated to levels seen in more mesic old-growth Douglas fir forests of Oregon and Washington (Taylor and Skinner 1997). In the Klamath Mountains snags and logs were likely clustered in time and space, with long intervals and large areas where dead wood was sparse (Skinner 2002). The large areas of nearly continuous fire-killed trees in the West Side Fire Recovery Project are not characteristic, nor is the Project area a "stand-replacement or mixed fire regime" where large fuel loads would have been experienced in past post-fire environments. See EIS Chapter 3 - Responsible Opposing Views. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
209 - Snag Retention (general, non-WL)	#5873-79	There is evidence that retaining more than the minimum number of snags has significant benefits for cavity dependent species. Comparing two sites in Northern California, Blacks Mountain Experimental Forest (BMEF) with little past logging and lots of snags, and Goosenest Adaptive Management Area (GAMA) with lots of logging and fewer snags, the author's found "… three times as many snags (6.38/acre vs. 2.04/acre, respectively) … The use of snags by cavity-nesting bird species was dramatically different between the sites. Thirty-one cavity-nesting pairs from 10 species were detected at BMEF, while only one pair each of two species were detected at GAMA…. This fifteenfold difference is much greater than any measure of snags or cavities reported. …" We feel that forest managers may well be asking a misleading question. "Snags per acre" requirements implicitly assume an equilibrium condition and reflect only one ecological requirement for a given cavity-nesting species. … [C]onsideration of foraging habitat and other ecological requirements must be part of the "snags per acre" management considerations. This is an important, but somewhat daunting proposition, as potential cavity-nesting species are diverse, and each species likely has very different foraging ecologies, as well as other differences in habitat requirements. … [C]avity nesters at BMEF used larger snags on average … [T]he loss of large trees due to logging in eastside pine and other forests, over the past century has major implications for cavity-nesting birds. … [F]orest managers must have a sense of snag recruitment in relationship to snag fall, and the patterns and processes that underlie them, when addressing wildlife needs. … We view the understanding of these complexities to be of primary importance in forest management for wildlife. Steve Zack, T. Luke George, and William F. Laudenslayer, Jr. 2002. Are There Snags in the System? Comparing Cavity Use among Nesting Birds in "Snag-rich" and "Snag-poor" Eastside Pine Forests. USDA Forest Service Gen. Tech. Rep. PSW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/017_Zack.pdf.	The paper cited is part of Proceedings of the Symposium on the Ecology and Management of Dead Wood in Western Forests (PSW GTR 181). We agree that leaving snags in various size ranges in sufficient quantities is important for birds and many other species. As previously noted, retaining all of the fire-killed snags is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7, ; EIS Chapter 3 - fuels). The Klamath Forest Plan provided guidelines for retention of snags (Forest Plan 4-30). The Forest Plan direction does not require that these snag metrics be met on every acre; the Forest Plan requires that within any 100-acre area, the appropriate number of snags be retained. This allows project design to more closely approximate the natural snag distribution described by Skinner (2002) and Taylor and Skinner (1996) with concentration of snags in time and space, and large intervening areas in time and space where snags would be relatively sparse. As noted by Zack et al. (2002), the authors of the cited paper, a "snags per acre" prescription is inadequate, as tree size, rate of snag generation, and mode of tree death have been disrupted this past century. Average snag counts on a per-acre basis provide one measure of snag density, but this does not reflect the patterns of dead wood that occurred on the landscape in the Klamath Province as described by Skinner (2002). Snags are being retained in Riparian Reserves and Snag Retention Areas. This concentrates snags in time and space as discussed by Skinner (2002). An assessment showed that snag standards are being met (Appendix E, Attachment 2). Thirty 100 acre areas were randomly sampled. Within those areas, an average of 1800 snags / 100 acres greater than 14 inches and 700 snags / 100 acres greater than 20 inches were being retained. See Response 5873-72 and 17111-1. See also EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised.
209 - Snag Retention (general, non-WL)	#5873-83	Consider and disclose reasons NOT to remove snags Science tells us that natural forests develop after disturbance with abundant structural legacies. These legacy features include snags and down wood which play a wide variety of valuable ecological services for the developing forest, including but not limited to: • nutrient uptake, storage, and release • water uptake, storage, and release • mycorrhizal colonization • wildlife habitat, in particular for primary cavity species which are recognized as a "keystone" element of healthy forests • allowing some forest species to linger in burned forests after disturbance and to recolonize burned forests sooner after disturbance, thereby shortening the period during which burned stands are unsuitable for wildlife • providing food for insects that in turn feed a wide variety of other wildlife such as birds and bats • favorable sites for seed germination and establishment • mechanical thinning of the regenerating stand due to the process of snag fall • shade and cover for everything from seedlings to big game • perches, nest, and den structures, In general, the larger the piece size, the longer they tend to last. But salvage logging removes those very elements that are most valuable for wildlife and most difficult to replace.	We agree with description of benefits provided by snags. Snag retention and coarse woody debris standards in the Klamath's Forest Plan are being met throughout the project. This comment provides no site-specific information other than the commenter's opinion that the desired ecological services of snags and down wood are not accruing, or that the guidelines for snags and down wood in the Forest Plan are inadequate. See also response 5873-72 and EIS Chapter 3, Responsible Opposing Views and Agency's Responses to Issues Raised.
230.01 - Env. Quality & Ecosys. Integrity	#13834-1	Forests should be managed in a way that protects endangered species, preserves clean water and allows the natural ecosystem to heal itself from fire as it has done for millennia. Let nature take back what it has created, so it can give it back to the world again.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See responses to comments 12414-1 and 6924-1. Best available science was considered and is referenced in the EIS and supporting documentation. The project was designed to be and is compliant with the Endangered Species Act and The Clean Water Act. The Klamath National Forest is consulting and conferencing with the U.S. Fish and Wildlife Service about the effects of the project on the Endangered Species Act-listed northern spotted owl and Endangered Species Act listing candidate Pacific fisher, respectively. The Forest is also working with the North Coast Regional Water Quality Control Board regarding compliance with the Clean Water Act.

Code	Comment Number	Comment Text	Response
230.01 - Env. Quality & Ecosys. Integrity	#16672-1	The drought in California is creating a more delicate situation in the state, which only makes forest ecosystems more important. We call on you to preserve the Klamath National Forest and log in a sustainable and ecologically appropriate way.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service acknowledges that we are in a drought; however, a drought condition is not sufficient rationale to not support the purpose and need of the project, as described in Chapter 1 of the EIS, including habitat and watershed improvement. The project is designed to meet legal requirements and to protect resources; see Chapter 2 of the EIS for the proposed actions, including project design features for resource protection.
230.01 - Env. Quality & Ecosys. Integrity	#18852-9	There is no single immediate solution to our ecological circumstance through such large scale and intensive management actions, as this project proposes. We need to understand the longterm process of forest restoration as occurring over time through multiple events and dynamic ecological processes. This plan does not achieve this level of site or species specificity, ecological consideration or temporal understanding, in large part due to the expansive area involved, and the limited time-frame involved in the plans consideration.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for the actions proposed. Long-term vegetative conditions are described in Chapter 3 of the EIS for both the no action and action Alternatives. The agency has conducted site-specific analysis of the proposed actions in accordance with National Environmental Policy Act regulations (40 CFR 1500-8). This is evidenced throughout the analysis and the project record.
230.01 - Env. Quality & Ecosys. Integrity	#18926-21	Biological Diversity is the foundation for many forest resources and benefits (including Scenery). There appears to be no tracking of how this project benefits, or impairs KNF westside biodiversity overall. The Klamath National Forest, and much of the Western US is known to be Highly Departed from its ecological Reference Conditions (primarily due to historic wildfire suppression). It would seem essential to demonstrate how well the project's alternatives would support the attainment of the Forest's ecological target conditions (The Historic "Reference condition" plus necessary adjustments to compensate for climate change, etc). Could it be that some areas should be reforested in approaches that are adjusted to meet the KNF's target conditions ? Isn't that the true purpose of Klamath Forest Plan Biological Diversity S&Gs 6-1 and 6-14, to identify how well a project would attain this target ?! ! Klamath-Siskiyou Bioregion! The KNF is central to the Klamath-Siskiyou bioregion, which is home to the largest expanse of wild lands on the West Coast. The International Union for the Conservation of Nature recognized it as one of seven areas of global botanical significance in North America. These forests are a stronghold for rare species and wild salmon. The region is third in species richness (for taxa ranging from butterflies and plants to birds and mammals) for all temperate conifer forests across the continent and contains some of the highest biomass-dense forests in North America, sequestering carbon and storing carbon long after a fire.! The Klamath Mountains in the K-S are renowned for their wealth of conifer species and are recognized worldwide as a center of plant biodiversity. In the Russian Wilderness Area eighteen different conifers grow ! within one mile.! !	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to 12414-1 and 6924-1. The project is consistent with the goals and standards and guidelines of the Northwest Forest Plan, as incorporated into the Forest Plan, including ones related to biological diversity. The agency recognizes the importance of the resources found within the Klamath Province and Klamath-Siskiyou Bioregion. Project design features in Chapter 2 of the EIS are designed to mitigation resource impacts and meet legal requirements. See Chapter 3 of the EIS for a disclosure of effects by resource area, including botany, climate change, air quality, aquatic resources, and fuels.
230.01 - Env. Quality & Ecosys. Integrity	#5873-57	11 Reasons Why Burned Forests are Beautiful 1. Severely burned forests provide rich habitats. 2. Severely burned forests are rich in bird life. 3. Severely burned forests support a wonderful variety of insects. 4. Severely burned forests still have lots of living trees, it just takes time for them to say hello. 5. Natural regeneration is everywhere. 6. If left alone, severely burned forests are fun to watch as they explode with new life over the years. 7. Shrubs and trees live together in harmony. 8. Severely burned forests provide habitat where it might be least expected! [e.g., bird nesting in root wads] 9. Severely burned forests still have patches of green. 10. The usual alternative to letting severely burned forests alone is an ecological disaster. [e.g. clearcut salvage and replanting and herbicides on private land] 11. Severe fire is a natural part of forest ecosystems. California Chapparal Institute. 2014. http://hosted.verticalresponse.com/652874/13cc17b39e/289104753/39addbbd1d/	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Forest Service reviewed the article and acknowledges the role of fire in the ecosystems and the beneficial effects of fire. See Chapter 2 of the EIS for a description of proposed actions of this project. See the affected environment section of Chapter 3 for a description of the post-fire condition by resource. See Chapter 3 of the EIS for effects of the proposed actions on resources by resource area.

Code	Comment Number	Comment Text	Response
230.01 - Env. Quality & Ecosys. Integrity	#6646-1	I'm writing because I'm very concerned that the "Westside Fire Recovery Project" in Klamath National Forest may cause undue harm to our local forest resources. As an environmental scientist, born and raised in Oregon, I have come to understand that fire is an integral part of ecosystem functioning, as are old growth trees. Post-fire logging will stunt the natural recovery processes of the forest and remove essential ecosystem elements. Salmon, one of our area's most charismatic and prized species, will be negatively impacted, not to mention numerous other organisms and ecosystem function overall. While economic development is important to the success of many communities, it is not an excuse to exploit the ecosystem resources on our reserved lands. Post-fire logging would cause undue harm for years to come, and leave our forests beyond a recoverable state. Please, if you value our forest resources, which make the Pacific NW so unique, please implement the Northwest Forest Plan and withdraw the proposal to clearcut up to 6,800 acres of burned forest in the Westside project.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See responses to comments 12414-1 and 6924-1. The Forest Service reviewed the article and acknowledges the role of fire in the ecosystems and the beneficial effects of fire. The purpose and need for the Westside Fire Recovery Project includes fuel reduction, restoration of wildlife habitat and watershed condition, and public safety as major components of ecosystem recovery, in addition to recovering value from deteriorating timber. See response to comment number 6271-1 for rationale behind salvage harvest in Late Successional Reserves. No clearcutting is planned as part of this project See Chapter 2 of the EIS for a description of proposed actions of this project, including project design features for resource mitigation. .See the affected environment section of Chapter 3 for a description of the post-fire condition by resource. See Chapter 3 of the EIS for effects of the proposed actions on resources by resource area. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See Chapter 1 of the EIS for a discussion about salvage in Late Successional Reserves. Project impacts are found throughout Chapter 3 of the EIS. The Forest Plan, which incorporates all direction from the Northwest Forest Plan, does allow for salvage harvest in Late Successional Reserve.
230.01 - Env. Quality & Ecosys. Integrity	#7776-1	Please reconsider the "Westside Fire Recovery Project" in the Klamath National Forest, which is actually a plan to clear cut old-growth trees. A naturally occurring forest fire is part of nature and the forest ecosystem that maintains the balance so necessary for endemic life to thrive. A clear cut may be profitable, but it is not good science and it is definitely not good for our environment or us. Please let nature take its course unhindered.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See responses to comments 12414-1 and 6924-1. Best available science was considered and is referenced in the EIS and supporting documentation.
230.02 - Inherent Worth of Nature	#17873-1	It has much more financial and social value as a nature reserve. there is no need to log and the financial value of logging is minimal	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project area is not in a nature reserve; see Chapter 1 of the EIS for a description of land allocations within this project area.

Code	Comment Number	Comment Text	Response
232.03 - Riparian Areas, Wetlands	#12346-17	Page 29 of the ACSOR acknowledges that salvage logging may negatively impact temporal connectivity "at the site scale" but dismisses the negative impact because 7 "project design features that require snag retention in the salvage units will meet the standards and guidelines at the site scale." This contention is incorrect, the PDFs do no such thing. In fact, the logging PDFs call for: (1) Counting Riparian Reserves as "units" in order to double-count the Reserves for leave-tree purposes while clearcutting the actual harvest units; (2) Defining units larger than the actual harvest area in order to count trees outside of the logging zone as "leave trees" and (3) Averaging leave tree retention over 100-acre plots such that many "units" will be effectively clearcut. Hence the project will indeed negatively impact terrestrial connectivity at the site scale in violation of ACSO 2. Inexplicably, on page 29 of the ACSOR the Forest Service claims that leaving felled snags greater than 26" DBH on site in the Riparian Reserves for fish bearing streams while removing smaller snags in these areas and all snags in the Riparian Reserves for non-fish bearing streams will retain habitat connectivity. In fact smaller snags and snags in non-fisher bearing Riparian Reserves directly contribute to wildlife connectivity and their removal will inhibit attainment of ACSO 2. Indeed, retention of terrestrial wildlife connectivity was one of the primary reasons the NWFP established Riparian Reserves for non-fish bearing streams.	The Aquatic Conservation Objectives are intended to be reached at the 5th field watershed scale, just as Key Watersheds are defined at the 5th field watershed scale. In order to assess compliance, the Klamath NF considered what occurs at the site, models impacts at the 7th field watershed scale, and then a conclusion for compliance with Aquatic Conservation Strategy is made at the 5th field watershed scale. Removed fire-killed trees in areas outside Riparian Reserves is a reasonable approach to maintain protection of the stream course. The primary concern for maintaining "connectivity" is to avoid creating habitat fragmentation. The amount of acres proposed for treatment is not significant enough to create habitat fragmentation. Also, the No Action Alternative may be more detrimental to wildlife habitat connectivity than taking action: The Silviculture Report states on page 9, "Alternative 1 [No Action] and Alternative 5 will, in time, result in reestablishment of a coniferous forest (Zhang et al. 2008; Shatford et al. 2007), but that forest may not be sustainable in terms of fuels and fire history because residual fuels will not have been treated or will only be treated in part. It may also take decades to reach that stage (Zhang et al. 2008). Given the fire return interval of the Klamath Province and the fuels present on the site, a stand replacement reburn is likely, because it takes so long for a coniferous forest to reestablish itself. Without fuels reduction and active reforestation in these conditions, reburns where fuels are heavy tend to be stand replacement events (Skinner et al. 2006; Weatherspoon and Skinner 1995). The result would likely be a loss of forest cover in this area and a conversion to brush/hardwoods." On pages 12-13 the Silviculture Report states, "Not all burned areas within the project area are proposed for post-fire treatment. The untreated areas, which include stands that are largely intact post-fire, would recover via natural processes. Also, deforested areas outside of the areas proposed for salvage harvest and fuels treatment, which include a variety of stocking densities and size classes that suffered moderate to heavy mortality, would be left to recover naturally over time. Some moderately burned areas still have a functional forest cover and have adequate seed sources to provide for natural regeneration, but stocking is less than desired to meet management objectives. Small forest gaps created by the fire would re-establish over time without active intervention relying on natural regeneration without site preparation. Dead and dying trees would be left in those areas to provide snags for wildlife. With no current fuels treatments, these areas will also be prone to future high intensity, stand-replacing fires. “Natural recovery” describes the intent to accept conditions that result from natural processes which may take many years to obtain. Vegetation expected to re-establish in larger openings include grass and brush and in some places hardwoods." Removing burned trees to reduce fuels and help pay for reforestation will create positive conditions for wildlife than taking no action. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
232.03 - Riparian Areas, Wetlands	#17478-2	stringent protection of riparian zones and remaining green trees in the burn area is an important consideration to plant and animal species.	See response to comment numbers 17375-2 and 12346-55. Green trees will be retained; see Chapter 2 of the final EIS for a description of what is being proposed.
232.03 - Riparian Areas, Wetlands	#17481-11	Remove slash and debris from drainages.	See response to comment number 17478-2.
232.03 - Riparian Areas, Wetlands	#17481-12	Need to discuss drainages; i. Removing fire debris that is effecting culverts and re-diversion of drainages for enhancing water quality and sedimentation. ii. Removing fire debris from burned out riparian areas. iii. Treat snags in riparian reserves at roads. iv. Hazard tree removal should also occur along roads and riparian reserves. v. Seek chainsaw authority in the next 5-10 years as part of ongoing emergency to use mechanical means.	See response to comment 17403-1. Removal of fire-related debris affecting culverts is conducted throughout the year as part of road maintenance.
232.03 - Riparian Areas, Wetlands	#17481-20	Mosaic approach should include meadows.	Comment is a statement of opinion. Proposed actions do not treat meadows. Range-3 project design feature was modified to add clarifying language that no planting is proposed within site preparation and planting or salvage units that overlap historic wet or dry meadows (as defined in Range-3); these are now just site preparation units that are site-prepared to improve growth of meadow vegetation (Chapter 2 of the final EIS). Also, equipment will be excluded from wetlands or wet meadows (excluding small springs and seeps); see project design feature watershed-4 in Chapter 2 of the final EIS. Please refer to 17478-2.

Code	Comment Number	Comment Text	Response
232.03 - Riparian Areas, Wetlands	#18857-8	No salvage units in Riparian Reserves.	Salvage is not occurring in hydrologic Riparian Reserves. Please see response to comment number 17478-2.
232.03 - Riparian Areas, Wetlands	#18878-49	DEIS: There is limited removal of large trees from the Riparian Reserves so coarse wood is not likely to be measurably reduced on the watershed scale. (Pg. 205) Comment: This is contradicted within the DEIS. On Pg. 204 it states, "there is no treatment in the Riparian Reserves in the salvage units and site preparation and fuels treatments are only removing dead vegetation." On Pg 166 it states, "specific project design features to minimize negative impacts include retaining snags within treatment units which include riparian reserves, and retaining legacy components and snags mixed in with green trees. Any soft (snags existing prior to the fires) snags (greater than 14 inches in diameter) felled for safety reasons will be left on site as downed woody debris." While on Pg. 123 the DEIS reverses upon itself and states "No planned salvage harvest will occur in riparian reserves." In another instance on Pg. 103 "No salvage logging will take place in hydrologic Riparian Reserves. Where hazard trees are felled in hydrologic Riparian Reserves for safety, they will be left for large woody debris recruitment. Watershed project design features that address this concern." So the ultimate question is how does one "remove large trees from Riparian Reserves" without harvesting them or are these critical components euphemistically considered "dead vegetation"?	See Chapter 2 of the EIS for a description of proposed treatments. There is not a contradiction. The Salvage Harvest and Roadside Hazard Treatments are two different prescriptions. No salvage harvest is proposed in hydrologic Riparian Reserves; however, trees may be removed in Riparian Reserves if they are a roadside hazard (per roadside hazard treatments). There is also fuels, site preparation, and planting proposed in Riparian Reserves as needed to improve the condition of the Riparian Reserves (see Aquatic Conservation Strategy analysis in Chapter 3 of the EIS). See page 57 of the Biological Assessment for Fish in the section for Hazard Tree Abatement and page 61-63 of the Biological Assessment for Fish in the sections for Salvage harvest and Hazard Tree Removal. There are hazard trees in three burned areas that pose a safety hazard, thus there is not discretion with regard to felling/removal. See Chapter 2 under wildlife project draft design features about what is being retained.
232.03 - Riparian Areas, Wetlands	#18883-21	The DEIS does not describe the width of Riparian Reserves near streams where trees up to 16 inches dbh will be removed. Although the DEIS says that only trees that can be harvested remotely, without equipment, will be cut; it is physically impossible to prevent damage to other trees and the forest soil within a riparian reserve. No trees of any size and no equipment should be allowed to trespass into riparian reserves. No trees of any size or condition should be taken from within riparian reserves as these areas provide the highest value for wildlife and natural regeneration.	See page 55 of the Biological Assessment for Fish: The width of Riparian Reserves, not just shade canopy is key to maintaining micro-climate conditions. Forest Ecosystem Management Assessment Team (1993) called for protection of two site potential tree heights or 300 feet, for all fish-bearing streams. Spence et al. (1996) note that the absolute minimum buffer width for maintaining cool air flow over the stream is one site potential tree height. The proposed action includes Riparian Reserve widths of two site potential tree height along fish-bearing streams and one site potential tree height along non-fish bearing streams. For this project, Riparian Reserves are excluded from salvage harvest, but some vegetation management will occur within Riparian Reserves (fuels treatment, hazard tree removal, legacy site treatments). Page 56 of the draft EIS references Forest Plan Management Area - 10 as describing Riparian Reserves, including the widths. It is not the intent that no actions will take place in Riparian Reserves as evidenced by what is written in the Forest Plan for Management Area - 10. See the relevant Standards and Guidelines in the Forest Plan such as MA10-7: The use of heavy equipment within Riparian Reserves for riparian habitat restoration may be approved after interdisciplinary review, MA10-58: Fell trees in Riparian Reserves when they pose a safety risk. Keep felled trees on-site when needed to meet Coarse Woody Debris objectives. MA10-54, MA10-60: Locate skid trails, cableways and skyline corridors to minimize impacts to Riparian Reserves from adjacent management activities, and MA10-61: Protect stream banks from adjacent timber management activities by fully suspending logs above stream banks during yarding.
232.03 - Riparian Areas, Wetlands	#18907-25	The DEIS does not describe the width of Riparian Reserves near streams where trees up to 16 inches dbh will be removed. Although the DEIS says that only trees that can be harvested remotely, without equipment, will be cut; it is physically impossible to prevent damage to other trees and the forest soil within a riparian reserve. No trees of any size and no equipment should be allowed to trespass into riparian reserves. No trees of any size or condition should be taken from within riparian reserves as these areas provide the highest value for wildlife and natural regeneration.	See response to comment number 18907-25 and 18883-21.
232.03 - Riparian Areas, Wetlands	#5873-117	Minshall, G.W. 2003. Responses of stream benthic macroinvertebrates to fire. Forest ecology and management. 178: 155-161. NOTE: Volume 178, issues 1-2 was a special issue of Forest Ecology and Management on the effects of wildland fire on aquatic ecosystems in the western USA. http://www.famu.org/mayfly/pubs/pub_m/pubminshallg2003p155.pdf.	Not substantive - comment is a scientific citation. The commenter fails to describe how this citation is relevant to the proposed actions or the effects of this project.

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232.03 - Riparian Areas, Wetlands	#5873-144	Where safety and LSR objectives conflict the agency must consider the no action or minimal restoration alternatives as acceptable methods of attaining LSR objectives. For instance, to ensure safety the proposed action would remove virtually all the snags in large patch cuts (i.e. clear cuts). This is inconsistent with the NFP ROD requirement to retain all snags likely to persist until the stand begins to recruit large snags. In other words, the type of cutting needed to ensure worker safety would degrade the development of high quality older forest that retains adequate legacies from the previous stand. Since salvage is not necessary to meet LSR objectives, it makes sense to forgo salvage and keep workers out of hazardous areas. Hazard trees must be carefully and conservatively selected. This is not a high use recreation area and anyone who visits the area would not expect the same degree of safety as one would find along paved public highways. Experience shows that most of the hazard is from smaller hemlocks that fall apart faster and from trees and lean noticeably toward the road. Removal of trees in an LSR could lead to perverse incentives to take trees that provide significant ecological benefits and do not present a significant hazard. Large roadside hazard trees should be left on the ground in the LSR and Riparian Reserves. The EIS fails to explain whether they are needed to meet biological objectives or not.	This comment reflects the author's opinions rather than the content of the Forest Plan concerning Late-Successional Reserve objectives and safety. The Forest Plan has no requirement that no action or minimal action is appropriate if there is a conflict with safety and Late-Successional Reserve objectives. The EIS does however have a "No Action" Alternative that is responsive to this comment. See Chapter 1 of the EIS for a discussion of salvage treatments in Late Successional Reserves which included a "No Action" Alternative. For the No Action Alternative, Table 2-34 in the draft EIS states: An unsafe condition for the public, forest workers and firefighters and for the communities adjacent to the Forest exists in the short term that would increase in risk in the long term. Safety is only one of the factors that must be addressed by the Westside Fire Recovery Project (See Purpose and Need, Chapter 1). We agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (Skinner 2002, Skinner et al. 2006, Knapp 2015; See also EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metric were developed from studies of late successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006). This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by • Retaining large “legacy” trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures. • Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity. • Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves by broadcast burning at the time activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire. Peterson et al. (2015) observed that:

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			"post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels and restoring low and mixed severity fire regimes in dry coniferous forests of western North America and other fire-prone forest types."
232.04 - Water Quantity	#18909-80	It is not clear in the DEIS when or how much water would extracted from numerous streams to fill water tank trucks, which can hold over 4,000 gallons per load during the proposed implementation. Given that the project area is over 200,000 acres and that there would be over 650 miles of roads needed for dust abatement, water drafting could have a significant effect on water quantity and temperature during hot summer months. The KNF LRMP at page 4-21 states, "5-3: A dust abatement strategy should be considered for all projects. Each strategy should address the reasonable opportunities to reduce the level of short-term and long-term dust generated from existing roads and those constructed in the future." The DEIS fails to discuss a dust abatement strategy and should clarify when and how much water would be extracted to fill tanks. Although we understand that exact numbers likely cannot be provided, projections or at least projected ranges and locations and timing should be provided to enable the public to better assess the impacts of the project. Aquatic species present could be at risk due to rapid changes or sustained reductions in flow, reduced dissolved oxygen, and/or increased water temperature. Exposed surfaces of water holes or other developments could erode and discharge sediment back into the waterway. In addition to direct hydrogeomorphic (forming and shaping landform by water) disruption to the channel and subsequent impacts to aquatic species, water-quality impacts can occur from road approaches that access the water drafting site. Many water drafting sites have steep approaches and in the absence of adequate drainage or surfacing, these approaches can become chronic sources of sediment and runoff to the channel. Water trucks often leak oil, and sometimes fuel, onto drafting pads, becoming a source of petroleum product contamination to surface waters.	The Forest acknowledges the importance of controlling water drafting during project implementation. Watershed-35 Project Design Feature (project design feature) details restrictions placed on water drafting for the project. Specifications are that no more than 10% of surface flow rates of Coho salmon critical habitat streams will be pumped. Restrictions are also established for non-Coho salmon critical habitat streams and nonfish-bearing streams in Watersehd-35 project design feature. Drafting will only occur at sites designated by the Forest Service and coordinated by a Forest service fisheries biologist such that potential impacts to anadromous fish are sufficiently minimized. Designated drafting sites are ones that typically are at lowest risk for erosion and sedimentation. Per Best Management Practice 2.11 in the project draft EIS no servicing or refueling of equipment will take place in Riparian Reserves except at designated landings that are most disconnected from water resources. National Marine Fisheries Service water drafting specifications (2001) and Forest Service Best Management Practices and project design project design features will be implemented to minimize effects of water drafting including during periods of low water flow. The June 19, 2015 addendum to the Biological Assessment for Fish states, "As part of the Project consultation, the Forest, National Marine Fisheries Service, and Karuk Tribe jointly developed a strategy to monitor implementation of Project elements that have the greatest likelihood of impacting SONCC Coho salmon and other salmonids. Pre Project, the group will monitor the hazard tree mark where it is proposed near SONCC Coho salmon CH; during the Project (especially June-Sept) all parties will share information about where Project water drafting is occurring, jointly monitor those water drafting actions, and help Forest Service Representatives decide where to shift Project water drafting so that impacts to SONCC Coho salmon and its CH are not adverse. also see pages 11-13, 37-38, and 64 in the April 13, 2015 Biological Assessment for Fish for additional information on drafting requirements and locations.
232.04 - Water Quantity	#5873-107	MPB-attack and salvage harvesting in Baker Creek, a 1570 km2 watershed, has been modelled using DHSVM to estimate the effects on streamflow. Flood frequency analysis was carried out for the baseline and three disturbance scenarios: conventional harvest, MPB epidemic and salvage harvest. In Baker Creek watershed, two major land use changes effect the streamflows: the MPB attack and the salvage of the attacked trees. Conventional harvesting in Baker Creek watershed before the MPB-attack did not substantially alter the streamflows. However, the combination of conventional harvesting and MPB attack, to 2006, has significantly increased the magnitude and timing of flood events. For example, former 20-year peak flow events can now be expected every 3 years. On average, peak stream flows will be 60% larger than baseline. As salvage harvesting takes place in the next few years, there will be further increases in peak flow and water yield, for example the 20-year peak flows will increase by 90% compared to baseline. These peak flow changes have implications on the channel stability and fish habitat of the stream network within Baker Creek watershed, as channel forming flows will occur more frequently.")	Comment references 2007 Forest Practices Board special investigation. Study is from a tributary of the Fraser River watershed in British Columbia. The Forest acknowledges that peak streamflow characteristics have been altered by the 2014 wildfires. Table 6 of the project Hydrology Report presents estimated post-fire increased unit peak flow (cubic feet per second per square mile) based on 2014 fire Burned Area Emergency Response reporting. Post-fire peak flows were estimated to increase by factors of 1.3 to 1.9. Peak streamflow increases of this magnitude were not expected to be large enough to produce adverse effects to channel morphology due to the inherent stability of steep, armored channels in the project area. Post-fire increased peak flow is partly attributed to the presence of water-repellent soils. Post-fire water repellency is expected to reduce significantly in the first few years post-fire and thus have diminished effects on peak flow. Effects of salvage harvest are incorporated in to the cumulative watershed effects equivalent roaded area model. Results of this modelling indicate that none of the project 5th field watersheds exceed the equivalent roaded area risk ratio under Alternative 2. These results are interpreted as a low risk for adverse effects to hydrologic function and water quality.

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232.05 - Water Quality	#12346-14	Similarly, page 11 of the ACSOR acknowledges that the Lower Scott Watershed Analysis indicates that Deep/Middle, Tompkins and Snow/Isinglass creeks are impaired 6 in part due to "high road density." Again, the Forest Service proposes numerous activities (such as log haul, yarding, landing construction, roadside logging and road construction) that will increase the cumulative and direct impacts of its transportation system rather than implementing the recommendations of the Lower Scott Watershed Analysis to decrease the impacts of the agency's road system on these water quality impaired water bodies. Such an action threatens violation of both the NW Forest Plan and the Clean Water Act. Page 17 of the ACSOR indicates that the Forest Service is aware that the Beaver Creek Watershed Analysis recommends that the agency "manage public lands to maintain connectivity" because "Beaver Creek is providing late-seral connectivity from the Oregon Cascades to the Klamath Mountains." Yet page 30 of the ACSOR acknowledges that "new landings may have site level impacts to terrestrial habitat connectivity where large trees or snags are removed" and that in the Beaver Creek Watershed "hazard tree removal will occur on 1,420 acres which will have a site scale effect on terrestrial wildlife connectivity." In other words, the Forest Service is proposing to implement actions that cut directly across the recommendations contains in its own Watershed Analysis.	Watershed Assessments (WA, also called Watershed Analyses) are intermediate planning documents used to document watershed conditions and provide recommendations for management. Watershed Assessment recommendations are not however binding management direction because they have not gone through the administrative procedures of public notice and comment nor has there been any appealable decision made concerning the recommendations made in the respective Watershed Assessments. A Watershed Assessment does not constitute or replace management direction in the Forest Plan, nor are their recommendations binding on decision makers. The comment speculates that certain Westside Fire Recovery Actions are not consistent with the WA where the action occurs, and as such the Project is not consistent with the Forest Plan or the Clean Water Act. The comment however provides no evidence other than a general description of actions to support this contention.The comment refers to the Lower Scott Watershed Analysis that was published in 2000. This watershed analysis is not Forest Plan direction; it describes existing conditions on or before 2000 with some recommendations of the time. Since 2000 road decommissioning, upgrade, and repair work has been ongoing across the west side of the Forest. In order for vegetation management (timber, fuels) projects to be implemented the Forest must comply with the requirements of the Clean Water Act. To demonstrate compliance, the Forest may apply for enrollment of the project under the North Coast Regional Water Quality Control Board's (herein Water Board) Waiver of Waste Discharge Requirements program. Alternatively, the Forest could apply for a Waste Discharge Permit. Either enrollment of the project under the Waiver, or issuance of a Waste Discharge Permit would demonstrate compliance with the Clean Water Act. With regard to habitat connectivity in the Beaver Creek watershed the Forest acknowledges potential adverse habitat effects at the site-scale from project implementation. However, site-scale effects are not anticipated to limit connectivity on the landscape scale such as connections between the Oregon Cascades and the Klamath Mountains. Alternative 3 and Alternative 3 Modified are responsive to this recommendation because they forego salvage operations in order to maintain connectivity.
232.05 - Water Quality	#12346-26	The Forest Service is proposing numerous actions that will directly increase sediment production and delivery to streams in addition to the significant sediment production that has already occurred from the wildfire events, wildfire suppression (including dozer lines), and the existing crumbing road system located on steep decomposed granitic slopes. On page 92 of the DEIS the KNF indicated that it would refuse to develop and implement an action alternative that avoided salvage logging on severely burned soils and prohibited road construction on erosive and fragile soil types. On page 99 the KNF indicated that under all developed action alternatives the Forest Service is committed to clearcut salvage logging on unstable slopes that comprise geological Riparian Reserves. Page 101 of the DEIS indicates that the Forest Service hopes to conduct commercial logging and yarding activities on 2,000 acres of "steep, weathered granitic lands" consisting of geological reserves and an additional 4,400 acres of roadside logging is "proposed on unstable lands considered to be geological Riparian Reserves." "All streams in the project area are listed as impaired under §303(d) of the Clean Water Act, which means that current conditions do not meet water quality standards and streams are not supporting their beneficial uses. The 303(d) list identified stream temperature and sediment as the pollutants causing impairment in small tributary streams." ACSOR at 46. Hence additional temperature and sediment pollution in this project area is precluded. The KNF acknowledges that its road system is the primary source of sediment pollution in the project area. Page 46 of the ACSOR indicates that a "majority of the legacy sediment sites are associated with the road system…" Interestingly, agency planners then try to distinguish prior road construction practices with those proposed in the Westside timber sale. "Road construction often did not avoid unstable slopes or riparian areas that are protected by today's BMPs." ACSOR at 46. In fact the Westside DEIS proposes postfire road construction on both unstable slopes and in riparian areas.	The comment refers to Alternative A which was developed based on the Beschta (1995) report. Alternative A was considered but not analyzed in detail because it did not meet the purpose and need of the project. Table 2-36 in the draft EIS describes how other project Alternatives (1-5) address recommendations from Alternative A. Based on the modeling, field review, and professional judgment of earth, water, and fish scientists that evaluated the effects of all Alternatives, the effects to watershed conditions are indistinguishable from the short and long term effects of the 2014 wildfire. These scientists are also recognize that the proposed actions, as modified, are better for watershed conditions and aquatic beneficial uses than the No Action Alternative. The comment correctly states that project action Alternatives propose salvage harvest in geological Riparian Reserves. These activities are proposed because salvage harvest and site preparation and planting will reduce fuels and hasten revegetation resulting in reduced risk of high-severity fire, surface erosion, and mass wasting in the future. The Forest acknowledges that streams in the project area are on the state 303(d) list of impaired waters due to temperature and sediment impacts (see response to comment number 12346-25). Project Design Features and Best Management Practices are implemented to minimize potential adverse effects to hydrologic function and water quality. In addition the project Legacy Site Inventory and Treatment Plan will reduce future risk to water quality from sediment. This plan is a requirement of the North Coast Regional Water Quality Control Board's waiver program. If the plan is not viewed as adequately reducing risk to water quality from legacy sediment sites (mostly old roads) then the project will not be enrolled in the waiver program and no project work can be implemented. The comment states that agency planners "try to distinguish prior road construction practices with those proposed in the Westside timber sale". In fact current road construction practices have higher standards with regard to identification of unstable landforms (no new road segments constructed on inner gorges, active landslides, or toe zones of dormant landslides), culvert sizing to convey the 100-year magnitude flow without failing, and the utilization of rolling dips and critical dips to guard against road erosion and storm damage. These measures result in newly constructed roads having lower risk of adversely affecting water quality. There is only very limited new temporary road and landing construction proposed for Riparian Reserves in the project. See Chapter 2 of the final EIS for the modified Alternative 2 and 3 for details. Also see response to comment 18878.63.
232.05 - Water Quality	#17455-1	The proposed project threatens water quality in several existing and proposed Wild & Scenic Rivers and may harm fish habitat and the threatened coho salmon!	Equipment will be excluded from wetlands or wet meadows (excluding small springs and seeps). Project Design Features, Best Management Practices, and Forest consultation with outside agencies such as National Marine Fisheries Service, and the Karuk Tribe have designed and shaped the project such that risk to fish habitat and special status fish species has been reduced. Consultation is ongoing. The comment expresses an unsupported opinion; the effects to Coho salmon are described in Chapter 3 of the EIS.

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232.05 - Water Quality	#17481-30	Alternative 4: Likes/Dislikes - I like the aspects of this Alternative that involve activities identical to Alternative 2. I dislike the aspects of this alternative that reduce recovery activities for the perceived benefits to water quality and fish. I believe the reduction in salvage activity and the loss of economic value, reforestation opportunities, fuel reduction, and future wildlife habitat is a very unbalanced trade for the small reduction in watershed effect.	Equipment will be excluded from wetlands or wet meadows (excluding small springs and seeps).The comment appears to be in favor of the project and critical of Alternative 4 because of reduction of salvage harvest (and fuels and planting) acres for little reduction in watershed risk.
232.05 - Water Quality	#17910-8	"Management activities that reinforce negative effects or undermine positive effects of fires must be avoided if streams are to recover. In particular, management activities that add to the risk of increased sedimentation or that remove ecologically important large wood from the watershed present a substantial and long term threat to the recovery of streams. In this regard, logging and roadbuilding represent one of the most significant forces threatening to retard stream and watershed recovery. Logging and roadbuilding (including, and maybe especially, temporary roads) accelerate sediment delivery rates, and are particularly risky in areas of steep slopes, shallow soils, unstable geology, and intense storms—precisely the areas already at greatest risk from the fires themselves. Roads distort the movement of groundwater, surface water and sediment through the watershed and greatly increase the risk of mass failure—landslides and debris torrents. Both logging and roadbuilding increase the risk and severity of scouring floods that degrade aquatic food chains. Adding timber harvest and road construction to an already fire-damaged watershed can only have negative and potentially severe effects. We know of no scientific reason to engage in salvage logging or roadbuilding in burned areas and we know of many sound reasons not to." (excerpt from a letter to the President, September 19th, 1994 by G. Wayne Minshall, Judy L. Meyer, Jack Stanford, James Karr and Christopher Frissell)	Comment appears to be a quote from a 1994 letter, but review of the WFR_PublicallyIDLiteratureCited.xlsx file failed to identify the reference. Entry also appears to lack a substantive comment related to the effects or analysis of effects for this particular project. See Chapter 2 of the EIS for a description of proposed actions; see Chapter 3 of the EIS for a discussion of effects. The project meets the purpose and need, while being consistent with law, regulation and policy, including consistency with the Forest Plan.
232.05 - Water Quality	#18726-3	The proposed 22 miles of "temporary" new roads, 14 new stream crossings and 152 new landings will fragment habitat and increase sediment in streams. The proposed logging will reduce shade and increase water temperature.	See Chapter 2 of the EIS for a description of proposed actions. The new preferred Alternative is modified Alternative 3, per the final EIS, which is a reduction in treatments compared to Alternative 2. Per the draft EIS; comment is in error in that Alternative 2 of the Westside Fire Recovery project proposes 3.6 miles (rather than 22 miles) of new temporary roads, with another 9 and 9.3 miles along reopened decommissioned roads and along temporary roads in existing roadbeds, respectively (see Table 7 in the Aquatic Conservation Strategy Report). Also see response to comment number 12364-1. Temporary road activities within hydrologic Riparian Reserves are much more limited with 0.3, 0.2, and 1.3 miles proposed in Alternative 2 of new temporary road, reopened decommissioned road, and temporary road in existing roadbed, respectively (see Table 8 in the Aquatic Conservation Strategy Report). As well there are only six new landings proposed for hydrologic Riparian Reserves under Alternative 2. These landings were approved for use after field inspection by watershed staff. The landings deemed acceptable for use were approved because they were characterized by some or all of the following conditions: 1) the landing was in the outer zone of the Riparian Reserves, 2) the landing was uphill or separated from the stream channel by an existing road, 3) the landing was not on an unstable landform, 4) the landing was not demonstrating active erosion, 5) the landing or landing edge was not vegetated with mature live trees that would need removed for landing use. Given the conditions stated above use of temporary road segments and landings in hydrologic Riparian Reserves is not expected to produce adverse effects to hydrologic function or water quality from sedimentation or increased water temperature. Unacceptable habitat fragmentation is not anticipated from these temporary road and landing activities.

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232.05 - Water Quality	#18878-47	The Karuk Tribe and others including the State of California have issued a State of Drought Emergency for two consecutive years running. We find it disconcerting that although the continued drought conditions are mentioned throughout the document, there is no discussion, much less an analysis, on the impact of the drought on aquatic species, cultural beneficial uses, or domestic water supply from water drafting. DEIS: Pumping rate will not exceed 350 gallons-per minute or 10% of the flow of the anadromous stream drafted from (Pg. 87) Below 4.0 cfs, drafting rates should not exceed 20 percent of surface flows. Water drafting should cease when bypass surface flows drop below 1.5 cfs. Water drafting sites located in non-fish-bearing waters only may include minor instream modification, such as fine sediment removal and building of board/plastic dams. (Pg. 88) Comment: During baseflow months, cold water from major and minor tributaries including nonfish bearing portions of the stream are critical to the health and survival of federally-listed and culturally sensitive aquatic species. Drafting from streams can have a direct impact on these species and beneficial uses. What analysis has been conducted to look at the effects on aquatic resources and create these best management practices (BMPs)? There is great concern over the described methodology as most individuals are untrained to gauge stream flows by direct observation. This leads to many questions that need to be answered before drafting can occur. Who is going to measure the flows (cfs)? What are their qualifications to perform such a task? Is there going to be qualified personnel onsite with the ability to gauge with calibrated flow meters? Additionally, does this allow for the temporary dewatering of smaller tributaries?	The effectiveness of Best Management Practices is monitored through a state-wide program, in agreement with the Water Quality Control Board. The water drafting restrictions were designed by the National Marine Fisheries Service, which regulates protection of salmon listed under Endangered Species Act, such as Coho. Therefore, the Forest is following direction from agencies with jurisdiction to protect water and fish. The June 19, 2015 addendum to the fish Biological Assessment states, "As part of the Project consultation, the Forest, National Marine Fisheries Service, and Karuk Tribe jointly developed a strategy to monitor implementation of Project elements that have the greatest likelihood of impacting SONCC Coho salmon and other salmonids. Pre Project, the group will monitor the hazard tree mark where it is proposed near SONCC Coho salmon CH; during the Project (especially June-Sept) all parties will share information about where Project water drafting is occurring, jointly monitor those water drafting actions, and help Forest Service Representatives decide where to shift Project water drafting so that impacts to SONCC Coho salmon and its CH are not adverse; also during the Project, the Forest Service and National Marine Fisheries Service level 1 team will coordinate in closer monitoring of the status of ground disturbing actions if/when operations are occurring outside of the Normal Operating Season (NOS) or within the NOS during wet weather - to ensure compliance with Forest Service Best Management Practices and Wet Weather Operations standards." The Forest appreciates the cooperative efforts of the Karuk Tribe and National Marine Fisheries Service.
232.05 - Water Quality	#18878-48	DEIS: Effects to water quality of proposed temporary roads, stream crossings, and landings are assessed. The long-term temporal bounding for this analysis is up to 10 years because recovery of the fire-disturbed hydrologic function (from ERA modeling) and surface erosion (from USLE modeling) is appreciable in the first decade. The short-term is between 2 and 4 years after implementation. (Pg 199) Comment: Not included in the analysis are the effects of existing road infrastructure and the effects that the salvage logging will have on water quality. We are doubtful that just by using BMPs, water quality impacts will be effectively mitigated due to the size and scope of the Refined Proposed Action. The increased use of the road infrastructure by heavy equipment, salvage logging units, roadside logging, addition of landings, and other associated activities will have a cumulative effect on water quality regardless of location within or outside of riparian reserves.	The Forest Cumulative Watershed Effects analysis methodology includes past, present, and reasonably foreseeable future vegetation management actions along with past wildfires and wildfire suppression (fire lines). In addition, effects of the existing forest road network, temporary roads, log landing construction and enlargement, and road improvements and decommissioning are also modelled. Results of the cfs modelling indicate that potential effects of project Alternative 2 on hydrologic function and water quality are indiscernible from potential effects of the 2014 wildfires at the 5th field watershed scale. The Forest acknowledges that temporary road and landing construction does effect hydrologic function and water quality. However, results of the hydrology analysis indicate that these effects will be at the site-scale. IN addition, any project action Alternative will include with it the Westside Fire Recovery project Legacy Site Inventory and Treatment Plan. Implementation of this plan will reduce the risk of road-related erosion and sedimentation below pre-project levels in the Elk Creek 6th field watershed. Effects to water quality are in Chapter 3 of the final EIS.
232.05 - Water Quality	#18878-50	DEIS: With alternatives 2, 3, and 5 there are several sites (along tributaries of Doggett and Grider) where project temporary road actions involve using roads that currently have legacy sediment sites, or areas that are at risk of erosion (and therefore a threat to water quality) due to past land use. When/if the project uses these roads they will be hydrologically stabilized and any active erosion, or risk of erosion will be addressed. (Pg. 215) Comment: Since it is logical to conclude these sites have been identified for years, if not decades, as a known "threat to water quality", why haven't they been addressed in an expedient manner? Also the statement "they will be hydrologically stabilized and any active erosion, or risk of erosion will be addressed" is vague. It what manner are they going to be stabilized? Is this before project activity or at some unknown point in the future? In light of the projected shortfall of funding post salvage for restoration what priority level would these activities receive?	Many but not all existing legacy sediment sites in the project area were inventoried prior to analysis of the Westside Fire Recovery project. Numerous proposed temporary road segments were field reviewed by watershed staff prior to approval, and this field assessment could result in the identification of new legacy sites. Implementation of the Westside Fire Recovery project will reduce the risk of road-related erosion and sedimentation over the mid- and long-term because any project action Alternative will include the Westside Fire Recovery Legacy Site Inventory and Treatment Plan as required by the North Coast Regional Water Quality Control Board's Waiver of Waste Discharge program. Hydrologic stabilization refers to any combination of treatments such as water barring, de-compacting, removal of crossing culverts and fills, or recontouring (see the 2011 R5 Soil and Water Conservation Handbook, Chapter 10 Water Quality Management Handbook, Best Management Practice 2.1). These stabilization activities would occur after the project was implemented and the road was no longer needed for travel. See response to comment number 18878-16 about project funding for implementation.

Code	Comment Number	Comment Text	Response
232.05 - Water Quality	#18909-68	As stated in the Hydrology Report, page 22,"All streams in the project area are listed as impaired under section 303(d) of the Clean Water Act, which means that current conditions do not meet water quality standards and streams are not supporting their beneficial uses (USEPA 2010). The 303(d) list identified stream temperature and sediment as the pollutants causing impairment in small tributary streams." (Emphasis added). Project activities will adversely affect water quality in multiple ways. For example, for alternative 2, site scale effects to channel morphology are anticipated from infrastructure (DEIS, 204); and risk of sediment regime alteration and temperature regime alteration are increased for certain watersheds (DEIS p. 206). These negative impacts will be mitigated by treatment of legacy sites. Please explain how this approach is consistent with the following Watershed and Habitat Restoration Standard and Guideline contained in the NWFP Standards and Guidelines at C-37: "WR-3. Do not use mitigation or planned restoration as a substitute for preventing habitat degradation."	The Forest acknowledges that all streams in the project area are listed as impaired under Section 303(d) of the Clean Water Act. However, site-scale effects to channel morphology are not expected to adversely affect water quality as is stated in the comment. Results of cumulative watershed effects analysis indicate that no project area 5th field watersheds are moved in to the elevated risk (risk ratio > 1.0) category for adverse effects to hydrologic function or water quality as a result of implementation of Westside Fire Recovery project Alternative 2. Only the Beaver Creek 5th field watershed is at elevated risk per the Universal Soil Loss Equation and mass wasting cumulative watershed effects models post-fire, and the risk ratios are not increased when effects of Alternative 2 are included. In order for any action Alternative to be implemented it must include the Westside Fire Recovery Legacy Site Inventory and Treatment Plan. Inventory, prioritization, and treatment of legacy sediment sites is required by the North Coast Regional Water Quality Control Board for Total Maximum Daily Loads compliance, and is necessarily planned restoration.
232.05 - Water Quality	#18909-70	All streams in the project are impaired for temperature and thus are not meeting their beneficial uses related to water temperature. (See Hydrology Report, page 22). The Klamath Stream TMDL action plan allocates "no temperature increases year round" (Water Quality Control Plan for the North Coast Region, 4-96). (Emphasis added). Despite this, the DEIS and Resource Reports indicate that the project may increase river and stream temperatures. Table 3-22 at page 209 of the DEIS indicates that the "risk to temperature regimes" will be increased in Alternatives 2 through 5 as compared to Alternative 1. Specifically, nine additional 7th field watersheds will have a "moderate" risk to temperature regimes, and one additional 7th field watershed will have a "high" risk to temperature regimes in Alternatives 2 through 5 as compared to Alternative 1. This violates the Klamath Stream TMDL, which prohibits anthropogenic temperature increases.	The Forest acknowledges the information referenced from Table 3-22 of the draft EIS. The risk of temperature regime alteration was assessed in the project hydrology report as follows: Watersheds with less than 20% of the live vegetation affected by the fire or treatments in the project in the Riparian Reserves have a low risk of temperature regime alterations. Watersheds with between 20-50% live vegetation affected or a highly likely landslide likelihood have a moderate risk of temperature regime alteration. Watersheds with more than 50% of the live vegetation affected or an almost certain landslide likelihood have a high risk of temperature regime alterations. A low risk means that the stream temperatures will remain within the range of natural variability. A moderate risk means that the stream temperatures will be affected on the short-term until shrubs and hardwoods re-sprout in the Riparian Reserves. A high risk means that the temperature will be measurably affected and it will take more than 10 years to recover. Moderate risk watersheds are expected to recover due to streamside vegetation growth within the first few years.
232.05 - Water Quality	#18909-71	The DEIS, page 198, admits that the project will potentially cause loss of shade, stating that, The effects of the project on shade are estimated by intersecting the treatment areas likely to remove live vegetation with Riparian Reserves. These areas are assumed to have the potential for shade loss. Shade will not be lost over much of the treatment area because the treatments focus on removal of only dead or small live trees. However, large live trees may be felled for safety. So the areas are considered to have the potential to loss stream shading. (Emphasis added). This potential loss of shade violates the Klamath Stream TMDL action plan's "no temperature increase" requirement.	See response to number 18909-71.
232.05 - Water Quality	#18909-72	The KNF Stream Sediment Monitoring Report 2009 to 2012 Revised: April 11, 2013 lists the monitored managed streams with sediment indicators not meeting reference conditions. Modeling of project impacts show an increase in risk of increased sedimentation under the Preferred Alternative, but dismiss this increase as insignificant because "[t]he effects of alternative 2 do not change the risk categories for any watershed compared to alternative 1." The DEIS states: "The effects of alternative 2 do not change the risk categories for any watershed compared to alternative 1. The USLE model increases for nine watersheds and the mass-wasting model increase for seventeen watersheds. The risk ratio increase is less than 0.2 in all cases." DEIS page 204. However, as the Hydrology Report states at page 2, "Model results fall on a continuum…," and dispute not changing the risk categories, alternative 2 nonetheless does increase the risk of sedimentation. Furthermore, the DEIS acknowledges that the project will have "[p]otentially sizeable effects on sediment at the site scale." Page 70. The DEIS at page 218 also states: "New temporary roads, particularly temporary road stream crossings, have a high risk for affecting aquatic habitat indicators at the site scale because of their impacts on sediment regimes and drainage networks." DEIS, page 218. Any increase in sediment is contrary to the requirements of the Clean Water Act, since the streams and rivers in the area are already impaired for sediment and for temperature which is increased by additional sedimentation.	The Forest acknowledges that results of the stream sediment monitoring program indicate numerous managed streams in exceedance of reference conditions for in-channel sediment indicators. Results of cumulative watershed effects analysis do indicate that effects of Alternative 2 do not change the risk category for any project area 5th field watershed for any on the three component models (equivalent roaded area, universal soil loss equation, mass-wasting). Post-fire only the Beaver Creek 5th field watershed is in the elevated risk category (risk ratio > 1.0) and incorporating effects of Alternative 2 in the model does not change this risk level. The comment references model results for 7th field watersheds. For the equivalent roaded area model results comparing seventy seven 7th field watersheds the average increase in risk ratio between Alternative 1 (no action) and Alternative 2 is 0.04. This value is within the margin of error of the model and thus the results are interpreted to mean that implementation of Alternative 2 does not change risk to hydrologic function or water quality at the 7th field watershed scale. The exceptions were in Jessups Gulch, Whites Gulch, and Upper North Russian Creek where Alternative 2 produced risk ratio increases of 0.8, 0.3, and 0.3, respectively. These increased risks will be mitigated by Project Design Features and Best Management Practices for any action alternative.

Code	Comment Number	Comment Text	Response
232.05 - Water Quality	#18909-73	The Final SONCC Coho Recovery Plan at 2014. 3-13 states: One of the most important ecological requirements of coho salmon is cold, clean, well oxygenated water. Impaired water quality parameters in the SONCC coho salmon ESU include increased water temperature, changes in pH above or below optimum levels, reduced dissolved oxygen, increased nutrient loading, and increased extent or duration of turbidity. (Emphasis added). Studies have linked timber harvest with increases in turbidity harmful to salmonids. For example, "Logging and turbidity in the coastal watersheds of northern California,"3 a study indexing chronic turbidity in 28 watersheds in Del Norte, Humboldt, and Mendocino counties in California found that "[t]he rate of timber harvest…explained much of the large differences in chronic turbidity among the study watersheds, with drainage area playing a subordinate, but still significant role."(Klein et al. (2011), 7). This study notes that, "Stream biota, such as salmonids, suffer not only from turbidity extremes but also from chronic turbidity." (Klein et al. (2011), 1). However, the DEIS does not appear to have any discussion of the impacts of the extensive timber harvest proposed on turbidity. The DEIS only mentions turbidity impacts of water drafting (Aquatic Resources Report, page 52) and culvert upgrades (Aquatic Resources Report, page 54). It also notes the for many watersheds, turbidity levels are elevated an likely to remain elevated for years. (See, e.g., Aquatic Resources Report, pages 105, 111, 116, 133). Analysis of the project impacts on turbidity must be done.	While the project hydrology report does not explicitly use the term "turbidity" the assessment of the risk of turbidity is inherent in the analysis of risk of sediment regime alteration. Results of this analysis are presented in the project hydrology report and draft EIS and indicate that implementation of Alternative 2 does not affect risk at the 5th field watershed scale, is minor to indiscernible at the 7th field watershed scale, but will likely be detectable at the site-scale particularly as related to temporary road and landing use in hydrologic Riparian Reserves. However, these effects will be balanced in the mid- and long-term by implementation of the Westside Fire Recovery Legacy Site Inventory and Treatment Plan that will be included in any action Alternative.
232.05 - Water Quality	#18909-74	The Westside Project relies extensively on best management practices (BMPs) to mitigate impacts of the proposed logging to water quality. For example, the DEIS page 92 states: "Action alternatives (2 through 5) minimize negative effects of salvage through implementation of watershed project design features." Appendix D details BMPs "developed to comply with Section 208 of the Clean Water Act. " DEIS page 404. However, even well-implemented BMPs cannot completely eliminate erosion from harvested slopes and forest roads-and thus impacts to water quality. For example, in the study "The incidence and role of gullies after logging in a coastal redwood forest" (Reid et al. 201015), "[t]he distribution and morphological characteristics of channels were mapped in a redwood forest at Caspar Creek, California, USA, to evaluate the extent to which recent logging has influenced channel conditions in the area." Page 155. This study concludes: 15 Reid, L.M., Dewey, N.J., Lisle, T.E., Hilton, S., 2010. The incidence and role of gullies after logging in a coastal redwood forest. Geomorphology 117, 155-169. Because an appreciable portion of the increased sediment input at Caspar Creek is associated with hydrologic changes caused by logging and because a significant portion of the excess sediment is generated along channels in and downstream of the logged areas, the strategies most often used in the region to reduce sediment inputs from logging-control of road-related erosion and establishment of riparian buffer strips-are not effective for reducing an important component of the logging-related sediment input at Caspar Creek. Klamath National Forest 2012 BMPEP Report, page 4, reported that BMPs were effective 87% of the time in 2012. The Klamath National Forest should make clear whether the failure rate of BMPs are being taken into account when deciding how many sediment sites will be treated to mitigate the project's adverse water quality impacts-and, if not, the Forest should build the BMP failure rate into their mitigation plans. Because of the very large size of the project, we believe that there may be an even larger failure of BMPs than usual, because of the operational challenges of overseeing and carrying out a project of this scale. Thus, a safety margin should be included in the number of sediment sites that are treated to better offset the negative water quality impacts of the project.	The Forest concurs that even well-implemented Best Management Practices may not completely eliminate erosion from harvested slopes and forest roads. However, surface erosion from uplands and roads is not automatically delivered to stream channels. Project Design Features (project design feature) of Chapter 2 of the EIS that prohibit salvage harvest and significantly limit temporary road and landing activities in hydrologic Riparian Reserves are expected to protect riparian values without adverse effects to beneficial uses. In addition, the risk of road-related erosion and sedimentation will be reduced over the mid- and long-term with implementation of the Westside Fire Recovery Legacy Site Inventory and Treatment Plan as a part of any project action Alternative. Soil, hydrology and aquatic resource effects are discussed in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
232.05 - Water Quality	#18909-75	A total of 953 legacy sediment sites were inventoried within the project boundary." (DEIS page 201). However, only "approximately 150 legacy sediment sites will be repaired under any action alternative." (Hydrology Report at page 36). The DEIS fails to consider how the treatments in one watershed will offset the impacts of the entire project area. A much higher percentage of legacy sediment sites treatments within the project boundaries would be needed in order to make up for the adverse water quality affects. R5 FSH 2509.22 - Soil And Water Conservation Handbook, Chapter 10 - Water Quality Management Handbook states: NEPA analyses for timber harvest, fuels, vegetation management, engineering, and recreation activities that include ground-disturbing activities will include an inventory of controllable sediment discharge sources and other legacy sites that may affect water quality within project boundaries and along appurtenant Forest Service roads. The DEIS and resources reports fail to provide an inventory of all legacy sites in the project area.	The Forest acknowledges that not all inventoried legacy sediment sites in the project area are included in the Westside Fire Recovery Legacy Site Inventory and Treatment Plan. This is primarily due to funding and feasibility limitations. The Forest has evaluated watershed conditions and prioritized restoration at the Forest-wide scale. The Forest proposes to treat all of the legacy sites in Elk Creek in combination with the sites treated by the 2014 wildfires Burned Area Emergency Response. Several additional sites may be improved incidental to road work completed on haul routes. No other sites will be treated as part of the Waiver coverage for the Westside Fire Recovery Project. This approach completes some restoration work in each Total Maximum Daily Loads (Klamath, Scott, and Salmon Rivers), but focuses most of the future work and funding into the Forest's priority watersheds (Elk Creek). The complete inventory of legacy sediment sites while not published along with the draft EIS is available.
232.05 - Water Quality	#18909-84	This report at page 46 incorrectly asserts that, "Cutting of trees for salvage harvest will not occur within Riparian Reserves under all methods of removal (tractor, skyline and helicopter)." As the Geology Report, page 5, about 2,000 acres of salvage logging is proposed in Riparian Reserves and on page 237 of the DEIS it states that 3,920 acres of salvage units are on steep granitic land. Because the Aquatic Resources Report fails to assess the impacts of the proposed logging in Riparian Reserves on aquatic resources, the report is incomplete and the report must be revised to include analysis of the proposed salvage harvest in Riparian Reserves on aquatic resources. Furthermore, at page 9, the Aquatic Species Resources Report states that "The WSF Project Area includes three Key Watersheds: Elk Creek, Grider Creek and the North Fork Salmon River." However, in the DEIS, at page 7, four Key Watersheds are identified: Elk Creek, Grider Creek, North Fork Salmon River, and South Fork Salmon River. The inconsistencies throughout the NEPA analysis reiterate their insufficiency.	See Chapter 2 of the EIS for a description of proposed actions. The Forest acknowledges that some salvage harvest is proposed for geologic Riparian Reserves, however, no salvage harvest is proposed for hydrologic Riparian Reserves. The Aquatic Conservation Strategy Report assessed potential effects of vegetation treatments and temporary road and landing activities in Riparian Reserves, including the steep granitic land referenced in the comment. See Chapter 3 of the EIS for a summary or see the project record for the full Aquatic Conservation Strategy Report.
232.05 - Water Quality	#18912-2	In addition to warming water from drafting in a critical time, albedo affects from recently clear-cut and burned areas will be working simultaneously to warm these waters. The rush to begin cutting will exacerbate the warmth of these streams, before natural succession (or planting) has time to replenish riparian and hillside cover. To make matters even worse, many of the proposed stream crossings within the burn, as well as the new and re-commissioned roads are located at sediment legacy sites. While the proposal does mention that these sites tend to be outside of anadromy, anyone who has hiked in the Klamath Mountains knows that these streams flow from steep mountains and are high gradient. These streams have the capacity to carry sediment!	No salvage harvest is proposed for hydrologic Riparian Reserves thus natural post-fire vegetative succession will proceed along stream courses naturally. The comment does not make the link between the occurrence of legacy sediment sites at stream crossings and warming water. The Forest does acknowledged that Klamath Mountain streams can and do carry sediment. Sediment transport is a natural part of stream dynamics that creates pools, builds banks, and provides spawning gravel. The risk of road-related erosion and sedimentation will be reduced over the mid- and long-term with implementation of the Westside Fire Recovery Legacy Site Inventory and Treatment Plan that will be a part of any project action Alternative. For clarification, there are no recent clear cuts on lands managed by Klamath National Forest.
232.05 - Water Quality	#18912-4	While my heart is with the Salmon, Steelhead and Lamprey populations of the Klamath system, I think it also important to note that the amphibians in these headwaters streams are particularly fragile. Warming temperatures and changes in trophic processes from light intrusion of the stream (fire or logging based) can lead to bottom up control of the stream. More algae and cyanobacteria (with their toxins), more grazers and fewer Ephemeropterans and Plecopterans will greatly change the vertebrate communities i.e. the amphibians and resident fish species that are already extirpated from or ill suited for the main Klamath. I hope that more of these heritage watersheds are left uncut, with an emphasis on selective replanting, temperature and sediment control, and awareness of the myriad of biological responses to altering the physical characteristics of these environments.	Comments states an opinion with information that does not request a change in proposed actions or clarification in information provided. The proposed action complies with the Aquatic Conservation Strategy Objectives that promotes managing aquatic habitat for the long term persistence of aquatic species.
232.05 - Water Quality	#18918-11	I understand that the WFRP would bring a deterioration in habitat along more than 3000 acres of streamside along the Klamath River, Scott River, and North Fork Salmon Wild and Scenic Rivers, and proposes more damage along the proposed Wild and Scenic Rivers of Elk Creek, Grider Creek, and South Russian Creek Wild and Scenic Rivers. The combination of a lot of road-building under the WFRP, while combined with the considerable soil disruption leading toward siltation of salmon stream and river segments due to removal of lots of snags and older forests, will spell disaster for native salmon streams of Siskiyou County. Specifically examine what the WFRP means for the Spring Chinook run in the Salmon River.	The comment is not consistent with the findings documented for this project. Fisheries biologists analyzed and disclosed the likely effects of the project on salmon and their habitat as shown in the Aquatic Resources section of Chapter 3 of the EIS and in the Biological Assessment and addendum for Threatened, Endangered, and Proposed Fish Species. The effects to Coho salmon and its habitat (including that used by Spring Chinook Salmon in the Salmon River) were determined to be "May Affect Not Likely to Adversely Affect". Fisheries biologists worked with the interdisciplinary team and Deciding Official to minimize potential negative effects to fish and their habitat. The Forest Service consulted with National Marine Fisheries Service and agreed that all action Alternatives May Affect but is Not Likely to Adversely Affect Endangered Species Act-listed Coho salmon. Table 24 of the Aquatic Resource Report for the final EIS describes the effects to other aquatic species. See Response to comments 12364-22, 17393-1, 19076-13.

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232.05 - Water Quality	#18926-39	Water quality in the Klamath River, Scott River, and North Fork Salmon River is listed as impaired and is on the 303(d) Clean Water Act. While the DEIS is supposed to use plain language it skews and blurs actual effects through models and relies on unreliable mitigations and the treatment of a fraction of legacy sediment sites. For instance, models show an increase in risk but it is so slight it does not change the risk ratios. However, any increase in sediment is contrary to the intent of the Clean Water Act, the Basin Plan and the Magnuson-Stevens Fishery Conservation and Management Act.! ! The DEIS considers different indicators of risk for water quality including: risk to channel morphology, risk of sediment regime alteration, risk of temperature regime alteration and the trend of riparian function for fisheries. The project includes portions of eight watersheds: Beaver Creek; Humbug Creek-Klamath River; Horse Creek-Klamath River; Seiad Creek-Klamath River; Lower Scott River; Thompson Creek-Klamath River; Elk Creek; and North Fork Salmon River (the DEIS Aquatics section includes eleven watersheds) and seventy-five sub-watersheds that intersect portions of the three fire-related areas. Post-fire sediment has already been delivered to project areas streams such as Elk and Grider creeks during winter 2014-2015 storms.! ! Risk to Channel Morphology! There will be nine watersheds that will continue to have a moderate risk, and two with a high risk to channel morphology. Cumulative effect on risk to channel morphology would result in Jessups Gulch moving from a low to high risk.! ! Risk of Sediment Regime Alteration! Models show increases for nine watersheds and mass-wasting increase for seventeen watersheds. Site-scale alteration of the sediment regime is anticipated in some cases.! Cumulatively thirteen watersheds had an increase in risk and three for the mass-wasting. The largest increase was in Jessups Gulch.! ! Risk of Temperature Regime Alteration! Nine watersheds move to high risk, including Robinson Gulch. There are ten watersheds that move to a moderate risk, including Miller Gulch-Klamath River, Upper Grider Creek, Tom Martin Creek, Horse Creek-Klamath River, Headwaters of Elk Creek, Upper Elk Creek, Lower East Fork Elk Creek, Hoop & Devil, Lower South Russian Creek and Big Creek. Cumulative effects increased the shade loss potential for 19 more watersheds. Big Ferry-Swanson, Quigley's Cove, Doggett Creek and Dutch Creek had the largest increase in percentage of the watershed with shade loss potential! !	The models are intensive and require interpretation. The Biological Assessment for Fish, including the appendices, and the Aquatic Resource Report provide an interpretation as to what the potential effects mean to aquatic organisms of concern. See response to comment number 18878-48. The Forest acknowledges the 303(d) listing of streams in the Klamath, Scott, and North Fork Salmon Rivers. Analysis and planning to support the Westside Fire Recovery project employed an established Cumulative Watershed Effects modeling process that was described in detail in a 2004 Forest process paper and also in the Westside Fire Recovery project Hydrology Report. Use of cfs models is not intended to "blur actual effects", but rather to integrate forest management and disturbance (wildfire) activities over space and time (past, present, and reasonably foreseeable future activities) to better understand existing and potential levels of risk to hydrologic function and water quality at various watershed scales. Project Design Features are not "unreliable mitigations" but rather are based on existing Forest Service Pacific Southwest Region Best Management Practices. While the Westside Fire Recovery project Legacy Site Inventory and Treatment Plan does not treat all legacy sediment sites in the project area implementation of this plan as a part of any project action Alternative will result in reduced risk of road-related erosion and sedimentation in the priority watershed of Elk Creek and the receiving Klamath River. Results of cfs modeling indicate that risk to hydrologic function and water quality, as assessed by watershed risk ratio, is not increased by any project action Alternative at the 5th field watershed scale. Equivalent Roaded Area (ERA) risk ratios are only increased by more than a value of 0.2 under Alternative 2 for three 7th field watersheds. The Forest acknowledges that post-fire sediment was delivered to Elk and Grider Creeks during the winter of 2014-15. Post-fire erosion and sedimentation is a natural process in the Klamath Mountains, and fish and other aquatic species have evolved with these watershed processes. Comment references low, moderate, and high risk "categories" that were erroneously utilized in the draft EIS Hydrology Report but were revised to "low risk" and "elevated risk" in the Amendment to the Hydrology Report. Regardless, results of the cfs models indicate that cumulative effects of project action Alternatives are indiscernible from 2014 wildfire effects at the 5th field watershed scale, and minor to indiscernible at the 7th field watershed scale (with the exception of Jessups Gulch). Any action Alternative will employ Project Design Features (project design feature) to minimize potential site-scale and local adverse effects to hydrologic function and water quality.
232.05 - Water Quality	#18934-11	Use of Roads & Roadside Hazard Tree Removal Although the Klamath National Forest was able to obtain agreement from the North Coast Regional Water Quality Control Board that allows deviation from the typical requirement to treat legacy sites on road networks simultaneously with project activities, the Westside project will have considerable impacts involving erosion and sedimentation from these legacy road networks. It is insufficient to treat a small subset of the most easily managed legacy sites rather than correct known issues at all legacy sites in the project area, especially considering the scope and scape of the project. The Westside project clearly prioritizes resource extraction over resource protection and its failure to adequately address legacy sites is a prime example of this. Decommissioned roads are just that: roads that have been removed from the National Forest system and "put to bed." They should be considered non-existent and not as avenues to reopen (sometimes with considerable impact) whenever there is a desire to return them to use, however temporarily. Project activities should utilize only existing NFTS roads without creating any new roadways (even temporary) or reopening decommissioned roads. This is of particular applicability to Grider Creek, Walker Creek, and the West Fork of Whites Gulch where several decommissioned roads are planned for reconstruction and use. These areas are located on steep, highly erosive decomposed granite and, in fact, this susceptibility to erosion and problems with sedimentation were the reason that these roads were removed from the road system and decommissioned. Roadside hazard tree removal should be limited to roads depicted in the Motor Vehicle Use Map and key roads needed for administrative purposes. These are the roadways used by the public and the ones needed to perform standard forest management activities. Maintenance level 1 & 2 roads do not need hazard tree removal since they are virtually unused. Opening closed roads to perform hazard tree removal is illogical for obvious reasons and should be eliminated from the proposed project. The Karuk Alternative does an excellent job of carefully selecting roads that should receive roadside hazard removal and fuels reduction treatments by prioritizing main access routes, roads to trailheads and locations of importance, as well as roads that are critical for strategic fuel breaks for both reintroduction of prescribed fire at the landscape level and/or	The purpose and need for this project was driven by the 2014 wildfires. There is a need for worker and public safety and access, there is a need for safe conditions for firefighters performing fire suppression for community protection, there is a need for a project that is economically viable, meeting project objectives and benefiting our local communities, and there is a need for restored and fire-resilient forested ecosystems. To meet those objectives, opening decommissioned road has been proposed and evaluated through modeling, field review, and professional judgment. The hydrologist found that watershed effects from the action Alternatives would be indistinguishable from the effects of the wildfire, and in the long term, it is anticipated that the proposed actions benefit watershed conditions and beneficial uses. Any Westside Fire Recovery action Alternative requires implementation of the Westside Fire Recovery project Legacy Site Inventory and Treatment Plan. This plan is not simply direction to treat the most easily managed legacy sites, but rather, was developed from pre-existing inventories and prioritization of legacy sediment sites. Legacy Site treatments in the Westside Fire Recovery project plan include diversion prevention, culvert upgrade, aquatic organism passage, infrastructure repair, and fill removal/reduction. The re-opening of decommissioned roads by the Westside Fire Recovery project is limited to an estimated 0.2 miles within hydrologic Riparian Reserves. Re-opening of any decommissioned roads will be done to current Forest Service standards, will employ erosion control Best Management Practices, and the road segments will be returned to the same (or better condition) with regard to hydrologic risk after use. Maintenance Level 2 roads are used by the public with high-clearance vehicles and Level 1 roads are used for forest management and fire suppression, for example. As such, hazard tree abatement along these roads will be a benefit. The Forest has consulted with the Karuk Tribe on development of the Westside Fire Recovery project. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
		for use in fire suppression or management in future wildfires.	
232.05 - Water Quality	#19072-1	In reviewing and analyzing the preferred alternative (Alternative 2), we are concerned that this alternative proposes activities with potential impacts to water quality that will not be mitigated to Jess than significant. Although this letter does not serve as a final determination, Regional Water Board staff currently does not believe that the Alternative 2 project would be eligible for coverage under Order No. RI-2010-0029, Waiver of Waste Discharge Requirements For Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region (Waiver). It is possible that Alternative 4, with some modifications, may be eligible for Waiver coverage. A final determination cannot be made until the final EIS with the alternatives is prepared and finalized and a Decision is issued. We will outline our concerns below.	Consultation with the Water Quality Control Board is ongoing. The Forest will follow the agreed upon procedures with the Water Quality Control Board to apply for Waiver coverage following a Decision for this project.
232.05 - Water Quality	#19072-2	The Waiver waives certain activities conducted on NFS lands from the waste discharge requirements of Article 4 (commencing with Section 13260) of Chapter 4, Division 7 of the California Water Code, except as provided within the Waiver. In order to receive coverage under the Waiver, projects must meet specific eligibility criteria and conditions. Projects are defined as Waiver Category A (lower threat to water quality) or Category B projects depending on the risks of water quality impacts. The Westside Fire Recovery Project is considered a Category B project because it is a timber harvest project. Condition number 14 on page 16 of the Waiver states, "Compliance With Waiver conditions will ensure that no significant environment impact to water quality occurs from an activity covered by this Waiver.· Activities that have potentially significant impacts to water quality that cannot be reduced to less than significant levels are not eligible for coverage under this Waiver and the USFS will need to submit a Report of Waste Discharge to the Regional Water Board." Our staff analysis of Alternative 2 suggests that potential impacts to water quality have not been mitigated to less than significant levels for the following reasons:	Consultation with the Water Quality Control Board is ongoing. The Forest will follow the agreed upon procedures with the Water Quality Control Board to apply for Waiver coverage following a Decision for this project.

Code	Comment Number	Comment Text	Response
232.05 - Water Quality	#3678-23	Water Quality – No Action direct and indirect effects "Over the long-term, the fuel load conditions will lead to fire intensity and flame lengths that are conducive to major fire runs, crown fires, and spotting. The large fuels component (greater than 3 inches) will lead to an elevated fire intensity and duration of fire on the landscape if it should re-burn. In 10 years, the conditions under alternative 1 will lead to nine percent of the area having flame lengths greater than 11 feet. Sixty percent of the treatment area is likely to experience flame lengths between 4 and 11 feet and thirty-one percent is likely to have flame lengths of less than 4 feet. (See fire and fuels report). High flame lengths are associate with high severity fire and will contribute to accelerated sediment delivery(DeBano et al. 2005), increased stream temperatures (Pabst and Spies 2001)and stream flows (Neary, et al. 2005a)and increased potential for the introduction of toxic chemicals from fire retardant application during future fire suppression efforts(Neary, et al. 2005b)."	Comment is a quote from the Hydrology Report that recognizes an effect of No Action.
232.06 - Watershed Condition	#10450-1	California forests are much too endangered by drought to allow short-sighted, profit-for-this-quarter, exploitation. It is essential to leave these watersheds undisturbed. The economic costs of mismanaging the watersheds can far exceed the quick profits available from logging. Please follow the rules and common sense by continuing to protect California watersheds from logging.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment 6646 and 6271-1. . See response to comments 17393-1 and number 18852-48. Taking No Action has negative consequences for fish and watershed conditions also. Page 16 of the Hydrology Report states, "Over the long-term, the fuel load conditions will lead to fire intensity and flame lengths that are conducive to major fire runs, crown fires, and spotting. The large fuels component (greater than 3 inches) will lead to an elevated fire intensity and duration of fire on the landscape if it should re-burn. In 10 years, the conditions under Alternative 1 will lead to nine percent of the area having flame lengths greater than 11 feet. Sixty percent of the treatment area is likely to experience flame lengths between 4 and 11 feet and thirty-one percent is likely to have flame lengths of less than 4 feet. (See fire and fuels report). High flame lengths are associate with high severity fire and will contribute to accelerated sediment delivery (DeBano et al. 2005), increased stream temperatures (Pabst and Spies 2001)and stream flows (Neary, et al. 2005a)and increased potential for the introduction of toxic chemicals from fire retardant application during future fire suppression efforts (Neary, et al. 2005b)." Alternative 1 will allow for passive recovery of vegetation in the watersheds which will be slower than if treatment, including planting, would occur. The extended duration of decreased interception, use of water by plants, and ground cover will extend the risk to channel morphology over the long-term. The No-action Alternative displays the effects of leaving the watersheds treated.
232.06 - Watershed Condition	#12346-20	Page 35 of the ACSOR acknowledges that "[s]ite scale impacts are direct impacts to bank and stream bottom such as from stream crossings on temporary roads." Numerous stream crossings are associated with proposed post-fire road construction. "There are temporary road crossings proposed which will directly affect the bank and channel integrity at the site scale. The banks will likely show effects of temporary crossings for the long-term." ACSOR. Long-term direct impacts to bank integrity violates ACSO 3. Page 35 of the ACSOR also indicates that "[g]round based salvage units with Riparian Reserves may involve crossing dry intermittent stream channels which could have a site scale effect on banks and aquatic integrity." Rather than disclose and analyze the location and effects of such crossings, the Forest Service relies entirely on generic BMPs and PDFs to mitigate (rather than avoid, or analyze) the negative environmental consequences.	The comment is correct that described in the Aquatic Conservation Strategy Report and Amendment, several stream crossings included in temporary road actions would have site level impacts to stream banks. In Modified Alternative 3, two perennial stream crossings and two intermittent stream crossings on temporary roads are included. One of the perennial crossings involved has not been appropriately hydrologically stabilized, and therefore the current condition is a legacy sediment site or risk to water quality. Because the project would address this legacy site after the road is used, the current and future condition of stream bed and banks would be improved and restored. For the other perennial crossing, and the two intermittent crossings, there are no legacy sediment sites present. These crossings are on old road beds that were decommissioned about 10-13 years ago. At these crossings, stream banks continue to show site level effects of the former crossings even though they have been appropriately hydrologically stabilized. Although there are some lingering effects to natural hillslope processes from these former roadbeds and crossings, they do not translate into meaningful negative impacts to aquatic resources or the distribution and abundance of aquatic species. The project will involve temporary site level impacts to aquatic habitat at these crossings and those impacts have been disclosed. Because project use would be temporary and the crossings would be again appropriately hydrologically stabilized after use, the current condition at these sites will be maintained and restored. At this point in the planning process it is not clear if any dry stream channel crossings within ground based units will be necessary, or where. These crossings involve low risk of impacting aquatic resources down stream and they must be designated by Forest Service representatives who seek input from watershed specialists and follow Best Management Practice guidelines that have been shown to be effective in minimizing potential site level disturbance and potential erosion related effects. See response to comment number 18909-83.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#12346-24	Page 219 of the DEIS acknowledges that the Forest Service proposes to take actions such that streams will "be negatively affected by temporary road actions and landings" in eight watersheds.	As described in the draft EIS for Alternative 2, there would have been short term negative effects to aquatic resources in Doggett Creek and a face drainage to Beaver Creek from use of these temporary roads, but long term benefits to water quality through addressing sediment sources on these road beds. Modified Alternative 2 drops these temporary road actions and therefore would result in less short term negative effects related to roads and sediment production, however, the opportunity to reduce sedimentation from these old road beds long-term would be foregone. Effects from Modified Alternative 2 from temporary road construction would be discountable to habitat indicators and minor to aquatic species. Modified Alternative 2 would remove three landings from use in the Beaver Fire area; as with all the Alternatives, there are no new landings in Riparian Reserves proposed in Beaver Fire area. The effects described for landings in the draft EIS Aquatic Resources Report would be reduced with Modified Alternative 2. The cfs modelling indicates that landings proposed under Alternative 2 would not add incremental increases to disturbance at the 5th-field watershed scale, and only a slight incremental increase in some watersheds at the 7th-field scale. Modified Alternative 2 further reduces the effects of landings that were described for Alternative 2 in the draft EIS Aquatic Resources Report. Due to project design project design features that would be implemented to minimize site scale effects, and due to reduced acreage of landings in the Beaver Fire area, effects of landings on habitat indicators would be reduced but similar to those described in the draft EIS. Modified Alternative 2 is similar to Alternative 2 (described in the draft EIS Aquatic Resources Report) within the Beaver Fire area with respect to the potential for indirect effects to aquatic resources from landings. Effects to habitat indicators would be discountable and effects to aquatic species would be minor.
232.06 - Watershed Condition	#12346-25	Page 220 of the DEIS indicates that the Forest Service intends to move watersheds away from attainment of ACS objectives such that "short term negative effects to aquatic habitat may occur in several stream reaches due to the project." Page 41 of the ACSOR acknowledges that the North Fork Salmon River, the Scott River and the Klamath River are 303(d) listed under the Clean Water Act for temperature and that TMDLs have been established to limit sediment pollution into these river systems. Page 42 of the ACSOR indicates that "roadside harvest may affect shade in areas where green hazard trees would be removed in the riparian reserve. This may affect shade at the site scale…" It is a violation of the Clean Water Act (and the ACS) to "affect shade at the site scale" of 303(d) listed watersheds. Page 42 of the ACSOR also indicates that the "effects to shade from temporary road actions in Riparian Reserves will likely be at the crossings and very localized." Interestingly, this section of the ACSOR declines to mention the link between sediment production from road construction and stream temperature. The Forest Service again 10 relies upon the assumption that it may violate the ACS at the localized scale as long as the agency doesn't degrade the entire watershed in one action.	The intent of the Westside Fire Recovery project is not to "move watersheds away from attainment of Aquatic Conservation Strategy objectives" as the comment states, but rather to reduce hazardous fuels and hazard trees, recover economic value, and restore forests following the 2014 wildfires. The draft EIS states that "these effects to habitat are likely restricted to within the first year post project". As the comment indicates, project documents describe inclusion of the Salmon, Scott, and Klamath Rivers on the state 303(d) list of impaired waters and the existing Total Maximum Daily Loads for these watersheds. Green hazard tree removal could have effects on Riparian Reserves shade as the comment suggests. However, green roadside hazard trees are infrequent and loss of shade from their removal will not be significant enough to result in increased stream temperatures. The comment erroneously states that it is a violation of the Clean Water Act to affect shade at the site scale in 303(d) listed watersheds. Rather, compliance (or violation) of the Clean Water Act depends on beneficial use support. Support of beneficial uses in project watersheds are not expected to be prevented by the removal of infrequent green roadside hazard trees in Riparian Reserves. The comment states a link between sediment production from road construction and stream temperatures. Such a link is not expected to be manifest relative to Westside Fire Recovery project temporary roads as they are typically located outside of Riparian Reserves, and project area channels are typically steep and not at risk for aggradation and widening and subsequent increased solar insolation and temperature increases. Page 220 is the section describing cumulative effects, such as those related to past, present and future foreseeable actions. Relative past actions are accounted for in the cfs modelling. The impact described on page 220 is related to ongoing private timber harvest: "Additive effects related to sediment delivery to streams are likely only as a result of private timber harvest, particularly in Doggett Creek." The Forest water, earth, and fish scientists worked together to protect beneficial uses for all action Alternatives. Alternative 2 was modified to reduce impacts (see response to comment number 12346-24) to the extent possible while meeting long term goals. Removal of hazard trees (roadside harvest) is a safety issue. The effects are evaluated at the site scale (some loss of shade is possible) and the 5th field watersheds, see Aquatic Conservation Strategy Report). The loss of shade at the site is not likely to change stream temperature at the 5th field scale because there are few places where stream shade is reduced. Since only fire-killed trees are being removed, shade is not affected in the long term. The Addendum to the Aquatic Resource Report acknowledges the risk of change in temperature as well as the link to sediment: Shade in Riparian Reserves protected by project design project design features which minimize effects of roadside hazard, temp road and landing, and fuels treatments resulting in discountable negative effects. Sedimentation can affect temps – see above for sediment impacts. Refer to the Aquatic Conservation Strategy Report that analyzes effects at the site and 5th field scales and in the long and short term. Also see response to comment 18296-37. The hydrology report explains that increased in temperature and sediment will be indistinguishable from the effects of the 2014 wildfire, and there are beneficial effects from the action Alternatives. If Aquatic Conservation Strategy compliance was managed at the site scale, one could reasonably argue that hiking on a trail, swimming in a river, taking water from a creek when backpacking, or clearing a spot for a tent would not comply.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#12346-27	Similarly, page 48 of the ACSOR attempts to define away the impacts of roadside logging in Riparian Reserves by contending that based on "design features for hazard tree removal that require hazard trees to be left on site in near-stream zones, and field review of hazard tree removal areas, hazard tree abatement along roadsides will have discountable effects to sediment regimes." In fact, there are no "design features" that prohibit the removal of the majority of hazard trees (those smaller than 26" DBH) in any Riparian Reserves and only fish-bearing streams will retain hazard trees greater than 26" DBH on site which will do nothing to reduce sediment production from yarding large diameter trees in headwater non-fish bearing streams that exist upstream of fish habitat. "At the site scale [road stream] crossings may increase sediment delivered to streams." ACSOR at 48. It is precisely this result that the ACS and the CWA seek to prevent. 11 "[L]andings constructed within Riparian Reserves has (sic) a high risk of impacts to sediment supply and delivery at the site-scale. At the site scale new landings in Riparian Reserves may delivered (sic) to streams" ACSOR at 49. Such impacts violate the ACS and the CWA for these 303(d) listed streams. The KNF is proposing multiple actions that will add to the cumulative and synergistic degradation of 303(d) listed streams through additional sediment production. For instance, page 49 of the ACSOR states that in the Horse Creek Watershed "[p]roposed ground based harvest and one temporary road action are likely to result in short term site level impacts to sediment in Doggett Creek during implementation and post project storms. These impacts would be additive to current and future sediment related impacts in this watershed due to heave fire impacts and private timber harvest (and associated road building).	Between draft and final, several additions were made to the ACS assessment to clarify impacts. Also, landing configurations and have changed, as have use of roads. The ACS assessment in the FEIS reflects these modifications. As a matter of interpretation, nothing in the ACS prohibits site scale impacts from an action. The ACS prohibits site scale impacts that prevent attainment of ACS objectives. The comment as written provides no information other than opinions to demonstrate the ACS objectives would not be achieved. In order to ensure those objectives are achieved, the Forest Plan provides Standards and Guidelines for activities in Riparian Reserves. The Westside Fire Recovery Project complies with those Standards and Guidelines. The Forest Supervisor will determine whether the Project meets, does not prevent, or fails to achieve the ACS objectives. See also response to 5873-142.
232.06 - Watershed Condition	#12346-30	The Forest Service is proposing roadside logging (and yarding) in Riparian Reserves throughout the project area. The agency is also proposing landing construction and new road construction in Riparian Reserves. Additionally the Forest Service is proposing to establish yarding corridors through and across hydrological Riparian Reserves. All of these activities will remove forest structure (standing live, dying and dead trees called snags, future down wood and canopy cover) that contribute to terrestrial and riparian plant communities and ecosystems. Page 31 of the Botanical Resources Report indicates that implementation of the logging project would involve "[t]he creation of roads and landings [that would] indirectly increase short-term sedimentation of springs and headwater causing a more precipitous decline in potential [Sensitive lichen] population viability." Page 56 of the ACSOR indicates that in recovering post-fire Riparian Reserves that the proposed "removal of green hazard trees may have a minor short-term effect on site scale species recruitment and thus composition because a potential seed source would be removed." Page 56 of the ACSOR incorrectly contends that the effects of hazard tree removal on forest structural diversity will be minor because large hazardous trees "felled within Riparian Reserves will be left on site and thus continue to contribute to structural diversity." In fact the Forest Service is proposing to remove such structural diversity in the Reserves for all non-fish bearing streams, which comprise the majority of Riparian Reserves in the project area. The 5th field Watershed Analysis for ACSO 8 (starting at page 58 of the ACSOR) relies upon the assumption that all roadside trees greater than 16" DBH will be retained on site. This assumption is incorrect. In fact all hazard trees up to 26" inches will be removed in all Riparian Reserves and all hazard trees regardless of size will be removed most Riparian Reserves. Hence the ACSOR analysis rests on a false assumption.	Fisheries, earth, and water scientists analyzed the effects of project activities and developed Project Design Features to protect riparian and aquatic resources. See Aquatic Conservation Strategy Report, Biological Assessment for Fish, EIS Chapter 3 - Aquatic Resources section, and the Aquatic Resource Report and addendum for the final EIS. If no action is taken, the watersheds with a high risk of temperature regime alterations, without artificial regeneration that is proposed in the action Alternatives, will have an extended duration of elevated risk. Natural regeneration will occur, but in general it will be more than 80 years to get trees with 10 inch diameters at breast height in areas burned with high and moderate severity (draft EIS page 202-203). For landslide risk, the Geology Report states: There is a reduction in the duration of elevated risk due to planting for nine watersheds compared to Alternative 1 [No Action]. The reduction in duration of elevated risk will benefit natural resources and infrastructure in the long-term. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#12346-31	By removing large wood from non-fish bearing hydrological Riparian Reserves the Forest Service will directly negatively impact populations of invertebrate riparian dependent species. Landing construction and new road construction in hydrological Riparian Reserves will also negatively affect invertebrate the riparian dependent species that this ACSO is designed to protect. Sediment production from upslope salvage logging activities will also negatively impact invertebrate riparian dependent species in the project area. Geological Riparian Reserves The Klamath National Forest proposes to ignore the NWFP ACS objectives for designated Geological Riparian Reserves in order to facilitate proposed salvage logging. Several action alternatives call for re-constructing and widening road 46N62 in the Caroline Creek Watershed. This action would necessitate mid-upper slope channel crossings, construction through debris flows and construction above an active landslide. DEIS page 218. Indeed, "proposed reconstruction of this segment could add weight to the head of the landslide which could cause it to re-activate if a landslide producing storm should occur before vegetation is reestablished." Ibid. "Reopening the mid slope decommissioned road in Caroline Creek-Klamath River drainage may have short term adverse effects to aquatic habitat in Gard Creek, Caroline Creek, and the Klamath River." ACSOR page 50. Interestingly, page 46 of the ACSOR describes the very practices proposed above as the types of activities that the Forest Service has learned to avoid: "A majority of the legacy sediment sites are associated with the road system, most of which was constructed in the 1960s and 1970s prior to modern best management practices…Road construction often did not avoid unstable slopes or riparian areas that are protected by today's BMPs." While an action alternative was (wisely) developed to avoid the effects of road construction described above, there is no guarantee that the Forest Service will select it. Indeed, all of the Forest Service action alternatives propose salvage logging and roadside logging on "steep weathered granitic lands" and "unstable lands considered to be Geological Riparian Reserves." DEIS page 101. Page 68 of the DEIS indicates that 57% of the project area in which the logging project is located has a "high erosion hazard rating" and page 101 acknowledges that 2,000 acres of salvage unit logging, 4,400 acres of roadside logging and 3,900 acres of fuel hazard treatments are proposed on "unstable lands considered to be Geological Riparian Reserves." The NW Forest Plan does not permit the Forest Service to conduct logging and road construction in unstable Geological Reserves. In 2007 the 9th Circuit Court found that "[p]ursuant to the ACS, (and thus the NWFP), lands that are "potentially unstable" must 14 be designated and managed as Riparian Reserve. ONRC v. Goodman, 13069. In the Westside Salvage Logging Project the Forest Service is not managing unstable designated Geological Riparian Reserves as Reserves. While hydrological Riparian Reserves are not proposed for salvage unit logging and (some) have a diameter limit to retain large diameter snags and future coarse woody debris, the KNF is proposing to log and yard unstable Geological Riparian as if they were instead designated as the matrix timber land use allocation.	Salvage will not occur in hydrologic Riparian Reserves unless there is a safety risk. Standard and Guideline MA10-58 says: Fell trees in Riparian Reserves when they pose a safety risk. Keep felled trees on-site when needed to meet Coarse Woody Debris objectives. Aquatic Conservation Strategy does not prohibit silviculture activities in Riparian Reserves. See response to comment 18852.48. Also see response to comment number 12364-1.
232.06 - Watershed Condition	#17112-4	The DEIS states that "Alternative 2 proposes construction or reconstruction of temporary roads, installation and removal of stream crossings, and construction of log landings in Riparian Reserves" (Chapter 3, p. 201-202). This seems counter-intuitive to the established goal of protecting riparian reserves, since salvage logging has already been excluded from these areas, and only hand-methods of site preparation will be used. The additional disturbance created by the construction of roads, stream crossings, and landing sites will undermine the Forest Service's efforts to minimize disturbance in these areas. It is recommended that alternative sites for roads and landings be established, if possible. Some stream crossings are inevitable, but they should be minimized in number and placed strategically to provide access to the greatest possible area of the treatment unit while minimizing adverse effects on Riparian Reserves.	Site reviews and professional judgment by fish and water scientists helped determine necessary Project Design Features for actions in Riparian Reserves. See Chapter 2 of the draft EIS for Project Design Features, especially project design project design features for Watershed-22 and 23. Also see response to comment 173403-1 for a description of Alternative 4 that was developed to reduce road construction.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#17387-12	Do not construct any new roads or landings. These watersheds have too much disturbance from the high severity fire - watch cumulative watershed effects.	See response to number 12346-32 and 12354-6 for road construction. There would be no difference in cumulative watershed effects between the action Alternatives due to road construction because no new roads are being constructed and temporary roads would be closed and hydrologically stabilized following project implementation. Analysis of the No-action Alternative displays the effects of not constructing any new roads. New road construction is reduced to two miles in Alternative 4 and one mile in Alternative 5. Cumulative watershed effects were analyzed and are displayed in the Water Quality section of Chapter 3 of the EIS. Also see response to comment 173403-1 for a description of Alternative 4 that was developed to reduce road construction and includes a description of some of the trade-offs.
232.06 - Watershed Condition	#18845-1	Please do not approve the massive logging project on the Klamath River. It will destroy the watershed	Chapter 3 of the EIS displays the effects of implementing the No-action Alternative. Position statement; see response to Comment number 16695-4.
232.06 - Watershed Condition	#18852-24	6) Physical disturbance to sensitive watersheds (i.e. salvage logging) as expressed by the total percentage of watershed area proposed for resource extraction (i.e. Walker Creek) is excessive and exacerbates areas which are already categorized as impaired. Previous land management plans have determined that these watersheds are incapable of sustaining such intensive treatments (i.e. USFS, 1997 flood review).	Project Design Features prohibit salvage harvest in most sensitive areas to watershed disturbance including stream course Riparian Reserves, inner gorge, active landslides and landslide toe zones. Even though salvage harvest may occur in deeply weathered and dissected granitic terrain, project design features prohibit the use of ground-based yarding and require full-suspension cable or helicopter yarding to minimize ground disturbance in these areas. Most of the deeply weathered and dissected granitic terrain includes stream course Riparian Reserves and inner gorges that will not be harvested. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed which in turn results in less ground-disturbance.
232.06 - Watershed Condition	#18852-55	National Forest Management Act 1976 Timber will be harvested from National Forest lands "only where..soil, slope or other watershed conditions will not be irreversibly damaged. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment, where harvest are likely to seriously and adversely affect water conditions or fish habitat."	Quote from NFMA - not substantive
232.06 - Watershed Condition	#18878-89	de la Fuente, Juan, and Elder, Don, 1997. The Flood of 1997 Klamath National Forest Phase 1 Final Report: November 24, 1998 USDA Forest Service Klamath National Forest, Internal Document. PROCEEDINGS of the Eighth Federal Interagency Sedimentation Conference (8thFISC), April 2-6, 2006, Reno, NV, USA JFIC, 2006 http://pubs.usgs.gov/misc/FISC 1947-2006/pdf/lst-7thFISCsCD/ 8thFISC/Poster de la Fuente.pdf	There is no comment only a citation - not substantive

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18909-128	It is interesting to note that during the 1997 flood event that slope aspect and slope greatly influenced landslide behavior. Roads undoubtedly have the greatest effects on slope stability. Rock pits, waste areas and timber landings behave similar to roads and involve the same types of features on the landscape (fills, cuts, and surface drainage features). However, they are often much larger. As a result, they can have significant effects on flood processes. The DEIS fails to adequately consider peak flows, floods, and as stated above, floodplains throughout the project area. The steep and unstable watersheds in the project area have seen multiple severe weather events. It would be wise for the KNF to learn from the past. Quoted below (emphasis added) is the KNF Flood of 1997 Phase 1 Final Report by Juan De La Fuente and Don Elder: Page 13, "Flood effects were greatest in their headwaters of Walker, Deep, Ukonom, Tompkins, Grider, Kelsey, Middle, Portuguese, and Elk Creeks. These all experienced many landslides in headwaters, and debris flows in many of the tributary channels. Similar, but less severe effects occurred in the headwaters of Beaver, Thompson, and Indian Creeks." Page 10, "Estimated recurrence intervals for these peaks ranged from 16 years at Indian Creek (near Happy Camp), to 37 years at Salmon River. The recurrence interval for the 1997 Flood was 14 years on Scott River, 32 years on the Shasta River, 15 years on the Klamath River at Seiad, and 18 years on the Klamath River at Orleans." Page 25, "Nonetheless, the concentration of road damage and flood altered channels in localized areas such as around Lake Mountain and upper Elk and Ukonorn Creeks suggests that intense storm cells or variations in snowmelt did in fact occur. The Lake Mountain area experienced the most severe flood effects on the Klamath Forest (Map 10). This area is drained by Kelsey, Deep, Middle, and Tompkins Creeks, (tributaries to the Scott River), and Grider, and Walker Creeks (tributaries to the Klamath River above the Seiad). The peak flow in the Scott River had a 14 year recurrence interval, and the peak in the Klamath River below Seiad had a 15 year recurrence interval (Map 5). By contrast, the Salmon River experienced a peak flow with a much higher recurrence interval (37 years), but landsliding, channel alteration, and road damage there was much less severe than in the Lake Mountain Area." Page 18, "The flood of 1997 involved the movement of soil, rock, and organic debris from hillslopes to stream channels at a scale not experienced since 1974 (the most recent landslide episode) on the Klamath National Forest. Approximately 1100 landslides were identified in Phase I. Air photo inventory identified about 446 miles of stream channels which were altered (scour, deposition, or removal of riparian vegetation) by the flood." Page 18, "Field observations revealed that landsliding was the dominant hillslope process associated with the flood. However, evidence of surface erosion was observed locally, primarily on poorly vegetated sites and on road cuts and fills. Scour and deposition are evident in many ephemeral channels which lacked these features prior to the flood. Large (about 20 acres) slumps and earthflows occurred in the Walker, Tompkins, Kelsey, and Thompson Creek watersheds." The largest of these originated on the toe zones of reactivated slumps and earthflows high in the watersheds. One on Road 46N6 1 in Walker Creek (Photos 4a & 4b) mobilized more than 300,000 cubic yards of material." Page 19, "With the exception of Deep and Walker Creeks, most streams retained the majority of their 30 year old (post-1964 flood) alder stands growing within andjadjacent to channels. These stands served to trap sediment and large logs. Streams such as Grider, Walker, Kelsey, Deep, Middle, Tompkins, and Ukonom Creeks delivered large volumes of sediment to the Klamath River, where remnants are still visible for a considerable distance downstream of their moliths."	The comment appears to reference information regarding the 1997 flood. For the Westside Fire Recovery Project , the hydrology report and Biological Assessment for Fish, and water and aquatic resources sections of Chapter 3 addresses existing conditions and project effects on peak flows, floods and floodplains.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18909-129	Page 21 and 22, "Most of the field observations and temperature data presented here were provided by Jon Grunbaum. A total of 446 miles of altered channel were identified by air photo inventory within the air photo study area. In addition roughly 90 miles of the Klamath, Scott, and Salmon Rivers were altered within the photo area. Channel alterations were most severe in Walker and Deep Creeks, where major debris flows traversed the entire channel length. In these streams, the floodplain was significantly altered and most of the riparian vegetation removed. The alluvial fan at the mouth of Walker Creek was built up considerably. Effects were less pronounced at Tompkins, Grider, Kelsey, and Indian Creeks." Page 22, "Based on observations of fisheries personnel, there appeared to be considerable reduction in size, volume, and depth of pools in Elk, Indian, Beaver, Grider, Tompkins, South Fork Salmon, and Walker Creeks, and there is a larger proportion of fine sediment in the substrate. Alluvial reaches were made shallower and wider due to sedimentation." Page 25 and 26, "To date, no definitive correlations have been identified which link variations in precipitation intensity, snowpack, or peak flows to variation in severity of flood effects. Nonetheless, the concentration of road damage and flood altered channels in localized areas such as around Lake Mountain and upper Elk and Ukonom Creeks suggests that intense storm cells or variations in snowmelt did in fact occur. The Lake Mountain area experienced the most severe flood effects on the Klamath Forest (Map 10). This area is drained by Kelsey, Deep, Middle, and Tompkins Creeks, (tributaries to the Scott River), and Grider, and Walker Creeks (tributaries to the Klamath River above the Seiad). The peak flow in the Scott River had a 14 year recurrence interval, and the peak in the Klamath River below Seiad had a 15 year recurrence interval (Map 5). By contrast, the Salmon River experienced a peak flow with a much higher recurrence interval (37 years), but landsliding, channel alteration, and road damage there was much less severe than in the Lake Mountain Area." Page 28, "Due to this combination of factors, landsliding is a common process today, and much of the recent landsliding consists of localized slumps and earthflows (reactivations) and debris slides on the toes of slump and earthflow deposits." Page 50, "Three primary conclusions are drawn, all of which have direct implications to future management of the Klamath National Forest. These are: (1) Sensitive Lands- Certain land types displayed particularly high landslide and debris flow rates under flood conditions; (2) Roads- Of the typical forest management practices, roads exhibited the largest directly observable effects on flood processes; (3) De-vegetation- Widespread de-vegetation of some watersheds by a combination of wildfire and timber harvest was associated with high rates of landslides and debris flows, particularly when it occurred on sensitive land types." Page 51, "6. The Effect of Roads on Landslide Rates- Roads obviously had a large effect on flood processes. About 25% of all landslides identified on air photos (1 82) occurred in the road corridor, and the landslide density (landslides per square mile) in road corridors was about 27 times that on undisturbed land." Page 52, "Rock pits and waste areas often involve very large cuts and fills (up to several hundred thousand cubic yards) and have the potential to destabilize hillslopes and alter drainage patterns. The large fills associated with landings and waste areas initiated a number of landslides." Page 52, "Predicting Landslide Sites- Many of the 1997 landslides occurred in areas with well- defined landslide features, such as on toe zones with well-fined slope breaks or on steep swales with clearly defined boundaries which would have identifiable as having a high landslide potential prior to the flood. However, some occurred in areas where evidence of previous landsliding was subtle, and poorly-defined, and it would have been difficult to have predicted a landslide of the magnitude which occurred at the site in 1997. Examples of debris slides in poorly defined swales were observed at McCash and Deep Creeks where debris slides occurred on 55% slopes. Similarly, subtle slump features were reactivated in Tompkins and Grider Creeks."	The comment appears to reference information regarding the 1997 flood. For the Westside Fire Recovery Project , the hydrology report and Biological Assessment for Fish, and water and aquatic resources sections of Chapter 3 addresses existing conditions and project effects on peak flows, floods and floodplains.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18909-130	Page 52, "The Effect of Timber Harvest and Fire on Landslide Rates- De-vegetated areas (logged areas or areas burned at high to moderate intensity) experienced landslides at a rate 6 times that of undisturbed land (exclusive of landslides in road corridors)." Page 52, "Physical Factors & Interactions Influencing the Flood Effects and Interactions- There is a strong correlation between the distribution of flood effects (landsliding and road damage sites) and physical attributes of the landscape. This was particularly true with geomorphic terrane, and elevation, and to a lesser degree with slope, and aspect. Combinations of Factors- Pre-flood disturbance to the soil and vegetation (roads, harvest, fire) exerted considerable influence on flood effects. Areas of concentrated de-vegetation and roads likely experienced cumulative effects, or the, results of multiple individual effects that accumulated ' over time and space. Threshold Conditions- Field observations revealed that all types of landslides (shallow debris slides, deep-seated slumps and earthflows and debris slides on road fills) occurred together in watersheds like Walker and Tompkins Creeks. This suggests that high groundwater conditions were attained at a variety of depths." Recommendations: 1. Sensitive Lands- (a) Identify and delineate sensitive lands (Riparian Reserves) at the watershed (during Watershed Analysis) and site levels (when projects are done). Utilize sound proven tools such as topographic maps, 30 meter digital elevation models DEM), air photos, and field investigations as well as new developments such as high resolution laser-generated DEM's; (b) Develop vegetative and soil objectives for Riparian Reserve lands; (c) Manage Riparian Reserves toward obtaining the stated objectives. 2. Roads- (a) Repair ERFO sites in accordance with guidelines in Appendix C of this report; (b) Decommission high risk, un-needed roads; (c) Focus road maintenance where most needed to prevent watershed damage, and with attention to repairing road drainage and diversion problems; (d)Avoid unstable lands when new roads are constructed, and utilize state of the art geotechnical techniques in landslide terrane and at streamcrossings; (e) Place special attention on constructing stable fills, whether for ERFO repair, new roads, waste areas, landings, etc.; (f) Initiate a process for inventorying high risk road segments and sites; (g) Prioritize road repair, upgrading, maintenance, 'and decommissioning projects on a watershed basis to maximize the benefit to aquatic resources; (h)Seek funding from multiple sources. 3. Vegetation Management- (a) Assure that timber harvest avoids unstable lands and other Riparian Reserves by utilizing skilled technical personnel during field layout; (b) In combating wildfire, employ strategies to minimize the amount of high and moderate intensity fire on Riparian Reserves; (c) Design prescribed fire to avoid high and moderate intensity fire on Riparian Reserves. 7. Map of Peak Flood Levels- Prepare a simple map and photographs showing maximum water levels which occurred during the 1997 flood on the Klamath River and some major tributaries. 11. Vegetation Management- In Riparian Reserves, develop and apply vegetation management objectives and guidelines for unstable lands and other types of Riparian Reserve. Outside of Riparian Reserves, apply the following vegetation management guidelines: Avoid regeneration harvesting and intense site preparation fire on landslide deposits and granitic terrane over large contiguous drainage areas. This can be accomplished by utilizing skilled earth scientists during layout. Avoid denuding discrete swales, which may be prone to debris slides in granitic terrane. Avoid de-vegetation of large contiguous area of landslide deposits, particularly within the same local hydrologic catchment. Maintain down logs to interact with future debris flows, in balance with desired fuel loading. Review pre-existing timber sales and find whether trees are marked within Riparian Reserves associated with landslides and altered channels associated with the 1997 flood. Use this process to refine Riparian Reserve mapping. Please see page 66a-e to observe photographs of road related landslides throughout Walker, Elk and Tompkins Creeks and the Salmon River. We hope the KNF will have the foresight to learn from the past.	The comment appears to reference information regarding the 1997 flood. For the Westside Fire Recovery Project , the hydrology report and Biological Assessment for Fish, and water and aquatic resources sections of Chapter 3 addresses existing conditions and project effects on peak flows, floods and floodplains.

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232.06 - Watershed Condition	#18909-69	The DEIS, page 205, says that Riparian Reserve function will be improved by Alternative 2, because the speed of reforestation will be increased. However, there does not appear to be any discussion supporting this bare conclusion. Please scientifically justify this statement, particularly in light of the statement at page 9 of the DEIS that a "relatively small acreage of Riparian Reserve [] burned at moderate- and high-severity in 2014," which would seem to indicate that a majority of the Riparian Reserves will be able to recover naturally. Further, the DEIS and ROD cannot rely on the Dec. 31, 2010 Forest Supervisor Memo instructing staff to disregard the 1995 ROD and FEIS KNF LRMP concerning areas with watershed concerns.	The Biological Assessment for Fish describes reforestation in Riparian Reserves: Treatments within Riparian Reserves are proposed within the plantation site-preparation and planting units in the Whites Fire and Happy Camp Complex to achieve ground cover and encourage natural recovery of vegetation and soils. Treatment will be focused in areas of high and moderate vegetation mortality and where the overhead hazards can be mitigated without equipment entry into Riparian Reserves. Page 42 describes the effects. The 2010 Forest Supervisor Memo states: I have determined that compliance with State of California requirements meets the intent of the Areas with Watershed Concern designations and provides a more consistent approach to protection and management of water quality on the Forest. The term "impaired water bodies," as defined by the State of California, in conjunction with identified locations of these impaired water bodies and associated management expectations as part of compliance with the Clean Water Act, replaces the term Areas with Watershed Concerns.
232.06 - Watershed Condition	#18909-76	The DEIS improperly obfuscates the effects of the Proposed Alternative on Riparian Reserves. This is effectuated in part by KNF's creation of two separate categories of Riparian Reserves- "Geologic Riparian Reserves," and "Hydrologic Riparian Reserves." (See DEIS, at 30, "This refers to hydrologic not geologic riparian reserves."). As a legal matter, under the Northwest Forest Plan, no such distinction exists. Instead, the Northwest Forest Plan makes clear that certain unstable areas are included within the definition of, and receive the same protections as, Riparian Reserves. The NWFP Standards and Guidelines define Riparian Reserves as "a key element of the Aquatic Conservation Strategy" which " provide an area along all streams, wetlands, ponds, lakes, and unstable and potentially unstable areas where riparian-dependent resources receive primary emphasis. Riparian Reserves are important to the terrestrial ecosystem as well, serving, for example, as dispersal habitat for certain terrestrial species." Page A-5. The Northwest Forest Plan requires the Forest Service is establish that commercial logging in Riparian Reserves is "needed" in order to attain the objectives of the Aquatic Conservation Strategy (ACS) prior to authorizing such logging. While some parts of the DEIS and Resource Reports make this (improper) distinction clear, others do not, making the information in the DEIS about treatments within Riparian Reserves extremely confusing and misleading. For example, in the ACSO Report, Table 8 ("Proposed activities in Riparian Reserves (RR) by watershed for each alternative") indicates that no salvage logging will occur within Riparian Reserves, without any clarification that this refers only to "Hydrologic Riparian Reserves." Similarly, at page 9, the DEIS states, with no caveat, that "[n]o treatment is proposed within riparian reserves, except roadside hazard treatment and within one- quarter mile of private property structures" (DEIS, 9). The Geology Resource Report at page 5, rather ambiguously hints at the fact that logging will occur in Riparian Reserves, stating "[t]here are about 3920 acres of salvage units (about 2,000 acres of salvage logging) on steep, weathered granitic lands (Riparian Reserve) proposed in this alternative." Because the Klamath National Forest made the effects of the proposed alternative on Riparian Reserves so difficult to understand, in part by misleading the public into believing that "Geologic Riparian Reserves" are exempt from the standards to apply to Riparian Reserves, the "draft statement is so inadequate as to preclude meaningful analysis" and the Service should "prepare and circulate a revised draft of the appropriate portion." See 40 C.F.R. § 1502.9. The Westside DEIS fails to give unstable and potentially unstable areas a "hard look" and fails to consider, R5 FSH 2509.22 - soil and water conservation handbook, Chapter 10 - Water quality Management Handbook12.11 Exhibit 06, BMP 1.6 - Protecting Unstable Lands which states: Objective: To provide special treatment of unstable areas to avoid triggering mass slope failure with resultant erosion and sedimentation. Explanation: This practice is an administrative and preventative control. Where unstable lands are delineated, they are taken out of suitable forest lands and are reclassified as unsuitable forest land. Using existing harvest technologies, unsuitable forest lands cannot be managed for timber production where irreversible adverse effects to soils, productivity, or watershed conditions may occur. Timber harvesting is deferred pending technology development proven to be operational on these sites without causing adverse environmental effects. Implementation: The interdisciplinary team will prepare plans and environmental documents, utilizing information provided by specialists trained and qualified to identify unstable areas. When warranted, based on location and size of the sale, proposed harvest units may be assessed for relationships to unstable areas through aerial photo reconnaissance (most recent photos at least 1:24,000 or larger scale) and a landslide hazard map, where available. These	The Geology report clearly states activities that are occurring in Riparian Reserves. For example, on page 8 it is stated, "Unstable lands are designated as Riparian Reserves in the Forest Plan (Standard and Guideline MA 10-2, page 4-108). The unstable lands component of Riparian Reserves includes active landslides, inner gorges, toe zones of dormant landslides and severely weathered and dissected granitic lands (Forest Plan, page 4-18)". For Alternative 2 as you mention, a component of unstable lands are again identified as Riparian Reserves: There are about 3,920 acres of salvage units (about 2,000 acres of salvage logging) on steep, weathered granitic lands (Riparian Reserves) proposed in this Alternative. No salvage will occur on inner gorges, active landslides or toe zones of dormant landslides (see Chapter 2 for project design features). Also proposed are about 960 acres of site preparation and planting, 4,395 acres of roadside hazard tree removal and 3,940 acres of fuels treatments on unstable lands considered to be Riparian Reserves. The effects are also described: Alternative 2 does not change the landslide risk for any watershed. The final documents will be reviewed for errors in use of the term "Riparian Reserves". In the early time of implementation of the Northwest Forest Plan and Klamath NF Forest Plan there was a tendency for people to overlook the geologically defined Riparian Reserves- - because they are not necessarily "riparian". The distinction was informally added on the Klamath NF to maintain protection of the entire Riparian Reserve land allocation and to highlight which areas were related to water and which were related to unstable lands.

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		features are then assessed on the ground as the team deems necessary. Where unstable lands are presently classified as suitable forest lands, the classification is changed to unsuitable forest lands. Unsuitable forest lands will not be harvested until they can be harvested without irreversible or unmitigable resource effects. If the team determines that current or prospective logging methods would result in irreversible or unmitigable watershed effects, then the line officer should reclassify the area to unsuitable forest land and defer harvesting.	

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18909-78	The Westside DEIS fails to consider floodplain hazards and fails to mention if the Regional Forester has evaluated the potential effects of the proposed treatments in the seventy-five sup watersheds within the project analysis area. The R5 FSH 2509.22 - soil and water conservation handbook, 12.71 Exhibit 02, BMP 7.2 - Conduct Floodplain Hazard Analysis and Evaluation states: Objective: To avoid, where possible, the long- and short-term adverse impacts to water quality associated with the occupancy and modification of floodplains. Explanation: Floodplain analysis and evaluation are part of the environmental documentation process. Analysis must be performed prior to acquisition or exchange of land within floodplains and when sites within floodplains are being considered for structures or developments. Environmental quality, ecological effects, and individual safety and health must be considered as well as flood frequencies, watershed conditions, climatic and environmental factors associated with past flood events, flood flow quantities and specific flood boundaries. 1. Implementation: The Regional Forester will be responsible for ensuring consideration of floodplain hazards and values in all NEPA environmental analysis. a. Ensure that flood hazards, floodplain and wetland values, and all alternatives that affect floodplain or that involves new construction in wetlands are fully considered in the Forest Service planning and decision-making process. b. Coordinate activities and interchange of floodplain and wetlands information with other concerned Federal and State agencies. c. Ensure that cooperative technical and financial assistance programs include an evaluation of floodplain and wetland values. d. Ensure that all documents conveying interest in or authorizing use of floodplains and wetlands on NFS lands contain disclosure of and/or restrictions as warranted which will reduce the risk of loss and preserve the national and beneficial values served by floodplains and wetlands. 2. The Forest Supervisor, through use of earth scientists, will: a. Analyze proposed actions affecting floodplains or involving new construction in wetlands to access the specific flood hazards, quantify floodplain or wetland values of the areas; determine the impacts of the proposal on those hazards and values; formulate and evaluate land and resource management options; develop practicable alternative actions or locations for evaluation and decision making. b. In actions where an alternative affecting the floodplain or new construction in a wetland is not practicable, modify plans, activities, and designs to minimize impacts of the action and mitigate its effects on the national and beneficial values of the floodplain or wetland. c. Ensure that all practicable and necessary mitigation measures are incorporated in specifications for the proposed action, and that the implementation of the selected action is accomplished in a manner that to the extent practicable restores and preserves the d. natural and beneficial values served by the floodplains and preserves and enhances the natural and beneficial values of wetlands. e. Require flood hazard and wetland evaluations prior to issuing licenses, permits, loans, or grants-in-aid. Provide assistance to applicants in obtaining help to make such evaluations in their proposals. f. Ensure that design, construction or rehabilitation of Forest Service real property is in accordance with standards and criteria outlined in the National Flood Insurance Program (42 U.S.C. 4001 and following) using flood-proofing measures and structural elevation where practicable. g. Provide for the placement of appropriate signs to enhance public awareness and knowledge of flood hazards. h. Establish specific management standards and guidelines for floodplains and wetlands as part of forest planning actions. i. Cooperate with State and county governments in developing and implementing appropriate early flood warning and evacuation plans.	Floodplains are part of the Riparian Reserve Land allocation in the Forest Plan and are analyzed as part of aquatic conditions. See the Biological Assessment for Fish and MA 10-2 of the Klamath NF Forest Plan Standard and Guidelines regarding floodplains.) The project does not involve the construction of facilities. The Forest is coordinating with regulatory agencies such as the Water Quality Control Board for compliance. The Deciding Official for this project is the Forest Supervisor, as delegated by the Regional Forester.

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232.06 - Watershed Condition	#18909-79	Refugia are a cornerstone of most species conservation strategies. They are designated areas that either provide, or are expected to provide, high quality habitat. A system of Key Watersheds that serve as refugia is crucial for maintaining and recovering habitat for at-risk stocks of anadromous salmonids and resident fish species. NFP B-18 According to the DEIS, Key Watersheds in the project area include: Elk Creek, Grider Creek (in the Seiad Creek-Klamath River watershed), North Fork Salmon River, and South Fork Salmon River. Fires, fire suppression and multiple timber sales have greatly impacted each of these Key watersheds. Key Watersheds are defined by the NFP as, a system of large refugia comprising watersheds that are crucial to at-risk fish species and stocks and provide high quality water. They are the highest priority for watershed restoration. Yet, instead of restoring these Key Watersheds- as required in the Northwest Forest Plan Aquatic Conservation Strategy- logging large old trees and snags that are contributing critical elements of forest and riparian structure with ground-based, cable and helicopter yarding, road construction/reconstruction, landings, and skid trails on steep and erodible hillsides will degrade riparian values and watersheds at large. Key Watersheds Inside Roadless Areas: "Inside Roadless Areas - No new roads will be built in remaining unroaded portions of inventoried (RARE II) roadless areas." Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl. Attachment A to the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl ("Standards and Guidelines"), at C-7. Grider Creek is identified in the DEIS as a Key Watershed (page 7) and as containing over 10,000 acres of Inventoried Roadless Area (page 300). Grider Creek is located in the Seiad Creek-Klamath River Watershed. The Aquatic Conservation Strategy Objective Report indicates that in the Seiad Creek-Klamath River Watershed, 13 miles of "Temp Road Access" would occur under Alternatives 2 and 3, and 2.1 miles of "Temp Road Access" would occur under Alternatives 4 and 5. This indicates that it is possible that new temporary road would be built in the unroaded portions of Grider Creek, which would violate the Aquatic Conservation Strategy. See Standards and Guidelines, at C-7. The Klamath National Forest should make clear whether any new temporary roads are proposed in roadless areas of the Grider Creek watershed.	Key Watersheds were defined for the Klamath NF as part of the Northwest Forest Plan and incorporated into the Klamath NF Forest Plan. The Grider Creek Key watershed is not within the Seiad-Klamath watershed, it is a 5th field watershed and Grider Creek is a tributary to the Klamath River. Before the Northwest Forest Plan and since the Klamath NF Forest Plan, watershed restoration has been a high priority for the Klamath NF, with millions of dollars spent on upslope and instream work throughout the Forest. The initial emphasis for restoration was to secure the best first - which meant prioritizing actions in Key Watersheds. The purpose and need for the Westside Fire Recovery Project was driven by the 2014 wildfires. As stated in the draft EIS, there is a need for worker and public safety and access, there is a need for safe conditions for firefighters performing fire suppression for community protection, there is a need for a project that is economically viable, meeting project objectives and benefiting our local communities, and there is a need for restored and fire-resilient forested ecosystems. To meet those objectives, opening decommissioned road has been proposed and evaluated through modeling, field review, and professional judgment. The hydrologist found that watershed effects from the action Alternatives would be indistinguishable from the effects of the wildfire, and in the long term, the proposed actions benefit watershed conditions and beneficial uses. The effects of taking No Action have documented negative effects to watershed conditions. The Klamath NF consulted with the National Marine Fisheries Service and agreed that the proposed actions, May Affect but will not Adversely Affect fish species listed under Endangered Species Act. The Klamath NF continues to implement a watershed restoration program in addition to other priorities on the Forest. Also see response to comment number 12364-1.
232.06 - Watershed Condition	#18909-82	The Hydrology Report and the Water Quality section of the DEIS look at project impacts to eight watersheds, while the Aquatic Species report looks at impacts to twelve watersheds. (Hydrology Report, page 5 & DEIS, page 199: "The spatial context for the hydrologic analysis is the project area that includes portions of the following eight 5th field watersheds: Beaver Creek; Humbug Creek-Klamath River; Horse Creek Klamath River; Seiad Creek-Klamath River; Lower Scott River; Thompson Creek-Klamath River; Elk Creek; and North Fork Salmon River. The 5th field watersheds are the analysis area for broad scale effects analysis. The 7th field watersheds are considered small scale for a project area of this size."; Aquatic Species Resources Report, page 11: "The Analysis Area is the following 5th-field watersheds (and their 7th-field subwatersheds or drainages) within three major burn areas that were affected by the 2014 fires and that have proposed activities: * Beaver Creek * Elk Creek * French-Scott River * Horse Creek-Klamath River * Humbug Creek-Klamath River * Indian Creek * Lower Scott River * North Fork Salmon River * Seiad Creek-Klamath River * South Fork Salmon * Thompson Creek-Klamath River * Ukonom Creek-Klamath River"). The Fish BA analyses impacts on eleven areas, which include the same watersheds as the Aquatic Resources Report, minus French-Scott River. Please explain and justify these differences in analysis areas. We are concerned about the completeness of the analysis in the Hydrology Report and Biological Assessment, as both left out watershed that the Aquatic Resources Report considered being within the analysis area.	Both the aquatic resources and hydrology analyses in Chapter 3 of the final EIS begin by considering all 5th field watersheds that were affected by the 2014 fires. Because several of these watersheds had no proposed actions within them, they discussed very little during the analysis of project effects. The 5th field watersheds that were affected by 2014 fires, but do not have proposed activities are: French-Scott River and Indian Creek. The 5th field watersheds where there are substantially less activities proposed, and less acres affected are: Humbug Creek-Klamath River, Ukonom Creek-Klamath River, and South Fork Salmon River. Both aquatic resources and hydrology analyses considered all 5th field watersheds potentially affected by the project. The project Aquatic Conservation Strategy analysis and report was prepared by both fisheries and hydrology specialists, and probably provides the best accounting of actions and effects in each 5th field watershed. The Aquatic Conservation Strategy Report addresses which specific 5th field watersheds are most relevant to the effects analysis and those where no or few activities are proposed.

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232.06 - Watershed Condition	#18912-5	I recently attended a presentation on the work of Matthew R. Cover from CSU Stanislaus, who has extensively studied post debris-flow ecosystems in the Klamath River drainage, and I hope you are familiar with his work. I also spoke with him about the WFRP. From my own interpretation about what he said and my prior knowledge of riparian-succession in the Klamath Mountains (I do not wish to portray these ideas as his, but am just stating that I am influenced by his words; obviously I cannot speak for anybody but myself), being aware of fire and logging's influence on the regularity and severity of debris flows is essential. Logging, but more specifically road cuts and stream crossings, are one of the major causes of these debris-flows. These features and their high use related to intensive cutting in these areas would be less maintained by vegetation and more vulnerable to causing a debris flow in these post-fire areas. According to Cover's work, it is apparent that riparian areas and the stream communities that have experienced a debris-flow take various amounts of time to be return to pre-flow conditions. These include the extirpation of amphibian species ten or more years after a flow, up to 100 years or more for biodiversity of riparian tree communities to return, and up to hundreds of years for streambed biomass and large woody debris to be recruited into these post-flow environments. As you know, these are all important factors in streams regarding species of concern.	Careful planning is required for logging and road construction. The Standards and Guidelines in the Forest Plan are incorporated from the Northwest Forest Plan that was designed to provide protection of riparian resources as well as provide for long term persistence of large and small fauna. The fish, earth, and water scientist conducted modeling, field work and used professional judgment to establish general and site specific Project Design Features (project design project design features) to protect water quality and beneficial uses while meeting the purpose and need for the project. The project design project design features prohibit salvage harvest, other than roadside hazard, in areas where ground disturbance may trigger debris flows including stream-side, wetlands, springs, active landslides, inner gorge and landslide toe zones. Even though salvage harvest may occur in steep, weathered granitic terrain (which are part of the Riparian Reserve land allocation), project design project design features prohibit the use of ground-based yarding and require full-suspension cable or helicopter yarding to minimize ground disturbance in these areas and reduce the potential for harvesting activities to trigger debris flows. Where the steep, weathered granitic terrain is overlain by stream course Riparian Reserve and inner gorges, there will not be salvage activities except for safety. And, even though roadside hazard salvage would occur in these areas, project design project design features restrict these operations below the road and limit the size of trees being removed which in turn results in less ground-disturbance. There are project design project design features for all new road construction to make sure they meet water quality, Endangered Species Act, and National Forest Management Act regulations. See Chapter 2 of the draft EIS for the full suite of project design project design features and the Aquatic Resources Report and Addendum for the assessment of impacts and protection of aquatic species.
232.06 - Watershed Condition	#18926-40	The DEIS claims that eventually the land will heal and the trend will be positive, except for "a slight downward dip in riparian function in watersheds with private land harvest due to the loss of shade in the stream channels."! ! While many of the watersheds would have increased high and moderate risk, the DEIS again discounts ! theses as insignificant and relies on the treatment of a fraction of legacy sites mainly in one watershed, Elk Creek, to offset effects to the activities in the entire project area. Reforestation is also noted as a positive, however, natural recovery would be more conducive with water quality.! ! Key Watersheds and the Aquatic Conservation Strategy! Refugia are a cornerstone of most species conservation strategies. They are designated areas that either provide, or are expected to provide, high quality habitat. A system of Key Watersheds that serve as refugia is crucial for maintaining and recovering habitat for at-risk stocks of anadromous salmonids and resident fish species.! Northwest Forest Plan (NFP) B-18! ! Key watersheds in the project area include, Grider Creek in the Siead Creek Klamath River, South and North Fork Salmon River and Elk Creek. Fires, fire suppression and multiple timber sales have greatly impacted each of these Key watersheds.! ! Key Watersheds are also defined by the NFP as, a system of large refugia comprising watersheds that are crucial to at-risk fish species and stocks and provide high quality water. They are the highest priority for watershed restoration. Yet, instead of restoring these Key Watersheds- as required in the Northwest Forest Plan Aquatic Conservation Strategy- logging large old trees and snags that are contributing critical elements of forest and riparian structure with ground-based, cable and helicopter yarding, road construction/reconstruction, landings, and skid trails on steep and erodible hillsides will degrade riparian values and watersheds at large.! !	Comment misinterprets the findings from the fisheries biologist, geologist, and hydrologist. In general, the impacts from project activities are insignificant and not distinguishable from the effects of the 2014 wildfire. Legacy site treatments are proposed in Elk Creek to meet conditions of the water quality waiver with the State Water Board. The project does not intend that these would offset impacts due to the project, rather to meet conditions of the waiver for compliance with the Klamath Stream Temperature Total Maximum Daily Loads. Negotiations with the State Water Board regarding compliance with the conditions of the waiver for the Salmon and Scott River Total Maximum Daily Loads is ongoing. Project design features prohibit salvage harvest, other than roadside hazard, in most Riparian Reserves including stream-side, wetlands, springs, active landslides, inner gorge and landslide toe zones. Even though salvage harvest may occur in deeply weathered and dissected granitic terrain, project design features prohibit the use of ground-based yarding and require full-suspension cable or helicopter yarding to minimize ground disturbance in these areas. Most of the deeply weathered and dissected granitic terrain is overlain by a dense network of stream course Riparian Reserves and inner gorges that will not be harvested. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed, which in turn results in less ground-disturbance. project design project design features apply to all road construction to prevent adverse impacts to aquatic beneficial uses. See response to comment 17403-1 that describes the development of Alternative 4 that reduces road construction and identifies some of the trade-offs and response to comment 18909-79 regarding restoration of Key Watersheds.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18937-11	A wide variety of activities proposed in the Westside Project DEIS would adversely affect water quality in the rivers and streams within the project areas and within the Klamath River watershed. On page 194 of the DEIS, it claims, "Results of the analysis are used to verify that project alternatives adhere to existing law, regulation, and policy such as the Clean Water Act (specified by TMDL requirements for the Klamath, Salmon, and Scott Rivers) and Forest Plan requirements including those related to the Aquatic Conservation Strategy." Unfortunately, the results of this analysis grossly understate the impacts of past logging and road use within the project area, and do not guide responsible management practices for the project area. An unassuming reader of the DEIS could actually surmise that the impacts to water quality would be negligible even after thousands of acres of clear cut logging on steep slopes above creeks and rivers, construction of new "temporary" roads, and the installation of 14 new stream crossings. This extreme mischaracterization of reality is disingenuous by design and misleads the public to believe that the commercial logging project will benefit streams and rivers. As well, the misleading and understated impacts to water quality in the preferred alternative in the DEIS are inconsistent to the Aquatic Conservation Objectives outlined in the Forest Plan. Of special concern is the creation of conditions that will lead to major debris flows that that could contribute to habitat loss for species already impacted by existing challenges in the Klamath River and tributaries. On page 17 of the associated Aquatic Species Resource Report it states, "Decreased interception of rainfall as a result of wildfire as well as increased sediment and runoff delivered to streams, can lead to an increased debris flow probability in the affected watersheds compared to pre-fire conditions. Post-fire debris flow events can degrade or aggrade stream channels and remove riparian vegetation. BAER teams reported that the probability of aquatic habitat being damaged by debris flow is likely and there is a moderate risk of damage to the quality of habitat (for about the next 10-years)."	The comment states that the analysis in the draft EIS "grossly understates the impacts of past logging and road use within the project area". The Forest cumulative watershed effects analysis process considers effects of past logging and road construction/use in the context of three different models: 1) Equivalent Roaded Area (ERA), 2) universal soil loss equation, and 3) mass-wasting. The ERA model is an overall index of watershed disturbance and includes past logged acres (by yarding system; tractor, cable, helicopter) and includes logging on private acreage. The ERA model further considers forest road variables such as width, slope, surfacing, and maintenance, upgrade, and decommission in order to compare relative watershed disturbance and risk from roads. The universal soil loss equation model considers effects of logging and road construction/use on surface erosion while the mass wasting model considers effects of management disturbance landslide risk. The comment refers to "major debris flows that could contribute to habitat loss for species already impacted by existing challenges in the Klamath River and tributaries". Debris flows are a natural process in Klamath Mountain streams and the routing of sediment (including gravels) and large wood, and associated habitat functions depend on debris flow processes. Aquatic species in the Klamath Mountains have evolved with debris flows. Importantly, mass-wasting risk increases 5-10 years post-fire as transpiration and mechanical root strength provided by fire-killed trees is significantly reduced in this time frame. This increased mass-wasting risk is expected to produce a corresponding increase in debris flow risk. However, proposed salvage harvest treatments do not increase the risk of mass-wasting that exists post-fire. Based on the modeling, field review, and professional judgment of earth, water, and fish scientists that evaluated the effects of all Alternatives, the effects to watershed conditions are indistinguishable from the short and long term effects of the 2014 wildfire. These scientists are also recognize that the proposed actions, as modified, are better for watershed conditions and aquatic beneficial uses than the No Action Alternative.
232.06 - Watershed Condition	#18937-12	As the DEIS states on page 213, "many flows delivered large wood to mainstem channels in some areas (Elk Creek). Many riparian areas along the Middle Klamath and North Fork Salmn River remain partially barren as a result of historic placer and hydraulic mining activities, and lower hillslope road construction that disconnected the river from its floodplain." ' Unfortunately, the DEIS does not cover other habitat sweeps that were caused by steep-slope logging in the Project area. We also noted that we can see that removing large wood from streams causes dire consequences endured largely by local residents during a flood emergency and the fish that depend on habitat for regeneration. Please note the exhibit satellite photographs below, that illustrate how the BAER observers cited above understated the risk to habitat when they claimed a "moderate risk of damage to the quality of habitat" is a likely outcome to Westside salvage logging. In 1997, ten years after a large logging project was completed in the Walker Creek watershed, a massive debris flow changed the topography of the area, causing extreme damage to aquatic habitat in Walker creek and downstream.	It is unclear what is meant by "habitat sweeps" or which "Burned Area Emergency Reclamation observers". The comment is unclear in linking the removal of large wood from streams to consequences of flooding endured by local residents during a flood emergency. Comment expresses concern for removal of large wood from streams. No alternative proposes timber salvage in hydrologic Riparian Reserves. Project Design Features prohibit salvage harvest in areas where future coarse woody debris (snags) are most likely to contribute to watershed function including stream course Riparian Reserves, inner gorge, active landslides and landslide toe zones. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed, which results in retention of larger size class coarse woody debris (>26" diameter at breast height) that persists in the environment much longer, providing longer lasting contributions to watershed function. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed which results in less ground-disturbance. The biological Assessment for Fish and the Aquatic Report and Addendum in the final EIS details effects to aquatic habitat. Given these project designs it is not anticipated that the project will result in significant removal of large wood from streams. Comment references 1997 flood impacts along Walker Creek but does not provide details about the referenced prior logging project or otherwise make the link between that project and 1997 flood processes and/or effects. The Forest acknowledges the significant disturbance in Walker Creek during the 1997 flood. This disturbance was produced by very large landslides (and resulting debris flows) on naturally unstable lands that had roads constructed under antiquated design practices. Temporary road segments proposed for construction in the Westside Fire Recovery project will avoid inner gorges, active landslides, and toe zones of dormant landslides, and will be constructed to current specifications with regard to drainage structures, among other improvements.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#18937-13	Grider and Walker Creek Watersheds The majority of the proposed units I saw were located on extremely steep slopes, directly above the creeks that provide thermal refugia to the Klamath river fish downstream from the Scott River. Grider and Walker creek both provide these resources to the river fishery. Simply put, salmon would have to pass up refuge (cooling off points) in the mouths of these newly temperature and sediment impaired creeks en route to spawning habitat upstream, most of which is unavailable due to dewatering in the Scott River already. This effect has the potential to mark the end game for threatened Coho salmon over time, and more certainly negatively impact the fall run Klamath Chinook that depend on the refuges in late August. Another field observation I witnessed was marking for roadside hazard tree removal (salvage). Much of the area I traveled within the Whites and Happy Camp (Seiad Valley) fire areas already had blue paint indicating a mark. This seemed completed for essential byways that would benefit firefighters, recreationalists or workers. Neither me nor Klamath Riverkeeper are opposed to providing safe passage for forest workers by removing trees that could cause injury, or worse. That said, many important trees along existing roadways that are eligible for removal under the preferred alternative. I intend to cruise the remaining miles with a skilled timber cruiser in the coming months and will encourage my constituents to do so, also. We plan to continue sending KNF individual observations about road hazards and excessive marks in the coming months. To put it simply, much of the roadside mark I saw was below the road I was traveling on. Many of the targeted trees would observably provide profits to timber markets rather obstruct any traditional roadway in the Forest System. Also, many of the trees marked, especially in the Whites fire area, appeared "green" and large, and did not seem to pose a threat to passers by - especially in comparison to all of the other Forest System roads I travel on (with regularity). Much of the "roadside hazard" application seemed to promote logging of large trees in riparian zones as a way of rewarding timber companies with "receipts" instead of promoting fire resilient landscapes or local economic resilience. This logging would also create "stream side shade removal" that will almost certainly increase temperatures to 303d listed rivers included in the DEIS and could mean "game over" for Klamath salmon seeking thermal refugia at river mouths while running upstream in warm late summer months. In the Walker Creek watershed, I could only travel as far as the intersection of 46N64 and 46N62 on the way to Lake Mountain Lookout, where I thought I could get a view of many of the larger units slated for clear cut. My strong feeling after traveling to Grider and Walker Creeks in the Happy Camp fire area is that if most or all of the standing snags are removed the chance for debris flow (in addition to adverse conditions caused by increases in sediment) in this area is likely, and the impacts to habitat downstream could be extreme. In addition, I am concerned that local residents may not understand the hydrological impacts of clearcut logging in the watershed that provides drinking water to their families. I am concerned that ideological differences between constituents could impede local community education about threats to domestic water quality and quantity. Simply put, I am concerned that the local residents' future could be threatened if this project proceeds as proposed.	The June 19, 2015 addendum to the fish Biological Assessment states, "As part of the Project consultation, the Forest, National Marine Fisheries Service, and Karuk Tribe jointly developed a strategy to monitor implementation of Project elements that have the greatest likelihood of impacting SONCC Coho salmon and other salmonids. Pre Project, the group will monitor the hazard tree mark where it is proposed near SONCC Coho salmon CH; during the Project (especially June-Sept) all parties will share information about where Project water drafting is occurring, jointly monitor those water drafting actions, and help Forest Service Representatives decide where to shift Project water drafting so that impacts to SONCC Coho salmon and its CH are not adverse; also during the Project, the Forest Service and National Marine Fisheries Service level 1 team will coordinate in closer monitoring of the status of ground disturbing actions if/when operations are occurring outside of the Normal Operating Season (NOS) or within the NOS during wet weather - to ensure compliance with Forest Service Best Management Practices and Wet Weather Operations standards." The Forest appreciates the cooperative efforts of the Karuk Tribe and National Marine Fisheries Service. The Biological Assessment for Fish conducted an analysis for impacts to Coho and their habitat and it was determined, as agreed upon with National Marine Fisheries Service, that the proposed actions, May Affect but are Not Likely to Adversely Affect fish species listed under Endangered Species Act.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#19072-11	The water quality risk to channel morphology was evaluated in the Project DEIS using the ERA model. USLE and mass-wasting models were also used to assess cumulative impacts. These cumulative impact models rely on "risk ratio", which is the model results (ERA, USLE or mass-wasting) divided by the watershed threshold of concern (WTOC) (model results/WTOC). The threshold of concern for the risk ratio is 1.0. According to the DEIS, "The threshold of concern does not represent the exact point at which adverse cumulative impacts will occur. Rather it serves as a "yellow flag" indicating increasing susceptibility for adverse effects to beneficial uses in a watershed." For the DEIS, watersheds with risk ratios of less than 1.0 are considered to have a low risk of increased susceptibility for adverse effects to beneficial uses in a watershed. Watersheds with risk ratios between 1.0 and 1.5 have a moderate risk, and greater than 1.5 have a high risk. ·.... For ERA, the DEIS states, "A low risk to channel morphology means that there is not likely to be a measurable change to peak flows and the channel bed, banks and floodplain will undergo natural modifications that are proportional to the storm events. A moderate risk indicates that peak flows may be artificially increased by the actions taken. The increased peak flow is likely to leave the channel susceptible to modifications that are slightly more than would occur under natural conditions. The perturbation of the geomorphic process would be over the short term (about two to four years). "A high risk to channel morphology means that the increase in peak flows would lead to undesirable changes (such as channel straightening and loss of coarse wood) that ·would require long-term recovery (greater than 10 years)." From the Westside Fire Recovery Report - Hydrology Report analysis, it appears all eleven 7th field watershed ERA risk ratios are greater than 1.0 post-fire, no action, with two of the eleven having risk ratios >1.5. According to this report, risk ratios increase in most cases-when implementing the preferred Alternative 2, with three of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2. For the mass-wasting analysis, all nineteen of the 7th field watershed have risk ratios are greater than 1.0 post-fire, no action, with five of the nineteen watersheds >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the nineteen 7th field watersheds having risk ratios >1.5 after implementing Alternative 2. USLE modeling shows similar results. All eleven of the 7th field watershed have risk ratios greater than 1.0 post-fire, no action, with five of eleven being >1.5. Risk ratios increase in most cases when implementing the preferred Alternative 2, with six of the eleven 7th field watersheds having risk ratios >1.5 after implementing Alternative 2. Our staff analysis of Alternative 2 raises concerns that conducting salvage harvest and associated activities in watersheds already exhibiting elevated risks for cumulative impacts could result in significant impacts to water quality, especially in watersheds that have burned with a moderate or high intensity.	The Cumulative Watershed Effects modeling performed in support of the draft EIS used the project's GIS dataset without removing any areas protected by project design features such as stream course Riparian Reserves, inner gorge, active landslides or landslide toe zones. Therefore given that these areas account for at least 25% upwards to 40% of the proposed treatment areas, the cfs have been conservatively estimated as such. The final EIS includes a revised run of the cfs models on the preferred consultation Alternative to provide a closer approximation of actual cumulative watershed effects. Field review and development of the project design project design features are applied to avoid significant effects. The impacts to watershed conditions are expected to be undistinguishable from the impacts of the 2014 wildfire. And, there are benefits to watershed conditions from the proposed action Alternatives. A monitoring team has been set up; see response to comment 18937-13.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#19072-12	Regional Water Board staff have reviewed the fire burn severity maps. In general, the burn intensity in riparian zones within the fire area was generally low or very low. This is because in most instances the fire backed into the riparian zone and the fire intensity decreased as the fire approached the stream. In a few areas su.ch as the North Fork of the Salmon River and in White's Gulch, high winds caused the fire to burn with high intensity across the riparian corridor. In these areas, there is charred timber with bare mineral hydrophobic soil with very little surface cover. In some cases, there are steep slopes leading directly to perennial fish-bearing watercourses. Much of the tree branches, leaves, and needles were consumed in the fire. These areas wi11 be subject to elevated erosion rates and increased sediment delivery to the watercourses due to the steep slopes, hydrophobic soils, and lack of surface cover for erosion control. None of the alternatives evaluated in the DEIS of the KNF Westside Fire Recovery Project propose to treat riparian zones that burned in the fire with a moderate or high intensity. Treating these riparian areas, perhaps by falling some trees-and - leaving them on the ground, and/or spreading slash on bare soils, could help to break up the hydrophobic crust, provide temporary sediment storage, and increase infiltration rates. Treating the riparian areas that burned at a high intensity could provide significant benefits to water quality, but were not included in the proposed action. Additionally, the proposed Project lacks an approved plan to treat legacy sediment sites. The Regional Water Board provided scoping comments on the Westside Fire Recovery Project to KNF on December 5, 2014. Below are examples of our comments on the preparation of a legacy site treatment program for the Project. "[t is our understanding that some treatment of legacy sediment sites along the NFS roads within the project area is being accomplished as a part of the USFS Burned Area Emergency Rehabi1itation (BAER) program. The legacy- site treatment that is planned or accomplished under the BAER program may result in progress toward TMDL compliance but Regional Water Board staff cannot determine whether BAER activities a]one will be adequate for USFS Waiver Compliance without additional details of that work. Given the huge size of the Project area, treatment of all the legacy sites may not be a realistic goal. However, treatment of some of the high priority legacy sediment sites in the Project area may be necessary in order for the Project to be eligible for Waiver coverage. KNF must propose an. acceptable legacy site treatment program for the Project to comply with the Waiver and demonstrate reasonable progress towards TMDL compliance." The Regional Water Board received a draft legacy site treatment plan for the KNF Westside Fire Recovery Project on April 21, 2015, but has not yet had time to complete our review of the plan. An acceptable legacy site treatment program must be approved by the Executive Officer before Waiver coverage will be granted and Project activities can commence. Most of the comments above are responding specifically to Alternative 2, the preferred alternative. Alternative 4 of the DEIS was designed to reduce watershed disturbance and impacts to water quality and fisheries, relative to Alternative 2, while still meeting the purpose and need for action on the Project Alternative 4 addresses several of the above described water quality concerns, including not conducting roadside hazard tree removal and salvage logging on Maintenance Level 1roads, a:nd not constructing log landings within Riparian Reserves. It is possible that Alternative 4 could be modified to address the additional water. quality concerns and be eligible for Waiver coverage. However, a final determination regarding Waiver coverage cannot be made until the final EIS is prepared with the alternatives finalized and a Decision is issued.	Many members of the public want nothing done in Riparian Reserves. The proposed actions Alternative try to address that concern while still meeting the purpose and need for the project. It is possible that in the future additional treatments in Riparian Reserves can be planned. Riparian Reserves within the plantation site-preparation and planting units in the Whites Fire and Happy Camp Complex will be treated to achieve ground cover and allow for natural regeneration of vegetation. Treatment will be focused in areas of high and moderate vegetation mortality and where the overhead hazards can be mitigated without equipment entry into the Riparian Reserves. Treatment will include hand-work only (no ground-based equipment) and lop-and-scatter or other fuels reduction will be implemented if fuel loading is above seven tons per acre; fuels may be hand-piled or windrowed and burned. Alternative 4 also proposes only manual treatment for all salvage harvest treatments within Riparian Reserves, but the number of acres made safer for fire fighting, community protection, and fire resiliency is reduced by 900 acres and there is a reduction in social benefits such as income and jobs (Table 2-32, draft EIS). Manual or hand treatment will fall standing dead conifers up to 16 inches in diameter at breast height with a chainsaw or other cutting implement, then cut and scattered throughout the riparian area to achieve 70 percent soil cover in Riparian Reserves within salvage harvest units. On slopes greater than 35 percent, manual felling of standing dead conifers, hardwoods, and brush will be limited to material less than ten inches diameter at breast height because of concerns about safety and effectiveness of treating large, heavy material by hand on steep grounds. The goal is to promote more rapid soil recovery and natural regeneration without additional planting in these units. If fuel loading exceeds ten tons per acre (and/or greater than 70 percent soil cover), excess fuels can be piled and burned or broadcast burned. The action Alternatives have been adjusted since the draft EIS to meet interests expressed by the public, including tribes, and consulting agencies such as the Water Quality Control Board, NOAA-National Marine Fisheries, and the U.S. Fish and Wildlife Service. Treating Legacy Sites will be an ongoing component of the overall watershed restoration program of the Klamath NF that will require additional National Environmental Policy Act and funding.
232.06 - Watershed Condition	#19076-4	These three watersheds should be considered in a separate EIS because of their bedrock nature, their importance to salmon, their legacy sedime11t site status due to past management, and their lack of high intensity burt1from recent fire (3% in Thompson, 1.2% in Grider).	These watersheds were included because treatments within them met the purpose and need for the Project. Unique watershed characteristics were considered and addressed through the interdisciplinary process resulting in the most appropriate project design and minimization measures.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#5873-108	Salvage retards watershed and aquatic recovery In short, by adding another stressor to burned watersheds, postfire salvage logging worsens degraded aquatic conditions accumulated from a century of human activity (CWWR 1996,NRC 1996, 2002,McIntosh et al. 2000). The additional damage impedes the recovery and restoration of aquatic systems, lowers water quality, shrinks the distribution and abundance of native aquatic species, and compromises the flow of economic benefits to human communities that depend on aquatic resources (Beschta et al. 2004). Karr, J. R., J. J. Rhodes, G. W. Minshall, F. R. Hauer, R. L. Beschta, C. A. Frissell, and D. A. Perry. 2004. The effects of postfire salvage logging on aquatic ecosystems in the American West. BioScience 54:1029-1033. http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/SalvageLoggingScience/Salvage-Karr04.pdf citing Beschta, ,R.L., J. J. Rhodes, J. B. Kauffman, R. E. Gresswell, G. W. Minshall, J. R. Karr, D.A. Perry, F.R. Hauer, C. A. Frissell. 2004. Postfire Management on Forested Public Lands of the Western United States. Conservation Biology 18: 957–967. Downloadable at: https://www.researchgate.net/publication/227654964_Postfire_Management_on_Forested_Public_Lands_of_the_Western_United_States?ev=prf_pub	The comment includes citations of many studies regarding salvage logging. However, for this project the fish, earth, and water scientists conducted field work in this specific area and used standardized analytical procedures to determine the effects of doing nothing (Alternative 1) and four action Alternatives in this specific landscape as changed by the 2014 wildfires. The results of their site specific field work and modelling based on Klamath NF conditions and processes is the best information available. Their work allowed for the development of Project Design Features (project design project design features) that are specific to this project and prohibit salvage harvest to protect watershed and fish resources, including stream course Riparian Reserves, inner gorges, active landslides and landslide toe zones. Even though salvage harvest may occur in deeply weathered and dissected granitic terrain, project design project design features prohibit the use of ground-based yarding and require full-suspension cable or helicopter yarding to minimize ground disturbance in these areas. Most of the deeply weathered and dissected granitic terrain includes stream course Riparian Reserves and inner gorges where burned trees will not be salvaged. Even though roadside hazard salvage would occur in these areas, project design project design features restrict these operations below the road and limit the size of trees being removed which in turn results in less ground-disturbance. Also see response to comments 18832-48 and 12346-26.
232.06 - Watershed Condition	#5873-115	"In places where salvage logging occurs, the amount of snags that can be removed from the uplands without serious adverse effects on stream macroinvertebrate but ecosystem recovery is unknown and is likely to vary with forest type, geology, and topographical relief. However, it is know that virtually all forms of postfire logging can have various adverse effects on stream ecosystems (e.g., Mehahan, 1983; Smith et al., 1993a, b; Stout et al., 1993; Ketcheson and Megahan, 1996). Based on results from watersheds having various proportions of their areas burned by wildfire (e.g., Minshall et al., 1995, 2001b; Minshall, personal observation), it is probable that the amount of timber removed should not exceed about 25% of the merchantable timber (unless contradictory information is available). In addition, postfire removal should be appropriately spaced across the landscape and should be in proportion to the size classes (DBH) of trees present at the time of the fire (see also Beschta et al., 1995). This proportional harvesting is necessary because of the important graded inputs (Lyon, 1984) that a mix of such large woody debris contributes to streams over the extended recovery period (Minshall et al., 1989). In addition, fire lines should be obliterated prior to logging, and road construction or other major ground-disturbing activities should be avoided in order to prevent additional runoff and erosion. Salvage harvest yeilds responses (e.g., ground disturbance, woody debris removal, interruption of normal infiltration pathways, and acceleration of surface flows) that interact with the direct and indirect effects of fire to make these actions so potentially damaging. In addition, the negative effects extend many years beyond the actual time of salvage activities because of the harvest of snags that normally fall and become incorporated into stream channels and forest floors over several decades or more (Lyon, 1984). These wood inputs are important to create habitat, increase nutrients, and retard runoff and channel alteration during what is normally the most critical stage of stream and riparian vegetation recovery (Minshall et al., 1989; Lawrence and Minshall, 1994)."	Salvage is not occurring in hydrologic Riparian Reserves. Page V-27 in the Forest Ecosystem Management Assessment Team report shows that nearly 100% of coarse wood debris to streams come from one tree-height distance from a creek, usually 150 feet. Therefore, the proposed action Alternatives will not be preventing coarse wood contribution to streams. Additionally, Project Design Features prohibit salvage harvest in the inner gorge, active landslides and landslide toe zones. Although salvage harvest may occur in deeply weathered and dissected granitic terrain, most of these areas includes stream course Riparian Reserves and inner gorges that will not be harvested. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed which in turn results in retention of larger size class of coarse woody debris (>26" diameter at breast height) that persists in the environment much longer, providing longer lasting contributions to watershed function. Alternative 2 proposed removal of burned trees on 11,700 acres and roadside hazard tree removal in coniferous forest on 16,600 acres (draft EIS page 15). These two actions are the most relevant to the comment, and involve 15.4% of the total burned area of 183,100 acres (draft EIS, page ii). Therefore, the project will retain more than 75% of the merchantable volume per watershed. Firelines were properly rehabilitated post-wildfire via fire suppression repair. Project design features limit the location and extent of road construction and other ground-disturbing actions to minimize erosion and sediment delivery.

Code	Comment Number	Comment Text	Response
232.06 - Watershed Condition	#5873-116	"In places where salvage logging occurs, the amount of snags that can be removed from the uplands without serious adverse effects on stream macroinvertebrate but ecosystem recovery is unknown and is likely to vary with forest type, geology, and topographical relief. However, it is know that virtually all forms of postfire logging can have various adverse effects on stream ecosystems (e.g., Mehahan, 1983; Smith et al., 1993a, b; Stout et al., 1993; Ketcheson and Megahan, 1996). Based on results from watersheds having various proportions of their areas burned by wildfire (e.g., Minshall et al., 1995, 2001b; Minshall, personal observation), it is probable that the amount of timber removed should not exceed about 25% of the merchantable timber (unless contradictory information is available). In addition, postfire removal should be appropriately spaced across the landscape and should be in proportion to the size classes (DBH) of trees present at the time of the fire (see also Beschta et al., 1995). This proportional harvesting is necessary because of the important graded inputs (Lyon, 1984) that a mix of such large woody debris contributes to streams over the extended recovery period (Minshall et al., 1989). In addition, fire lines should be obliterated prior to logging, and road construction or other major ground-disturbing activities should be avoided in order to prevent additional runoff and erosion. Salvage harvest yeilds responses (e.g., ground disturbance, woody debris removal, interruption of normal infiltration pathways, and acceleration of surface flows) that interact with the direct and indirect effects of fire to make these actions so potentially damaging. In addition, the negative effects extend many years beyond the actual time of salvage activities because of the harvest of snags that normally fall and become incorporated into stream channels and forest floors over several decades or more (Lyon, 1984). These wood inputs are important to create habitat, increase nutrients, and retard runoff and channel alteration during what is normally the most critical stage of stream and riparian vegetation recovery (Minshall et al., 1989; Lawrence and Minshall, 1994)."	See Response to comments number 5873-115
232.06 - Watershed Condition	#5873-124	Salvage: Watershed restoration. Salvage logging will adversely affect the ability of the land to absorb, store and release high quality water and the NEPA analysis fails to address these concerns. First, post-fire soils are fragile because the soil duff is often consumed by the fire and the carbon and other nutrients have been largely removed. Logging will further disturb the soils and litter and disrupt the natural soil recovery processes. Logging will also disturb and rearrange the soil protecting needle litter that will fall in the months after the fire. Second, large wood absorbs water and serves as a significant water reservoir that is especially critical during the dryer summer months. Logging removes the wood and so reduces the potential water reservoir. Recent research indicates that much water is stored in buried wood. This buried wood is likely to result of trees that have fallen on hillslopes and become buried in natural sediment moving downslope. Salvage will adversely affect the recruitment of future buried wood. The agency's snag retention guidelines are based on wildlife needs, but fail to consider or analyze the need to large snags and large down logs for soil, water storage, nutrient storage, or other purposes. Third, road construction, reconstruction, and road use all adversely affect the ability of the land to "distribute quality water."	Most of the trees removed by salvage logging will occur via helicopter or cable yarding systems, hence limiting the amount of soil cover disturbance post-harvest. Felling of trees will provide additional short-term soil cover due to the broken out tree tops and branches distributed through salvage units post-harvest. Project design features prescribe the amount of soil cover left to meet soil quality standards. The majority of the wood that would retain the most water would be left on site in the stream course Riparian Reserves. Coarse wood left on the ground or buried in upland areas provides a very small proportion of the moisture that could be retained during the hot summers of the Klamath Mountains. The project proposes between 4 and less than 1 mile of new temporary road construction and 9 to less than 1 mile of reopening decommissioned roads, depending on the Alternative. Where roads are would be constructed, reopening, or reconstructed project design features would require rehabilitation that will likely put these legacy roadbeds in a better condition than they were in the past, given that most of these legacy roads were built prior to Forest Service establishment of best management practices. Changes to the travel system is an issue that is outside of the scope of this analysis. The Forest Service incorporated concern about new road construction into relevant issue number 2 (draft EIS, Chapter 1) and developed Alternative 4, which responds to this issue. See draft EIS Chapter 2 for a description of Alternative 4. Project design features have been developed and modified since scoping to reduce or avoid negative effects on watershed conditions from temporary road access (Chapter 2). Proposed road access needed for implementation, including road maintenance, is described in Chapter 2 under each action Alternative. Additionally, legacy site treatments, including road improvement actions, are described under the proposed action and apply to all action Alternatives (Chapter 2). Effects of road access related action on watershed conditions are described in the hydrology section of Chapter 3.Also see response to comment number 12364-1. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
232.07 - ACS	#12346-13	The Project Will Violate the Aquatic Conservation Strategy (ACS) The March 2015 Aquatic Conservation Strategy Objective Report (ACSOR) indicates that the project will inhibit attainment of ACS objectives in numerous ways. Page 7 of the ACSOR reveals the Forest Service is aware that Caroline Creek, Walker Creek and West Grider/BittenBender are water quality impaired, subject to undesirable hillslope conditions and processes, and that "high road densities have contributed to impaired conditions." Hence the applicable Watershed Assessment directly recommends that the Forest Service "[d]ecommission roads contributing to the impairment of subwatersheds flowing a site specific analysis." In the Westside logging project the Forest Service is proposing to violate the ACS by ignoring the recommendation of its own Watershed Analysis. Rather than decreasing the impacts of the high road density in these water quality impaired water bodies, the Forest Service proposes increasing the cumulative negative watershed impacts through temporary road construction in riparian reserves, roadside logging in riparian reserves, and construction of log landings in riparian reserves. All of these actions will increase, as oppose to decrease, the impacts of the transportation system on hillslope processes, sediment production and aquatic health in opposition to the recommendations contained in the Forest Service Watershed Analysis.	The comment is referring to "management opportunities" summarized in Table 3 of the Aquatic Conservation Strategy Objective Report. This information was gleaned from the Thompson/Seiad/Grider Ecosystem Analysis published in 1999. The document identified high road densities in the Caroline Creek, Walker Creek, and West Grider Creek watersheds as contributing to water quality impairment and recommended road decommissioning. Since these 1999 recommendations road decommissioning, upgrade, and repair work has been ongoing across the west side of the Forest. In order for vegetation management (timber, fuels) projects to be implemented the Forest must apply for enrollment of the project under the North Coast Regional Water Quality Control Board's Waiver of Waste Discharge Requirements program. Primary components of the waiver are: 1) maintenance and restoration of Designated Riparian Zones pursuant to the Aquatic Conservation Strategy and Adaptive Management Strategy; 2) the timely implementation of watershed restoration plans that require inventories, prioritization and remediation of pre-existing sediment sources; and 3) for site-specific activities, the implementation of on-the-ground prescriptions to meet the Best Management Practice goals identified for the activities covered by this waiver (see page 9 of Water Board Order Number R1-2010-0029). Because the Forest is required to identify and remediate pre-existing sediment sources, which are most frequently associated with roads, road densities and related undesirable hillslope processes have been reduced. Based on equivalent roaded area model results presented in the Westside Fire Recovery Hydrology Report implementation of project Alternative 2 has minor to indiscernible effects on the watershed risk ratio of Walker Creek (moves from 1.0 to 1.1), Caroline Creek (0.5 to 0.6), and West Grider Creek (no change at 0.4). As Caroline and West Grider Creeks remain well below a risk ratio of 1.0 no adverse cumulative effects to hydrologic function or water quality are anticipated. Walker Creek marginally exceeds the watershed threshold of concern (risk ratio of 1.1) with implementation of Alternative 2 and thus has an elevated risk of adverse cumulative effects. However, project design features and best management practices are planned and implemented to protect against these adverse effects. Roadside vegetation treatments consist of fuels reduction and hazard tree removal, the effects of which are included in the equivalent roaded area model analysis, and not salvage logging. No new temporary road segments will be constructed in Riparian Reserves.
232.07 - ACS	#12346-16	Page 23 of the EA claims that "the only project action that could have any effect on the presence of trees near streams and down wood recruitment is hazard tree removal" in the Riparian Reserves. The ACSOR (page 24) then attempts to discount this impact to the first objective of the ACS by pointing out that snags greater than 26" DBH will be felled and left on site in the Riparian Reserves for fish bearing streams. No attempt is made to explain why removing 20"-26" DBH snags from Riparian Reserves is desirable or why non fish-bearing streams should not be managed to allow for large wood recruitment that benefits numerous aquatic species other than fish.	The comment is referring to the project EIS rather than an EA. Based on IDT field discussions on April 22 and 23. Project Design Features (project design project design features) have been revised such that all hazard trees greater than 26" diameter at breast height will be retained within the first site-tree distance from channels in all hydrologic Riparian Reserves (fish-bearing, permanently flowing nonfish-bearing, and seasonal or intermittent streams). The largest trees (> 26" diameter at breast height) provide the most benefit to riparian and aquatic systems in terms of sediment retention and metering, habitat, and nutrient cycling functions. We acknowledge that removal of hazard trees in the 20-126" diameter at breast height size class could reduce benefits from some of the aforementioned functions, however, we believe that the number of hazard trees identified in this size class (say on a per-acre basis) will be small.
232.07 - ACS	#12346-18	As acknowledged on page 30 of the ACSOR "temporary road crossings in Alternative 2 may have site level effects to aquatic habitat in several locations" which will inhibit attainment of ASCO 2. Similarly, page 30 also states that "[n]ew landings may have site level impacts to terrestrial habitat connectivity where large trees or snags are removed" thus impairing attainment of ACSO 2. In the Beaver Creek Watershed "hazard tree removal will occur on about 1,320 acres which will have a site scale effect on terrestrial wildlife connectivity where there was high/moderate fire severity because there will be a high density of hazard trees in those areas." (ACSOR 31). Presumably avoiding this violation of the ACS lead the agency to develop (but not propose) an action alternative that avoids these impacts to wildlife connectivity in the Beaver Creek Watershed. We agree with the Forest Service finding at page 31 of the ACSOR that "[l]andings may affect terrestrial wildlife connectivity at the site scale. We disagree with the Forest Service that the NWFP permits ACS violations that impact the ACS objectives at any scale smaller than the 5th field watershed. The impacts of proposed "temporary" road construction on ACS objectives are both significant and last for years. As acknowledged on page 31 of the ACSOR (but not disclosed in the DEIS) "[s]hort term sediment related impacts over about one mile of stream area expected during the time when the road is prepared for use, used, and then hydrologically stabilized. Effects may occur during storms throughout the first few years post-project as the road prism readjusts."	Fish, earth, and water scientists analyzed the effects of project activities and developed Project Design Features to protect riparian and aquatic resources. Effects at the site, 7th, and 5th field were analyzed and the short and long term effects were evaluated. Overall, the hydrologist determined, based on the modeling, field review, and professional judgment, that the effects to watershed conditions from any action Alternative will be indistinguishable from the effects of the wildfire. Also, there are negative effects from taking No Action. If no action is taken, the watersheds with a high risk of temperature regime alterations, without artificial regeneration that is proposed in the action Alternatives, will have an extended duration of elevated risk. Natural regeneration will occur, but in general it will be more than 80 years to get trees with 10 inch diameters at breast height in areas burned with high and moderate severity (draft EIS page 202-203). The benefit is meeting the Aquatic Conservation Strategy objectives. The proposed actions have beneficial effects to aquatic species, and to the connectivity of aquatic habitat, at the three sites that will have crossings upgraded with bottomless arches. These sites are in the lowest reaches of Twin Creeks and Malone Creek, just upstream of their confluence with Elk Creek (just upstream of confluence of Elk and East Fork Elk Creeks), and in upper East Fork Elk Creek (see project maps). These structures will allow for free movement of special status fish and amphibian species under these road crossings where passage has been blocked for many years during most or all flows. These benefits also meet Aquatic Conservation Strategy. See chapter 3 of the final EIS for an updated Aquatic Conservation Strategy analysis. Hazard trees need to be harvested to meet important safety goals. See wildlife and watershed project design features in chapter 2 of the final EIS for the mitigations for salvage harvest. In response to public comments, consultation, and our own concerns about wildlife connectivity in the Beaver Fire Area, salvage harvest was dropped from alternatives 5, alternative 3, and modified alternative 3 (the preferred alternative); see chapter 2 of the final EIS. The effects of hazard tree removal on connectivity is disclosed in chapter 3 of the final EIS.

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232.07 - ACS	#12346-19	The proposed logging also will negatively impact terrestrial connectivity in the Horse Creek Watershed because "[h]azard tree removal will occur on about 1,390 acres which will have a site scale effect on terrestrial wildlife connectivity where there was high/moderate fire severity…" ACSOR at 31. Further, "[s]hort term sediment related impacts along about 1.5 miles of stream are expected" due to proposed road construction in the Horse Creek Watershed. ACSOR at 31. Additionally, the construction of 15 landings "may affect terrestrial wildlife at the site scale." ACSOR at 32. The NWFP does not permit actions that will inhibit the objectives of the ACS. Perhaps the most significant direct damage to the objectives of the ACS are proposed within the Seiad Creek Watershed in which the Forest Service intends to remove 4,570 acres of roadside habitat, construct 50 new landings and utilize "existing roads beds near the streams that currently have erosion problems." ACSOR at 32. "Short term site level effects related to sediment delivery to streams as a result of disturbance, especially at crossings, would be expected during and post project during storms for several years." ACSOR at 32. Similar violations of ACSO 2 are proposed for the Thompson Creek, Elk Creek and North Fork Salmon River Watersheds.	Hazard tree removal will result in select trees being felled and trees > 26" diameter at breast height within the first site tree distance of all defined stream channels being retained on-site. Comment references potential short-term sediment impacts to a 1.5 mile segment of creek. The Aquatic Conservation Strategy Objective Report does acknowledge this potential but also states that the stream is non-fish-bearing and that "long-term benefits to this drainage are expected because the condition of the roadbed will be improved post-project by out-sloping and pulling fills at crossings and appropriately treating the current legacy sediment site". Comment references proposed treatment of 4,570 acres in Seiad Creek. These are the maximum extent of roadside hazard treatments proposed in Alternative 2 (Modified Alternative 3 has less) that remove limited numbers of trees and so are not accurately characterized as a complete removal of habitat. The project does estimate 50 new landings for the watershed but the majority of these (45) are outside of Riparian Reserve areas and the remaining 5 site were approved for use only after field inspection by aquatics resource specialists found these actions would not remove shade over perennial streams or inhibit the function of aquatic habitat. These approvals were based on on-site assessment of risk of erosion and sedimentation. For example, two of the five deemed appropriate for use are sited uphill of a road and > 200' from a stream channel in the outer zone of the Riparian Reserves associated with Grider Creek. These proposed actions were evaluated and only landings that were considered low risk for sediment production (and other negative effects) to streams were approved for use. Further, all landings used by the project are subject to erosion control Best Management Practices during and after use; these landings will provide for reforestation actions that are likely to accelerate the re-generation of mature forests that are sustainable over time given the local fire regime.
232.07 - ACS	#12346-21	Numerous activities are proposed that will inhibit attainment of ACSO 3. Page 38 of the ACSOR indicates that "[a]lternative 2 proposes to temporarily re-open segments of decommissioned road in Gard and Cliff Valley creeks which involve several crossings in [the] Gard Creek area and one intermittent crossing of Cliff Valley Creek. The [stream] banks will likely show effects of temporary crossings for the long-term. As these roads have been appropriately decommissioned and stabilized, there is no potential long term benefit involved in opening and using them for the project."	Comment refers to Aquatic Conservation Strategy Objective number 3: Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations. The Forest acknowledges that reopened crossings will have longer-term, site-scale effects on the channel in the immediate vicinity of the crossing. However, project Best Management Practices are planned and implemented such that potential erosion and sedimentation associated with the crossings is controlled during road use to prevent adverse water quality effects, and crossings will be restored after project completion. Given that the number of re-opened crossings is limited, Best Management Practices, and that effects are expected to be manifest at the site-scale, these activities are not anticipated to prevent attainment of Aquatic Conservation Strategy Objective number 3. Further, the Forest expects positive watershed effects from any hazardous fuels treatments and site preparation and planting facilitated by the reopening of the road segments. Also see response to comment number 12364-1.
232.07 - ACS	#12346-29	The NEPA documents supporting the Westside Fire Salvage project fail to analyze or disclose the role of large down wood in moderating peak flows and maintaining in-stream flow during low flow conditions. Klamath National Forest BMPs that allow for up to 50% of streamflow to be diverted by water drafting would directly inhibit attainment of ACSO 6. ACSO 7 This objective of the ACS is not at issue in the Westside Project.	Action Alternatives 2 through 5 retain downed wood as specified earlier in Chapter 2 and through implementing project design features. It is unclear if the comment is referring to large wood on hillslopes or within channels. The Forest acknowledges the importance of large wood to watershed processes and aquatic functions. Project Design Features (project design feature) were developed such that no salvage harvest will occur in Riparian Reserves along fish-bearing, perennial nonfish-bearing, and intermittent stream channels. In addition, large roadside hazard trees (> 26" diameter at breast height) within one site tree distance of stream channels will be felled but left in place in Riparian Reserve areas. These design features will ensure that post-fire recruitment of large wood to Riparian Reserves and stream channels will not be adversely affected by project activities and will thus provide important functions to aquatic systems. Per Watershed-36 project design feature water drafting will not exceed 10% of the surface flow in channels designated as Coho salmon critical habitat. In fish-bearing channels outside of Coho critical habitat drafting will not exceed 20% of the surface flow and drafting will cease (or not begin at all) in channels where surface flow is less than 1.5 cubic feet per second (cfs). The June 19, 2015 addendum to the fish Biological Assessment states, "As part of the Project consultation, the Forest, National Marine Fisheries Service, and Karuk Tribe jointly developed a strategy to monitor implementation of Project elements that have the greatest likelihood of impacting SONCC Coho salmon and other salmonids. Pre Project, the group will monitor the hazard tree mark where it is proposed near SONCC Coho salmon CH; during the Project (especially June-Sept) all parties will share information about where Project water drafting is occurring, jointly monitor those water drafting actions, and help Forest Service Representatives decide where to shift Project water drafting so that impacts to SONCC Coho salmon and its CH are not adverse; also during the Project, the Forest Service and National Marine Fisheries Service level 1 team will coordinate in closer monitoring of the status of ground disturbing actions if/when operations are occurring outside of the Normal Operating Season or within the Normal Operating Season during wet weather - to ensure compliance with Forest Service Best Management Practices and Wet Weather Operations standards."

Code	Comment Number	Comment Text	Response
232.07 - ACS	#12346-42	The Forest Service is proposing thousands of acres of roadside logging in Reserve land use allocations. Page 35 of the DEIS indicates that the agency is proposing 2,062 acres of roadside logging in Riparian Reserves and 8,086 acres of roadside logging in Late 15 Successional Reserves. Only 2,255 acres of the proposed roadside logging is located in lands designated for timber productions (DEIS at 36). While the DEIS attempts to justify extensive roadside Reserve logging as related to the "safety" element of the project purpose and need, in fact the removal of roadside trees has nothing to do with public safety and is solely designed to accomplish the agency's economic preferences. Page 23 of the ACS Report indicates that the agency intends to retain snags >26" DBH located in the Riparian Reserve of fish-bearing streams that are felled as part of the roadside logging prescription in order to provide for down wood recruitment. No explanation is provided as to why large trees (greater than 26" DBH) are proposed for removal after being felled in the Riparian Reserves for non-fish bearing streams or in the LSRs. Down wood recruitment serves the management goals for these land use allocations by providing for wildlife habitat, nutrient cycling and needed legacy forest structure. Its removal serves only economic, rather than ecological, objectives. Please note that the KNF LMRP standards and guidelines for Riparian Reserves (MA 10- 58) direct the Forest Service to "fell" as opposed to "remove" trees where they pose a safety risk. Page 34 of the DEIS indicates that the Forest Service intends to remove (and in some cases clearcut) dead and live trees up to 250' feet below roads and that some snags and trees located further than 250' feet above roads will be removed due to "slope." This can be contrasted with the Riparian buffer for non-fish bearing streams which is considerably smaller than 250'. The agency offers no rational explanation for why trees may travel further downhill to reach roads than to reach streams or how snags that are 150' in height will jump up hill for several hundred feet to reach logging roads. When the Klamath National Forest signed the 2010 decision to log the Panther Salvage timber sale (a cumulative impact that is not fully disclosed and analyzed in the Westside DEIS) the KNF authorized removal of alleged "hazard" trees up to 200' feet above and below logging roads. See Panther EA page 24. The KNF 2014 decision to log the Salmon Salvage timber also authorized removal of roadside trees up to 200' feet above and below roads. No explanation is provided in the Westside DEIS of why KNF timber planners have now increased the size of post-fire roadside clearcuts by an additional 100' to a total of 250' feet above and 250' feet below roads in the Westside timber sale.1 Inexplicably the KNF will now create a 500' foot wide post-fire clearcut along some roads rather than the previous 400' wide swath. The Salmon Salvage and Panther decision documents are attached to these comments.	The comment refers to Table 2-4 of the draft EIS. This table displays acres of roadside hazard treatments by management area and fire area. It is not accurate to characterize these acres as roadside "logging" as the treatment is only applicable to trees that pose a hazard to the road. Standard and Guidelines MA10-58 says, Fell trees in Riparian Reserves when they pose a safety risk. Keep felled trees on-site when needed to meet Coarse Woody Debris objectives. It is anticipated that large areas within the roadside hazard acreage will remain predominantly unchanged by the treatment because they lack trees that pose a hazard to the road. Within Riparian Reserves large hazard trees (> 26" diameter at breast height) that are felled within the first site tree distance of fish-bearing, perennial nonfish-bearing, and intermittent stream channels will be left on site for the provision of hydrologic and aquatic functions. This inclusion of perennial nonfish-bearing and intermittent channels is a modification since the draft EIS was published. The comment appears to refer to the footnote on page 34 of the draft EIS that states "hazard tree removal is proposed within 250' on either side of selected roads". This does not apply to all roads in the project area and hazard tree removal is not accurately characterized as a "clearcut". For reference, Riparian Reserves widths are established at one site-potential tree slope distance along nonfish-bearing streams. The site tree distance is at least 150'. Cumulative watershed effects of the referenced Panther project have been analyzed in watershed models just as all past, present, and reasonably foreseeable future activities are. Hazard trees are identified for removal by engineering and Silviculture staff for removal based on their location and condition. When an economic gain is realized, these funds may be used for reforestation. Timber sale receipts will fund reforestation work that is critical for restoration of watershed conditions for fish habitat and the creation of future wildlife habitat for the federally-listed northern spotted owl and other important wildlife species. In addition, capturing the maximum economic value of the salvaged timber would benefit the local counties and communities' economies (draft EIS page 21). Note that the purposes of this project is: to address the needs for 1) worker and public safety and access; 2) safe conditions for firefighters performing fire suppression for community protection; 3) a project that is economically viable, meeting project objectives and benefiting our local communities; and 4) restored and fire-resilient forested ecosystems.
232.07 - ACS	#18878-63	Other specific comments which need to be addressed Please note that much of the analysis in the DEIS and ACSOR rely upon the existence of Riparian Reserves to mitigate and reduce sediment production from upland salvage logging activities. Yet the DEIS calls for logging in steep, unstable Geological Riparian Reserves and in moderately and high severity logging units above burned Hydrological Riparian Reserves in which "key riparian functions, including sediment retention capacity and streams shade, are assumed to be lost ... "ACSOR page 49. The Westside DEIS "Forest Plan Consistency checklist" contends that the project is "compliant" with Key Watershed road standards because allegedly "the project will not increase the amount of system roads in Key Watersheds" (emphasis in original). The word "system" (italicized or not) never appears in the LRMP Key Watershed standard 6- 24.	The Westside Fire Recovery project proposes no salvage harvest treatment in hydrologic Riparian Reserves--the reserves along fish-bearing, perennial nonfish-bearing, and intermittent stream channels. As such these Riparian Reserve areas will buffer potential upland salvage harvest to the extent naturally possible given variable effects of the 2014 wildfires in Riparian Reserves. Salvage harvest treatments are proposed for geological Riparian Reserves because these areas will benefit from hazardous fuels reduction and site preparation and planting in that risk of future high-severity wildfire will be reduced. Additionally, the areas will become re-forested more quickly (due to planting) thereby lowering the risk of sediment production from surface erosion and mass wasting processes. Table 2 in the Aquatic Conservation Strategy Report demonstrates that a relatively small percentage of Riparian Reserves in the project area experienced high soil burn severity in 2014. As such, Riparian Reserves will still provide key function of sediment retention and shading that is referenced in the comment. With regard to roads in key watersheds the Westside Fire Recovery project proposes treatment of existing legacy sediment site in the Elk Creek Key Watershed as a condition for enrollment of the project in the North Coast Regional Water Quality Control Board's waiver program. Treatment of these legacy sediment sites will reduce significantly risk of stream sedimentation and water quality impacts related to road system erosion.

Code	Comment Number	Comment Text	Response
232.07 - ACS	#18878-64	It does not appear that the Forest Service has met LRMP standard 6-29 in any Key Watershed within the Westside planning area. Instead of following the direction to "prioritize roads for relocation and restoration or closure, based on the impact to Forest resources" the agency is proposing to re-open previously closed and decommissioned roads in order to maximize timber harvest. While the DEIS attempts to justify extensive roadside Reserve logging as related to the "safety" element of the project purpose and need, in fact the removal of roadside trees has nothing to do with public safety and is solely designed to accomplish the agency's economic preferences. Page 23 of the ACS Report indicates that the agency intends to retain snags >26" DBH located in the Riparian Reserve of fish-bearing streams that are felled as part of the roadside logging prescription in order to provide for down wood recruitment. No explanation is provided as to why large trees (greater than 26" DBH) are proposed for removal after being felled in the Riparian Reserves for non-fish bearing streams or in the LSRs. Down wood recruitment serves the management goals for these land use allocations by providing for wildlife habitat, nutrient cycling and needed legacy forest structure. Its removal serves only economic, rather than ecological objectives. The combined effects salvage logging to facilitate future fire suppression, and the impacts of that fire suppression, must be analyzed together in a single NEPA document. Actions are connected when they "cannot or will not proceed unless other actions are taken previously or simultaneously" or when they are "interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R §1508.25(a)(l)(ii, iii). Where one project will not proceed but for the completion of another, it is a connected action and NEPA mandates that both actions be analyzed in the same document. Thomas, 753 at 759.	The Westside Fire Recovery project proposes treatment of legacy sediment sites in the Elk Creek Key Watershed as part of any project action Alternative. These treatments will prioritize road restoration based on road impacts to forest resources as is stated in the comment. Importantly, the legacy sediment site treatments will reduce the risk of adverse effects to water quality from road-related erosion and sedimentation in Elk Creek. Additional road treatments have been planned and implemented across the project area as a result of post-2014 wildfire Burned Area Emergency Response efforts. This Burned Area Emergency Reclamation work has reduced the risk of road-related erosion and sedimentation. Within Riparian Reserves large hazard trees (> 26" diameter at breast height) that are felled within the first site tree distance of fish-bearing, perennial nonfish-bearing, and intermittent stream channels will be left on site for the provision of hydrologic and aquatic functions. This inclusion of perennial nonfish-bearing and intermittent channels is a modification since the draft EIS was published. The comment states that the effects of future fire suppression must be analyzed in the National Environmental Policy Act document as it is a connected action. The project proposes salvage harvest and hazardous fuels reduction to reduce the risk of high-severity wildfire in the future. Future wildfire and its associated suppression activities are unpredictable events with associated emergency actions at that time. It is uncertain the size, location, or year of the next fires. Therefore, fires and suppression are not reasonably foreseeable activities in the current analysis. Also see response to comment number 18909-79 regarding watershed restoration.
232.07 - ACS	#18912-2	In addition to warming water from drafting in a critical time, albedo affects from recently clear-cut and burned areas will be working simultaneously to warm these waters. The rush to begin cutting will exacerbate the warmth of these streams, before natural succession (or planting) has time to replenish riparian and hillside cover. To make matters even worse, many of the proposed stream crossings within the burn, as well as the new and re-commissioned roads are located at sediment legacy sites. While the proposal does mention that these sites tend to be outside of anadromy, anyone who has hiked in the Klamath Mountains knows that these streams flow from steep mountains and are high gradient. These streams have the capacity to carry sediment!	Project Design Feature (project design feature) Watershed-36 provides detailed standards for water drafting in Coho salmon critical habitat streams and other fish-bearing (non-Coho) streams. The implementation of these standards should prevent water warming directly related to drafting from occurring. The Forest acknowledges that fire-killed trees provide less shade to Riparian Reserves and streams, however, the extent of high-severity fire along streams in 2014 was modest (see Table 14 in the project Hydrology Report). As such, most Riparian Reserves in the project area are providing shade similar to what was produced before the 2014 wildfires. There are a limited number of stream crossings proposed by the project, and these will be constructed, used, and restored based on Best Management Practices to limit erosion and sedimentation and potential adverse effects to water quality. Additionally, where proposed temporary road segments and stream crossings encounter existing legacy sediment sites these sites will be prioritized for restoration so that long-term risk of erosion and sedimentation is reduced below pre-project risk.
232.07 - ACS	#19072-9	1. Aquatic Conservation Strategy Compliance . . The Northwest Forest Plan 'Aquatic Conservation Strategy Objectives Guidelines state that Forest Service and BLM-administered lands within the range of the northern spotted owl will be managed to maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. The Standards and guidelines for Riparian Reserves prohibit or regulate activities that retard or prevent attainment of Aquatic Conservation Strategy objectives. Alternative 2 proposes about 3,920 acres of salvage units (about 2,000 acres of salvage logging) on steep, weather granitic lands in Riparian Reserves. No salvage logging is proposed on inner gorges, active landslides or toe zones of dormant landslides. Also proposed is about 960 acres of site preparation and planting, 4,3-95 acres of roadside hazard tree removal, and 3,940 acres of fuels treatment on unstable lands considered to be Riparian Reserves. Alternative 2 also proposes construction of new log landings within aquatic Riparian Reserves and the reuse of existing log landings within Riparian Reserves. The number ·of pw and reused . Reserves may i:-esul t in significant impacts to water quality, and the draft EIS has not adequately proposed mitigation measures to reduce impacts to less than significant levels.	The Forest acknowledges the salvage harvest, site preparation and planting, hazard tree, and hazardous fuels treatments proposed for geologic Riparian Reserves. These geologic Riparian Reserves do not have active stream channels like hydrologic Riparian Reserves, and the treatments are proposed because it is anticipated that fuels reduction followed by planting will serve to reduce risk of future high-severity fire and sediment production from surface erosion and mass-wasting processes. A small number of log landings in Riparian Reserves were approved for use after field inspection by watershed staff. The landings deemed acceptable for use were approved because they were characterized by some or all of the following: 1) the landing was in the outer zone of the Riparian Reserves, 2) the landing was uphill or separated from the stream channel by an existing road, 3) the landing was not on an unstable landform, 4) the landing was not demonstrating active erosion, 5) the landing or landing edge was not vegetated with mature live trees that would need removed for landing use. Given these conditions, use of landings in Riparian Reserves is not expected to produce adverse effects to hydrologic function or water quality.

Code	Comment Number	Comment Text	Response
232.07 - ACS	#5873-110	Salvage logging will set back vegetative recovery that has already started and thereby retard attainment of riparian and aquatic management objectives. In research on post-fire logging on the Winema NF, Sexton (1998) found that salvage logged sites produced only about 38% of the understory biomass of that on the unlogged site; and one year later produced only about 27% of the understory biomass of that on the unlogged site. In fact, Sexton's (1998) study comparing salvaged and unsalvaged areas of a fire on the Winema NF one and two years after logging showed: Salvage Areas Unsalvaged Areas reduced vegetation biomass greater vegetation biomass reduced species diversity greater species diversity reduced species richness greater species richness reduced growth of planted seedlings greater growth of planted seedlings reduced survival of planted seedlings greater survival of planted seedlings Sexton, Timothy O. 1998. Ecological effects of post wildfire activities (salvage-logging and grass-seeding) on vegetation composition, diversity, biomass, and growth and survival of Pinus ponderosa and Purshia tridentata. MS Thesis Oregon State University. Corvallis, OR. 121p	The referenced citation studied effects on the Winema National Forest in Central Oregon. The Winema NF is an eastside (east of the Cascade Mountain crest) forest environment that is significantly different from forests in the Klamath Mountains and in the Westside Fire Recovery project area. Comment states that post-fire salvage resulted in reduced biomass, reduced species diversity, reduced species richness, and reduced survival and growth of planted seedlings relative to unsalvaged sites. Post-salvage biomass may not be a significant concern in the wetter Klamath Mountains. Additionally, a primary objective of the WFR project is to reduce forest fuels thereby reducing the intensity and subsequent direct, indirect, and cumulative adverse effects of future fires in the project area. The proposed salvage occur on just 11,700 acres of the 162,300 acres burned on national forest lands, with reforestation occurring on 7,900 acres. Overall, due to the mosaic nature of the proposed activities and the reforestation, biomass is not significantly affected.
232.07 - ACS	#5873-142	The proposed salvage activities are in fundamental conflict with the Northwest Forest Plan Aquatic Conservation Strategy objectives, especially because proposed logging, yarding, soil ripping, helicopter landings, safety zones, and road activities will— a) cause soil erosion and sedimentation. For instance, road use will cause sediment to enter streams, which will reduce aquatic insect abundance, which will adversely affect fish. b) Chronic lack of large woody debris does not support complex aquatic habitat structures, functions, and processes including: pools, gravel retention and storage, stream energy dissipation, side-channels, cover, winter refugia, and substrate and nutrients supporting organisms of all kinds. c) fires are a primary mechanism of large wood recruitment to streams. Removal of large quantities of large wood will limit recruitment of large woody to streams that are already severely degraded in terms of large wood and the aquatic habitat complexity it provides. If the large trees are retained they may some day be delivered to streams via landslides, but if the large snags are removed they will never reach streams. d) The NEPA analysis inappropriately relies on the filtering effect of riparian buffers that are severely affected by the fire and will very likely NOT filter sediment to the degree found in studies involving unburned riparian buffers. To be effective, riparian buffers need healthy vegetation, coarse woody debris, and adequate cover of litter and duff, all of which have been significantly reduced by the fire. e) Some riparian areas on private land located below BLM salvage areas will not function to filter sediment both because of fire effects and subsequent disturbance from private land salvage logging. f) Channel morphology and large woody debris recruitment will be adversely affected by logging in riparian reserves.	This comment largely reflects the opinion of the commenter and provides general descriptions of aquatic function and potential effects but does not provide information specific to the Westside Recovery Project, compliance or non-compliance with the Aquatic Conservation Strategy or the content of the draft EIS. We agree that logging, yarding, and landing and road construction and use have the potential to cause erosion and sedimentation but that doesn't mean those effects will occur. Extensive project design features have been incorporated into the project to prevent adverse impacts to water quality. Our analysis shows that the conditions created by the fire are driving watershed conditions now, and will continue to do so should the West Side Recovery Project be implemented. This was demonstrated by the recent debris flows from summer thunderstorms. It should be noted that our assessment predicted high likelihood of these events occurring whether the West Side Fire Recovery Project is implemented or not and that implementation will not increase the risk of debris flows or landslides (EIS Chapter 3 –Geology, Hydrology, Aquatic Resources, Aquatic Conservation Strategy Assessment). At most, there is some potential for site scale sediment impacts from project implementation that are minor compared to the effects of the fire (Chapter 3 – Hydrology). The cumulative watershed effects analysis presented in the Westside Fire Recovery project Hydrology Report incorporates these activities. Results of CWE analyses indicate that 9 of 10 project area 5th field watersheds remain below model thresholds of concern and thus are not expected to manifest adverse cumulative watershed effects to hydrologic function or water quality. Only the Beaver Creek 5th field watershed marginally exceeds the Threshold of Concern (risk ratio of 1.0) under alternative 2 with risk ratios of 1.1 and 1.2 for the mass-wasting and universal soil loss equation models, respectively. While risk ratios in excess of 1.0 are interpreted to mean an elevated risk of adverse cumulative effects Project Design Features and Best Management Practices are planned and implemented to prevent adverse effects. Items b) and c) of the comment concern the lack of existing large woody debris (or large wood) in streams and the potential for impacts to future large wood recruitment due to post-fire salvage operations. A fundamental Westside Fire Recovery project design feature was to remove all Riparian Reserves along stream channels from proposed salvage harvest in order to prevent impacts to hydrologic function and water quality. We agree that wildfire is a key mechanism by which large wood is recruited to streams, and the project is designed such that no timber salvage will occur in Riparian Reserves along streams, and the large hazard trees (> 26"" DBH) most beneficial to aquatic functions will be felled but retained within the first site tree distance along all defined streams (fish-bearing, perennial nonfish-bearing, and intermittent). We concur that riparian zones that experienced high-severity fire do not provide the same water quality buffering functions as unburned riparian zones the 2014 fires resulted in modest amounts of high-severity fire in Riparian Reserves in the project area. Table 14 in the Hydrology Report displays 2014 fire severity along intermittent and perennial streams in the project area. The highest value reported is 8% of intermittent streams in the Beaver Fire burned with high severity. Given these data we believe that the buffering capacity of channels in the project area is predominantly intact. Regarding point f) in the comment there is proposed hazard tree removal in Riparian Reserves but there will be no logging in Riparian Reserves along stream channels in the project. Snags in Riparian Reserves have been retained, and additional snag retention areas have been designated. An Aquatic Conservation Strategy assessment is provided in the final EIS. The Forest Supervisor will determine whether the project meets, or does not prevent attainment of Aquatic Conservation Strategy objectives. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
233.01 - Air Quality	#6-1	There are sizable asbestos containing rock formations in the fire area, including almost the whole Grider Creek Drainage. A map is attached. "In the past, EPA response actions were often taken when materials containing greater than 1 percent asbestos were present. However, asbestos in soils at and below 1% may still pose unacceptable health risks depending on site-specific conditions and land use (EPA 2004, EPA 2008). Current EPA policy recommends development of site-specific, risk-based action levels to determine if response actions should be taken when asbestos levels below 1 percent are found at a site (OSWER Directive, EPA 2004)."http://www.epa.gov/superfund/health/contaminants/asbestos/index.htm Here are tips from the Naturally Occuring Asbestos Fact Sheet for reducing your exposure to NOA: "-Be aware of windy conditions and avoid dusty conditions to reduce exposure -Limit dust generating activities, such as riding offroad vehicles, riding bicycles, running or hiking, riding horses or moving livestock, etc. -Avoid handling or disturbing loose asbestos containing rock types - Drive slowly over unpaved roads, with windows and vents closed, to minimize dust generation (California Air Resources Board recommends that vehicle speeds not exceed 15 miles per hour on unpaved roads where asbestos is present) -Avoid or minimize the tracking of dust into vehicles [and homes] -Do not use compressed air for cleaning your vehicles after your visit. Use a wet rag to clean the interior" and, as other sources suggest, a High Efficiency Particulate Air (HEPA) filter vacuum." And here's more from EPA: "Common work practices include limiting activities on NOA-containing areas, reducing driving speed on unpaved roads that may contain NOA, and cleaning vehicles driven over NOA. For example, during road construction or maintenance activities on unpaved areas where NOA is present, the As- bestos Airborne Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations of the California Air Resources Board (ARB) requires that vehicle speeds not exceed 15 miles per hour.1 Worker health and safety measures that include respiratory protection may be warranted. For information, consult with Occupational Safety and Health Administration Asbestos Standards for the General Industry and Asbestos Standards for the Construction Industry (http://www. osha.gov/SLTC/asbestos/hazards.html)."	Thank you for the information. How the existing regulations related to the potential for naturally occurring asbestos is discussed in the Section I of the Amendment to the Geology Report.
233.01 - Air Quality	19158-1	I finally was able to review more documentation regarding the project, and found the air quality resource report. Great to see you're the contact! First, Siskiyou County is currently in attainment for ozone. Nonetheless efforts to mitigate ozone precursors are encouraged. On page two the report has a bold type "Invalid source specified..", regarding organic aerosols. Should that be clarified or the referral to peaking aerosols be removed? Also on page two, under direct and indirect effects, it states: "So the emissions from the prescribed fire will be 8 per year." (That sounds really low). That snetence in particular is unclear in its conclusion and it may be help to state what units the "8" is referring to. It is 8 tons of emissions, combined total, NOx, PM, or? I have not reviewed all the documentation so please excuse my ignorance regarding the following. I read that the project entails over 16K acres total of Rx fire use. How many years does that cover? Is there any consideration to utilize smoke or particle monitors for the project? Road comments/questions include: If dust control or mitigation is required or has already been factored in, will there be water availible to wet roads under the current and forecast drought conditions? Is road grading or construction of roads, even tomporary, part of this project? Are there roads, existing or planned, in or through ultramafic rock locations? If so, California Air Toxic Control Measure(s) for the control of dust from naturally occuring asbestos may be applicable and should probably be addressed if not already so.	The "Invalid source specified" error was due to a formatting issues that was from converting the word document over to a .PDF. There should have been a link the website http://www.arb.ca.gov/app/emsinv/emssumcat.php. The only criteria pollutants analyzed for was nitrogen oxides due to the incorrect assumption that Siskiyou County was still in non-attainment for ozone. The amendment has updated this assumption to correctly identify Siskiyou County as in attainment for all criteria pollutants so Conformity is not required. The nitrogen oxide analysis was continued in the amendment to allow the reader to compare between the draft EIS and the final EIS only. There is no requirement for an analysis for particulate matter or dust (since the county is in attainment). However, a first order analysis was completed and is included in the Air Quality report amendment. There are mitigations in place that require water or chemical dust suppressant to reduce dust while hauling on dirt roads. There are an estimated 16,000 acres of prescribed burning. Only about 20% of that is assumed to be implemented in any given year (so 5 years total). FOFEM results show that there is about 5 lbs./acre of NOx emissions (see addendum to the AQ report) – so ((0.20x16,000)x5lb/acre)/2000)) = 8 tons/year of emissions of NOx (it was a typo to leave out the units). This is laid out a little better in my updated report. There is standard road maintenance associated with this project which will be completed with programmatic mitigations. An analysis regarding naturally occurring asbestos is in the Geology report amendment. Timber harvest is exempt from most of the regulation regarding naturally occurring asbestos with the exception of road construction on ultramafic rock. The project proposes temporary access roads on ultramafic rock but no new roads are being added to the system.
233.02 - Climate Change	#10501-1	You need to follow your own rules regarding logging protected forest preserves. Allowing extreme clearcutting is contrary to best practices for our environment. Especially now that California is experiencing severe drought conditions, tampering with natural recovery processes threatens watersheds and makes no sense whatsoever.	The Westside Fire Recovery project follows regional and national guidance and the standards and guideline in the Forest Plan including those related to salvage harvest, reforestation, roadside hazard treatments and fuel reduction as displayed on the summarized and referenced Forest Plan consistency checklist. Natural recovery processes will take place on between 65% to 100% of the area burned at moderate to high severity (depending on the project Alternative analyzed) as disclosed in the climate change section of Chapter 3 of the EIS. As noted in Chapter 2 of the EIS, natural recovery will take place on between 80% and 100% of the total project area.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#13380-1	THE NW USA IS ALREADY A WAR ON OUR FORESTS AND RIVERS AND WILDLIFE FOR FAR TOO LONG!!! LOGGING INDUSTRY WE DEMAND CEASE AND DESIST IN DESTROYING OUR WATERSHEDS CLEARCUTTING FORESTS MUST BE BANNED IT JUST CAUSES DROUGHT THE MORE THE TREES GO DOWN THE LESS RAINFALL, THE LESS RAIN THE LESS FISH AND OTHER WILDLIFE SPECIES!!! CUTTING DOWN FORESTS IS VERY BAD WRONG AWFUL FOR CLIMATE CHANGE CRISES...OPPOSITE OF WHAT WE MUST BE DOING TO SAVE OUR PLANET AND BUILD HEALTHY COMMUNITIES FOR PERSONAL AND PLANETARY HEALING!!! THESE TREES ARE OLDER THAN PEOPLE AND CORPORATIONS EAGER TO RUIN EVERYTHING AND TURN ANCIENT TREES INTO TOILET PAPER THROWAWAY WASTE!! TIME TO MAKE PAPER AND MANY BUILDING MATERIALS OUT OF HEMP NOW!!! BAN CLIMATE CRIMES OF IMMORAL LOGGING WHEN OUR CLIMATE NEEDS PROTECTIONS FROM MORE RUTHLESS DESTRUCTIONS COMMITTING CRIMES AGAINST HUMANITY AND ALL LIVING THINGS!!!	The effects of project Alternatives on climate change are disclosed in the climate change section of Chapter 3 of the EIS.
233.02 - Climate Change	#13574-1	You have got to be kidding about cutting old growth forest during this time of record carbon emissions. Cutting old growth trees will help no-one. GO back to the drawing board and remember why taxpayers fund the Forest Service. It is not for silly temporary profit and large carbon emissions. You should be ashamed of yourself. Snap out of it and function in a respectful manner. You did study Biology? The mere suggestion of clear cutting old growth trees is an outrage.	The relationship between harvest of dead and dying trees and carbon storage is discussed in the climate change section of Chapter 3 of the EIS.
233.02 - Climate Change	#13702-1	Our forests are our planet's air & water conditioning systems. We need them in tact. I can't believe that in times of severe drought you are considering cutting a forest which sequesters water. It's nuts!! We cannot eat, drink or breathe money!!	The project Alternatives include cutting of live trees only if they are an immediate hazard to safety. See response to 12346-55.The effects of harvesting dead and dying trees are disclosed in the climate change section of Chapter 3 of the EIS.
233.02 - Climate Change	#14826-1	whsat will you do when all the trees, clean air and water are gone? buy clean water and air? you are creating your own slavery. the logging lifestyle is dying without the help of enviornmentalists. THERE IS A LIMITED AMOUT OF TREES, THEY CAN ONLY GROW SO FAST. you realize trees would help lessen the effects of global warming.....ya know fresh oxygen and what not	The project Alternatives include cutting of live trees only if they are an immediate hazard to safety. See response to 12346-55.The effects of harvesting dead and dying trees on water are disclosed in the air quality and water quality (hydrology) sections of Chapter 3 of the EIS.
233.02 - Climate Change	#15169-1	But, since the deaths of forests effect the air and climate of the entire planet, I felt I had to speak out. Although, I did not "personalize" the letter below. I feel that it already says what needs saying better than I could do. But please, I would ask you to give the below full consideration nonetheless, as it is of crucial importance!	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 3 of the final EIS for a disclosure of project's effects to air quality and climate.
233.02 - Climate Change	#15253-1	It is inexcusable that in the massive drought conditions that California is now facing and has been facing for so many years now but has become extreme, that any further thought of deforestation under any guise would be considered madness. To expose the land to further degradation, sun penetration, drying trends, siltation, etc. should be considered criminal at this point in history. Deforestation should be stopped globally particularly in evergreen forests, in order to cease climate change and absorb the massive buildup of CO2. What you are proposing should be banned and for your own sakes, you should voluntarily cease deforestation and be planting everything you can for any kind of future for your children and families now.	The project Alternative include the cutting of live trees only if they are an immediate hazard to safety and planting seedlings to recover conifer forest as described in Chapter 2 of the EIS. See response to 12346-55.The effects of harvesting dead and dying trees on water and climate change are disclosed in the water quality (hydrology) and climate change sections of Chapter 3 of the EIS.
233.02 - Climate Change	#17386-2	I attribute much of our current drought to the removal of millions of trees: each mature tree transpires 200 +/- gallons of water per day. That is hundreds of million of gallons of water every day that is not stabilizing our climate. (We humans also like to breathe their oxygen)	See the response to comment number 14826-1.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#18872-12	The drought conditions, with far less water for all is not a mystery, the ocean currents are the key to our weather. Warm currents are seen farther North creating warmer water with warmer storms in the North.	We acknowledge that California is in a drought; however, this is beyond the scope of the project's analysis.
233.02 - Climate Change	#18883-13	Reforestation should utilize seedlings grown in a nursery from seeds taken from live trees in adjacent forests. These seedlings will be more adapted to local soil and water conditions and may be more resilient to climate change.	It is already the policy of the Klamath National Forest to utilize seedlings grown in a nursery from local seeds; when available, these seedlings even come from the same district where they are to be planted. Reforestation will plant seedlings appropriate to the climate of the project area as discussed in Chapter 2 of the EIS to insure these seedlings are adapted to local soil and water conditions; these seedlings may be more resilient to climate change as disclosed in the climate change section of Chapter 3 of the EIS.
233.02 - Climate Change	#18909-108	The ability of the Region's forestlands to sequester and store carbon has become a matter of national and international significance. Region 5 Ecological Restoration Implementation Plan The DEIS claims that our forests will benefit from fuels reduction designed to favor fire-resistant trees and reduce the risk of loss due to wildfire and will ultimately reduce carbon dioxide emissions from future fires. However as show from our comments we do not believe this assumption to be true. The DEIS fails to consider even the most rudimentary calculation of the carbon emissions involved in logging, yarding, hauling and processing. It does not consider: the rate of CO2 emissions from standing snags compared to snags that are taken off site, the role of down rotting logs on soil carbon levels or future stand development and CO2 capture, the role of forest soils on carbon sequestration, the impacts of increased fire hazard (via slash and plantation establishment) or the influence of the low surface to volume ratio of slash, sawdust and disposable wood products compared to the high surface to volume ratio of large snags and down wood on carbon sequestration. A recent Executive Order called for several agencies, including the Department of Agriculture to meet and create a plan to adapt their land- and water-related policies to protect watersheds and natural resources in the face of climate change. The DEIS does not consider or address the 2012 National Fish, Wildlife and Plants Climate Adoption Draft Strategy. Live tees, like the live trees targeted for removal in the Westside project, absorb carbon dioxide for use in photosynthesis, making them one of the most effective natural tools to remove the greenhouse gas from the atmosphere. It is imperative to retain dense stands and canopy on north and east facing slopes in regards to climate change, as these areas will provide the highest amount of refugia for plant and animal species. Further, the DEIS fails to analyze the fact that large old trees can store carbon for decades and even centuries. Preserving intact snag forest ecosystems and forests in this region is also a local solution to climate change. Further the DEIS does not consider the effects of climate change on weather, plants or wildlife. The agencies own scientific accounts19 show that these watersheds may continue to experience drought, decreased snow pack, rain events which increases the chance for flooding and possibly increased wind events which can influence fire behavior. 19 Butz, Ramona J. and Safford, Hugh. A summary of current trends and probable future trends in climate and climate-driven processes for the Klamath National Forest and surrounding lands. USDA Forest Service, Pacific Southwest Region.	The climate change section of Chapter 3 of the final EIS have been expanded to address carbon storage (sequestration). Department of Agriculture and Forest Service climate change adaptation guidance is followed. The information provided by Ramona Butz and Hugh Safford (Forest Service 2011) for the Klamath National Forest has been incorporated. As noted in responses to previous comments, live trees are not targeted for removal unless they are an immediate hazard to safety.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#18926-31	The DEIS claims that our forests will benefit from fuels reduction designed to favor fire-resistant trees and reduce the risk of loss due to wildfire and will ultimately reduce carbon dioxide emissions from future fires. The DEIS fails to mention the effects of logging or include analysis regarding the carbon emissions involved in logging, yarding, hauling and processing. It does not consider: the rate of CO2 emissions from standing snags compared to snags that are taken off site, the role of down rotting logs on soil carbon levels or future stand development and CO2 capture, the role of forest soils on carbon sequestration, the impacts of increased fire hazard (via slash and plantation establishment) for the first 20 years after harvest on carbon sequestration should there be another stand replacing fire or the influence of the low surface to volume ratio of slash, sawdust and disposable wood products compared to the high surface to volume ratio of large snags and down wood on carbon sequestration.! ! A recent Executive Order called for several agencies, including the Department of Agriculture to meet and create a plan to adapt their land- and water-related policies to protect watersheds and natural resources in the face of climate change. The DEIS does not consider or address t	The commenters statements are inaccurate and claims are unsupported by evidence. The EIS analyzed the effects of logging throughout Chapter 3 of the EIS. Carbon emissions are discussed to the extent practical in the climate change section of Chapter 3. The purpose and need of the project includes the improvement of watersheds. See Chapter 2; the project incorporates watershed project design features and legacy site treatments. See Chapter 3 of the EIS for a disclosure watershed effects.
233.02 - Climate Change	#18926-32	Live tees, like the live trees targeted for removal in the Westside project, absorb carbon dioxide for use in photosynthesis, making them one of the most effective natural tools to remove the greenhouse gas from the atmosphere. It is imperative to retain dense stands and canopy on north and east facing slopes in regards to climate change as these areas will provide the highest amount of refugia for plant and animal species. Further, the DEIS fails to analyze the fact that large old trees can store carbon for decades and even centuries. Preserving intact snag forest ecosystems and forests in this region is also a local solution to climate change.! !	This project will only cut live trees that are of an immediate safety hazard as discussed in Chapter 2 of the EIS. See response to 12346-55.The expanded discussion in the climate change section of Chapter 3 of the final EIS acknowledges the storage capabilities of large old live trees and discloses the effects to carbon storage of removing dead and dying trees.
233.02 - Climate Change	#19079-10	Lie #1, the forest will become sequestered as lumber. Very little of the carbon in a forest will end up in a finished wood product. Over 60% of the carbon in a young growth redwood and fir forest is found in the leaves, branches, stump, roots and soil (Jandl 2007, Bonan 2008, Thomas and Martin 2012), all of which is left to decompose or be burned, releasing most of it's CO2 to the atmosphere in a short period of time. Of that which makes it to the mill, roughly half will end up in a finished product, the rest is mill waste to be burnt or put in a landfill where it is converted to methane.	The expanded climate change section of Chapter 3 of the EIS acknowledge the importance of forests, especially with healthy live trees, as carbon sinks (for carbon storage). Although they mention that some carbon is stored in finished wood products, these sections do not suggest that this is a major proportion of carbon storage. Carbon is stored in dead trees for a short time period but is released when these dead trees decay as disclosed in these sections of Chapter 3 of the EIS; this is reinforced in the citations provided in the comment.
233.02 - Climate Change	#19079-11	Lie #2, this lumber will remain sequestered for 100 years. Of the 20% that does become a wood product, most of this will be in use for less than 40 years (Smith 2006, Gower 2006, Ingerson 2009, Skog 2008). Of the 1% that does stay in use for 100 years, this is still not to be considered long term sequestration, as it only means that this carbon will enter the atmosphere when sequestration is most needed. The conservative IPCC states that by 2100 we need to be carbon neutral or carbon negative worldwide or expect the worst.	Nowhere in the EIS is it suggested that carbon requested in lumber or wood products is in use for more than 40 years. However, carbon in the dead or dying trees in the project are likely to release carbon much sooner than 40 years. The project will not affect the ability of the forest to be a carbon sink (store carbon) by 2100.
233.02 - Climate Change	#19079-12	Lie #3, a young forest takes in the lions share of carbon and not so much as it matures. As a tree matures it adds ever greater amounts of carbon to it's structure. If the biomass of a tree is 50% carbon, and that biomass is growing ever greater as the tree matures, then it's storage of carbon is also increasing as it matures, and not visa versa as the timber industry claims. This is especially true for conifer forests in Northern California. The following quotes from recent research highlight this fact; "The oldest tree we measured produced more heartwood in its main trunk over 651 years (351 m3) than contained in any tree we measured <1500 years old. Increasing wood production as trees age is a mechanism underlying the maintenance of biomass accumulation during forest development and the carbon-sink capacity of old-growth forests" (Sillett 2009). "Large, old trees do not act simply as senescent carbon reservoirs but actively fix large amounts of carbon compared to smaller trees; at the extreme, a single big tree can add the same amount of carbon to the forest within a year as is contained in an entire mid-sized tree" (Stephenson 2014).	Nowhere in the EIS is it suggested that young trees take in the lion's share of carbon and older trees take in less. It is suggested, in the expanded climate change and vegetation sections of Chapter 3 of the EIS that live trees are most important for carbon storage over time since dead or dying trees release carbon as they decay.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#19079-2	Where in the document do you refer to "climate change?" The President has directives, Department of Interior and the USFS have directives when planning projects to consider the impacts of climate change.	The project is consistent with Presidential Executive Order on Sustainability, the draft Council on Environmental Quality recommendations on greenhouse house emissions, and the most recent Forest Service directives of 2009. The disclosure of effects of the project on climate change is provided in the expanded climate change section of Chapter 3 of the final EIS and in other referenced sections of the Chapter.
233.02 - Climate Change	#19079-4	No green growing trees should be cut. International research has deemed old growth trees sequester the most CO2 out of the atmosphere and deliver oxygen, more than second growth or third growth forest stands.	See the response to comment number 18926-32.
233.02 - Climate Change	#19079-9	As climate disruption accelerates, tipping points are reached and carbon levels soar, it is imperative that all of humanity work together to drastically cut emissions while removing excess carbon from the atmosphere, storing it long term as best we can. Or as Spock would say, "it's the only logical choice we have Jim." Yet we are given very few options, and in truth there is only one that can actually stem the tide. The last hope for mankind lives in a forest near you, and it's called a tree, natures greatest carbon storage bank. For many years we have heard about the importance of saving tropical forests, but equally important is the need to save temperate forests, both softwood and hardwood, and especially the redwood/fir forests of Northwestern California. They soak up carbon faster, and store it longer, than anything else on earth (Keith 2009, Sillett 2009). Recent research has shown that forests are the greatest carbon sink on the planet (Pan 2011). This is a quote from one of the lead researchers, Dr. Simon Lewis; "Humans are altering the world's forests in a number of ways.....Our research shows these changes are having globally important impacts, which highlights the critical role forests play in the global cycling of carbon and therefore the speed and severity of future climate change." The other types of carbon sequestration available to us on a large enough scale are the oceans and human induced geoengineering. Unfortunately the oceans can no longer handle large amounts of carbon sequestration without becoming highly acidic, killing ocean life, while all anthropogenic methods proposed are untested, dangerous for the environment and costly beyond anyone's dreams. That is why I say that the last hope for mankind resides in our forests, and, if left to grow, these same forests would heal the earth, provide habitat for species on the brink, clean our water and provide high quality unpolluted oxygen to breathe. It's the greatest no-brainer we've ever been faced with. That is, unless, you talk to someone who makes money from cutting those forests down. Then you run into a wall of obfuscation, a fantasy land where clearcutting a forest every 30 to 40 years becomes sustainable forestry and a solution to global warming instead of a crime against humanity. The obvious oxymoron of claiming clearcuts sequester carbon has been allowed to exist and shape regulatory policy because of the power of the timber industry. They have convinced regulators that turning a forest into lumber is a form of sequestration. Though hard to believe, the following from an industry website explains this rationale; "Did you know that carbon accounts for around 50% the dry weight of a tree? When trees are harvested and manufactured into products, this carbon remains stored for the life of the wood product.....One of the best ways to address climate change is to use more wood, as it is the most abundant, biodegradable and renewable material on our planet!" I can almost hear Orwell screaming from the grave.	The expanded climate change and vegetation (silviculture) sections of Chapter 3 of the EIS acknowledge the importance of forests, especially with healthy live trees, as carbon sinks (for carbon storage) as noted in the article cited by Keith (2009), Sillett (2010) and Pan (2011). The Westside project will not remove live trees unless they are an immediate safety hazard as noted in previous responses to comments; removing dead or dying trees will not have negative effects of leaving trees to grow and store carbon. Quotation from Dr. Simon Lewis is not provided in either or these citation. There is no evidence provided that this project will measurably decrease the carbon storage capability of the project area as addressed in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-106	Salvage and Climate Change Climate change is expected to increase the magnitude and intensity of rain events which can cause significant erosion, especially after disturbances such as fire and logging. It would be wise to retain extra material on site after fire in order to intercept and absorb the energy of rain drops, absorb and store water, stabilize soil, capture and store mobile sediment, etc. Garbrecht, J. D., J. L. Steiner, and C. A. Cox (2007), Climate change impacts on soil and water conservation, Eos Trans. AGU, 88(11), 136. http://www.agu.org/eos_elec/2007/11-136_climate.html. The agency needs to ensure that the hydrology and erosion models used in the NEPA analysis accurately account for the expected increase in storm impacts due to climate change. Salvage will exacerbate peak flow effects The Effect of Mountain Pine Beetle Attack and Salvage Harvesting On Streamflows Special Investigation. FPB/SIR/16. March 2007. http://www.unbc.ca/assets/qrrc/the_impact_of_climate_change_and_harvest_of_mountain_pine_beetle_stands_on_streamflow_in_northern_british_columbia.pdf ("Salvage clearcut logging of grey-attack forest will affect peak flows and water yield significantly more than leaving the grey-attack forest standing. The grey-attack forest continues to play a role in snow interception, in reducing incoming solar radiation and reducing wind speed across the snowpack. As a result, the annual peak flows in the stream are delayed and of less magnitude than in clearcut watersheds. Leaving the MPB grey attack forest standing will result in lower peak flows than salvage harvesting the watershed.	The Garbrecht et al. citation is not a scientific study but an opinion piece that reiterates recommendations made by the Soil and Water Conservation Service for a national conservation watershed approach for the 21st century. These recommendations are beyond the scope of the project. The expanded water quality (hydrology), climate change and soils sections of Chapter 3 of the final EIS use the most recent information on expectations for extreme storm events in the project area to consider adaptation approaches that can be related to the activities proposed in the project. The effects of the proposed project on peak flows are disclosed in the expanded water quality (hydrology) section in Chapter 3 of the final EIS.
233.02 - Climate Change	#5873-15	Salvage logging will make climate change worse because logging accelerates the transfer of carbon from the forest to the atmosphere. Carbon in wood products is transferred to the atmosphere at about the same rate as carbon in fire killed trees. However, the DEIS fails to recognize that only a small fraction of the carbon removed from the forest via salvage logging ends up in wood products, and most of it is converted to slash, sawdust, milling waste, etc. and carbon in all of these pools is transferred to the atmosphere more rapidly than carbon in the dead trees. Each year that carbon can be retained in the forest and not in the atmosphere is a climate gain which the DEIS does not properly quantify. Salvage logging also delays revegetation, so the process of carbon uptake after the fire will be slower with salvage logging than without. 18. Diverse natural young forests are more resilient to climate change than simplified forests that result from salvage logging and replanting.	The contribution to carbon sequestration (storage) is disclosed in the vegetation (silviculture) section of Chapter 3 and referenced vegetation resource report. Managing forests for carbon sequestration has been a poorly understood science; some recent publications indicate that active forest management is believed to be an effective method of carbon sequestration for the future. Scientific evidence to support carbon storage is cited in the climate change section of Chapter 3 of the final EIS and in the expanded climate change section of that Chapter. This project retains all live trees except those that pose an immediate danger to safety so that carbon storage is continued in live trees.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-159	In the United Kingdom, which started estimating prices for carbon emissions several years ago, the government's latest calculation is a range of $41 – $124 per ton of CO2, with a central case of $83. An expanded calculation of carbon prices for the United States should at least explore prices in this range … Frank Ackerman, Elizabeth A. Stanton. 2010. The Social Cost of Carbon - A Report for the Economics for Equity and the Environment Network. April 1, 2010. http://www.e3network.org/papers/SocialCostOfCarbon_SEI_20100401.pdf. In recent work, Nordhaus (2010) ran a an updated version of the regional integrated model of climate and the economy (RICE model). The model also calculates the path of carbon prices necessary to keep the increase in global mean temperature to 2 °C or less in an efficient manner. The carbon price for 2010 associated with that goal is estimated to be $59 per ton (at 2005 prices) … William D. Nordhaus 2010. Economic aspects of global warming in a post-Copenhagen environment. PNAS June 29, 2010 vol. 107 no. 26 11721-11726. http://www.pnas.org/content/107/26/11721.full.pdf. The 2006 "Stern Review" from the UK Treasury concluded that each ton of carbon dioxide emitted will cause $85 worth of damage to the world's economy. http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm. According to the Congressional Research Service, capturing and storing most of the carbon from coal as it is combusted costs between $43-89/ton of CO2, and this price will likely increase after the many safety, environmental, and efficiency problems with CSS are fully accounted for. Parker, Folger & Stine. 2008. Capturing CO2 from Coal-Fired Power Plants: Challenges for a Comprehensive Strategy. CRS Report for Congress. http://www.fas.org/sgp/crs/misc/RL34621.pdf citing S. Julio Friedmann, Carbon Capture and Sequestration As a Major Greenhouse Gas Abatement Option (November 2007), p. 11. That's another good indication of the value of a storing a ton of carbon in forests. Howard, P. 2014. OMITTED DAMAGES: What's Missing From the Social Cost of Carbon. http://costofcarbon.org/files/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf ("ABSTRACT: The 2013 Interagency Working Group on the Social Cost of Carbon (IWG) updated the U.S. social cost of carbon (SCC) for 2015 from a central value of $24 to $37 using three integrated assessment models (IAMs): DICE-2010, FUND 3.8, and PAGE09. The SCC is the additional economic damage caused by one ton of carbon dioxide. While some have questioned the increase in the SCC as too high, a thorough examination of the latest scientific and economic research shows that $37 should be viewed as a lower bound. This is because the studies available to estimate the SCC omit many climate impacts—effectively valuing them at zero. Where estimates are available for a given type of impact, they tend to include only a portion of potential harms. This paper represents the first attempt to systematically examine and document these omissions for the latest versions of the three IAMs used by the IWG, as well as earlier versions when they are used in calibrating the updated models. … [H]ot spot damages include[e] increases in forced migration, social and political conflict, and violence; weather variability and extreme weather events; and declining growth rates. A better accounting of catastrophic damages is also needed, as well as many other impacts.") Laurie T. Johnson & Chris Hope, 2012. The social cost of carbon in U.S. regulatory impact analyses: an introduction and critique, J Environ Stud Sci. DOI 10.1007/s13412-012-0087-7. http://www.springerlink.com/content/863287021p06m441/fulltext.pdf?MUD=MP ("We reestimate the values from the models (1) using a range of discount rates and methodologies considered more appropriate for the very long time horizons associated with climate change and (2) using a methodology that assigns "equity weights" to damages based upon relative income levels between regions—i.e., a dollar's worth of damages occurring in a poor region is given more weight than one occurring in a wealthy region. Under our alternative discount rate specifications, we find an SCC [social cost of carbon] 2.6 to over 12 times larger than the Working Group's central estimate of $21"…) If the agency chooses to disclose the economic and other benefits of logging, they must also disclose the social costs. See Sierra Club v. Sigler, 695 F.2d 957, 979 (5th Cir. 1983), Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 448 (4th Cir. 1996); Columbia Basin Land Prot. Assn v. Schlesinger, 643 F.2d 585, 594 (9th Cir. 1981).	The carbon dioxide emissions projected to occur due to the project activities are disclosed in the air quality section of Chapter 3 of the final EIS. The future benefits to carbon storage of reforestation and recovery are disclosed in the climate change section of Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-160	The DIS says “active forest management is believed to be an effective method of carbon sequestration.” This is not a well-supported statement because virtually every type of logging, including salvage logging and fuel reduction will transfer carbon form the forest to the atmosphere, increase GHG emissions, and make climate change worse. See Mitchell, Harmon, O’Connell. 2009. Forest fuel reduction alters fire severity and long-term carbon storage in three Pacific Northwest ecosystems. Ecological Applications. 19(3), 2009, pp. 643–655 http://www.fs.fed.us/pnw/pubs/journals/pnw_2009_mitchell001.pdf; Heiken, D. Myths & Facts on Forest, Carbon and Global Warming slide show clarifying many misconceptions about forests, logging, and carbon: http://www.slideshare.net/dougoh/forest-carbon-climate-myths-presentation/; Heiken, D. “The Straight Facts on Forests, Carbon, and Global Warming” provides a more detailed foot-noted report: https://dl.dropboxusercontent.com/u/47741/Oregon%20Wild%20Report%20on%20forests%2C%20carbon%2C%20and%20global%20warming%2C%20ver.%201.4.pdf Avoid “before-and-after” carbon accounting Some NEPA analyses say that logging is carbon neutral because the forest captures and stores the same pre-harvest amount of carbon after a period of regrowth. This is highly misleading. The proper analysis requires comparison of the amount of carbon with the project and without the project, not before and after logging. This is not only required to accurately determine the effect of vegetation removal on forest carbon storage but it is also consistent with NEPA requirements to compare action and no action alternatives. The only way to properly evaluate the net carbon impacts of energy from forest biomass [or any vegetation management] is to estimate … net change in atmospheric CO2 levels over time with and without the harvest of wood biomass for energy. …[I]t is necessary to construct a baseline, or control, scenario (that is no biomass harvest). … Once a baseline is established, one can assess how switching to wood biomass would change atmospheric carbon levels. … [T]he information provided by only comparing forest carbon stocks before and after biomass harvest could be a very misleading indicator of the impact of biomass energy on the atmosphere. Carellichio, P., Walker, T. 2010. Commentary: The Manomet Study Got the Biomass Carbon Accounting Right. The Forestry Source. 4 Nov 2010. http://www.nxtbook.com/nxtbooks/saf/forestrysource_201011/index.php#/4. The Carbon Value of Wood Products Substitution is Over-estimated. The agency should avoid arguments that support logging and the alleged climate benefit of storing carbon in wood products or using wood as a substitute for alternative building materials. There may be some slight benefit from wood as a substitute but most of the analysis that tout this effect are produced and advocated by the timber industry with unreasonable assumptions that don’t stand up to scrutiny. • Only a small fraction of the carbon in a forest ends up in long-term storage in wood products. Most of the carbon in a logged forest is transferred to the atmosphere in an accelerated fashion. For every ton of carbon stored in wood products, there are several times more carbon from the forest prematurely transferred to the atmosphere. • Substitution is speculative because the alleged benefits are in the distant future, and it takes more than a century to off-set the carbon emissions caused by logging forests. • Also, carbon benefits from substitution are typically realized in the distant future and must be discounted. • Many analyses start with bare ground instead of an existing forest, which biases the analysis because the carbon loss from logging are not accounted for. • Many analyses forget that wood already dominates the building material markets, and climate benefits would only be realized to the extent wood actually displaces other building materials, which is very difficult to show. People have a strong preference for wood houses, so less logging does not necessarily translate into more steel and cement houses. It’s virtually impossible to verify that a given wood product from a given harvest activity actually being used to substitute for steel and concrete. • Using wood may delay, but does not prevent, fossil fuel use. • Carbon credits require “additionality.” Credit can only be given if the market share of wood increases relative to steel and concrete. This is unlikely. • A credible analysis of substitution must account for the time it takes to reabsorb the carbon after forests are logged, differences in the useful lifespan of different building materials, the improving carbon efficiency of the energy input used to make alternative building materials, the possibility of demand-side policies such as recycling and “demand reduction.”	Powers, E., Marshal, J., Zhang, J., and Wei, L. 2013. Post-fire management regimes affect carbon sequestration and storage in a Sierra Nevada mixed conifer forest. Forest Ecology and Management. Vallant, N, Reiner, A., Wright, E. 2013. Prescribed fire effects on field-derived and simulated forest carbon stocks over time. Forest Ecology and Management. Zhang, J., Powers, R., and Skinner, C. 2010. To manage or not to manage: The role of silviculture in sequestering carbon in the specter of climate change. Forest Service Proceedings RMRS-P-61. Hurteau, M. and North, M. 2010. Carbon recovery rates following different wildfire risk mitigation treatments. Forest Ecology and Management. North, M. and Hurteau, M. 2011. High-severity wildfire effects on carbon stocks and emissions in fuels treatments and untreated forest. Forest Ecology and Management. Powers et al (2013) found that while areas without salvage retained higher stored carbon (due the snags left on the landscape) they had the lowest carbon sequestration rates compared to treated areas. Valliant et al (2010) showed that after 8 years after treatment the stored carbon removed via fuels reduction was nearly equal to areas with no treatment, but the areas with no treatments had a potential for 45% more carbon emissions under wildfire conditions. Zhang et al (2010) and Hurteau and North (2010) both reported benefits to carbon sequestration as a result of forest management activities including fuels reduction and timber harvest. North and Hurteau (2011) found that areas with post-fire treatments have a greater initial loss of stored carbon but long-term the areas may benefit from a lower rate of decomposition (releasing less carbon) and increased carbon sequestration rates. Harmon and O'Connell (2009) found that fuels treatments removed more carbon than was estimated to be lost during a wildfire. North and Hurteau (2011) and Powers et al (2010) report similar findings - that there is an overall immediate loss of stored carbon if vegetation is removed. However, they also reported increases in overall sequestration and chronic loss of stored carbon from decomposition of dead material. Heiken (2011) is a opinion article and is not peer reviewed. It does provide recommendations for improving carbon storage which includes protecting and promoting old growth forests. The project is designed to restore and move toward a fire-resilient ecosystem (see Purpose and Need in Chapter 1 of the final EIS). This is in line with Mr. Heiken's recommendations as how the Alternatives meet this need is summarized in the comparison of Alternatives section of the final EIS.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-161	The agency should avoid bringing unsupported information into the NEPA process. The agency must give fair treatment to the merits of the competing ideas by disclosing the flaws and caveats associated with the substitution argument. Shafer et al (2011) state: An alternative to increasing carbon stores within the forest is to harvest wood and store some of this carbon within wood products (Perez-Garcia et al., 2005). Under current manufacturing, use, and disposal practices this alternative is unlikely to increase the overall carbon store of the forest sector, which includes the forest and wood products derived from the forest (Harmon et al., 2009). Manufacturing, use, and disposal of harvested wood all entail significant carbon losses that are either as large as or larger than those in the forest itself (Krankina and Harmon, 2007). Wood products carbon offsets associated with biofuels and substitution of wood for more energy intensive building materials, such as steel and concrete, can theoretically increase the carbon "stores" of wood products beyond that stored in the forest itself (Perez-Garcia et al., 2005; Lippke et al. 2010). However, several issues need to be recognized regarding these offsets. First, most analyses have presented theoretical maximum product substitution offsets and ignored the effects of additionality (i.e., degree to which practices differ from business as usual or statutory requirements), permanence and replacement of existing wood products, and enduser preferences for building materials. If these factors are included, then substitution effects are substantially lower than the theoretical maximum and unlikely to surpass carbon stores in forests for many centuries if at all. Second, depending on the starting condition of the forest, both product substitution and forest-related biofuels can create carbon debts that delay carbon benefits. For example, biofuels harvested from existing forests could offset fossil fuel releases of carbon, but recent studies have indicated that carbon debts associated with the energy used during biofuel harvests, decreased carbon stores in forests, and differences in carbon to energy ratios could persist for decades to centuries, implying a significant temporal lag in net carbon uptake (Fargione et al., 2008; Searchinger et al., 2009). Third, being offsets, the effectiveness of both biofuel and product substitution will vary with the duration of the offset; the longer the delay in releasing fossil fuel carbon, the more effective offsets become: An offset with a 1 year delay would have little impact on atmospheric CO2 concentrations, whereas an offset of hundreds of years would have a much greater impact. Unfortunately, the duration of offsets is not well understood at this point, but it is unlikely to be infinite as tacitly assumed in many current analyses. Finally, while offsets are often counted as carbon stores, they are difficult to directly inventory because they are not physically in an identifiable location, whereas carbon stored in forests can be more directly inventoried and quantified. Sarah L. Shafer, Mark E. Harmon, Ronald P. Neilson, Rupert Seidl, Brad St. Clair, Andrew Yost 2011. Oregon Climate Assessment Report (OCAR) http://occri.net/ocar Chapter 5. The Potential Effects of Climate Change on Oregon's Vegetation. http://occri.net/wp-content/uploads/2011/04/chapter5ocar.pdf	The Oregon Climate Assessment Report (Shafer et al 2011) is not directly applicable to the Westside project area; for the Westside project, information from the California climate assessment has been used. The offsets of carbon stored in harvested wood products is mentioned in the climate change section of Chapter 3 of the final EIS but is not used as an offset or mitigation to the amount of carbon storage removed by salvage of dead or dying trees. Carbon storage in wood products is just one of the factors considered in the environment effects of the project to carbon storage. See response to previous comments for additional information.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-162	Complex native forests are more resilient to climate change than simplified plantations. ... [R]educing emissions from deforestation and degradation may also yield co-benefits for adaptation by maintaining biodiversity and other ecosystem goods and services, while plantations, if they reduce biological diversity may diminish adaptive capacity to climate change (e.g., (Chum et al., 2011). Primary forests tend to be more resilient to climate change and other human-induced environmental changes than secondary forests and plantations (Thompson et al., 2009). The impact of plantations on the carbon balance is dependent on the land-use system they replace, while plantation forests are often monospecies stands, they may be more vulnerable to climatic change (see IPCC WGII Chapter 4) ... Adaptation measures in return may help maintain the mitigation potential of land-use systems. For example, projects that prevent fires and restore degraded forest ecosystems also prevent release of GHGs and enhance carbon stocks (CBD and GiZ, 2011). ... Forest and biodiversity conservation, protected area formation, and mixed-species forestry-based afforestation are practices that can help to maintain or enhance carbon stocks, while also providing adaptation options to enhance resilience of forest ecosystems to climate change (Ravindranath, 2007) ... IPCC AR5, Working Group III, Mitigation of Climate Change, Chapter 11 Agriculture, Forestry and Other Land Use (AFOLU) (Final Draft 2014) pp 46-47. http://report.mitigation2014.org/drafts/final-draft-postplenary/ipcc_wg3_ar5_final-draft_postplenary_chapter11.pdf Cumulative Impacts of GHG Emissions Must not be Minimized The DEIS says "… effects of ongoing or reasonably foreseeable future actions in the project area is expected to provide minimal cumulative effects …" (DEIS p 243). This analysis is flawed. Since the atmosphere is well-mixed globally, the cumulative effects analysis cannot be limited to "the project area." The DEIS also say "… these emissions are expected to be minimal and are expected to be minimal and able to disperse readily..." The dispersal of GHG emissions here will contribute to cumulative impacts in the rest of the world, and vice versa; cumulative emissions in the rest of the world will have impacts here. The Westside DEIS fails to take a hard look at the effects of salvage logging and other planned activities. A proper consideration of cumulative impacts of GHG on global climate change will increase the chances that the decision-maker will choose the no action alternative, or consider and choose an alternatives such as removing only small trees and leaving the large trees that store the most carbon in the forest where they will store carbon the longest.	The first half of this comment (until the citation for the IPCC AR5) is a direct quote from the IPCC AR5. There is no project specific comment associated with this text. The second half of this comment related to the cumulative effects of greenhouse gases is responded to in comment number 5873-163.

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-163	The NEPA analysis must avoid minimizing this project's contribution to carbon emissions and global warming by saying the effects of this project would be negligible on a global scale. This is not an appropriate framework. Global climate change and ocean acidification are the result of the cumulative effects on the global carbon cycle which is spatially distributed. There is no single culprit, nor is there a silver bullet solution. All emissions are part of the problem, and all land management decisions must be part of the solution. Since the global carbon cycle is spatially distributed, carbon storage and carbon emissions will always we spread out around the globe, and the carbon flux at any given place and time may appear small, but cumulatively they help determine the temperature of our climate and the pH of our oceans. Given the current carbon overload in the atmosphere and oceans, the carbon consequences of every project must be carefully considered (rather than dismissed as negligible). The agency may argue that logging a few small patches of forest won't make a difference in the global scheme of the climate problem, but as Voltaire said, "No snowflake in an avalanche ever feels responsible." The NEPA analysis must recognize that global warming will not be solved by one miraculous technological fix or by changing one behavior or one economic activity. The whole global carbon cycle must be managed to reduce carbon emissions and increase carbon uptake. Recent evidence supports the conclusions that all net emissions of greenhouse gases are adverse to the climate. None can be considered de minimus. "We show first that a single pulse of carbon released into the atmosphere increases globally averaged surface temperature by an amount that remains approximately constant for several centuries, even in the absence of additional emissions. We then show that to hold climate constant at a given global temperature requires near- zero future carbon emissions. Our results suggest that future anthropogenic emissions would need to be eliminated in order to stabilize global-mean temperatures. As a consequence, any future anthropogenic emissions will commit the climate system to warming that is essentially irreversible on centennial timescales." H. Damon Matthews and Ken Caldeira. 2009. Stabilizing climate requires near-zero emissions. Nature Vol 455 | 18 September 2008 | doi:10.1038/nature07296. Former D.C. Circuit Judge Wald wrote in a 1990 dissenting opinion, which was recently quoted with unanimous approval by the Ninth Circuit in Center for Biological Diversity v. NHTSA: [W]e cannot afford to ignore even modest contributions to global warming. If global warming is the result of the cumulative contributions of myriad sources, any one modest in itself, is there not a danger of losing the forest by closing our eyes to the felling of the individual trees? 538 F.3d at 1217. Similarly, the U.S. Supreme Court's decision in Massachusetts v. EPA noted that one cannot avoid responsibility to reduce and mitigate the climate problem by attempting to minimize the scale of one's contribution to the problem. ("While it may be true that regulating motor-vehicle emissions will not by itself reverse global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to slow or reduce it.... In sum, … [t]he risk of catastrophic harm, though remote, is nevertheless real. That risk would be reduced to some extent if petitioners received the relief they seek." 127 S.Ct. 1438, 1455 (2007) http://web.archive.org/web/20080610172128/http://www.supremecourtus.gov/opinions/06pdf/05-1120.pdf)	Updates to the Air Quality Report's cumulative effects have been made in the Report Amendment per this comment. The greenhouse gas emissions from this project are less than 0.005% of the global annual greenhouse gas emissions (See Amendment to Air Quality Report - Methods Section and Environmental Consequences Section and the Air Quality Methods Section and Environmental Consequences Section of Chapter 3 of the final EIS). The US Forest Service Climate Change Considerations in Project-Level National Environmental Policy Act Analysis guidance document (2009) stresses that "It is not possible to determine the cumulative impacts on global climate change from emissions associated with any number of particular projects". It does go on to say that for large projects the cumulative analysis may include quantified emission in the context of other (Regional, National, or Global) emissions sources. And that there may be a qualitative description of the effect on climate change. The draft EIS and the Air Quality Report (incorporated by reference into the draft EIS) quantified the emissions but did not put it into context of other sources or describe the qualitative effects. These were updated in the Amendment to the Air Quality Report and the Air Quality Section of the final EIS (See Amendment to Air Quality Report - Methods Section and Environmental Consequences Section and the Air Quality Methods Section and Environmental Consequences Section of Chapter 3 of the final EIS).

Code	Comment Number	Comment Text	Response
233.02 - Climate Change	#5873-164	CEQ draft guidance on NEPA and climate change recognizes that disclosure of the incremental nature of GHG emissions attributable to any given project is merely a restatement of the nature of the climate problem itself and and does not allow agencies ot avoid disclosure and consideration of alternatives and mitigation. CEQ recognizes that many agency NEPA analyses to date have concluded that GHG emissions from an individual agency action will have small, if any climate change effects. Government action occurs incrementally, program-by-program and step-by-step, and climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions, including decisions made by the government. Therefore, the statement that emissions from a government action or approval represent only a small fraction of global emissions is more a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether to consider climate impacts under NEPA. Moreover, these comparisons are not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations. This approach does not reveal anything beyond the nature of the climate change challenge itself: The fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impact. 77 Fed. Reg. 77802, 77825. (Dec. 24, 2014).	This is a quote from the CEQ Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (2014). The project considered the CEQ guidance in its assessment within the sideboards of the Service Climate Change Considerations in Project-Level National Environmental Policy Act Analysis guidance document (2009).
233.02 - Climate Change	#5873-165	NEPA Analysis of Climate Change The Forest Service is now on record in the New York Times stating that carbon consequences of forest management are relevant to project-level decision-making. … occasionally, when tour groups come through, someone will ask what role the trees might play as the nation addresses global warming. After all, forests soak up carbon dioxide as they grow. “We've always said that's outside the scope of this project,” said Michael Keown,... “But those days have come and gone.” WILLIAM YARDLEY 2009. Protecting the Forests, and Hoping for Payback. The New York Times November 29, 2009. http://www.nytimes.com/2009/11/29/science/earth/29trees.html. The Forest Service's Dave Cleaves said “Forests serve an important role in sequestering or removing carbon dioxide from the atmosphere and today, their role is even more important because of climate change. … Forests are the solution to absorbing carbon dioxide from the atmosphere and regulating temperatures. We must take an active role in keeping, planting and respecting forests for all they provide for us such as carbon, wood, flood control, wildlife habitat, and all the rest.” [FS newsletter] Engaging a Climate Ready Agency from Dave Cleaves, Forest Service Climate Change Advisor. April 30, 2013. http://www.fs.fed.us/climatechange/updates/April%202013%20Climate%20Update%20.pdf. What does adequate NEPA analysis look like? http://web.law.columbia.edu/climate-change/resources/nepa-and-state-nepa-eis-resource-center#Federal Guidelines. The Forest Service has started to answer that question … “In recognizing agency responsibility to consider climate change, the responsible official can cite the Forest Service mission to ‘sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations' and state how their decision considered climate change issues. … Climate change effects include the effects of agency action on global climate change and the effects of climate change on a proposed project. … Scoping is useful to determine if climate change issues are specifically related to the proposed action. Refrain from prematurely dismissing climate change issues as “outside the scope” of the analysis and use the interdisciplinary team and other sources to identify potential cause-effect relationships (if they exist) between the proposal and climate change. … Alternatives may include mitigation measures to reduce GHG emissions, affect carbon cycling, or enhance adaptive capacity. … Many proposed projects and programs will emit greenhouse gases (direct effect) and, thus, contribute to the global concentration of greenhouse gases that affect climate (indirect effect). Quantifying greenhouse gases emitted and/or sequestered may help choose between alternatives based on relative direct effects trade-offs. Forest Service decisions having the potential to emit or sequester more greenhouse gases; … may be best informed by quantitative analyses. … Qualitative effects disclosure for a project's impacts on GHG emissions and carbon sequestration should be couched in the ecosystem's role in the carbon cycle. … Forests play a	The project record does not dispute the statements made by Micheal Keown or Dave Cleaves (as cited by the commenter). The effects of climate change on the project and effects of the project on climate change were disclosed in the draft EIS and now in the final EIS in the Climate Change Section with the Vegetation, Fire and Fuels and Air Quality reports incorporated by reference. The project includes fuels reduction which is intended to meet the purpose and need of restoration and promoting a fire-resilient ecosystem and reforestation of areas that were deforested by the wildfire will increase the speed at which conifer forest is re-established on the landscape (Environmental Consequences Section of the Vegetation Report as incorporated by reference into the final EIS).

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		major role in the carbon cycle. … It may be appropriate for the decision document rationale to include some indication of how climate change considerations (if any) were weighed during decisionmaking. These statements should reference relevant NEPA documents, assessments, and science to substantiate findings. … [W]hen responding to comments about climate change [the agency may] 1. Modify alternatives including the proposed action. 2. Develop and evaluate alternatives not previously given serious consideration by the Agency. 3. Supplement, improve, or modify the analysis. 4. Make factual corrections. 5. Explain why the comments do not warrant further agency response …" USDA Forest Service. 2009. Climate Change Considerations in Project Level NEPA Analysis. January 13, 2009. http://www.fs.fed.us/emc/nepa/climate_change/includes/cc_nepa_guidance.pdf. http://www.fs.fed.us/emc/nepa/climate_change/includes/cc_cover_letter.pdf. Note this document has some serious shortcomings. It completely misses the contribution of logging to GHG emissions and it fails to recognize the useful role of NEPA's requirement for cumulative impacts analysis to address the programmatic effects of the agencies' forest management programs. The project-level effects of logging must be linked to the cumulative global effects of climate change through a credible cumulative effects analysis. The FS' assertion that "Because the context of individual projects and their effects cannot be meaningfully evaluated globally to inform individual project decisions, it is not possible and it is not expected that climate change effects can be found to be 'significant' under NEPA and therefore require EIS preparation." Is absurd and erroneous. Recognizing the significant global impact of collective project-level actions, it is clear that a programmatic EIS is needed and a project-level FONSIs are inappropriate until one is done.	
233.02 - Climate Change	#5873-189	The following is an excerpt from Ron Bass's presentation, "NEPA and Climate Change: What Constitutes a Hard Look?" The recommended 10-step approach takes into consideration the existing provisions of the NEPA regulations, recent court decisions, and various state programs. The steps conform to the main elements of a NEPA document. Affected Environment Step 1 – Describe the existing global context in which climate change impacts are occurring and are expected to continue to occur in the future. Step 2 – Summarize any relevant state laws that address climate change. Step 3 – Describe any relevant national, statewide, and regional GHG inventories to which the project will contribute. Environmental Consequences Step 4 – Quantify the project's direct and indirect GHG emissions. Step 5 – Convert the GHG emissions into carbon equivalents using an established "carbon calculator." Step 6 – Discuss whether the project would enhance or impede the attainment of applicable state GHG reduction. Step 7 – Describe the cumulative global climate change impacts to which the proposed action would contribute, i.e., the impacts of the project on climate change. (This may use the same information as in Step 1.) Step 8 – Describe how the impacts of global climate change could manifest themselves in the geographic area in which the project is proposed, and therefore potentially affect the project, i.e., the impacts of climate change on the project (e.g., sea level rise could affect a coastal project). Alternatives Step 9 – Include alternatives that would meet the project objectives but would also reduce GHG emissions.	The Air Quality report as summarized and incorporated by reference into the final EIS include the components recommended by Bass's "National Environmental Policy Act and Climate Change: What constitutes a Hard Look?" There is no explicit climate change Alternative because it was not determined to be a relevant issue during scoping comment disposition (See Issues section of Chapter 1 of the final EIS). However, the Alternatives have varying levels of treatments and the Air Quality analysis reports emissions for all alternatives including no action for comparison. There are no project design features specifically to mitigate greenhouse gas emissions for this project. The second piece of literature cited in this comment is a newsletter summarizing discussions regarding the Department of Energy's climate change policy. This is not relevant to this project. The US Forest Service has issued guidance for dealing with climate change for US Forest service land management activities (Climate Change Considerations in Project-Level National Environmental Policy Act Analysis guidance document, 2009).

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233.02 - Climate Change	#5873-190	Mitigation Measures Step 10 – Identify mitigation measures that would reduce GHG emissions, including both project design or operational changes and potential compensatory mitigation (e.g., carbon offsets). DOE 2009. NEPA and Climate Change: "Don't Do Nothing" NEPA Lessons Learned - Quarterly Report. June 1, 2009. http://energy.gov/sites/prod/files/LLQR-2009-Q2.pdf citing Ron Bass 2008. Evaluating Greenhouse Gases and Climate Change Impacts Under NEPA: Ten Steps to Taking a Hard Look. ICF/Jones & Stokes. Impact Report Nov. 2008. http://www.icfi.com/insights/white-papers/2008/evaluating-greenhouse-gases-and-climate-change-impacts-under-nepa-ten-steps-to-taking-a-hard-look. NEPA's requirement to take a "hard look" requires the agency to consider the effects of logging-related GHG emissions. This includes: • Disclose whether the cumulative effects of logging-related GHG emissions are consistent with emissions reduction goals established by state or federal government or international agreements. In 2007, the Oregon legislature passed HB 3543 that codifies Governor Kulongoski's greenhouse gas reduction goals: namely, by 2010 to begin to reduce greenhouse gas emissions, by 2020 to achieve greenhouse gas levels 10% less than 1990 levels and by 2050 to achieve greenhouse gas levels 75% below 1990 levels. ORS § 468A.205. The agency should also strive to harmonize with State of Oregon statewide land-use planning goals (adopted in administrative rules) that prohibit land use activities that exceed the "carrying capacity" of air and water resources. OAR 660-015-0000(5) - (6). The Department of Land Conservation and Development (DLCD) defines "carrying capacity" as a "Level of use which can be accommodated and continued without irreversible impairment of natural resources productivity, the ecosystem and the quality of air, land, and water resources." There is a large body of science indicating that we are already beyond the level of CO2 in our atmosphere that can be described as safe or reversible. "In November 2014, in a historic joint announcement with China, President Obama laid out an ambitious but achievable target to reduce greenhouse gas emissions in the United States in the range of 26 to 28 percent below 2005 levels by 2025." https://www.whitehouse.gov/climate-change; https://www.whitehouse.gov/the-press-office/2014/11/11/fact-sheet-us-china-joint-announcement-climate-change-and-clean-energy-c On June 25, 2013, President Obama released his Climate Action Plan which includes forest conservation among the "first pillar" of efforts to reduce emissions, saying: "Preserving the Role of Forests in Mitigating Climate Change: America's forests play a critical role in addressing carbon pollution, removing nearly 12 percent of total U.S. greenhouse gas emissions each year. … Conservation and sustainable management can help to ensure our forests continue to remove carbon from the atmosphere … " http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf "[A]dvancing efforts to protect our forests" is also mentioned in the 6th U.S. Climate Action Report under the United Nations Framework Convention on Climate Change (UNFCCC). The agency should advance this national climate goal by conserving public forests. Carbon emissions from logging public lands directly conflict with this important national goal and indicate potential significant impacts requiring an EIS. Logging related GHG emissions (and forgone opportunities for increased storage of carbon in forests) will conflict with these state, federal and international GHG reduction goals. • Disclose the social cost of carbon as a proxy for the impacts of GHG emissions. GHG emissions from logging (and other land management activities) impose significant costs on society, such as the cost of damage caused by climate change and the costs of adapting to climate change and the cost of sequestering carbon to mitigate emissions. CEQ's draft guidance on NEPA and Climate Change recognizes that the social cost of carbon ("SCC") is a "harmonized, interagency metric that can provide decisionmakers and the public with some context for meaningful NEPA review." 79 Fed. Reg. 77802, 77827. "The SCC estimates the benefit to be achieved, expressed in monetary value, by avoiding the damage caused by each additional metric ton (tonne) of carbon dioxide (CO2) put into the atmosphere. Ruth Greenspan and Dianne Callan, World Resources Institute, More than Meets the Eye: The Social Cost of Carbon in U.S Climate Policy, in Plain English (July 2011) at 1. The NEPA analysis should carefully disclose these social costs. The express purpose of SCC analysis is to provide an apples-to-apples basis for comparing a project's economic benefits with GHG pollution impacts (costs). Where SCC is not completed, these impacts (costs) are hidden from the public and, in fact, often "paid for" by the broader environment and public in the	The mitigation measures step 10 portion of this comment and the "Don't Do Nothing" citation go with comment number 5873-189 and is addressed in that response. The SCC is intended to be used to evaluate the cost benefit of restrictions on carbon emissions (Greenspan, 2011). Greenspan (2011) takes "no direct position on the merits" of SCC. The article is intended to inform the reader on how SCC values were derived and how they are intended to be used. SCC is intended to inform Federal policy and is not calibrated for the project-level. This caveat needs to be kept in mind when using it at the project level. The EPA's SCC numbers range from $12/tonne to $116/tonne. The middle value is $39/tonne and is what is used in this demonstration. The greenhouse gas emissions are about 45,000 tonnes per year ove 5 years. Assuming that the SCC is $39/tonne this comes to about $8.8 million which is mainly from hazardous fuels reduction (aka prescribed fire). The Association for Fire Ecology, the International Association of Wildland Fire and the Nature Conservancy discuss the total cost of wildfires in "Reducing Wildfire Risk: or we'll continue to pay more for fire disasters" (2015) (http://wildfiretoday.com/documents/AFE-IAWF-PositionPaper.PDF). They are including not just the suppression but the cost of training needed for fire suppression personnel, real estate devaluation, emergency services, loss of forest commodities, and long-term rehabilitation. The total cost of the Old Grand Prix wildfire in 2003 is estimated to be about $1.2 billion. The total cost of the Rim fire in 2013 is estimate to be $1.8 billion. When weighing the cost benefit the $8.8 million of SCC for hazardous fuels reduction with the total potential cost of wildfires like the Grande Old Prix and the Rim the benefits of fuels reduction outweighs the SCC of greenhouse gas emissions from the project.

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		form of degraded ecological resiliency, public health impacts, and more. The agency must recognize that the federal estimate of SCC likely underestimates—perhaps significantly—the climate impacts of GHG pollution. As the U.S. Environmental Protection Agency has concluded: given current modeling and data limitations, [the federal SCC values] do[] not include all important damages. As noted by the IPCC Fourth Assessment Report, it is "very likely that [SCC] underestimates" the damages. The models used to develop SCC estimates, known as integrated assessment models, do not currently include all of the important physical, ecological, and economic impacts of climate change recognized in the climate change literature because of a lack of precise information on the nature of damages and because the science incorporated into these models naturally lags behind the most recent research. EPA, The Social Cost of Carbon, http://www.epa.gov/climatechange/EPAactivities/economics/scc.html. Agencies seeking to incorporate climate change considerations in rules and regulations often rely on a cost-benefit analysis, weighing the cost of curbing emissions against the expected damages from every ton of carbon dioxide (CO2) that goes into the atmosphere — a value known as the "social cost of carbon" (SCC). … While no definite SCC has been set so far, an interagency working group has endorsed a "central" estimate of $21 per ton of CO2 in 2010, or roughly 20 cents per gallon of gasoline — far too small a price incentive to prompt substantive mitigation measures.	

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234 - Soils	#12346-56	Soils The Forest Service may not propose and authorize activities that will inhibit attainment of the standards and guidelines of its Land Resource Management Plan. Please note that page 231 of the DEIS indicates that: 23 For alternative 2, 2,800 acres would not meet desired conditions for soil stability, 825 would not meet surface organic matter, 2,214 acres for SOM, and 1,255 for soil structure. The KNF offers no explanation for why it intends to conduct actions that will result in undesirable soil conditions that violate forest plan standards across thousands of acres. Please note that the KNF FY12 Monitoring and Evaluation Report (page 8 and 9) discusses impacts of post-fire tractor yarding in the Panther Salvage timber and states: The majority of areas that did not meet desired [post project] conditions were located on primary skid trails and landings. Due to a lack of protective duff mat on the soil surface, and increased amount of disturbance was noted on secondary skid trails compared to green timber sales. Recommended changes to planning tractor yarding for salvage timbers sales is to reduce the extent of soil displacement and compaction by limiting slope steepness where skidding can occur or limiting the total area in the unit in primary and secondary skid trails. Alternatively, planners can reduce soil disturbance in fire salvage units by changing logging systems from tractor yarding to cable or helicopter yarding. The monitoring information above, developed by the Klamath National Forest, indicates that BMPs and PDFs are not sufficient to protect soils during KNF post-fire logging operations. KNF post-fire timber practices are not sufficient to meet Forest Plan soil standard 3-2. Page 231 of the Westside DEIS indicates that "[p]ost fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production." In contrast, were the KNF to allow for natural recovery of burned sites the "natural falling of dead needles, branches and eventually tree boles would continue to assist in recovery of soil stability." DEIS page 230. Page 5 of the Soil Resources Report acknowledges that: Ground-based harvest would be expected to delay vegetation recovery on up to 30 percent of a units area, and ground based harvest of roadside hazard could impact 30 to 60 percent. Vegetation began to recover almost immediately following the fires and will continue to add soil cover and increase soil stability where undisturbed. Page 20 of the Soil Resources Report concludes that "[t]he proposed action is likely to result in less than 30 percent cover and the soil stability indicator would not be met on approximately 30 percent of proposed ground based units…" The result being that "[a]dding the effects of alternative 2 to the effects of past, present, and reasonably 24 foreseeable future actions could have substantial negative effects on soil desired conditions." This result is inconsistent with the NWRP, the KNF LRMP and NFMA. The KNF practice of defining the "project area" to exceed the actual harvest units in order to mask site-level Forest Plan violations is arbitrary and capricious. Forest Plan S&Gs 3-1 and 3-2 will not be met on "about 4,000 acres" under the current logging proposal. See Soil Resources Report at 8. Pages 30-31 of the Soils Resources Report directly acknowledges that the proposed logging will violate KNF LRMP soil protection requirements. Standard 3-1 necessitates that the KNF "[p]lan and implement land management activities to maintain or enhance soil productivity and stability." 3-1 will not be met "on approximately 2,000 acres for Alternative 2, and 1,500 acres for alternative 3 through 5." Standard 3-2 necessitates maintaining certain percentages of soil cover based on slope and soil type. 3-2 will not be met "on approximately 2,000 acres for Alternative 2, and 1,500 acres for alternative 3 through 5." Standard 3-3 necessitates that timber planners "[m]aintain soil productivity by retaining organic material on the soil surface and by retaining organic material in the soil profile." 3-3 would not be met "on approximately 2,000 acres for Alternative 2, and 1,500 acres for alternative 3 through 5." Standard 3-5 requires the KNF to "[m]aintain a minimum of 85% of the existing soil organic matter in the top 12 inches of the soil profile to allow for nutrient cycling and maintain soil productivity." This standard would be violated "on approximately 2,000 acres for Alternative 2, and 1,500 acres for alternative 3 through 5." Please note that while the DEIS is replete with numerous conclusory statements regarding the efficacy of "decommissioning" temporary roads that will be (re)constructed to facilitate logging, page 20 of the Soil Resources Report acknowledges that "soil stability would remain impacted over the long term on existing or previously decommissioned temporary roads, and exiting landings." Westside timber planners have made no effort to comply with KNF LRMP Forest-wide standard 1-2 which requires the agency to "identify areas of unacceptable soil erosion during project planning of project	Project design features have been revised to effectively meet Forest Plan Standard and Guidelines 3-2 for soil cover and 6-16 for Coarse Woody Debris. Tractor harvest could result in temporarily not meeting soil cover standards, yet for any tractor harvest unit that does not meet the soil cover standards in table 4-2 of the Forest Plan upon completion of treatments, areas where soil cover is deficient will be mulched so that soil cover standards are met. Additional mitigations designed to meet Standard and Guideline 3-2 include limiting skidding equipment to slopes less than 35 percent, and site preparation is designed to maintain adequate soil cover by not reducing the sum of 1, 10, and 100 hour fuels to less than less than 7 tons per acre. Also during site preparation, manual felling of small diameter trees could also be accomplished to add soil cover on ground based harvest units. To meet the surface organic matter Forest Plan Standard and Guideline 3-6, the watershed-36 project design feature would require retention of 5 to 20 pieces of Coarse Woody Debris per acre. Areas that would not meet the soil organic matter indicator and soil structure indicator are limited to skid trails, temporary roads, and landings. Because these areas are small and scattered, soil productivity is unlikely to be impacted on a unit scale and Forest Plan Standard and Guideline 3-1 would be met. Text has been added to Chapter 3 – Soil to clarify Project Design Features and project impacts. Also see response to comment number 12364-1.

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		implementation so project plans for restoration and improvement can be developed." Watersheds throughout the planning area are suffering from unacceptable soil erosion associated with legacy sites that the KNF has refused to identify or address. The only watershed in which unacceptable soil erosion is acknowledged and addressed in the Westside DEIS is Elk Creek where the Water Board has required that legacy sites be addressed. No other portion of the planning area complies with Forest Plan standard 1-2.	

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234 - Soils	#12346-67	The Westside salvage DEIS does not disclose and analyze the impacts, location, acreage or science surrounding the significant direct and cumulative impacts associated with proposed machine piling activities. 34 Please note that recently your colleagues in the Six Rivers National Forest concluded: "Machine piling/burn piles would increase ground disturbance and soil displacement when the machine turns." -Little Doe and Low Gulch Timber Sale DEIS p 110. No similar analysis or disclosure is present in the Westside DEIS. Indeed, the amount, location and impacts of machine piling are simply ignored. Mechanical piling is universally recognized as an outdated practice that has disproportionately harmful significant impacts on watershed and soil resources. Please see: Evelyn Bull et al. Trees and Logs Important to Wildlife in the Interior Columbia River Basin PNW-GTR-391 (1977). BLM, USGS, Biological Soil Crusts: Ecology and Management (Technical Reference 1730-2 (2001) (Available from BLM Publication Management Distribution Service, Bldg 41, E-16 (BC-650B) Denver, CO 80255 We further encourage the agency to examine the soil compaction monitoring reports from 1985 through 1997 on the Payette National Forest. While the Payette contains different ecotypes and soil types than does the Westside project area, the monitoring reports clearly show long-lasting and significant soil damage from tractor piling activities. Similar monitoring in the Idaho Panhandle (Jerry Niehoff) and the Kootenai National Forest (Lou Kuennen) demonstrate significant impacts to soils. We also encourage the agency to review the findings of Geppert, R.R., Lorenz, C.W., and Larson, A.G., 1984. Cumulative Effects of Forest Practices on the Environment: A State of the Knowledge. Wash. For. Practices Board Proj. No. 0130, Dept. of Natural Resources, Olympia, Wash. Manual piling or underburning is far preferable to tractor piling. Manual piling and underburning have none of the negative impacts to soils associated with tractor piling, and they provide an increased opportunity for local employment while significantly reducing long-term damage to soil health and productivity. Hence manual piling or underburning would better achieve the stated purpose and need for the project. Given that these practices can reduce fuels without the negative impacts associated with machine piling, they are reasonable to implement and reasonable to consider and analyze as an action alternative. Heavy machine use in timber sale units causes soil compaction and displacement. Soil compaction is an increase in bulk density with a corresponding decrease in soil porosity. Compaction reduces soil productivity through a reduction in root growth, tree height, and 35 timber volume (Greacen and Sands 19804; Froehlich and McNabb 19845) and may be produced by a single pass of logging equipment across a site (Wronski 19846). Productivity losses have been documented for whole sites (West and Thomas 19817) and for individual trees (Froehlich 19798, Helms and Hipkin 19869). Decreases in important microbial populations have also been observed in compacted soils (Amaranthus et al. 1996.)10 Soil compaction may also increase surface runoff because of reducing infiltration (Graecen and Sands 1980.)11 Soil displacement from ground-based machine use occurs when the tracked equipment turns on its skids pushing the soil into small piles, or berms, along the skid trails. This displacement of the topsoil removes the organic litter layer and exposes mineral soil. Removal of the loose, organic surface materials promotes surface sealing and crusting that decreases infiltration capacity and may increase erosion (Child et. Al. 1989.)12 Soil displacement also results in a loss of important soil biota, such as mycorrhizal fungi, which facilitates nutrient uptake by plants (Amaranthus et al. 1989 and 1996.)13 Please note how the Medford BLM recently responded to requests from the timber industry to authorize machine piling on federal lands:	The effects of mechanical piling were considered in the Soils section, Chapter 3, of the EIS: “Site preparation or fuels management zones could result in impacts to soil cover, soil organic matter and soil structure, especially if mechanical equipment is used. A project design feature would require site preparation treatments to be designed to meet the Forest Plan soil management direction. Site preparation and tree planting could benefit soil stability and SOM if brush fields, which are less effective soil cover, would otherwise dominate the site over the long term. In addition, Watershed Project Design Features for mechanical site preparation are described in detail in Chapter 2 of the EIS.Chapter 3 of the EIS has been revised to analyze impacts of machine piling where it overlaps with proposed harvest. Site preparation is designed to not reduce fine fuels to less than 7 tons per acre. The soils report for this project analyzed the impacts of machine piling to soil indicators, but did not account for the overlapping of the two treatments. Tractor piling has been proposed where there is a need to remove larger material that otherwise would not be feasible using hand piling. The soil organic matter indicator is used to analyze impacts to soil biota. When soil organic matter is displaced, soil biota, such as mycorrhizal fungi are impacted thereby decreasing overall soil productivity. Effects to soil organic matter are described in the soils report for the project and summarized in Chapter 2 of the EIS. Soil organic matter could be removed due to displacement from mechanical equipment or could occur gradually over time due to accelerated erosion. Accelerated erosion would be expected to decrease soil organic matter where the soil stability indicator is not met as described above. Therefore, mitigations to maintain soil stability would also maintain soil organic matter. With the application of soil stability measures described above, it is expected Forest Plan standard and guideline 3-3 would be met within the proposed activity areas.
234 - Soils	#12354-1	Salvage logging inhibits forest succession - or inhibits natural successional species. While microbial communities are more changed by fire tha n by clear-cut (1-yr.* 5- yr., and 60-yr. all show differences), the phoenicoid fungi and other microbes increasing in post-fire soils (Staddon et al. 1998) may assist in successional regeneration. "[L]ogging differs from fire, for instance, in its effects on soil nutrients (Weber 1987), carabid assemblages (Beaud ry et al. 1 997), and surface vegetation (Whittle et al. 1997). " · (Radeloff et al. 2000) Staddon, W. J., L. C. Duchesne, and J. T. Trevors. 1998. Impact of clear-cutting and prescribed burning on microbial diversity and community structure in a Jack pine (Pinus banksiana Lamb.) clear-cut using Biolog Gram negative microplates. World Journal of M icrobiology & Biotechnology 14:119-123.	Soil organic matter refers to the upper soil horizon and is expected to contain the highest amount of soil microbes including fungi. Therefore, the soil organic matter indicator has been used to analyze impacts to overall soil productivity due to changes in microbial communities. Where the soil organic matter indicator is not met, microbial communities have the potential of being been impacted. Impacts to Soils are discussed in the soils report and summarized in Chapter 3 of the final EIS. In the soils report, impacts to soil microbes and soil nutrients have been analyzed using the soil organic matter indicator. Impacts to soil cover have been analyzed using the soil stability indicator. Chapter 3 of the final EIS summarizes these impacts.

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234 - Soils	#14557-1	During this drought, the last thing you want to do is to clear-cut trees that hold the soil. While the soil it is dry, it will blow away. And when the rains come - and they will - there will be landslides. Respect the life on earth, such as the trees, and protect the ecosystem for us all.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the final EIS for a description of proposed treatments; no clear-cutting is proposed with this project. The soils report for the project quantifies impacts to soil stability due to proposed activities including harvest. The final EIS summarizes these impacts. Landslide risk is assessed in the Geology report as amended and in the Geology Environmental Consequences Section of the final EIS. The wildfire effects did increase the landslide risk. However, the analysis shows that none of the project Alternatives increase the risk in any watershed.
234 - Soils	#15125-1	At a time of extreme drought, when the soil requires vegetation to assist with holding its integrity, you plan on adopting a "scorched earth" policy. This makes absolutely no sense.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The soil report for this project describes impacts to soil stability and surface organic matter indicators. Chapter 3 of the final EIS summarizes the soils effects analysis. When the soil stability indicator is not met, ground cover is likely to be insufficient for erosion control. Project Design Feature Watershed-30 would require additions of mulch to provide for erosion control on approximately 40 acres.
234 - Soils	#16695-3	Moreover, this project would damage the fragile soils that need to be left alone to regenerate, not subject to mechanical shear and friction from heavy machinery in their unclothed condition, not buffered from physical stress as is soil with normal vegetative detritus.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The soil report for this project describes impacts to soil indicators. Chapter 3 of the final EIS summarizes the soils effects analysis.
234 - Soils	#17460-10	It is disappointing that the recommendations of the 1995 Beschta Report, dismissed under Alternative A, were not given full scientific consideration. Many of the recommendations were simply dismissed as having been minimized by "project design features," such as the recommendation in table 2-36, Row 1 (a-f), which addressed areas having sensitive soil conditions. Yet this conclusion is not supported by the March 2015 "Soils Report" prepared for the Westside Project, which concluded that, under Alternative 2, page 5: "Adding the effects of alternative 2 to the effects of past, present, and reasonably foreseeable future actions could have substantial negative effects on soil desired 6 conditions. "	Negative effects to soils desired conditions could occur even with implementation of project design project design features. When averaged between the 3 fire areas, soil desired conditions would not be met on less than 10 percent of the fire analysis areas. Therefore, forest soils standard and guidelines would be met. The highest soils impacts would occur under Alternative 2 within the Beaver fire area. Alternatives have been proposed which would reduce the area not meeting the soil desired conditions. Soils derived from Schist, Granite, or Serpentine parent material are most sensitive to disturbance by mechanical equipment. Ground based harvest could have the highest potential to impact these soils. Project Design Feature Watershed-8 would restrict all ground based harvest equipment to less than 35 percent slopes. In site preparation units (where no salvage will occur) felling and skidding equipment will be restricted to slopes less than 35% on granitic and schist soil types. The soils report analyzes the cumulative impacts to desired conditions from the 2014 fires and proposed project activities.
234 - Soils	#17910-6	GEOLOGY: A report on salvage logging by Pacific Rivers Council in 1995 states that “Salvage logging by any method must be prohibited on sensitive sites, including: in severely burned areas (areas with litter destruction), on erosive sites, on fragile soils, in roadless areas, in riparian areas, on steep slopes, any site where accelerated erosion is possible, and watersheds with existing serious sedimentation problems.” (A report on salvage logging by Pacific Rivers Council in 1995) Is there ANY ground in the footprint of the KNF 2014 fires that does not fit in one of these categories? The potential for mass wasting, erosion and sedimentation from salvage logging “temporary” roads must be addressed in depth.	The Pacific Rivers Council Paper (Beschta et al 1995) is focused on soil productivity and soil erosion concerns in the post-fire environment. There are project design features incorporated into the Alternatives to mitigate impacts to soil resources. The estimated effectiveness of the project design features, the soil types, and the effects of the project on soil resources can be found in the Environmental Consequences in the Soil Section of Chapter 3 of the final EIS and the Soils report as amended. There is no salvage logging in hydrologic Riparian Reserves (Chapter 2 of the final EIS). The Hydrology section of the final EIS discusses the 303(d) listing under the Clean Water Act of all the watersheds in the project area. The watersheds are listed for excessive sediment and/or temperature. The effectiveness of the project design features and effects to sediment delivery to streams is summarized in the Hydrology Environmental Consequences section of Chapter 3 of the final EIS. Soil erosion processes are different than those governing mass-wasting. The Environmental Consequences in the Geology Section in Chapter 3 of the final EIS provide the estimated acres of unstable lands (as defined in the Forest Plan) in each type of proposed treatment by Alternative. The Landslide Risk assessment for the Westside Fire Recovery Project takes a holistic approach. It does not analyze the effects of each action separately, however the effects of temporary roads is incorporated into the Landslide Risk assessment. They are considered a high level of disturbance and are included in the acres of high and moderate disturbance used to estimate landslide risk. A discussion of temporary road actions and the potential effects at the site scale is in the Environmental Consequences section of the Geology report as amended.

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234 - Soils	#18852-21	3) Disturbance to soils, soil chemistry / fertility, erosion and mass wasting is not adequately addressed.	Impacts to soil erosion have been analyzed using the soil stability indicator. Areas not meeting desired conditions for soil stability would have high erosion hazard ratings. The soil organic matter indicator analyzes impacts to the upper soil horizon where most plant available nutrients exist and soil chemistry could be most impacted. The soils report for the project analyzes these impacts which are also summarized in the EIS. Mass wasting is assessed as Landslide Risk in the Geology Report and is summarized in the EIS.
234 - Soils	#18852-47	31) Consider an upper limit for slope % for acceptable timber harvest. Slopes over 40% should not be considered for timber harvest activities, nor on unstable geologic parent materials. Increased erosion, sedimentation, slope failures, mass wasting etc. are not acceptable results of forest management and salvage logging.	Impacts to soil erosion have been analyzed using the soil stability indicator. Areas not meeting desired conditions for soil stability would have high erosion hazard ratings. The soil organic matter indicator analyzes impacts to the upper soil horizon where most plant available nutrients exist and soil chemistry could be most impacted. The soils report for the project analyzes these impacts which are also summarized in the EIS. The Forest Plan defines unstable lands as Riparian Reserves. The landforms the Forest Plan defines as unstable lands are active landslides (including earth flows), toe zones of dormant landslides, inner gorges and steep, weathered granitic lands. There is salvage harvest on these landforms. As described in the Methods section of the Geology report and summarized in the Geology section of Chapter 3 of the final EIS, root support plays the primary role in slope stability post-fire. Fire killed trees cease to provide slope stabilizing root strength after about 10 years regardless of whether the tree is left standing or is cut down. So the removal of dead trees does not affect landslide risk. The current landslide risks are elevated due to the large areas of fire killed trees. The infrastructure needed to harvest the trees does have an effect (see response to number 17910-6 on the effects of temporary road access on landslide risk). The effect is acute at the site scale but is small over a 7th field watershed scale because of the small number of acres required for landings and temporary road access. There is an indirect benefit of salvage harvest on unstable lands – post-salvage reforestation will decrease the duration of the elevated landslide risk. The landslide risk will begin to go down as there are trees large enough to provide enough root strength to reduce landslide potential (about 10 inches in diameter). The Geology Environmental Consequences Section of the final EIS and the Geology report as amended discloses the effects of salvage logging
234 - Soils	#18857-6	No salvage logging on sensitive soils, active landslides, dormant landslides, toe zones of dormant landslides, earth flows and other erosive soil types. * No salvage units on decomposed granite.	See response to comment 18852-47 regarding unstable lands. Soils derived from Schist, Granite, or Serpentine parent material are most sensitive to disturbance by mechanical equipment. Ground based harvest could have the highest potential to impact these soils. Project Design Feature Watershed-8 would restrict all ground based harvest equipment to less than 35 percent slopes. In site preparation units (where no salvage will occur) felling and skidding equipment will be restricted to slopes less than 35% on granitic and schist soil types.
234 - Soils	#18878-56	DEIS: 2,800 acres would not meet desired conditions for soil stability, 825 would not meet surface organic matter, 2,214 acres for SOM, and 1,255 for soil structure (Pg. 231) Comment: The Forest Service offers no explanation for why it intends to conduct actions that will result in undesirable soil conditions that violate forest plan standards across thousands of acres.	Ground based harvest equipment would result in the highest rates of accelerated erosion and this would have the greatest potential impact to long term soil impairment. Impacts were predicted to be highest within the Beaver Fire area, and the modified Alternative 3 only proposes ground based harvest on some of the roadside hazard treatments within this fire area. For all Alternatives and fire areas, project design project design features have been revised so that all new temporary roads would be decompacted. This would occur to a depth based on soil type and slope to promote the return of vegetation, improve soil stability, and decrease potential impacts from subsoiling. It is not our intent to conduct activities that would result in undesirable soils conditions. Therefore, an erosion control plan has been developed and by following the plan, erosion and sedimentation can be controlled or prevented.
234 - Soils	#18878-57	DEIS: Post fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production. (Pg. 231) Comment: The ACS and the CW A do not permit Forest Service logging actions that will result in a 6 fold increase in sediment production let alone those that will result in a 1,000 fold increase. Ground based harvest equipment would result in the highest rates of accelerated erosion. Impacts to soil stability were predicted to be highest within the Beaver Fire area, and the modified Alternative 3 only proposes ground based harvest on some of the roadside hazard treatments within this fire area.	Tractor harvest could result in temporarily not meeting soil cover standards, yet for any tractor harvest unit that does not meet the soil cover standards in table 4-2 of the Forest Plan upon completion of treatments, areas where soil cover is deficient will be mulched so that soil cover standards are met. Additional mitigations designed to meet Standard and Guideline 3-2 include limiting skidding equipment to slopes less than 35 percent, and site preparation is designed to maintain adequate soil cover by not reducing the sum of 1, 10, and 100 hour fuels to less than less than 7 tons per acre. Also during site preparation, manual felling of small diameter trees could also be accomplished to add soil cover on ground based harvest units. For all Alternatives and fire areas, project design project design features have been revised so that all new temporary roads would be decompacted. In addition, This would occur to a depth based on soil type and slope to promote the return of vegetation, improve soil stability, and decrease potential impacts from subsoiling. It is not our intent to conduct activities that would result in undesirable soils conditions. Therefore, an erosion control plan has been developed and by following the plan, erosion and sedimentation can be controlled or prevented. The project is consistent with Aquatic Conservation Strategy objectives, as stated in the Forest Plan; see a summary of the Aquatic Conservation Strategy review in Chapter 3 of the EIS and the full report in the project record.

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234 - Soils	#18878-79	Finally, in terms of post-fire salvage activities the Karuk Tribe is especially concerned with any planned ground disturbing activities in inner gorges, previously active landslides and older landslide deposits. These concerns are based upon a 1998 report of general findings by USFS Geologists which states that "Watersheds devegetated by a combination of wildfire and timber harvest experienced high rates of landslides and debris flows, particularly on devegetated sensitive geomorphic terranes." (de la Fuente, et al 1997) Depending on the timing, location and severity resulting landslides and debris flows can and do endanger significant cultural resources, public and personnel safety, private property, and infrastructure.	Project Design Features prohibit salvage harvest in most sensitive areas to watershed disturbance including stream course Riparian Reserves, inner gorge, active landslides and landslide toe zones. Even though roadside hazard salvage would occur in these areas, project design features restrict these operations below the road and limit the size of trees being removed which in turn results in less ground-disturbance. Two of the purposes of the proposed actions are: 1) worker and public safety and access, 2) safe conditions for firefighters performing fire suppression for community protection. Timber harvest as used in de la Fuente (1997) is referring to green tree removal or live trees. See response to number 18852-47 for summary of reasoning for treatments on unstable lands. The Geology Report as amended and summarized in the final EIS acknowledges the effects of wildfire on landslide risk in the Affected Environment Section.
234 - Soils	#18883-8	No helicopter logging should be allowed because these areas are intrinsically steep and the disturbance of fallers and workers cutting trees and the movement of logs on the ground will accelerate erosion over the already high erosion that is occurring due to fire-loss of ground cover.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Helicopter logging and other logging techniques are proposed, consistent with the Forest Plan and law, regulation and policy. The soils report describes impacts to soil indicators. Chapter 3 of the EIS summarizes the soils effects analysis. The soils report for the project analyzes the impacts to accelerated erosion due to helicopter logging using the soil stability indicator. The no action Alternative analyzes these impacts if no helicopter logging occurred.
234 - Soils	#18883-9	Skyline logging is extremely damaging to the forest floor. This activity will tremendously increase the already bare soil mobility. Climate change is already demonstrating that increased intensity of precipitation is occurring and predictions are that it will occur in the future. These high intensity storms will increase soil particle mobilization of bare soils and skyline logging techniques will exacerbate the already fragile surface soil and cause deep gully erosion in steep areas.	General comment, opinion, or position statement; see response to Comment number 16695-4.The soils report for the project has estimated that skyline logging could increase areas with high erosion hazard ratings by approximately 10 percent. These impacts have been analyzed using the soil stability indicator. Chapter 3 of the EIS summarizes this analysis. The winter following the fire was warmer and generally resulted in higher rates of erosion due to higher intensity precipitation over the project area, most of which was rain rather than snow. See the climate change section of Chapter 3 of the EIS for a discussion of how that has been considered.
234 - Soils	#18909-94	"The soil is the great connector of lives, the source and destination of all. It is the healer and restorer and resurrector, by which disease passes into health, age into youth, death into life. Without proper care for it we can have no community, because without proper care for it we can have no life." ? Wendell Berry, The Unsettling of America: Culture and Agriculture According to the KNF LRMP the maintenance of soil productivity, permeability and fertility is a National issue of high intensity and a requirement. Soil is a critical component to nearly every ecosystem in the world, sustaining life in a variety of ways-from production of biomass to filtering, buffering and transformation of water and nutrients. Natural processes can take more than 500 years to form one inch of topsoil. According to the DEIS, 4,236 acres would not meet desired conditions for soil stability; 900 acres would not be met for surface organic matter, 2,214 acres for soil organic matter and 1,255 acres for soil structure.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. When averaged between the 3 fire areas, all desired soils conditions would not be met on less than 10 percent of the fire analysis areas. Therefore, forest soils standard and guidelines would be met. The highest soils impacts would occur under Alternative 2 within the Beaver fire area, where the soil stability indicator would not be met on approximately 29 percent of the fire analysis area. Alternatives have been proposed which would reduce the area not meeting the soil stability indicator to between 15 and 20 percent. It is not our intent to conduct activities that would result in undesirable soils conditions. Therefore, an erosion control plan has been developed and by following the plan, erosion and sedimentation can be controlled or prevented.
234 - Soils	#18909-95	Soil Stability: Soils Report page 16, "Prior to proposed activities approximately 490 acres of the project area are not meeting desired conditions for soil stability. The areas that are not meeting the desired condition have high EHRs, or less than 30 percent soil cover due to recent wildfires which combusted organic matter on top of the soil surface. Generally, existing EHRs are high on slopes greater than 30 percent and moderate on slopes less than 20 percent. Soil disturbance has the potential to increase the erosion hazard because soil cover is reduced on portions of units." Page 17, "Immediately following the fire, EHRs were high on approximately 57 percent of the project area." An estimated 4,236 acres of the project area would not meet desired conditions for soil stability because soil cover would be less than 30 percent. Construction of temporary roads, associated with ground based harvest, would have the highest impact to soil stability and sedimentation. Post fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production.	See response to 18909-94.

Code	Comment Number	Comment Text	Response
234 - Soils	#18909-96	Surface Organic Matter: Approximately 900 acres may not meet the desired condition for surface organic matter due to insufficient retention of large woody material. Post-fire woody debris constitutes a valuable natural element as a potential source of nutrients. Charred wood represents a considerable pool of nutrients including Nitrogen and micronutrients Sodium, Manganese, Iron, Zinc, and Copper.	The surface organic matter indicator would not be met on less than 10 percent of each of the fire analysis areas. As described in the soil resource report, a scarcity of large wood may not necessarily translate to reduced soil productivity, for a couple of reasons. First, heavily charred wood decays much more slowly; lots of smaller diameter material would be expected to remain longer. Second, coarse wood doesn't contribute that much to soil fertility – it's carbon rich and nutrient poor, so it contributes some carbon for soil organic matter (SOM), but most of the carbon goes off as carbon dioxide from microbial respiration as it decays (Spears, 2003). Also, formation of SOM is a much longer term process than the period of wood scarcity, and soil carbon has a huge buffering capacity because it is such a large source of carbon. For these reasons, it's expected that LMP soils standards and guidelines would be met for the surface organic matter indicator.
234 - Soils	#18909-97	Soil Organic Matter: Currently 660 acres do not meet standards for soil organic matter. It is anticipated that 2,214 acres for soil organic matter would not meet desired conditions. Less soil organic matter would decrease soils ability to hold moisture, with implications for soil biota, and plant growth. An adequate level of soil cover is needed to maintain soil stability and prevent accelerated erosion. The most severe displacement is expected to occur during temporary road construction, landings and skid trails. Displacement caused by new skid trails and temporary road construction will be considered a long-term disturbance as no mitigations to replace displaced soil organic matter are planned. A Non-Native Invasive Plant project design feature would require removal of the top few inches soil on approximately 24 landings. This would result in major decreases to soil organic matter on landings.	The soil organic matter (SOM) indicator would not be met on less than 10 percent of each of the fire analysis areas and therefore, it's expected LMP soils standards and guidelines would be met for the soil organic matter indicator . See soils section of Chapter 3 of the final EIS for details. Project design features have been revised to more effective decompact new temporary roads to promote the return of vegetation and improve soil stability. Effectively maintaining soil cover and decompacting temporary roads would maintain soil organic matter on site. So although displaced, it's likely soil organic matter would not be lost to soil erosion and LMP soils standards and guidelines would be met. Although the Non-Native Invasive Plant (NNIP) project design feature would result in localized, major decreases to soil organic matter on landings, this could prevent NNIP infestations within units that could out compete native plants and result in long term decreases to SOM.
234 - Soils	#18909-98	Soil Structure: Currently 815 acres are not meeting standards for soil structure. Soil structure could have substantial negative effects and would not meet desired conditions on approximately 1,255 acres. Soil structure conditions are not met when areas have reduced infiltration and permeability capacity. Reduced infiltration and permeability capacity is expected due to the use of mechanical equipment on landings, skid trails, and temporary roads. Construction of new landings, and temporary roads would reduce infiltration to near zero. Changes in porosity occur both by the reduction of soil pore space by force applied to the soil surface (compaction) and the filling of pores by soil and ash material (soil sealing). The DEIS claims, "[s]ince this is less than 10% of the project area, Forest Plan standards will be met on the project area as a whole." However, the KNF Forest Plan standards state that planned activities are to maintain or enhance soil productivity and stability and to maintain soil productivity by retaining organic material on the soil surface and by retaining organic material in the soil profile. Further, the 10% is meant for treatment acres not the entire project areas. The Westside DEIS proposed project area is 218,600 acres, however the treatment acres are less than 55,000. The DEIS fails to appropriately and adequately analyze and disclose the effects of the project and the irreversible impacts to soils. R5 FSH 2509.22 - Soil And Water Conservation Handbook, Chapter 10 - Water Quality Management Handbook, 12.11 Exhibit 03, BMP 1.3 - Determining Surface Erosion Hazard For Timber Harvest Unit Design, " Where the harvest impacts cannot be reduced to a low or moderate level with treatments, then the harvest units should be avoided or harvest methods modified, or both (see also BMP 1.6). All action alternatives in the DEIS fail to meet soil standards and guidelines. The KNF LRMP at page 4-21, "3-6 Refer to the Coarse Woody Debris (CWD) section of Biological Diversity under Biological Environment for coarse woody debris standards and guidelines designed to maintain soil fertility and provide for species needs." Alternative 2 fails to meet CWD retention requirements for soil fertility and the needs of species.	The draft EIS was revised to compare the acres not meeting soil desired conditions to the project analysis area where treatments are proposed. When averaged between the 3 fire areas, all desired soils conditions would not be met on less than 10 percent of the fire analysis areas. Therefore, forest soils standard and guidelines would be met. Project design features have been revised to more effective decompact new temporary roads to promote the return of vegetation and improve soil stability. Alternatives have been proposed which would reduce the area not meeting the soil desired conditions. It is not our intent to conduct activities that would result in undesirable soils conditions. Therefore, an erosion control plan has been developed and by following the plan, erosion and sedimentation can be controlled or prevented.

Code	Comment Number	Comment Text	Response
234 - Soils	#18926-26	SOILS ! According to the KNF forest plan the maintenance of soil productivity, permeability and fertility is a National issue of high intensity. Soil is a critical component to nearly every ecosystem in the world, sustaining life in a variety of ways-from production of biomass to filtering, buffering and transformation of water and nutrients. ! ! The dominant soils within the analysis area are mostly sandy loams or loams with gravelly to extremely gravelly texture modifiers, indicating high natural infiltration rates, and high rock content in many areas. According to the DEIS, 4,236 acres would not meet desired conditions for soil stability; 900 acres would not be met for surface organic matter, 2,214 acres for soil organic matter and 1,255 acres for soil structure.! ! Soil Stability! An estimated 4,236 acres of the project area would not meet desired conditions for soil stability because soil cover would be less than 30 percent. Construction of temporary roads, associated with ground based harvest, would have the highest impact to soil stability and sedimentation. Post fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production.! ! Soil Structure! Soil structure could have substantial negative effects and would not meet desired conditions on approximately 1,255 acres. Soil structure conditions are not met when areas have reduced infiltration and permeability capacity. Reduced infiltration and permeability capacity is expected due to the use of mechanical equipment on landings, skid trails, and temporary roads. Construction of new landings, and temporary roads would reduce infiltration to near zero. Changes in porosity occur both by the reduction of soil pore space by force applied to the soil surface (compaction) and the filling of pores by soil and ash material (soil sealing).! The DEIS claims, "Since this is less than 10% of the project area, Forest Plan standards will be met on the project area as a whole." However, the KNF Forest Plan standards state that planned activities are to maintain or enhance soil productivity and stability and to maintain soil productivity by retaining organic material on the soil surface and by retaining organic material in the soil profile.! !	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to 18909-94.The Forest Service acknowledges the benefits of soil resources.
234 - Soils	#19076-13	ome removal of hazard trees along public roads and strategic fuels treatments are needed to protect: local communities, but the compaction of soil due to logging and road building proposed is too harmful to such a cfitica1 a.1:ea, especially the 3 watersheds mentioned above	It is not clear which 3 watersheds are being referenced in the comment. No project action Alternative proposes timber salvage in hydrologic Riparian Reserves. See Chapter 2 of the EIS for a description of proposed actions. Further, the extent of reopened decommissioned roads and new temporary road construction is limited to 0.2 and 0.3 miles, respectively, within hydrologic Riparian Reserves under Alternative 2. This number is reduced for the preferred Alternative in the final EIS--modified Alternative 3. Given that these ground disturbing activities are very limited along waterways, adverse effects to hydrologic function and water quality are not anticipated. In addition Project Design Features (project design feature) and Best Management Practices are designed and implemented to prevent adverse effects to water quality and project activities such as planting and legacy sediment site treatments are anticipated to produce positive effects to water quality over the mid- and long-term. Project design features have been revised to effectively meet Forest Plan Standard and Guidelines 3-2 for soil cover and 6-16 for Coarse Woody Debris. Tractor harvest could result in temporarily not meeting soil cover standards, yet for any tractor harvest unit that does not meet the soil cover standards in table 4-2 of the Forest Plan upon completion of treatments, areas where soil cover is deficient will be mulched so that soil cover standards are met. Additional mitigations designed to meet Standard and Guideline 3-2 include limiting skidding equipment to slopes less than 35 percent, and site preparation is designed to maintain adequate soil cover by not reducing the sum of 1, 10, and 100 hour fuels to less than less than 7 tons per acre. Also during site preparation, manual felling of small diameter trees could also be accomplished to add soil cover on ground based harvest units. To meet the surface organic matter Forest Plan Standard and Guideline 3-6, the watershed-36 project design feature would require retention of 5 to 20 pieces of Coarse Woody Debris per acre. Areas that would not meet the soil organic matter indicator and soil structure indicator are limited to skid trails, temporary roads, and landings. Because these areas are small and scattered, soil productivity is unlikely to be impacted on a unit scale and Forest Plan Standard and Guideline 3-1 would be met. Text has been added to Chapter 3 – Soil to clarify Project Design Features and project impacts. Effects to watersheds and soils from project activities are discussed in the EIS, Chapter 3, Water Quality and Soils sections. See response number 19076-13. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
234 - Soils	#19076-4	These three watersheds should be considered in a separate EIS because of their bedrock nature, their importance to salmon, their legacy sedime11t site status due to past management, and their lack of high intensity burt1from recent fire (3% in Thompson, 1.2% in Grider).	The project boundary is up to the discretion of the Responsible Official. The fire areas were used, as described in Chapter 1 of the EIS. Effects of treatments are considered by fire area and watershed; see Chapter 3 of the EIS under hydrology or the associated report for more information. These watersheds were included because treatments within them met the purpose and need for the Project. Unique watershed characteristics were considered and addressed through the interdisciplinary process resulting in the most appropriate project design and minimization measures.
234 - Soils	#3678-25	Soils – No Action direct and indirect effects "Under alternative 1, large surface organic matter could reach sufficient levels within approximately five years and contribute to the recovery of soil productivity. It is possible that the surface organic matter indicator would not be met if material greater than 12 inch diameter exceeds 800 cubic feet. If a wildfire occurs during the next 10 to 15 years, soils would burn with a high SBS directly beneath this large woody debris. This could occur on approximately 2,500 acres of the project area and it's estimated large wood could cover 5 to 10 percent of this area."	The removal of large woody debris, greater than 12 inches in diameter, could reduce the area that burns with high soil burn severity in a future fire. This potential benefit has been clarified in the EIS Chapter 3. As described by Brown, 2003 this benefit occur if wildfire occurs 10 to 15 years from now, through areas with greater than 35 tons per acre large woody debris. The soils report analyzed areas greater than 35 tons per acre, yet incorrectly converted 35 tons per acre to 800 cubic feet per acre. This number has been revised to 2,500 cubic feet per acre to correctly correlate to research by Brown 2003. A wildfire 10 to 15 years from now is an unpredictable event, and therefore areas with greater than 35 tons per acre large woody debris are not factored into acres not meeting desired conditions for any of the Alternatives. Under the No Action Alternative, high soil burn severity could occur on approximately 2,609 acres if a wildfire burns 10 to 15 years from now. Proposed harvest under Alternative 2 could reduce this amount by 283 acres, 123 acres for Alternative 3, 253 acres for Alternative 4, 187 acres for Alternative 5, 177 acres for the modified Alternative 2, and 173 acres for the modified Alternative 3.
234 - Soils	#5873-109	The quantity, quality, and rate of revegetation has a direct contribution to controlling erosion and sedimentation. USGS has described the role of vegetation in slope stability and erosion as follows: In a watershed, vegetation provides five major physical functions that help control soil erosion during rainfall events (Spittler, in press): • Interception of rainfall, which extends the time for water to reach the ground surface and absorbs raindrop impact energy. • Mulching of the ground surface to provide temporary water storage and slow release, slope roughness, and energy absorption. • Structural support of loose, surficial material. • Reinforcement of the deeper soil by roots, which increases the natural slope stability. • Maintains conditions necessary for soil micro-organisms that provide soil structure. http://web.archive.org/web/20040218052053/http://landslides.usgs.gov/html_files/ofr95-508/skrep2.html citing Spittler, T.E., in press, Fire and the debris-flow potential of winter storms, in, Proceedings of the Symposium on Brush Fires in California Wildlands: Ecology and Resource Management: International Association of Wildland Fire. Wagenbrenner et al (2015) found that - • Post-fire salvage logging increased soil compaction and decreased vegetative cover. • Salvage logging greatly increased sediment production from more disturbed plots. ("Sediment production from the skidder plots was 10–100 times the value from the controls.") • Salvage logging delayed post-fire recovery of vegetation and sediment production. ("The relative differences in sediment production between the disturbed plots and the controls tended to increase over time as the controls exhibited more rapid regrowth." Data were taken 2-8 years post-harvest.) Joseph W. Wagenbrenner, Lee H. MacDonald, , Robert N. Coats, Peter R. Robichaud, Robert E. Brown. 2015. Effects of post-fire salvage logging and a skid trail treatment on ground cover, soils, and sediment production in the interior western United States. Forest Ecology and Management. Volume 335, 1 January 2015, Pages 176–193. http://www.nrel.colostate.edu/assets/nrel_files/labs/macdonald-lab/pubs/Salvage-logging-Wagenbrenner%20et%20al-ForEcolMgmt-2015.pdf	The soils report for the project considers the findings of Wagenbrenner et al (2015) as well as the contribution of vegetation in controlling erosion. Vegetation would provide for the five major physical functions described. A loss of vegetation would result in areas that partially meet the soil structure indicator, and areas that do not meet the soil structure and soil organic matter indicators. The five major physical functions have not been discussed in the soils report, but the impacts have been analyzed using the soil indicators. Impacts to soils are summarized in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
234 - Soils	#5873-114	Salvage logging and associated activities such as site prep, fuel treatment, and planting kills understory vegetation which will significantly reduce site productivity. Salvage logging will increase soil erosion and sedimentation through the following mechanisms, each or which must be addressed in detail in the NEPA analysis: 1. Soil disturbance, 2. damage to live and dead roots, 3. removal of organic material, 4. delay of revegetation, 5. construction of roads and landings, 6. increased channel erosion from peak flow caused by a. loss of large logs that help anchor snowpacks, b. mobilization of fine soil particles that seal the soil surface and increase c. loss of dead tree canopy; See McNabb and Swanson, "Effects of Fire on Soil Erosion," Chapter 14 in Natural and Prescribed Fire in Pacific Northwest Forests, Walstad, Radosevich, and Sandberg, editors, OSU Press. Since the recovery of understory groundcover is the primary recovery mechanism for post fire recovery of erosion and runoff, and consequent downstream sediment-related effects, this indicates that post-fire logging seriously impedes recovery of sediment regimes after fire. Kattleman (1996) noted that "If post fire treatments of salvage logging and site preparation prevent rapid reestablishment of low vegetation, resulting erosion can be greater than that directly produced by the fire."	We agree in general that logging can cause soil erosion however we don't believe the described impacts will occur on the Westside Fire Recovery Project Area because of the design of the proposed actions. This comment provides general literature citations however the citations are not specific to the effects of the proposed Westside Fire recovery Project. Literature citations that assert an impact may happen are not the same as a site specific analysis that demonstrates probable impacts. There are extensive project design features to minimize soil erosion in the Westside Fire Recovery Project. Between draft and final, project design features have been added to ensure that Forest Plan standards for soil cover and coarse woody debris are met. These standards are designed to ensure that the impacts described do not occur. The comment asserts that proposed activities would "kill understory vegetation which will significantly reduce site productivity." No information is provided to support that assertion and that has not been our experience. Sites are rapidly reoccupied by manzanita, ceanothus, snowbrush and other species on the Klamath under just about any circumstance after a fire, so it is unlikely that we would return to a post fire erosion environment particularly since coarse woody debris and ground cover (which currently don't exist in much of the project area) would be generated by proposed salvage and site preparation activities. Impacts due to salvage logging and associated activities have been described in the soils report for the project and summarized in Chapter 3 of the EIS. Removal of organic matter is analyzed using the soil organic matter indicator for below ground, and the surface organic matter indicator for above ground material. In the soils report for the project, damage to live and dead roots was not specifically mentioned, yet it was considered in the overall impacts to vegetation and soil cover as described in the impacts to soil stability. It is also likely that future repeated high severity fire from untreated fuels (no action, as suggested by the comment) would negatively impact soils (EIS Chapter 3 – Fuels, Soil).
234 - Soils	#5873-118	Undisturbed litterfall after wildfire reduces soil erosion caused by both rain and overland-flow. By disturbing needle cover and effectively reducing the soil coverage, logging and yarding will cause increased in erosion compared to not logging. Pannkuk, C. D., and P. R. Robichaud. 2003. Effectiveness of needle cast at reducing erosion after forest fires, Water Resources Research, Vol. 39, No. 11, doi:10.1029/2003WR002318, 2003. http://www.agu.org/pubs/crossref/2003/2003WR002318.shtml They found that a 50 percent ground cover of Douglas fir needles reduced water flow erosion by 20 percent and rain-induced erosion by 80 percent. A 50 percent ground cover of ponderosa pine needles reduced water flow erosion by 40 percent and rain-induced erosion by 60 percent.	The Forest Service acknowledges that post-fire litterfall reduces soil erosion. However, the reference cited is primarily a comparison of effects of two needle types (ponderosa pine and Douglas Fir) on surface erosion rates. The publication does not explicitly use the terms "salvage", "harvest", or "logging" for example. Project Design Features (Watershed-10 project design feature) specify that unit site preparation will retain as close to 7 tons of surface fuels per acre as possible. In addition, the project proposes lop-and-scatter treatments in plantation units within Riparian Reserves in the Whites and Happy Camp Complex Fire areas. Retention and production of surface material will reduce risk of surface erosion. The potential for proposed activities to remove existing soil cover, including litterfall has been analyzed using the soils stability indicator in the soils report for the project and summarized in Chapter 3 of the EIS. Salvage harvest would remove soil cover and result in higher erosion rates compared to the no action Alternative. This would mostly occur during ground based harvest on approximately 30 to 40 percent of a units area. In addition, machine piling to complete site preparation would remove soil cover.
234 - Soils	#5873-175	Post-fire logging inevitably involves increases in road use, which increases erosion and sedimentation, especially at road crossings (Reid and Dunne, 1984; Roni et al., 2001). Roni et al. (2001) identified reductions in road traffic as a component of watershed restoration, indicating that increased road traffic works in opposition to watershed and stream restoration. Beschta et al. (1995) noted that even relatively low impact logging systems such as helicopter yarding should be avoided where sedimentation is already a major problem for salmonids or other sensitive aquatic species, because any activity that disturbs litter layers of soil surface horizons, either pre- or post-fire can accelerate soil erosion and sediment delivery to aquatic systems. The USFS and USBLM (1997a; c) conceded that logging generally increases erosion and, consequently, sedimentation, regardless of how carefully it is implemented. Megahan et al. (1992) came to similar conclusions. Elevated erosion and sedimentation persist for several years after logging disturbance (USFS and USBLM, p. 1101, 1997a). BMPs do not eliminate the persistent erosional impacts of post-fire logging. USFS and USBLM (p. 446, 1997c) concluded that although BMPs can reduce sediment yields compared to historical practices, risks of increased sedimentation will continue to occur if road building or timber harvest occur, damaging aquatic habitats. Ziemer and Lisle (1993) stated that there are no reliable data indicating that BMPs are cumulatively effective in protecting aquatic resources from the adverse effects of logging and associated impacts. Espinosa et al. (1997) provided evidence from watershed case histories that BMPs thoroughly failed to cumulatively protect salmonid habitats and streams from severe damage from roads and logging. Logging effects on soils and vegetation increase erosion and sedimentation in the post-fire environment. Logging causes soil compaction which causes loss of soil productivity and increased erosion. The latter is essentially permanent (Beschta et al., 1995) and is the most severe source of reductions in long-term soil productivity (USFS and USBLM, 1997a; b). Soil compaction persists for at 50-80 years (USFS	The soils report for the project describes impacts to soil erosion and soil compaction due to post fire logging as analyzed using the soil stability and soil structure indicators. Impacts are summarized in Chapter 3 of the EIS. The soils report discusses that if soil cover is not available, soil stability and SOM could be impacted over the long term. Wagenbrenner, 2015 concludes that the reduction in vegetative regrowth can persist over time. The soils report also discusses that subsoiling would promote the recovery of soil stability, soil organic matter, and soil structure, yet soil productivity would remain impacted over the long term on compacted surfaces that are not subsoiled. Compaction and reduced soil productivity are only analyzed within the proposed treatment areas for this project and the soils cumulative effects analysis does not consider impacts on public lands on regional scales.

Code	Comment Number	Comment Text	Response
		and USBLM, 1997a). Compaction and reduced soil productivity are already major concerns on public lands on regional scales (USFS and USBLM, 1997a; CWWR, 1996).	

Code	Comment Number	Comment Text	Response
234 - Soils	#5873-176	Logging also reduces soil productivity by removing trees which are major sources of the coarse woody debris (CWD) and organic matter critical to soil productivity (USFS and USBLM, 1997a). Even the removal of slash consisting of tops and branches negatively affects soil productivity by negatively affecting nutrient and organic matter levels; burning these materials in place (as occurs with wildland fire) causes much less negative impacts on soils (USFS and USBLM,1997a). USFS and USBLM (p. 466, 1997a) found that losses in soil productivity were correlated with logging and roads within the ICBEMP project area. USFS and USBLM (p. 206, 1997a) and Kattleman (1996) state that the prevention of soil damage and loss of productivity is easier and more effective than attempts to restore it after damage has occurred. A primary approach to restoring soil productivity is to restore organic matter and coarse woody debris levels by leaving areas undisturbed until organic matter levels have recovered (USFS and USBLM, p. 206, 1997a, emph. is mine). Avoidance of increased erosion is key to restoring soil productivity (Beschta et al., 1995; USFS and USBLM, p. 206, 1997a). The most effective means of controlling erosion is to avoid activities that disrupt/damage soils and vegetation, as is exceedingly well-documented in the literature. Due to the manifold negative effects of logging on soil productivity, erosion, and sedimentation, USFS and USBLM (1997b) concluded that logging had greater negative effects on ecosystem functions than the baring of soils by fire. The USFS and USBLM (Ch. 4, pp. 12-13, 1997b) notes that although fire may reduce soil productivity, it typically does not reduce it as much as from soil compaction and whole tree removal (e.g. logging), except in the rare cases where fire consumes all organic material. It states: "Because of the mosaic pattern that wildfire produces, and the residual wood that is left on site...wildfire usually has fewer implications for loss of soil productivity and function than disturbances which remove oil organic matter and [increase] bulk density as well." Logging effects on soil properties are usually more severe and more persistent than those of fire (USFS and USBLM, Ch. 4, pp. 13, 1997b). These multiple impacts on soil productivity are probably why salvage-logging retards post-fire vegetative recovery. Sexton (1998) documented that post-fire salvage logging over snow reduced regrowth of ponderosa pine and other species relative to adjacent burned, but unlogged, areas. Naturally regenerating groundcover in unlogged areas also had greater survival and growth than plantings on areas that had been salvaged logged after fire. Notably, these adverse effects of logging on regrowth were from over-snow logging (Sexton, 1998). It is highly likely that ground-based logging without snowcover retards regrowth to a greater extent due to its greater negative effects on soils. Kattleman (1996) noted that “If postfire treatments of salvage logging and site preparation prevent rapid reestablishment of low vegetation, resulting erosion can be greater than that directly produced by the fire.” Coupled with Sexton’s work and the known effects of logging on soil productivity and concomitant effects on revegetation, it appears that post-fire logging creates more erosion and sedimentation than fires	Beschta et. al, 1995 concludes that ground based logging and soil disruption are not likely to be consistent with ecological restoration. See the end of Chapter 2 for how an Alternative based on the Beschta suggestions was considered. The soils report for the project describes impacts to soil productivity due to logging and whole tree removal. The EIS summarizes the relative importance of soil erosion and soil compaction to overall soil productivity. The no action Alternative analyzes impacts to soil productivity by leaving areas undisturbed. Post-fire logging over snow has not been proposed for this project. Project Design Features (project design project design features) have been developed to decrease the potential of accelerated erosion and would require mulching up to 40 acres of skid trails where accelerated erosion is predicted to be highest, limiting skidding equipment to slopes less than 35 percent, and retaining material greater than 8 inches in diameter unless needed to reduce 1,000 hour fuel loading to seven tons per acre. A project design feature requires decompacting new temporary roads to varying depths based on slope and soil type to promote the return of vegetation while avoiding additional impacts to soil stability; see Chapter 2 of the final EIS under watershed project design project design features in the project design feature table.

Code	Comment Number	Comment Text	Response
234 - Soils	12346-12	DEIS: Post fire accelerated erosion due to ground based salvage logging could result in a 6 to 1,000 fold increase in sediment production. (Pg. 231) Comment: The ACS and the CW A do not permit Forest Service logging actions that will result in a 6 fold increase in sediment production let alone those that will result in a 1,000 fold increase.	The reference to a 6 to 1,000 fold increase in sediment from ground-based skidding is a literature citation to Wagenbrenner - 2015. It is not an analysis of the effects that would necessarily occur in the Westside Fire Recovery Project. Wagenbrenner (2015) also noted that "Adding slash to skid trails increased total ground cover by 20-30% and reduced sediment yields by 5 to 50 times over untreated areas. Project Design Feature Watershed 30 states "Where skidding occurs through units with less than 50 percent soil cover, mulch skid trails of greater than 15 percent slope, to achieve at least 50 percent effective soil cover on skid trails (approximately 40 acres across the project area may require this). Effective soil cover could include plant litter, woody material in contact with the soil, living vegetation, and rock fragments with a diameter of ½ to 3 inches. Use of certified weed free materials including straw, wood chips, or mulch may be used where on-site material is insufficient. This action is expected to significantly reduce potential erosion from skid trails as noted by Wagenbrenner (2015). Soil organic matter is currently limited in severely burned areas but will recover as dead trees fall and leaf litter from early seral plant communities accumulates.Ground based harvest equipment would result in the highest rates of accelerated erosion. Impacts to soil stability were predicted to be highest within the Beaver Fire area, and the modified Alternative 3 only proposes ground based harvest on some of the roadside hazard treatments within this fire area. Tractor harvest could result in temporarily not meeting soil cover standards, yet for any tractor harvest unit that does not meet the soil cover standards in table 4-2 of the Forest Plan upon completion of treatments, areas where soil cover is deficient will be mulched so that soil cover standards are met. Additional mitigations designed to meet Standard and Guideline 3-2 include limiting skidding equipment to slopes less than 35 percent, and site preparation is designed to maintain adequate soil cover by not reducing the sum of 1, 10, and 100 hour fuels to less than less than 7 tons per acre. Also during site preparation, manual felling of small diameter trees could also be accomplished to add soil cover on ground based harvest units. For all Alternatives and fire areas, project design project design features have been revised so that all new temporary roads would be decompacted. In addition, This would occur to a depth based on soil type and slope to promote the return of vegetation, improve soil stability, and decrease potential impacts from subsoiling. It is not our intent to conduct activities that would result in undesirable soils conditions. Therefore, an erosion control plan has been developed and by following the plan, erosion and sedimentation can be controlled or prevented. Elements in the ECP include effectively constructing waterbars on skid trails, confining tractors and feller-bunchers to approved skid trails and equipment routes, and implementing appropriate road watering to maintain road fines on site. Text has been added to the final EIS to clarify these requirements and effects. The project is consistent with Aquatic Conservation Strategy objectives, as stated in the Forest Plan; see a summary of the Aquatic Conservation Strategy review in Chapter 3 of the EIS and the full report in the project record.

Code	Comment Number	Comment Text	Response
235 - Minerals & Geol. Resources	#18909-103	There are about 3,920 acres of proposed salvage units on steep, weathered granitic lands designated as Riparian Reserves, about 960 acres of site prep and plant, 4,395 acres of roadside hazard tree removal and 3,940 acres of fuels treatments on unstable lands, Riparian Reserves. The watersheds with a high landslide risk that will have a reduced duration of elevated risk are Upper Grider Creek, Cliff Valley, Lower Grider Creek, O'Neil Creek, Walker Creek, and Caroline Creek. The reduction in duration of elevated risk will benefit natural resources and infrastructure in the long-term. Middle Creek, Horse Creek, and Upper Elk Creek have a moderate landslide risk and will have a duration of elevated risk of 30 years in this alternative. Lower Grider and Walker Creek have very high landslide risk due to the potential to impact private land - so the reduction of elevated risk from more than 80 years to 30 years is of great benefit for protecting human safety and private property in these two watersheds. Rancheria Creek, which also has a very high landslide risk, will continue to have a greater than 80-year duration of elevated risk because there is less than 25 percent of the high and moderate vegetation burn severity areas being planted. All other watersheds will have a greater than 80 year duration of elevated risk. The DEIS fails to meet the KNF LRMP Standards and Guidelines, Geology 4-5: "Promote slope stability and maintain soil productivity on geologically unstable lands." The KNF LRMP page 4-18 states, "2-1 Manage vegetation on geologically unstable lands (including active landslides, all inner gorges, margins and toe zones of dormant landslides and severely weathered and dissected granitic lands) to maintain or enhance slope stability and soil productivity according to Riparian Reserves standards and guidelines." The DEIS states that the project does not change the landslide risk for any watershed. However, there is a change in the risk ratio or the percent of watersheds with high or moderate disturbance for twenty-eight watersheds due to treatments. Then the DEIS claims that there is a reduction in the duration of elevated risk due to planting for nine watersheds compared to no action, but science shows that natural regeneration would take place and would not disturb the geologic structure. Please also see the Treatment in Riparian Reserve section of these comments, page 31. The KNF LRMP at page 4-19 states, "2-3: A geologic evaluation will be conducted for all projects involving ground- or vegetation-disturbing activities on potentially unstable land. Such land includes, at a minimum, all of the geologically sensitive land identified in the geologic layer of the Forest Plan database. These investigations will include geologic hazards and resource assessments, development of management requirements and mitigation measures, and documentation. All such investigations will review for accuracy the geologically unsuitable lands, which are identified in the project area on the geologic layer of the Forest Plan database, and other potentially unstable lands. Recommendations for inclusion of more land into this category and/or exclusion of other lands will be provided. These geologic investigations will be conducted in a way consistent with the generally accepted standards of the profession. Documentation will include: a summary or abstract, observations, analysis, conclusions, recommendations and references, and be in a format compatible with NEPA requirements." Data collection will include all information needed to adequately address the geologic questions at hand. Minimum data necessary for projects involving ground- or vegetation-disturbing activities in areas containing geologically sensitive lands are as follows: a) Distribution of rock types and relevant structural features within the project area, b) Distribution of geomorphic terranes with unique landslide potential, c) Distribution of all previously identified unsuitable land (due to instability), and d) Distribution of known geologic SIAs, caves, groundwater developments, and rock material quarries. The DEIS and Geology Report fail to disclose this information.	The acres of unstable lands with treatments has been updated in the Geology Environmental Consequence section of Chapter 3 of the final EIS and the Geology report as amended. The duration of elevated landslide risk indicator is intended to illustrate compliance with Standard and Guidelines 2-1 and the Forest Program Emphasis "Promote slope stability and maintain soil productivity on geologically unstable lands". See response to number 18852-47 for summary of effects to landslide risk and the indirect benefits of reforestation. A geologic evaluation per Standard and Guideline 2-3 was completed and is documented in the Geologic report as amended and incorporated by reference into the final EIS in Chapter 3. Recommendations for mitigation are captured in the watershed project design features in Chapter 2 of the final EIS. The information includes bedrock geology maps, geologic terrane maps with previously identified unstable lands. The report as amended now includes explicit information on the distribution of SIAs.The Federal Cave Resource Protection Act (1988) prohibits the disclosure of cave locations. However, A map of the limestone bedrock (the most likely to contain caves in the project area) was added to the Geology report amendment. A discussion of groundwater effects was added as well. There is no proposal to develop or use Forest Service rock quarries so they are not discussed in the report or final EIS.

Code	Comment Number	Comment Text	Response
235 - Minerals & Geol. Resources	#18926-27	The DEIS states that the project does not change the landslide risk for any watershed. However, there is a change in the risk ratio or the percent of watersheds with high or moderate disturbance for twenty-eight watersheds due to treatments. Then the DEIS claims that there is a reduction in the duration of elevated risk due to planting for nine watersheds compared to no action, but science shows that natural regeneration would take place. ! !	It is difficult to directly measure slope stability so the analysis uses landslide risk as a proxy for slope stability. Landslide risk is a combination of the likelihood a landslide event may occur and the consequences of such an event. The likelihood of a landslide uses a combination of the risk ratio of the GEO model, percent unstable lands and percent high and moderate disturbance in the watershed. The final EIS and the Geology report as amended report the incremental changes in measures such as GEO model risk ratios and percent watershed with high and moderate disturbance. The landslide risk categories are based on professional judgment of the Forest Geologist and are intended to better illustrate the effects to slope stability of the project rather than simply displaying the incremental changes in the measures. See the response to comment number 18852-47 for a summary of how the project affects landslide processes. Only the construction of new landings and temporary roads is considered high or moderate disturbance. The removal of fire killed trees (aka salvage or site preparation) is included in the model but does not affect the GEO model risk ratio (Methods section of the Geology report as amended). All other actions do have an effect and are illustrated in the increase or decrease (in the case of road stormproofing) GEO model risk ratio. The changes, however, were not enough to move any watersheds from one risk category to another. The duration of elevated risk is related to the speed at which the areas burned with high and moderate severity fire are reforested with 10 inch trees (See Section I of the Geology Amendment). The effects analysis does account for natural reforestation. However, the Silviculture report shows that areas that have site preparation (including salvage) and planting will have conifer forest re-established faster than relying on natural regeneration. The duration of elevated risk is reduced in watersheds where at least 25% of the high and moderate severity burn is replanted.
236 - Fire, Fire Risk	#17387-6	Support reducing fuels/fire hazard along primary access roads and roads with high potential to be used for managing planned and unplanned ignitions	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The suggestion of the commenter is already incorporated into project design; see Chapter 2 of the EIS for details. Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
236 - Fire, Fire Risk	#18878-34	Fire and Fuels Methodology Overview of Methodology DEIS: A combination of field-collected data, geospatial data, fire modeling, professional judgment, and literature review was used to provide a landscape level picture of potential fire behavior and analyze environmental consequences of the project to fire and fuels. (Pg. 118) Comment: It is unclear at what point fire return was analyzed for the alternatives. Depending on where, when and why fire is re-introduced should change the fuel conditions on the ground.	We agree that depending on where, when and why fire is re-introduced would change fuels conditions on the ground. For modeling purposes, it was assumed that initial fuels treatments would be done in the short-term defined in the Fire and Fuels Report as one to five years. Maintenance of fuels treatments is described in the Fire and Fuels Report and therefore, it is assumed that fuels treatments would stay effective over the long-term as defined in the Fire and Fuels Report.
236 - Fire, Fire Risk	#18878-36	DEIS: Few forested regions have historically experienced fires as frequently and with such high variability in fire severity as the Klamath Mountains Bioregion (Taylor & Skinner, 1998) which includes the project area.(Pg. 119) Comment: It should be noted this high variability of fire severity has contributed to the diversity for which this region is known, and integral to Karuk management practices which foster the cultural resources found in the project area. What also is not discussed in this section is how suppression policy has aggravated fire severity. To quote Taylor & Skinner (1998), "As the time since the last fire lengthens in these fire-prone forests, surface fuels and live ladder fuels will accumulate. Accordingly, the probability of large, severe fires will likely increase as has been the case throughout the western United States (e.g., Mutch and Cook, 1996). The use of fire will likely be an integral component of management plans that 9 of22 successfully provide long-term, late-successional conditions in the newly established latesuccessional reserves of the Klamath Mountains." Unfortunately, the use of fire is not an integral component of management plans and regulated to the periphery of the refined proposed action with the exception of the Whites Fire perimeter. Karuk philosophy, the Karuk ECRMP, and the Karuk Alternative all consistently note that fire is an integral component of management plans.	Within the Fire and Fuels Report "Fire History" section and "Pre-fire Condition" section it describes the history of fire in the project area. Similar conclusions are drawn from the Fire and Fuels Report compared to this comment in terms of high variability of fire severity, diversity, and how fire suppression has aggravated fire severity. It is noted in the Fire and Fuels Report that "decades of fire exclusion lead to an increased accumulation in all fuel profiles across the landscape. Before fire suppression, fires had higher spatial complexity created openings of variable size within a matrix of forest that was generally open comparatively to today." Fire is an integral part of the Klamath Land and Resource Management Plan and part of the EIS. Strategic hazardous fuels treatments are proposed in all action Alternatives and are proposed to treat within the WUI and road and ridge systems to implement prescribed fire activity and other fuel treatment activities. Further descriptions of the use of fire can be found in the Fire and Fuels Report or Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
236 - Fire, Fire Risk	#18878-42	DEIS: The Fire and Fuels resource report displays projected surface fuel loads predicted over a 50-year period, based on completion of implementation actions. (Pg. 124) Comment: It is unclear why the 50 year period of fuel build up is being stressed. The median fire return interval of 8-38 years over that 50 year timeframe. If fire would be used as a management tool as in the Karuk Alternative then the surface fuel loading should be reduced to acceptable levels.	The Forest Plan recommends using 50 years for an analysis period. The Fire and Fuels Report for the Westside Fire Recovery Project (Chapter 3 of the EIS) uses short term (one to five years) and long-term (20 years and greater) to display modeled outputs (see methodology sections). The break up in years for the analysis period helps compare Alternatives for different time frames. This helps account for comparing measurement indicators and other analysis for the different range of fire return intervals experienced within the project area. For analysis, it was assumed that fuels treatments would occur in the short-term with maintenance fuels treatments to follow. This allows a comparison of fuels treatments proposed in the Westside Fire Recovery Project to no action.
236 - Fire, Fire Risk	#18909-27	FIRE AND FUELS The temporal analysis for the Fire and Fuels section of the DEIS fails to consider years 6-19. The Direct and Indirect Effects analysis section of the DEIS page 121: "Since lightning is the predominate cause of ignition in the project area, there is a future concern that small fires will be difficult to control and will have a high probability of requiring large quantities of suppression resources." This statement accentuates the need for a long-term fire strategy which the DEIS fails to consider. The Cumulative Effects section for Alternative 1 page 122 states: "As a result of the operations expected on privately owned lands these lands are expected to be relatively fire safe." Why is this assumed? How much slash was left on the ground in the Beaver Fire area? How did the plantations in this fire area affect fire behavior? The DEIS does not analyze or disclose the high severity fire behavior in the Beaver Fire area caused by industrial plantation forestry. The assumption that private lands logging creates a relatively fire safe condition is far from reality as seen in the 2014 Beaver Fire. Alternative 2, as stated in the DEIS page 122: "Steeper slopes (greater than 40 percent) would be anticipated to require hand piling and or broadcast burning to achieve desired surface fuel loadings of less than 10 tons/acre. Compared to ground-based and cable units, within helicopter units or those areas on steep slopes, larger diameter (greater than 3" diameter) fuels may have increased loads as these fuels can be difficult to pile by hand." In fact, helicopter logging, nearly 50% of the project area, can create such a deep bed of flammable fuels that the agency may not be able to manual pile or broadcast burn. For example, the Salmon Salvage project, where the agency is considering torching these deep fuel beds on steep slopes from a helicopter. Further as noted above, the DEIS analysis seems to rely on the assumption that all activity fuels treatments and other fuels reduction would take place on 100% of the project area. There is no guarantee that fuels reduction would take place, especially given that only 32% of the funding would be provided from timber sale receipts.	This comment has a number of discrete points, each of which is addressed individually below:1. Though the temporal analysis of fire modeling in Chapter 3 of the Final EIS gives discrete years for specific outputs, such as potential flame length and fireline intensity, these outputs are representative samples of the continuum of change expected over time. Vegetation does not grow and change at a rate that will be detected by fire models on a year to year basis, largely due to the nature of fire behavior modeling and representative fuel models used as proxies for the actual vegetation. The concept becomes that of a punctuated equilibrium, where vegetation that is represented by a static values, is in fact growing and changing, and, eventually, reaches a threshold at which it is more appropriately represented by changed values. The points in time chosen by the fuels specialists who compiled the Fire and Fuels section o final EIS Chapter 3 used professional judgement and experience with the vegetation types within the project area, informed by vegetation growth simulation, to determine, to determine what the likely pathways for vegetation parameters, given either a treatment Alternative or no action, given the starting vegetation condition. In this way, the modeling captures time periods with discrete changes happening as opposed to a continual modeling process that attempts to capture minute changes on a daily or yearly basis.2. A long term fire management strategy is not the goal of this project or the EIS. The long term fire management strategy for the forest is defined through the Klamath National Forest Fire Management Plan, which draws its direction from the Forest Plan. This project is a site specific plan for management of post fire activities, and is limited to actions analyzed in the EIS and within the project area until conditions change sufficiently to warrant new analysis through the National Environmental Policy Act process. 3. In response to concerns regarding the Beaver fire and high severity, the goal of the final EIS is not to disclose, discuss or determine the cause for fire severity patterns that happened during the 2014 fire season. The purpose of this EIS is to disclose environmental effects of the proposed actions with the project area defined for the Westside Fire Recovery. The Fire and Fuels section of Chapter 3 of the final EIS states “As a result of the operations expected on privately owned lands these lands are expected to be relatively fire safe”, with the additional statement of “This is primarily due to the removal or reduction of most of the dead and dying trees on these lands. When added to the 1,765 acres already meeting desired condition there will be 11,665 acres meeting desired condition over the next 10 years”. This statement clarifies the comment quote, by determining that these lands are expected to be relatively fire safe over the next 10 years. The condition of these lands past 10 years cannot be readily determined by the forest service because of uncertainty in actions on private land that are wholly outside the control of the US Forest Service. The condition of these plantations during the Beaver Fire can be assumed to be well over 10 years of age, given that they are composed of trees that have commercial value, and therefore are not a reasonable comparison to the likely condition of these stands for the next 10 years.4. Regarding fuel loading on steep slopes, yes, helicopter logging may result in concentrations of slash too thick to Handpile or machine pile. This is why the proposed Alternatives, Chapter 2 of the EIS, allow for broadcast burning of such material as part of fuel reduction in site preparation units. The environmental effects of this type of post-logging slash treatment are disclosed in the resource reports and Chapter 3 of the final EIS. In addition, Helicopter logging is not proposed for 50% of the project area, and in fact, composes less than 50% of acres proposed for harvest, with less than 10% of federal land in the project area proposed for harvest operations.5. See comment number 18878-16 for a discussion funding for slash treatments.

Code	Comment Number	Comment Text	Response
236 - Fire, Fire Risk	#18926-18	Plantations and Site Preparation! Site preparation with conifer tree planting can be problematic especially in drier times. Many conifers will not survive in drier times as we are experiencing. Conifers, particularly pine species, can burn up and not sprout after a fire. In these times which tend to be drier, conifers particularly in plantations can pose a more significant fire risk in many areas. This has been experienced in several of the more intensive and severe burns and fires over the past 40 years. ! ! Since tree plantations are known to have increased fire behavior, increased fire risk would result reestablishment of highly flammable tree plantations. This would result in greater risks to forest and watershed values - and greater risks for future firefighters - for many years to come. ! !	See response to number 18926-7. Appendices C and D in the Silviculture report address the reforestation prescriptions and stand evaluation process which identifies the areas within the project boundary where optimal reforestation could occur. Specifics regarding precipitation are not addressed, but wider spacing, microsite planting, and release tactics can ameliorate the potential effects of climate change, particularly drier seasons, on stand development. Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995). The Westside Fire Recovery Project is treating slash/fuel loading in plantations. In the Fire and Fuels Report; Direct and Indirect Effect section it states "Fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014). Research has shown that the quickest way to reestablsih a coniferous forest after stand replacement fire is by active reforestation (Zhang et. al 2008). We agree that effective fuels reduction treatments to address activity fuels will be necessary to prevent future fire events from becoming stand-replacing fires that destroy planted seedlings. Research has shown fuel treatments increase the likelihood of the planted trees surviving future fires (Weatherspoon and Skinner 1995, Omi and Kalabokidis 1991). Heavy residual fuels need to be reduced substantially to help assure sustainability of plantations. Follow-up reforestation surveys will be completed to assure that the reforestation objectives are achieved." Fuels reduction actions are further described in the Fire and Fuels Report.
236 - Fire, Fire Risk	#18926-7	Tree Plantations - Increased fire risk would result reestablishment of highly flammable tree plantations. This would result in greater risks to forest and watershed values, greater risks for future firefighters and managers, for many years to come. ! !	Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995). The Westside Fire Recovery Project is treating slash/fuel loading in plantations. In the Fire and Fuels Report; Direct and Indirect Effect section it states "Fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014). Research has shown that the quickest way to reestablsih a coniferous forest after stand replacement fire is by active reforestation (Zhang 2008). We agree that effective fuels reduction treatments to address activity fuels will be necessary to prevent future fire events from becoming stand-replacing fires that destroy planted seedlings. Research has shown fuel treatments increase the likelihood of the planted trees surviving future fires (Weatherspoon and Skinner 1995, Omi and Kalabokidis 1991). Heavy residual fuels need to be reduced substantially to help assure sustainability of plantations. Follow-up reforestation surveys will be completed to assure that the reforestation objectives are achieved." Fuels reduction actions are further described in the Fire and Fuels Report.
236 - Fire, Fire Risk	#18934-6	The Karuk Alternative is the only proposed alternative that addresses restoration of fire resilient forests through scientifically valid concepts referenced in Dr. Franklin's comments. The DEIS summary states that the 6,700 acres of salvage logging in moderate to high severity burn areas will reduce future fire risk and severity. What data is this statement based on? In our experience, and based on the research papers cited in comments from Dr. Franklin, whether or not an area was salvaged logged appears to have far less effect on risk and severity than whether or not the activity fuels were treated or when the next wildfire occurred.	Thank you for your comments on the Westside Fire Recovery Project. See Chapter 2 of the EIS for a discussion of how the Karuk Alternative was considered and incorporated into modified Alternative 3 (preferred Alternative in the final EIS). A combination of field-collected data, geospatial data, fire modeling, professional judgment and literature review is used to provide a landscape level picture of potential fire behavior and analyze environmental consequences of the project to fire and fuels. This all helped draw conclusions on fuels treatment effectiveness on the landscape. In addition, all salvage units will have site preparation done as a fuels treatment to reduce fire hazard, risk, and severity in the future. Methodology and the analysis of proposed actions is further described in the Fire and Fuels Report and within Chapter 3 of the EIS. The primary reason that salvage harvest is proposed is to reduce future heavy fuel accumulations that will result from fire killed trees and thus reduce the risk of future high severity fire that would delay the development of late successional stand conditions, as consistent with the purpose and need of the project from Chapter 1 of the EIS.

Code	Comment Number	Comment Text	Response
236.01 - Wildland/ Urban Interface Cond.	#17349-7	Wild/and/Urban Interface areas-The WUI zone of a number of communities was burned over during the fires. Effected communities include Happy Camp, Seiad Valley, Hamberg, etc. In these situations the fuel complex in the WUI will be less hazardous for 4-7 years following the fire but beyond this period the fuel complex will rapidly become more hazardous as the dead material decays and falls to the ground and the sprouting vegetation matures. The Recovery plan needs to address this problem by sclieduling treatments to prevent an escalation of hazard and risk in the burned WUI areas.	We agree that the fuel complex in the WUI will be less hazardous for 4-7 years following the fire but beyond this period the fuel complex will rapidly become more hazardous as the dead material decays and falls to the ground and the sprouting vegetation matures. The action Alternatives all implement multiple types of activities to reduce snag densities and surface fuel loading, including within the WUI. The Fire and Fuels Report states "Units proposed for treatment occur both within the WUI and strategic road and ridge systems in which fire suppression resources utilized historically to control unplanned fires and implement prescribed fire activities. Any hazardous fuels treatment not meeting desired conditions can be maintained with future treatment." The maintenance of these treatments will address future escalation of hazard and risk both within and outside the WUI. Fuel treatments within the Wildland Urban Interface promote safer firefighting actions and public evacuation, should a future large fire occur within the project area. Eliminating high snag densities and treating surface fuels within the WUI has an indirect effect on reducing sources for embers, spotting, and receptive fuel beds. These indirect effects are a benefit in Alternative 2 (and other action Alternatives), when compared to Alternative 1, where no action is taken to reduce future available material. Additionally, increased spotting and radiation would make structures more difficult to defend from crown fire, as opposed to surface fire. (Cohen & Butler, 1996) (Scott & Reinhardt, 2001). Identified treatments in the WUI modify fire behavior such that fires are anticipated to spread slower, with flame lengths less than four feet, allowing responding resources to take direct action to control fires. These direct actions are effective due to the change in composition and structure of fuels, which promotes low resistance to control when compared to Alternative 1. Further description of the fuels strategy and how WUI treatments are applied on the ground can be viewed in the Fire and Fuels Report -- "Hazardous Fuels Treatment" section.
236.01 - Wildland/ Urban Interface Cond.	#17481-19	There are issues regarding the 10-acre size limitation of treatment. Intensity maps show burned out areas adjacent and to the south of Happy Camp that are not included is treatments. Must focus on the WUI areas. WUI areas must be defined.	Forest Plan standards and guides within Late-Successional Reserves land allocation provides direction to not salvage harvest in patch sizes less than 10 acres. Forest Plan Management Area 5-30, "Guidelines for Salvage: 1. The potential for benefit to species associated with late-successional forest conditions from salvage is greatest when stand-replacing events are involved. Salvage in disturbed sites of less than 10 acres is not appropriate because small forest openings are an important component of old-growth forests. In addition, salvage should occur only in stands where disturbance has reduced canopy closure to less than 40%, because stands with more closure are likely to provide some value for species associated with these forests." The project is consistent with this Management Area 5-30 (1) for the reasons stated. WUI treatments are defined within the Fire and Fuels Report and hazardous fuels treatments are identified to protect communities in all action Alternatives. Fuels treatments identified for WUI treatment include small diameter thinning, mastication, site preparation, fuel management zones, ridgetop fuel breaks, underburning, as described in Chapter 2 of the final EIS are not limited by patch size. These prescriptions are aimed at reducing the threat to communities in both the short and long-term. Additionally, other recent past, ongoing, and future foreseeable projects, mentioned in the cumulative effects section, also address fuel conditions in the WUI.

Code	Comment Number	Comment Text	Response
236.01 - Wildland/ Urban Interface Cond.	#17481-4	I like the salvage plan with rehab of burned plantations and fuels treatment. Seems like the max alternative is somewhat restrictive by not considering patches less than 10 acres, especially in the WUI. Also proposed fuels treatments seem a bit fragmented and disconnected, especially in the WUI. Seems like prescribed burning could be expanded to include the east side of ridge in Happy Camp and east side of Grider Creek. Some properties appear well protected and others have no proposed protection. This is evident in both Happy Camp and Seiad Valley as well as along Scott River Road. There appears to be less protection proposed for Hamburg even though that area was very challenging during fire and where it spotted across the river.	Many communities along the Klamath River, including Happy Camp, Seiad Valley and Hamburg currently have contracts awarded to do WUI treatments. Therefore, many of these areas were not identified in the Westside Fire Recovery Project for treatment because similar treatments and objectives would be met. See a list of actions considered for cumulative impacts in the Appendix of the EIS. WUI treatments did not include a patch size limitations.
236.01 - Wildland/ Urban Interface Cond.	#18883-22	The Forest Service should not be treating the Wildland Urban Interface to protect private property. Private property owners are responsible for protection of their property and not the Forest Service. Many communities have expanded with roads and many buildings into areas that used to be dense forest. If the private property owners want to do fire protection, then they can do it on their own in accordance with the laws that regulate fire and logging on their private property. This project should not be justified to protect these sprawling home sites and structures.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. To clarify, treatments proposed in WUIs are proposed on National Forest System lands adjacent but not including private property. Treatments near communities on National Forest System lands are proposed with the project, as consistent with the purpose and need of the project in Chapter 1 of the EIS.
236.02 - Fuel Load	#14-11	new research document has recently been published highlighting the long-term positive fuel reduction effects that are created by dead tree removal. I have included this document as part of the comments. We ask that it be incorporated into the record in support of your efforts.	The comment doesn't cite any particular research to review or reference. We will review the literature and incorporate the best available science into the EIS or project record, as appropriate See response to number 17111-5
236.02 - Fuel Load	#17910-3	Several factors associated with fire-proofing operations may actually enhance the frequency and intensity of fires. If the canopy provided by big trees is reduced, the understory will dry out earlier in the fire season. And disruption and damage to soils from heavy equipment can reduce soil moisture retention, also creating drier conditions during fire season. (Harvey et. Al. 1994)	This article referenced by the commenter does not seem applicable to post-fire salvage harvest conditions of this project for the following reasons. The article is discussing the affects of green-tree fuel reduction activity, not post-fire conditions. These areas burned at such intensities that they no longer offer adequate canopy cover to provide the shade, moisture, humidity, and temperature characteristics. Salvage units and roadside hazard treatments are removing dead trees that no longer provide the benefits of canopy cover. Hazardous fuels treatments primarily remove understory vegetation and have little effect on canopy. No salvage harvest is proposed in streamside Riparian Reserves, so there is no impact to shade or soil moisture to streams. The project incorporates project design features for streamside Riparian Reserves shade protection, as described in the watershed project design features in Chapter 2 of the final EIS related to roadside hazard treatment, landings, and fuel treatments. Changes to shade, and consequently changes to soil moisture, are anticipated to be discountable as a result of proposed actions.
236.02 - Fuel Load	#17910-4	Also, the fine fuels produced by logging slash actually contribute more to the spread of fires than large fuel classes that are difficult to ignite and contribute mainly to fire intensity. Logs also absorb moisture and slowly release critical nutrients into the ecosystem, and they are important microsites for mycorrhizal and other biological activity, particularly during the dry season. (Harvey et. Al. 1978)	See response to comment number 5873-98
236.02 - Fuel Load	#18914-1	Regarding Fuel Management Zones, the Draft EIS places too much emphasis on conifers for overstory tree retention. The importance of hardwoods on these FMZs is not discussed or are the proposed actions sufficient to assure a strong hardwood presence on these FMZs. I am assuming that most of these strategic ridge FMZs will be shaded fuel breaks. The diameter limit for brushing/removal is slated at 12 inches DBH. Where spacing objectives are met, I would like to see the diameter for conifers lowered to 8" DBH. A 8" DBH conifer tree is well on it's way to achieving resilience to fire; limbing up the bole should be sufficient.	As described in Chapter 2 under the proposed action, "Treatments in these zones aim to maintain existing control lines by removing all dead vegetation and live brush greater than two feet tall, and by thinning live conifer trees less than 12 inches in diameter at breast height to approximately 20-foot spacing. Hardwoods would be retained." In Alternative 2 Modified, 8 inch diameter at breast height live trees are identified as the maximum for roadside fuels treatments and Fuel Management Zones.

Code	Comment Number	Comment Text	Response
236.02 - Fuel Load	#18935-7	2) The DEIS discounts persistence of highly flammable slash fuel on steep slopes where post-logging fuel treatments are unlikely to occur in any action alternative. Post-fire logging creates enormous quantities of highly flammable activity-created fuel ("slash"). Duncan (2002) reported that woody fuels on the ground surface increased 1.2 to 5.3 tons per acre after post-fire logging. Donato and others (2006) compared fire hazard in the Siskiyou National Forest of Oregon burned by wildfires in 1987 and 2002, and concluded that post-fire logging significantly increased the likelihood of catastrophic "reburn" compared to sites that were left to naturally recover without management due to the density and volume of fine woody fuels created by post-fire logging activities. Thompson and others (2007) reported similar results. The Forest Service admits that the project will significantly increase fine fuel load on the forest floor by relocating unburned biomass (i.e., tree tops, limbs, needles) from the forest canopy to the ground surface. See DEIS at 124; USDA (2015b: 6) ("Under alternative 2, activity generated slash will be piled and burned reducing surface fuels to levels consistent with low severity fire effects"). As discussed above, post-logging fuel treatments must follow salvage logging activities where the objective of logging is to minimize "reburn" hazard (Donato 2006, Dunn and Bailey 2015). However, the Forest Service supplies no assurance that post-logging fuel treatments will occur in most of the project area. See DEIS at 30-33 (no requirement of fuel treatment after "salvage harvest" on ~6,800 acres); compare 36 ("activity created slash will be piled and burned" in "wildland urban interface" settings (~2,200 acres)); 37 ("Mechanical or mastication equipment may be used to pile activity slash within [fuel management areas (~4,800 acres)] in addition to, or in lieu of, hand work"). According to the DEIS, Harvesting of trees are planned utilizing ground based, cable and helicopter logging. It is anticipated that there will be a delay between harvesting activities and associated fuel reduction activities. During this time frame, greater accumulation of surface fuels due to logging activities would be anticipated especially within cable and helicopter units where whole tree yarding is not planned. The short term effect of logging is an elevated surface fuel loading from broken tops and branch wood. The greatest fuel loadings post-harvest is expected to occur within helicopter units, followed by cable and ground based units. However, post logging activity breaks the structure and composition of the fuel bed. Upon completion of fuel reduction activities, ground based units would be expected to reduce the greatest amounts of surface fuels due to the ease of facilitating piling and other fuels reduction activities on gentler slopes. Steeper slopes (greater than 40 percent) would be anticipated to require hand piling and or broadcast burning to achieve desired surface fuel loadings of less than 10 tons/acre. Compared to ground-based and cable units, within helicopter units or those areas on steep slopes, larger diameter (greater than 3" diameter) fuels may have increased loads as these fuels can be difficult to pile by hand. DEIS at 122 [emphasis added]. Slash fuel concentrations are likely to occur on steep slopes where post-logging pile-and-burn fuel treatments present the greatest logistical difficulty. The area to be logged by helicopter systems indicates the degree to which fire hazard will increase as a result of salvage logging with little or no post-activity fuel treatment. See DEIS at 31 (Table 2-1: harvest treatment by logging system).	Removing large trees by salvage alone is not a sufficient fuels treatments as pointed out by many of these studies. The Westside Fire Recovery Project proposes follow-up fuels treatments after salvage logging to reduce fuel loading and fire hazard. The Westside Fire Recovery Project reduces future accumulations of fuel loading as trees fall to the forest floor through salvage logging and treats surface fuels upon completion of cutting activities. The Fire and Fuels Report sites many findings that support short to long-term benefits from fuels reduction and is summarized in Chapter 3 of the EIS.See response to comment number 18878-16 about project funding for implementation.
236.02 - Fuel Load	#19-3	The preferred alternative 2 proposes to treat the most acres and is the most aggressive alternative analyzed. However, it is certainly a long way from meeting the need for restored and fire-resilient forested ecosystems. As detailed in the DEIS, only approximately 6,800 acres are proposed for salvage logging, this represents less than 4% of the total burned acres, and only 14% of the 46,635 acres that burned at high severity, (stand replacing). This means that 86% or 41,835 acres that burned at high severity will not be restored or become fire-resilient ecosystems if Alternative 2 is not implemented, and even less would be treated if any of the other alternatives are selected. The DEIS specifically states: "Following a high severity wildfire, heavy fuel loadings predisposes an area to higher intensity and higher severity wildfires in the future. Such fires inhibit forest stand regeneration and result in stand type changes to brush or other non-forested vegetation types, delaying these lands from reaching the desired conditions of the Forest Plan or providing for future forested wildlife habitat per Forest Plan goals and direction. High intensity fires also put remaining wildlife habitat at risk or future loss."	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The proposed actions were designed to meet the purpose and need of Chapter 1 of the EIS to varying degrees within the constraints of law, regulation, and policy. Some restrictions apply to proposed treatments in order to be consistent with Forest Plan direction and other law, regulation, and policy. The Alternatives were developed within those sidebars, as described Chapter 1 and 2 of the EIS. Due to some of these restrictions, large areas of high severity fire will not be able to be considered for treatment. The Fire and Fuels Report and EIS disclose that large patches of high severity fire that do not receive proposed treatments would reduce the effectiveness in meeting the purpose and need and desired condition.

Code	Comment Number	Comment Text	Response
236.02 - Fuel Load	#5873-14	Salvage logging will not meaningfully reduce fire hazard. Salvage logging removes the large logs (which are least hazardous, and most valuable to wildlife) while moving small fuels (which are most hazardous) to the ground where they are more available for combustion. Activity fuel treatments are only partially effective and will retard desired vegetation/watershed recovery. Replanting conifers will likely exacerbate fuel hazard by creating a dense, homogenous fuel structure in the decades to come. 16. The purpose and need to conduct salvage logging and replanting to restore resilient forests needs to be reconsidered. The proposed action will do the exact opposite of the intended outcome. The best available science shows that salvage logging and replanting will retard complex forest recovery and make the forest less resilient and increase fire hazard.	Salvage logging will remove some large logs and site preparation treatments will remove small fuels, reducing fire hazard. Project design features within the Westside Fire Recovery Project protect watershed and resource values. The Fire and Fuels Report describes fuel treatments for the Westside Fire Recovery Project and how they will reduce fire hazard. Research has shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995). The Westside Fire Recovery Project is treating slash/fuel loading in plantations. In the Fire and Fuels Report; Direct and Indirect Effect section it states "Fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014). Research has shown that the quickest way to reestablsih a coniferous forest after stand replacement fire is by active reforestation (Zhang et. al 2008). Aggressive reduction of residual fuels will be necessary to prevent future fire events from becoming stand-replacing fires that destroy planted seedlings. Research has shown fuel treatments increase the likelihood of the planted trees surviving future fires (Weatherspoon and Skinner 1995, Omi and Kalabokidis 1991). Heavy residual fuels need to be reduced substantially to help assure sustainability of plantations. Follow-up reforestation surveys will be completed to assure that the reforestation objectives are achieved." Fuels reduction actions are further described in the Fire and Fuels Report. As per the Fire and Fuels Environmental Consequences section of the EIS: "Post treatment activities under Alternative 2 are expected to significantly reduce large surface fuel accumulations in the future compared to Alternative 1. The Fire and Fuels resource report displays projected surface fuel loads predicted over a 50-year period, based on completion of implementation actions. While modeling predicts an expected increase in surface fuels less than 3 inches diameter at breast height as compared to the Alternative 1, after implementation of proposed activities, modeling results predict that within ten years, Alternative 2 will continue to promote low accumulations of surface fuel loadings. Comparatively, taking no action significantly elevates surface fuels for decades. Salvage logging and treatment of activity fuels significantly reduces future fuel loading, particularly in fuels greater than 3inches in diameter."
236.02 - Fuel Load	#5873-173	Salvage accompanied by fuel treatment lowered CWD into the optimum range (fig. 9). The simulations for salvage of all dead merchantable trees without fuel treatment and 50 percent salvage accompanied by fuel treatment produced nearly the same amount of CWD … [T]he level of salvage affected snag density significantly … In planning for retention of a given amount of CWD, treatment of fuel that reduces small-sized CWD (trees up to 6 inches d.b.h.) makes it possible to retain more large-diameter dead snags. Brown, James K.; Reinhardt, Elizabeth D.; Kramer, Kylie A. 2003. Coarse woody debris: managing benefits and fire hazard in the recovering forest. Gen. Tech. Rep. RMRSGTR-105. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 16 p. http://www.fs.fed.us/rm/pubs/rmrs_gtr105.html (This paper reveals a scientific controversy about how much wood and of what size to leave after a fire and this issue needs to be fully analyzed in an EIS.) "There's no science that demonstrates re-burn potential in areas where there is downed wood or decayed wood." Craig Bobzien, Bitterroot NF Acting Supervisor (Missoula Independent, July 19, 2001) "We found no studies documenting a reduction in fire intensity in a stand that had previously burned and then been logged." Environmental Effects of Postfire Logging (USDA Forest Service, 2000) "[We] are aware of no evidence supporting the contention that leaving large dead wood material significantly increases the probability of reburn." Wildfire and Salvage Logging (Beschta, et al., Oregon State University, 1995) "The removal of large, merchantable trees from forests does not reduce fire risk and may, in fact, increase such risk." Dept. of Agriculture and Interior, Report to the President (September 2000) Bitterroot NF Burned Area Recovery DEIS, p.3-12: "The slash created by the harvest and fuels treatments that is left on the ground for site protection and future site productivity, would create a short term (zero - eight years) fire hazard. The fuel-bed created by these treatments would be, in large part, comprised of material in the smaller size classes. These fuels would contribute to the flammability and continuity of fuels on a local level, as well as across the landscape. Under good burning conditions, fires burning in these slash fuel types have the potential to spread rapidly and extensively."	Salvage logging does create additional activity fuels that, if untreated, can increase long-term fire risk The commenter cites several papers alluding to increased fire risk in post fire salvage conditions from untreated logging slash. Those conditions are not anticipated in the Westside Project because treatment of activity fuels is a part of all of the action Alternatives (final EIS Chapter 3). The effects of treatment of activity fuels by various methods are shown in the model outputs in the Fuels Report. The Fuels Report also clearly shows the long-term effect of fuel accumulation from fire-killed trees if no salvage harvest occurs. Model results in the Fuels Report are consistent with findings reported in Peterson (2014) that showed heavy fuels from fire-killed trees can persist for as many as 40 years, and that significant reductions in fuel loading can be accomplished by salvage logging. Knapp (2015) states "consumption of both standing snags and Coarse Woody Debris increases fire-line intensity, contributing to extreme fire behavior and more severe fire effects (Page et al., 2013). With Coarse Woody Debris, Brown et al. (2003) speculated that an optimum quantity for warm and dry ponderosa pine and Douglas fir forest types of the western U.S. that would provide for wildlife, nutrients and other ecological benefits, without contributing to excessive risk of an uncharacteristically severe wildfire, would fall within the range of 11.2–44.8 Mg ha-1 (5–20 tons ac-1), with the higher fuel loading acceptable if the Coarse Woody Debris was comprised of larger pieces." These are the target residual fuel levels anticipated in the Westside Project. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
236.02 - Fuel Load	#5873-174	A recent fuels modeling project for the Cerro Grande Fire area (Greenlee 2000) found that, without fuels treatment, fire risk in ponderosa pine stands bordering Los Alamos generally would be: 1) lower than the pre-fire risk during the first five years after the Cerro Grande Fire, 2) equal to the pre-fire risk during succession years six through twelve, and 3) lower than the pre-fire risk during succession years 13 through 23. Specifically, WUI fire risk would increase markedly by succession year six due to heavy fuel accretion in the moderately- to severely burned stands. Such fuel accretion occurs as a result of numerous fallen snags intermingled with the newly developing understory of grasses, shrubs, and trees. Greenlee, Dawn. 2000. Predicted changes in fire danger in the Los Alamos Wildland-Urban Interface as a result of the Cerro Grande wildfire. Unpub. final rept. FEMA-1329-DR-NM, on file at Fire Research Institute, Missoula MT. The agency often alleges that leaving large snags and logs will increase “resistance-to-control” during future fire fighting. Any discussion of “resistance to control” needs to be limited to areas where direct attack fire-fighting is likely to occur. Improving resistance to control does not justify salvage logging in areas that are not likely to be subject to direct attack, such as topographic chimneys, or steep mid-slope areas. Resistance to control is defined as— the relative difficulty of constructing and holding a fire control line as affected by resistance to line construction and fire behavior. Resistance to line construction is the relative difficulty of constructing control lines as determined by the fuel, topography, and soil. National Wildfire Coordinating Group. 1998. page G-16. While future fire in the next 50 years is by no means a certainty, large logs may increase the time and effort needed to construct fire lines in the event of a future fire. However, this is only a concern in specific locations where fire lines are likely to be built, not all across the landscape. The only place it makes sense to remove large wood to reduce resistance-to-control is in areas where the agency anticipates building fire lines, such as “shaded fuel breaks.” Furthermore, fire lines are often built along ridgelines, so the interest in reducing resistance-to-control must be balanced against the significant impacts of removing large snag and logs other ecological values associated with ridgetop locations. These unique ridgetop values include rare plants and bats roosts. Large logs do not always have lengthy burn-out times or cause severe soil effects as sometimes assumed. Large logs in fact do not burn well. … in most situations the consumption of large woody detritus is linked to consumption of the forest floor. The reason appears to be related to the extremely loose packing of woody detritus. To burn there must be a positive feedback of energy between pieces; and given the distance between large pieces of wood, this feedback is very low. Therefore, for coarse wood this positive feedback is with the underlying forest. This is important because it means that without deep forest floor layers, large pieces of woody detritus will not be completely consumed even when the moisture content is extremely low (similar to attempting to burn a single dry log in a fire place without another log or finer fuels). Harmon, Mark E. Moving towards a New Paradigm for Woody Detritus Management. http://www.fs.fed.us/psw/publications/documents/gtr-181/071_Harm.pdf in William F. Laudenslayer, Jr., Patrick J. Shea, Bradley E. Valentine, C. Phillip Weatherspoon, and Thomas E. Lisle Technical Coordinators. Proceedings of the Symposium on the Ecology and Management of Dead Wood in Western Forests. PSW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/. Logging after fire increases future fire risks. The Biscuit Fire in southern Oregon was the largest fire in Oregon’s history in terms of acreage. A large part of this fire area had burned 15 years earlier in 1987. Researchers found that areas that had been logged after the Silver Fire burned with much higher severity than those that were unlogged. While only 28% of the unlogged portions of the Silver Fire burned with high severity in the Biscuit Fire, 68% of the logged portion burned severe. The unlogged portion of the Silver Fire area experienced relatively equal amounts of land burning as high, moderate, low and unburned. The vegetation mortality in the logged units stands out in sharp contrast to the conditions in the unlogged land that was also affected by the 1987 Silver Fire. (Harma and Morrison 2003	Resistance to control and WUI fire risk are analyzed for the Westside Fire Recovery Project in the Fire and Fuels Report and summarized in the EIS, Chapter 3. Findings in the Fire and Fuels Report show that all action Alternatives will reduce fire risk to communities within the project area and improve resistance to control. Removing large trees by salvage alone is not a sufficient fuels treatments as pointed out by many studies. The Westside Fire Recovery Project proposes follow-up fuels treatments after salvage logging to reduce fuel loading and fire hazard. The Westside Fire Recovery Project reduces future accumulations of fuel loading as trees fall to the forest floor through salvage logging and treats surface fuels upon completion of cutting activities. The Fire and Fuels Report sites many findings that support long-term benefits from fuels reduction and can be found in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
236.02 - Fuel Load	#5873-92	Modeling done by the University of Washington scientists shows that post-fire landscapes are by far the least hazardous fuel profiles not just in the short-term but for several decades after wildfire. If the agency is following the National Fore Plan they will prioritize fuel reduction in areas that are suffering from fire suppression, not areas that have just burned. C. Larry Mason, Kevin Ceder, Heather Rogers, Thomas Bloxton, Jeffrey Comnick, Bruce Lippke, James McCarter, Kevin Zobrist, Investigation of Alternative Strategies for Design, Layout and Administration of Fuel Removal Projects; Rural Technology Initiative; July 2003; http://www.ruraltech.org/pubs/reports/fuel_removal/. See especially Appendix B, pages 13 and 14.	The research provided by the commenter (Mason et al. 2003) is primarily related to risk reduction prior to a fire rather than a post-fire environment. The conditions described for the Fremont National Forest are not necessarily the conditions that exist in the Klamath Province of northern California with respect to fire severity and cycling of dead wood. See Response 5873-72. The fuels reduction activities proposed in the Westside Fire Recovery project are projected to reduce future fire severity in the short-term and long-term compared to the no action Alternative. See Chapter 1 of the EIS and Chapter 3 of the Fire and Fuels Report for further information.See also:Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada.Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA.Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID.Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.
236.02 - Fuel Load	#5873-93	Salvage increases fire hazard. Faulty analysis of reburn potential. Prevention of reburn must not be used as a justification for post-fire logging, without carefully documenting the rationale and providing references to published scientific studies (not just hypotheses and speculation and anecdotes). Also, the Forest Service must explain whether logging will increase or decrease the risk of reburn in terms of fuels profiles over various time horizons, ignition sources, etc. Salvage logging increases fine and mid-size fuels in the short-term by leaving treetops, branches, and needles on site. Fine and mid-size surface fuels also occur in unsalvaged areas, but accumulate gradually over time. It is unlikely that fuels in an unsalvaged area would reach the same magnitude as in the post-salvage scenario because decomposition breaks down new material accumulates. As noted by scientists interviewed by the Oregonian, “There would be less risk by leaving dead trees standing where they gradually would decay while keeping their tinder above the reach of flames.” Michael Milstein. “Scorched forests best left alone, study finds.” The Oregonian, Jan 6, 2006.	See response to comment number 5873-14. The Oregonian is not a peer reviewed literature source that requires review.
236.02 - Fuel Load	#5873-95	A study of the portions of the Biscuit fire that were previously burned by wildfire, reveals that salvage logging did not reduce the severity of subsequent fires, and in fact salvage logging appeared to increase the severity of subsequent wildfires. See Jonathan R. Thompson, Thomas A. Spies, and Lisa M. Ganio. 2007. Reburn severity in managed and unmanaged vegetation in a large wildfire. Proceedings of the National Academy of Sciences. PNAS published online Jun 11, 2007. http://www.fs.fed.us/pnw/pubs/journals/pnw_2007_thompson001.pdf (“In places that burned with high severity in the Silver Fire, areas that were salvage-logged and planted burned with even higher severity than comparable unmanaged areas.”) http://www.fs.fed.us/pnw/research/PNAS_Biscuit_Author_Comments_PNW.doc. This represents significant new information about salvage logging. (“Some, including forest scientists, would have expected fire severity to be lower in the logged and planted sites, where large wood was removed, broadcast burning done to reduce fine surface fuels, and some vegetation management conducted possibly reducing the cover of flammable shrubs. That our findings were the opposite of this expectation indicates that the large diameter wood is not a major factor in flammability …”). A recent scientific study scientific study of post-fire logging (McIver and Ottmar 2007) showed that salvage logging causes a four-fold increase in fine fuels and that increase can last for 15 years. Fine fuels tend to cause wildfires to rapidly spread which is more likely to kill young trees and set back forest recovery. Unlogged fire areas (the controls) had lower levels of fine fuels but had higher levels of large fuels. Large fuels do not tend to exacerbate the spread of fire but they can heat the soil. However, soil heating is a patchy phenomena that forests have evolved with and can tolerate. Retaining the large wood is also important for wildlife habitat and soil conservation. The scientific consensus in the fuel	The Biscuit Fire project's analysis is outside the scope of this analysis. Removing large trees by salvage alone is not a sufficient fuels treatment as pointed out by many of these studies. The Westside Fire Recovery Project proposes follow-up fuels treatments after salvage logging to reduce fuel loading and fire hazard. The Westside Fire Recovery Project reduces future accumulations of fuel loading as trees fall to the forest floor through salvage logging and treats surface fuels upon completion of cutting activities. The Fire and Fuels Report sites many findings that support long-term benefits from fuels reduction and is summarized in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
		management literature is that it is more important to control small fuels. J.D. McIver, and R. Ottmar. 2007. Fuel mass and stand structure after post-fire logging of a severely burned ponderosa pine forest in northeastern Oregon. Forest Ecology and Management. Volume 238, Issues 1-3 , 30 January 2007, Pages 268-279. http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/SalvageLoggingScience/Salvage-McIver07.pdf Donato looked at the effects of salvage logging after the Biscuit fire and found that— Postfire logging significantly increased both fine and coarse downed woody fuel loads (Fig. 1B). This pulse was comprised of unmerchantable material (e.g., branches), and far exceeded expectations for postfire logging-generated fuel loads (5, 6). In terms of short-term fire risk, a reburn in logged stands would likely exhibit elevated rates of fire spread, fireline intensity and soil heating impacts (7). Postfire logging alone was notably incongruent with fuel reduction goals. Fuel reduction treatments (prescribed burning or mechanical removal) are frequently intended following postfire logging, including in the Biscuit plan, but resources are often not allocated to complete them (8). Our study underscores that, after logging, mitigation of short-term fire risk is not possible without subsequent fuel reduction treatments. D. C. Donato, J. B. Fontaine, J. L. Campbell, W. D. Robinson, J. B. Kauffman, B. E. Law. Post-Wildfire Logging Hinders Regeneration and Increases Fire Risk. www.sciencexpress.org. 5 January 2006. The 1987 Bland Mountain fire burned east of Canyonville and was heavily salvage logged. The same area then reburned in 2004 with high fire intensity. Salvage logging did not appear to save these plantations from intense fire, in fact, the removal of large logs and dense replanting may have made the fire more intense. One fact is unquestionable, that is that fire hazard is high in young plantations even when they are salvaged. Salvage logging does nothing to address this fact, and may in fact lead to increased density of conifer vegetation types that are more flammable than the mixed conifer-broadleaf vegetation types that may be less flammable. The NEPA analysis asserts that leaving large numbers of snags is unsafe and the NEPA document describes an undesirable scenario with respect to the no action and restoration alternatives, but the NEPA document must acknowledge the fire risks associated with salvage logging including: (a) salvage logging will remove most of the largest logs that least prone to burn (because large logs hold the most water the longest and they have relatively high ratios of volume to surface area), (b) salvage logging leave behind almost all of the smallest material which is most prone to drying and burning (e.g., relatively low ratio of volume to surface area), (c) the proposed action may lop and scatter the tops of large trees that are too big for the ground-based harvest machinery, (d) salvage logging equipment and workers could start fires, (e) increased human access increases the risk of human caused ignition, (f) the replanting will create a fuel load that is dense, uniform, extensive, volatile, and close to the ground (During an extreme weather conditions this is one of the most extreme fire hazards in the forest). There is little empirical support for the idea that salvage logging reduces the intensity or severity of subsequent fire. Recent data show an actual increase in fire severity where post-fire logging had occurred. McIver, James D.; Starr, Lynn; [Technical Editors] 2000. Environmental effects of postfire logging: literature review and annotated bibliography Gen. Tech. Rep. PNW-GTR-486. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 72 p. http://www.fs.fed.us/pnw/pubs/gtr486.pdf. Harma K., and P. Morrison. 2002. Analysis of Vegetation Mortality and Prior Landscape Condition, 2002 Biscuit Fire Complex. Pacific Biodiversity Institute. http://web.archive.org/web/20060518211529/http://www.siskiyou.org/issues/pbivegetative.pdf Dennis C. Odion, Evan J. Frost, James R. Strittholt, Hong Jiang, Dominick A. Dellasala§, And Max A. Moritz. 2004. Patterns of Fire Severity and Forest Conditions in the Western Klamath Mountains, California. Conservation Biology. Volume 18 Issue 4 Page 927 - August 2004. http://www.blackwell-synergy.com/links/doi/10.1111/j.1523-1739.2004.00493.x.	

Code	Comment Number	Comment Text	Response
236.02 - Fuel Load	#5873-96	The agency also over-states the risk of leaving standing snags. Where large numbers of standing snags were present in bug killed areas burned by the Hayman fire in Colorado, fire was generally less severe compared to other areas where large numbers of dead trees were absent. In addition to wildfires, the Hayman Fire burned over another type of natural fuel modification: an area affected by a spruce budworm outbreak. Most Douglas-fir in the area between points 47 and 48 on figure 63 were killed by spruce budworm in the early 1990s with subsequent mortality in remaining trees from Douglas-fir beetle. Surface fuel loads were not excessive, since most of the Douglas-fir snags remained standing. The only live trees remaining prior to the Hayman fire were scattered ponderosa pine and the reduction in crown cover due to insect mortality seemed to affect fire behavior. The fire spread towards the southeast through this area during the relatively inactive period between the runs of June 9 and 17. The fire burned mostly as a surface fire on both sides of Westcreek, with small patches of crown fire activity. From the air, the burn appeared less severe than in areas outside the budworm affected area (fig. 70). Graham, Russell. 2003. Hayman Fire Case Study. Rocky Mountain Research Station Report RMRS-GTR-114. p 144. http://www.fs.fed.us/rm/pubs/rmrs_gtr114.html.	The commenter fails to provide a clear indication of where or how the risk of leaving snags is overstated in the draft EIS. The pre-fire conditions and the fire effects of the Hayman Fire are not comparable to this project's conditions and outside the scope of this analysis. It is in a different fire regime, with different climate variables than the Klamath Province. The risk of leaving snags in terms of fuels conditions for this project are analyzed in the EIS and is site specific for the Westside Fire Recovery Project (fuels section of chapter 3 of the final EIS). We are proposing to retain many snags both across the landscape outside of treatments units and within treatment units, as described in the wildlife project design features and the description of actions in the preferred alternatives (modified alternative 3) in chapter 2 of the final EIS. See pie charts and bar graphs within the chapter for comparative information. See response to comment # 18935-5 for more information. Also see responsible opposing points of view at the beginning of chapter 3 of the final EIS.
236.02 - Fuel Load	#5873-98	Salvage typically removes the largest logs that act as water “reservoirs” and are least prone to drying. See Amaranthus, M.P.; Parrish, D.S.; and D.A. Perry. 1989. Decaying Logs as Moisture Reservoirs After Drought and Wildfire. In: Alexander, E.B. (ed.) Proceedings of Watershed '89: Conference on the Stewardship of Soil, Air, and Water Resources. USDA-FS Alaska Region. RIO-MB-77. p. 191-194. This study found that large down logs in a post-fire landscape contain 25 times more moisture than the surrounding soil. While the authors recommended preventing large accumulations of "woody residue" (which the author described as very small diameter material--branches, twigs, etc.), they also recommended leaving down logs after fires to PREVENT future fire severity. They concluded that, "When forest managers are analyzing for fire risk, they should take into account the high water content of fallen logs during the period in which wildfire potential is greatest... Fallen trees, in a range of decay classes, therefore provide a long-term reservoir of moisture. A continuous supply of woody material left on the forest floor, not only protects the productive potential of the forest soil, but also provides a sanctuary for ectomycorrhizae and a significant source of moisture in the event of prolonged drought or wildfire." The study was conducted in the Klamath region in an area with roughly 40 inches of annual rainfall. It was published in 1989 in Proceedings of Watershed '89: a conference on the stewardship of soil, air and water resources. USDA Forest Service, Alaska Region: pp. 191-194 (1989).	Benefits of leaving large woody material are incorporated into the Westside Fire Recovery Project. The Westside Fire Recovery Project proposes to reduce fuel loading to reduce fire hazard while leaving areas of woody material to meet Land and Resource Management Plan goals and objectives (project design features Wildlife-11 through Wildlife 13, Wildlife-15). Effects analysis within the EIS, Chapter 3, take into account woody material. Removal of down logs would reduce the productive potential of the soil by impacting microorganisms and decreasing soil moisture. Areas deficient in large logs would not meet the surface organic matter indicator and these impacts are summarized in Chapter 3 of the EIS.
236.03 - Community Protection	#13-3	Adopting the FS preferred alternative would also promote conflict in our communities and render the Forest Service more susceptible to lawsuits if homes are destroyed because KNF managers chose to create greater future fire risks via salvage logging rather than choosing the Karuk or another alternative which offers more community protection, creates ridge top shaded fuelbreaks capable of stopping a future fire and which results in less fire risk over time.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report and EIS show all action Alternatives have a reduction of hazard to communities and in areas where fuels are being treated. See Chapter 2 for a discussion of the Karuk Alternative, how it was considered, and what components of it were or were not incorporated into the preferred Alternative (modified Alternative 3). Fuel breaks are part of the proposed actions, some as originally proposed and some as incorporated from the Karuk Alternative.
236.03 - Community Protection	#17481-24	I would like to see full recovery treatment adjacent to small towns and settlements. This should include removal of Snags, dead and dying trees, and development of shaded fuel breaks.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. All action Alternatives include treatment adjacent to communities/WUI and remove snags, dead and dying trees and development of ridge-top fuel treatments.

Code	Comment Number	Comment Text	Response
236.03 - Community Protection	#17764-5	I do not believe the Westside project promotes recovery or that it would protect communities- it would actually hinder natural recovery and increase the fire risk.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The Fire and Fuels Report suggests that fuels treatments would protect communities and decrease fire hazard. The action Alternatives all implement multiple types of activities to reduce snag densities and surface fuel loading, including within the WUI. The Fire and Fuels Report states "Units proposed for treatment occur both within the WUI and strategic road and ridge systems in which fire suppression resources utilized historically to control unplanned fires and implement prescribed fire activities. Any hazardous fuels treatment not meeting desired conditions can be maintained with future treatment." The maintenance of these treatments will address future escalation of hazard and risk both within and outside the WUI. Fuel treatments within the WUI promote safer firefighting actions and public evacuation, should a future large fire occur within the project area. Eliminating high snag densities and treating surface fuels within the WUI has an indirect effect on reducing sources for embers, spotting, and receptive fuel beds. These indirect effects are a benefit in the action Alternatives, when compared to Alternative 1, where no action is taken to reduce future available material. Additionally, increased spotting and radiation would make structures more difficult to defend from crown fire, as opposed to surface fire. (Cohen & Butler, 1996; Scott & Reinhardt, 2001). Further descriptions of WUI treatments can be viewed in the Fire and Fuels Report.
236.03 - Community Protection	#18849-4	Given the chronic neglect of forest conditions over the past three decades, emergency treatments must proceed to protect communities such as Happy Camp and Scott Bar from future fires that will be aggravated by dead wood.	Comments about past forest management are outside the scope of this project. Conditions of the post-fire environment are addressed throughout Chapter 3 in the affected environment. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. The Fire and Fuels Report analyzes and describes actions of treatments that would protect communities, including the removal of fire killed trees. A full description of WUI treatments can be viewed in the Fire and Fuels Report.
236.03 - Community Protection	#18859-11	Given the chronic neglect of forest conditions over the past three decades, emergency treatments must proceed to protect communities such as Happy Camp and Scott Bar from future fires that will be aggravated by dead wood.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
236.03 - Community Protection	#18859-2	The Westside Recovery Project proposed by the Klamath National Forest is urgently needed to address the priority needs resulting from the 2014 wildfire season. The lack of active management, a prolonged drought, and a century of fire suppression has left our forests, our communities and our county as a whole under a constant threat of large, uncharacteristic, catastrophic wildfires.	Comments about past forest management are outside the scope of this project. Conditions of the post-fire environment are addressed throughout Chapter 3 in the affected environment. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. Identified treatments in the WUI modify fire behavior such that fires are anticipated to spread slower, with flame lengths less than four feet, allowing responding resources to take direct action to control fires. These direct actions are effective due to the change in composition and structure of fuels, which promotes low resistance to control when compared to Alternative 1.
236.03 - Community Protection	#18872-3	We, The Shasta Nation, A Sovereign and the public that resides in our Unextinguished Land Titled Indian Lands, and throughout the California Republic are in fact being terrorized by these catastrophic forest fires. FEMA Fire prevention monies should be available for communities and homes in the fire off season to areas of imminent danger. Many communities within the West side fires that were on evacuation notice with existing sub level fire conditions exist with the current fire threat until the next fire event. . . All communities with appropriate agencies need to prepare for fire in the spring and fall,as if a fire is likely to occur in the summer months, money spent now will save money later. Fire safe councils, State and Federal fire crews need to do this preparatory readiness when conditions are suitable. They are after all public servants.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The statement is outside the scope of this project because this project is a fire recovery project. The Westside Fire Recovery Project does propose WUI treatments to reduce fire hazard.
236.03 - Community Protection	#18872-8	A priority of projects around communities and homes	All action Alternatives propose treatments around communities. These treatments would be prioritized to protect communities and homes.

Code	Comment Number	Comment Text	Response
236.04 - Fire Supression	#12346-50	Future Wildfire Suppression Actions Please note that the Westside DEIS indicates that part of the purpose of the project is to provide conditions to facilitate future fire suppression/exclusion. Hence continued fire suppression constitutes a "connected action" to the proposed salvage logging. As connected action, the impacts and consequences of fire suppression activities (such as fireline construction, use of retardant, and backburns/burnouts) must be disclosed in the NEPA document for this project. Yet here the Forest Service has refused to disclose even the site-specific and cumulative impacts of fire suppression activities (including dozer line construction in Riparian Reserves) associated with the 2014 Westside fires, let alone the cumulative impacts of the future fire suppression that the agency hopes to facilitate via additional logging. Throughout the DEIS the Forest Service states part of the objective of the roadside salvage logging is to provide ingress and egress for firefighters and that part of the objective of unit salvage is to affect fire behavior and the ability to suppress future fires. Given that safety is one of the purposes of the project, and that fire suppression effectiveness was used as a measure of achievement of that purpose, there is no doubt that fire suppression is a connected and cumulative action to the authorized logging activities.	Although wildfire is a regular occurrence in the Klamath Province, when, where, and how big the next fire will be is unknown. Given the unpredictable nature of wildfire, it is unreasonable for the Forest Service to consider and analyze the site specific activities associated with suppression of wildfire as either a connected action or cumulative action.
236.04 - Fire Supression	#12346-54	The ecological impacts of wildland fire-suppression activities can be significant and may surpass the impacts of the fire itself. A recent paradigm shift from fire control to fire management has resulted in increased attention to minimizing the negative effects of suppression. While the philosophy behind minimum-impact suppression tactics has provided a good first step in this direction, increased attention to the ecological effects of suppression is needed, especially in the management of public lands. We reviewed the potential impacts of suppression on land, air and water resources and the impacts of using fire to help control fire. Effects on land resources include erosion, which is exacerbated by the construction of fire lines, temporary roads, and helicopter pads, and some postfire rehabilitation activities. Although the fire itself is the most obvious source of air pollution, the vehicles used in suppression activities contribute to this problem and to noise pollution. Water resources, including aquatic flora and fauna, may be seriously affected by suppression activities that can increase erosion, sedimentation, turbidity, and chemical contamination. Finally, the use of backburns and burnout operations contributes to the risk of soil and water contamination, increases the total area burned, and promotes more intense fires or more homogenous burned areas. Although no fire-management strategy should be applied uniformly, some general techniques such as use of natural clearings, natural barriers, and appropriately sized fire lines, "leave no-trace" camping, and careful application of fuels and retardants can be employed to minimize the impacts of suppression. 21 Because part of the purpose of the Westside Fire Salvage project is to facilitate additional fire suppression, the cumulative and connected impacts of such suppression must be disclosed and analyzed.	See response to comment number 12346-50. Fire suppression activities have been accounted for in the existing conditions.
236.04 - Fire Supression	#17111-24	Issues associated with fire suppression could be addressed by creating snag-free corridors or narrow FMZs. Some limited tree planti ng may be justified to provide seed sources for tree species otherwise likely to be absent or under-represented but the plantings should be carried out in low numbers and at variable density. Establishment of large areas of plantations, even at low density, is inappropriate within the LSRs or on sites characterized by Fire Regimes I and II. Finally, current knowledge regarding the ecology and recovery of the NSO should be considered during revision of the DEIS.	Please see the response to comment number 17111-4. Please see the updated Terrestrial Wildlife Biological Assessment for a review of current knowledge regarding the ecology and recovery of northern spotted owl. Fire suppression activities are outside the scope of this project and its analysis. While silvicultural practices are not always viewed as ecologically sound, recent studies have shown that there is a need to create stands with late successional characteristics to support species populations that rely on this type of stand. Silvicultural treatments can increase stand structural variability, move stands toward multi-level canopies and increase residual tree growth, primarily in the form of thinning (Dodson, Ares, and Puettmann 2012). Through artificial reforestation, conifers are given a head start at re-establishment, and subsequent thinning treatments can move stands towards a condition more ecologically suitable for wildlife in a shorter time frame than if left to establish naturally. Forest wide standards and guidelines encourage restocking of lands left understocked after wildfire. Tree planting prescriptions are based on historic unit conditions and will be planted in clusters and at a lower density than in the past (EIS, Chapter 2, Alternative 2, Reforestation and Release). Current knowledge regarding the northern spotted owl has been considered in the EIS (Chapter 3, Terrestrial Wildlife). Best available science is referenced throughout the final EIS, biological assessment, and other supporting documents.

Code	Comment Number	Comment Text	Response
236.04 - Fire Supression	#18747-2	The treatment of ridge tops is especially important to slow or stop Forest Fires and all of the above adds a great measure towards the safety of personnel and vehicles in the fire areas and escape routes.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Numerous ridgetop treatments are proposed in all action Alternatives within the Westside Fire Recovery Project. See Chapter 2 for a description of proposed actions. See the fuels section for a discussion of effects.
236.04 - Fire Supression	#18878-25	DEIS: High severity areas are characterized by total or near-total conifer crown consumption.Within areas of moderate burn intensity, some crown consumption has occurred as a result of the fire but these areas are characterized by total or near-total crown scorch. The vast majority of crown-scorched trees have been killed by the fire or damaged beyond their ability to survive. (pg 111) Comment: Please provide literature which concludes, "The vast majority of crownscorched trees have been killed by the fire or damaged beyond their ability to survive" a 6 of 22 moderate burn intensity. In addition please define "vast majority" and what percentage of crown scorching was documented.	As described in Chapter 3 of the EIS, "Site visits to the project area by foresters and a silviculturist were conducted between October 2014 and December 2014. Remotely sensed data on vegetation burn severity were field-validated and potential treatment areas were identified. Stand data were collected using ocular estimates and plot data collection, as needed." The fire-injured tree marking guidelines for the Westside Fire Recovery Project are based on published models from the Hood et al. 2010 study (Hood, Sharon M.; Smith, Sheri L.; Cluck, Daniel R. 2010. Predicting mortality for five California conifers following a wildfire. Forest Ecology and Management. 260: 750-762). The guidelines are based on probabilities and the Forest chose to only mark trees with a high probability of mortality thus minimizing the chance that large numbers of green trees that might otherwise live will be removed. In addition, many of the trees that will not be marked for removal because they do not meet this high threshold will ultimately die, providing for snag habitat, etc. See response to comment number 12346-55. The Westside Proposed Action focuses on high severity patches that consist of dead trees, the number of trees marked for removal with some level of green crown (i.e. the ones that will utilize the guidelines) will be minimal; and even fewer of these marked green trees would have ultimately survived based on the high Pm chosen for the project. The fire-injured tree marking guidelines for the Westside Fire Recovery Project are based on published models from the Hood et al. 2010 study (Hood, Sharon M.; Smith, Sheri L.; Cluck, Daniel R. 2010. Predicting mortality for five California conifers following a wildfire. Forest Ecology and Management. 260: 750-762). These well established guidelines are based on the best available science documenting post-fire conifer mortality in California and their use has contributed to the success of many post-fire salvage and restoration projects. The Hood et al. 2010 publication that the marking guidelines are based on compares their models to other models in the scientific literature and describes the similarities and differences in tree mortality predictions. Differences exist between different studies due to a variety of factors including the geographic locations where the models were developed, whether the data was collected from prescribed fires or wildland fires, the methods used to evaluate fire-injuries and the size and number of fire-injured trees in the respective datasets. The Hood et al. 2010 study is based on the most comprehensive dataset for wildland fire-injured conifers in California, and the guidelines developed from this publication are the most appropriate for the Westside Fire Recovery Project.
236.04 - Fire Supression	#18878-36	DEIS: Few forested regions have historically experienced fires as frequently and with such high variability in fire severity as the Klamath Mountains Bioregion (Taylor & Skinner, 1998) which includes the project area.(Pg. 119) Comment: It should be noted this high variability of fire severity has contributed to the diversity for which this region is known, and integral to Karuk management practices which foster the cultural resources found in the project area. What also is not discussed in this section is how suppression policy has aggravated fire severity. To quote Taylor & Skinner (1998), "As the time since the last fire lengthens in these fire-prone forests, surface fuels and live ladder fuels will accumulate. Accordingly, the probability of large, severe fires will likely increase as has been the case throughout the western United States (e.g., Mutch and Cook, 1996). The use of fire will likely be an integral component of management plans that successfully provide long-term, late-successional conditions in the newly established latesuccessional reserves of the Klamath Mountains." Unfortunately, the use of fire is not an integral component of management plans and regulated to the periphery of the refined proposed action with the exception of the Whites Fire perimeter. Karuk philosophy, the Karuk ECRMP, and the Karuk Alternative all consistently note that fire is an integral component of management plans.	Several elements of the Karuk Alternative overlap with the Preferred Alternative. See Chapter 2 for a discussion of how the Karuk Alternative was considered.

Code	Comment Number	Comment Text	Response
236.04 - Fire Supression	#18878-45	DEIS: Resources, including aircraft, heavy equipment and personnel were safely able to drop water and retardant in open areas and construct line with minimal large woody debris. (Pg. 127) Comment: Earlier in the document on Page 125 it states "Effectively produce fire behavior such that persons using hand tools can generally attack fires at the head or flanks and handline is sufficient to hold the fire." We are concerned that there seem to be conflicting and potentially misleading statements throughout the DEIS.	On Page 125 of the draft EIS under the "Fire Behavior Synopsis" section, the document is referring to predicted fire behavior under Alternative 2. On page 127, under the "Fire Suppression Capability" section, the document is referring to an example of the Kyburz Fire. We see no indication of misleading or conflicting statements in this example.
236.04 - Fire Supression	#18935-5	he Forest Service acknowledged that the Center discussed in its scoping comment the information cited above, but did not respond to it (USDA 2015a: 97, 106) (acknowledging information with no response). The DEIS contains no specific information to support its projection of snag fall rates or its statement that large woody fuel will feed uncontrollable wildfire in the project area. See DEIS at 120 ("Over the course of time, it is anticipated that fireline intensities from stored standing material that fall and accumulate on the surface will exceed intensities of 6,000 British Thermal Units per foot per second (btu/ft/sec) … Re-burn within these locations will have a high probability of burning at high severity again due to the fire intensity and duration as larger fuels are consumed after the flaming front has passed"). To reach this statement, the Forest Service says that it modeled snag-fall rates in the project area. Id. 118 ("Post-fire stand data were collected," and "these data were used to enter into a snag-fall and decay model that quantifies potential surface fuel loads overtime as snags weaken, break and/or fall over"). However, the analysis does not describe the "snag-fall and decay model," assumptions of the model, inputs to the model, or any information about quality control to ensure that model outputs accurately reflect facts in the project area. NEPA requires disclosure of factual information used by agencies to support assumptions and conclusions about environmental effects of proposed actions. The "snag-fall and decay model" applied in this case epitomizes the black box lacking explanation and repeatability that is barred by Ninth Circuit case law. It fails to meet basic standards of professional and scientific integrity. The lack of information is significant because relevant scientific information cited above indicates that snags may remain standing for many decades, and much longer than the 20-year time horizon applied by the DEIS to compare effects of alternatives. See id. 119 ("Short-term analysis is considered at one to five years post-fire; long-term analysis extends out to greater than 20 years to model the potential effects of standing snags, downed wood and subsequent surface fuel loading over time"). Moreover, failure to quantify decomposition (decay) of woody fuels contributes to gross overestimation of available fuel load and predicted fire intensity over time (USDA 2015b: 41-48). The black box "snag-fall and decay model" applied by the Forest Service in this project overlooks scientific information that is directly on point and exposes a key flaw in the DEIS regarding decomposition of woody fuels over time. Dunn and Bailey (2015) modeled temporal fuel dynamics after wildfire controlling for effects of salvage logging in forests dominated by ponderosa pine and Douglas-fir. That research states that coarse woody fuel (>3 inches diameter) decomposed at a rate of 22-60 percent by the time such fuels class peaked in volume ~30 years after wildfire. Salvage logging increased coarse fuel density for 7 years compared to a no-logging scenario, after which coarse fuels were less abundant than without logging. Salvage also increased fine fuel density (most flammable) for 22 years compared to a no-logging scenario. Dunn and Bailey (2015) state that while fuels increase over time in the absence of salvage logging, decomposition also occurs, and fuel accumulation is not constant over time. In contrast, the Forest Service assumes in its analysis of fire resistance-to-control and wildfire behavior that fuels will accumulate over time, but fails to account for woody fuel decomposition. See DEIS at 120 ("Over the course of a 50-year period, surface fuel accumulation is expected to occur from two sources: (1) new vegetation that establishes and grows over time, and (2) accumulations from snags as they fall"); compare id. 230-231 (large snags that fall to the ground decompose over time to promote soil development and post-fire ecological recovery).	Combined response with comment number 18935-6. As mentioned in the Fire and Fuels Report under the " Fire Modeling" section, fuels plot information was used to provide information into the 'Snag-fall and decay" model using methods from Wilson 1999. Furthermore, the Fire and Fuels report states that a review of the calculations (from Wilson 1999) demonstrates that similar snag fall and decay rates can be expected for the Klamath Mountains. Snag fall and decay rates where analyzed over a 50 year period for the analysis. Decay rates are part of the calculation described in this modeling exercise. Dunn and Bailey 2015 state "Total surface fine woody fuel loadings peaked 17–18 years post-fire (6.76–9.92 Mg ha_1) in unmanipulated stands; thereafter decay losses exceeded input rates and loadings decreased. Salvage logging immediately increased surface fine woody fuel loadings by 160–237% above maximum loadings observed in unmanipulated stands, and were higher during the initial 18–22 years post-fire." We agree with the commenter that fuels increase overtime in the absence of salvage logging, that decomposition rates occur, and fuel accumulation does not occur constantly through time. These concepts, including findings from Dunn and Bailey 2015, are accounted for in the Fire and Fuel Report and summarized in Chapter 3 of the EIS. Furthermore, the Westside Fire Recovery Project proposes to reduce fuel loading post-salvage harvest through site preparation fuels treatments. Removing large trees by salvage alone is not a sufficient fuels treatment as pointed out by many of these studies. The Westside Fire Recovery Project proposes follow-up fuels treatments after salvage logging to reduce fuel loading and fire hazard. The Westside Fire Recovery Project reduces future accumulations of fuel loading as trees fall to the forest floor through salvage logging and treats surface fuels upon completion of cutting activities. The Fire and Fuels Report sites many findings that support long-term benefits from fuels reduction and can be found in Chapter 3 of the EIS. Project design features are also in place to provide resource protection measures in meeting the Forest Plan. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
236.04 - Fire Supression	#18935-6	Moreover, Dunn and Bailey (2015: 104-107) observe that absence of salvage logging 18 years after wildfire did not result in coarse wood input to forests meriting application of the "high" fire hazard metric cited by the Forest Service in this project (Brown et al. 2003). In fact, salvage logging increased density and volume of fine woody fuels (slash) to a degree that fire hazard was "high" ~20 years after wildfire irrespective of coarse wood input to surface fuel load by snag fall. Management implications of the NecroDynamics temporal fuel model developed by Dunn and Bailey (2015: 106-107), never addressed by the Forest Service in the DEIS, are highly relevant to this project: Although salvage logging reduces coarse woody fuel loadings, alone it does not mitigate re-burn hazard because it increases fine woody fuel loadings and has little direct effect on reestablishing vegetation. Spatial fidelity of high-severity fire has been observed and may result from shrub crown combustion (Thompson and Spies, 2009), or combustion of heavy fuel loadings that release large amounts of heat (Odion et al., 2004). Therefore, additional hazardous fuels treatments are required to reduce fine woody fuel loadings (McIver and Ottmar, 2007) and the abundance of the highly-combustible shrub fuel layer (Weatherspoon and Skinner, 1995). Shrub control would reduce woody vegetation biomass but may increase herbaceous (i.e. grass and forbs) fuel loadings in the near term (McGinnis et al., 2010), which can be a significant fuel layer as it cures and becomes a combustible, continuous fuelbed (McIver and Ottmar, 2007). Additionally, intensive reforestation typically substitutes conifer biomass for shrub biomass, limiting hazardous fuels reduction unless additional efforts are employed to reduce and maintain crown continuity and surface fuel loadings (Lyons-Tinsley and Peterson, 2012). Intensive postfire hazardous fuels treatments that influence all hazardous fuel layers could have negative consequences on ecosystem function, making them an undesirable mitigation strategy. Long-term management strategies promoting fire resilient ecosystems should maintain the ecological functions supported by early seral habitats and coarse woody detritus, while mitigating their contribution to fire hazard (Brown et al., 2003). Salvage logging to enhance ecosystem resilience may not be appropriate if multiple ecosystem functions and resources are considered, including; coarse wood use by wildlife (Cahall and Hayes, 2009; Hutto, 1995; Fontaine et al., 2009; Saab et al., 2005), functional attributes of early seral vegetation (Swanson et al., 2010), compounding effects on soil and nutrient pools (Brais et al., 2000; Triska and Cromack, 1980) and reduced water and carbon storage (Harmon et al., 1986). Salvage logging intensity can be reduced to maintain the ecological benefits of early seral habitats and coarse woody detritus, but less intensive salvage logging retains more fine and coarse woody fuels potentially limiting any re-burn hazard reduction (Donato et al., 2013; Ritchie et al., 2013). Those research findings of Dunn and Bailey (2015) agree with Donato and others (2006) that additional fuel treatment is necessary to avoid significant increase of fire hazard and undesirable fire effects after salvage logging. They also agree with conclusions of Beschta and others (2004), Lindenmayer and others (2008), Lindenmayer and Noss (2006) and Noss and others (2006) that, on balance, salvage logging intended to minimize "reburn" hazard is incompatible with management objectives for national forest lands including conservation of soil productivity and biological diversity.	See response to comment number 18935-5.
236.04 - Fire Supression	#5873-12	Since the location and timing of future fires cannot be predicted, creating safe space for firefighters should be limited to the structure ignition zone and limited areas that are highly likely to be used as future fire control lines. If makes no sense to sacrifice ecological restoration goals in order to facilitate highly speculative future fire-fighting.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The proposed treatments shown in the Fire and Fuels Reports are largely based on strategic locations where firefighters will likely be in the future for planned and unplanned ignitions. Many of these locations will likely be used as control lines for future wildfire suppression as well as implementation of future prescribed fire.
236.06 - Fire Adapted Ecosystem	#17359-3	As a former resident of southwest Oregon, I wish to see the Forest Service accept fire as a normal component of nutrient cycling and succession, and I continue to do so, starting with its response to the 2014 fire season.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
236.06 - Fire Adapted Ecosystem	#17450-2	Second, I have recently hiked through many of the areas burned in the 2014 fire and have observed them to be recovering nicely. New growth is occurring, wildlife is resuming its place in the order of things and there are no significant erosion or safety issues.	Statement that is outside the scope of this project.
236.06 - Fire Adapted Ecosystem	#17481-21	Fire is a landscape process and an acre-by-acre treatment is decoupling safety in the WUI, habitat and other functional needs are not acre-by-acre.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
236.06 - Fire Adapted Ecosystem	#18852-30	12) The role of re-introducing or "allowing" fire into the project area in order to assist with treatment of fuel loading and fire risk over time, and the return to functional ecological processes within a "post-suppression" fire regime is not adequately addressed. Based on maps for Alternatives #2-5, there is not an adequate plan for prescriptive or wild land fire return to these fire effected landscapes. 13) The role of future fire suppression efforts in landscapes effected by the Beaver, Happy Camp Complex and Whites fire should be considered within a "let-burn" context, in order to treat fuel loading and assist with ecological processes. Prescribed fire within these landscapes should be encouraged. (Please see the Karuk alternative for mapping of intended prescriptive fire allowance).	See response to comment number 12346-50. Prescribed fire is a component of all action Alternatives.
236.06 - Fire Adapted Ecosystem	#18852-5	We have fundamentally made an enemy of fire which is an inherent and essential component of our forested ecosystem. This enemization (i.e. fire suppression) has created forest fuel loading and forest structures which is highly susceptible to catastrophic wildfire over large contiguous acreage, as evidenced in the burn severity maps included in the project documents. The "Westside Recovery" project dialogue also emphasizes the risks if fuels are left untreated, however it does not adequately take into account the natural process of incremental fuels treatments if our fire regime (6-12 year intervals) are allowed to proceed unmolested.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge the importance of fire in a fire-adapted ecosystem, as referenced throughout the final EIS. Where fire has or will be desired conditions in the Forest Plan and the purpose and need of the project, no treatments are proposed. Treatments are proposed where they are needed to meet project purposes, including reducing future fire risk and improvements to long-term wildlife habitat and watershed conditions. Evidence of this includes that this project proposed prescribed underburning as needed to meet project objectives. See response to comment number 18935-7 for planned follow-up fuels treatments. See the No Action for effects of no treatment.
236.06 - Fire Adapted Ecosystem	#18878-28	DEIS: Light-seeded, prolific, early successional weed and grass species, having survived the fire in unburned pockets and perimeter areas, will rapidly reinvade burned areas. Well established perennial root or rhizome species will likely re-sprout from existing root systems. Brush species, such as manzanita, snowbrush, deerbrush and whitethorn, are well-adapted ecologically to the fire-impacted ecosystems. Assuming fire intensity and duration at less than lethal levels, these species are capable of root collar sprouting. Brush seed, which may retain viability for 40-150 years in the duff layer, will germinate in potentially large numbers for 2-3 years after fire-scarification. Fire top-killed hardwood tree species, such as black oak, tanoak, madrone, and live oak are also capable of root-collar sprouting. These species are able to take immediate advantage of a well-established root system, giving them the inherent capability to grow rapidly for early site dominance. (Pg 112) Comment: Once again the author is using terminology such as "fire-impacted ecosystems" and "rapidly reinvade" as a semantic tool eliciting a negative emotional response to what is being described. The accepted terminology for the Klamath Province in terms of fire is fireadapted ecosystem. Without a balanced discussion in regards to our fire-adapted ecosystem and ecosystem responses, the reviewer is left with an incomplete view, much less a basic understanding, of the role fire has played in shaping the landscape.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
236.06 - Fire Adapted Ecosystem	#18878-9	Fire will continue to be a presence on the Klamath Mountain landscape and shape future vegetation, fuel loadings, and fire severity patterns" (Pg 2) 2 of 22 Comment: The above statement is partially correct. Yes, fire will continue to be a presence on the landscape shaping future vegetation and fuel loading. Yet it is critical to point out, "More area is burning at high intensity, and this is related, in part, to higher quantities and more homogeneous fuels caused by accumulation during the firesuppression period" (Taylor, Skinner, and Agee, 2006). These conditions are a direct result of past, current, and, it appears from the DEIS, proposed future KNF management actions such as the Refined Proposed Action. We are at a critical management decision point where we can re-establish the traditional role that fire played on the landscape. Emergency Triggering Event	We acknowledge that fire will continue to be present in the Klamath Province, as discussed throughout the final EIS. We agree with the reference by Taylor, Skinner, and Agee and that some of the existing fuels conditions are a result of past management, including past fire suppression activities. However, past fire actions are outside the scope of this project (other than as considered under affected environment analysis in Chapter 3 of the final EIS). We disagree that this project in contributing to homogenous fuels conditions, since the opposite is true. Salvage harvest and fuels treatments are proposed to reduce the amount and continuity of future fuels across the landscape. See the purpose and need in chapter 1 and the proposed actions, which described intention, in chapter 2 of the final EIS. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See Chapter 3 under fuels for a discussion of the effects of this project on fuels conditions. We agree with the importance of fire on the landscape, as evidenced by the fact that our proposed includes prescribed underburning (see Chapter 2). Where fire achieved desired conditions of the Forest Plan and already meets the purpose and need of the project, no treatment is planned.
236.06 - Fire Adapted Ecosystem	#18935-3	(1) The DEIS fails to reliably state temporal rates of snag fall and wood decomposition affecting projections of fuel density and fire hazard over time. The Center noted in scoping comment that time required for fire-killed trees ("snags") to fall to the ground and become available fuel for combustion by wildfire is proportional to their size and varies by species. For example, 20 years may pass before fire-killed ponderosa pine snags of relatively small size (i.e., 6-9 inches diameter) break or topple, and Forest Service research states that larger stems of fire-killed ponderosa pine and Douglas-fir may remain standing for up to 80 years (Harrod et al. 1998). Russell and others (2006) studied temporal dynamics of woody fuel after wildfire affected mixed conifer forest with a significant component of Douglas fir, similar to conditions in the project area. They distinguished longevity of Douglas fir snags from ponderosa pine snags, and reported that stems of the former species remained standing longer due to relative heartwood density and rate of decay. More than 80 percent of Douglas fir snags stood 10 years after wildfire compared to approximately 30 percent of ponderosa pine snags (Russell et al. 2006: 183 - Fig. 1). Similar to in Chambers and Mast (2005), large snags (>20-inches diameter) and snags occurring in high densities persisted much longer than smaller snags and others that were not clumped (Russell et al. 2006: 184). Post-fire logging increased the rate of snag fall and shortened the period in which snags provided habitat for cavity-nesting bird species (Russell et al. 2006: 186). Citing this information, we commented that the project is likely to accelerate snag loss and recruitment of large woody fuels compared to a scenario in which no logging occurs.	See response to comment number 18935-5. Harrod et al. 1998 state "some recent data collected in the Leavenworth Ranger District, Wenatchee National Forest, suggests that some snags may last up to 80 years." This is based on personal communications, and not published data. The literature shows that most large trees do not stay upright nearly this long as pointed out the commenter. Harrod et al. 1998 summarize the snag longevity data and state that fall down rates have only been studied for up to 15 years, so anything beyond that would be based on extrapolation and not actual data. In their snag fall model, harrod et al. 1998 choose 45 years as the time when all snags have fallen, which they term "generous." The literature summarized in Harrod et al. 1998 shows most snags, even the large ones" do not last more that 20-25 years (Keen 1929, Keen 1955, Bull 1983). Knapp et al. 2015 did not see an increasing rate of snag fall after salvage logging and saw "no effect of increasing levels of retention on the percent of material coming down" (Ritchie et al. 2013. The Russell 2006 study reported shorter snag longevity in salvaged logged plots compared to unsalvaged log plots, which the authors attribute to the fact that salvage removed the largest trees. Because the salvaged areas contains more small snags and smaller trees fall quicker than larger trees, the average for the salvaged areas was lower. Salvage itself did not cause snags to fall more quickly.
236.06 - Fire Adapted Ecosystem	#5873-105	LSOG FIRE BEHAVIOR: "The multi-layered, mixed-conifer stands in age classes greater than 120 years with more open stand structure have lower surface fuels and higher canopy heights. These stands would likely have single or group tree torching with low rates of spread and short flame lengths. A fire started within these stands would likely be easily suppressed." Butte Falls Blowdown Salvage Environmental Assessment. Butte Falls Resource Area. Medford BLM. Department of the Interior. 2008. http://www.blm.gov/or/districts/medford/plans/files/EAOR1150802.pdf pages 56-57.	Statement that is outside the scope of this project.

Code	Comment Number	Comment Text	Response
236.07 - Fire Behavior Plantations	#17460-12	Throughout the DEIS and accompanying reports, many references to fire safety are made as a justification for this project: some have merit, like roadside hazard treatments and fuels treatments in the WUis; at the same time, deeper in the documents, the specifics of the concerns within the LSRs and away from roads and WUis state that increased fire potential will not exist there for 10-15 years: that's an emergency that doesn't really exist yet. If fire safety is the driving concern, are there higher priority projects that are being ignored, due to all the attention given to the Westside Project? After dozens of visits to the Happy Camp Complex area following the fires, and comparing those areas that burned most severely to historical imagery through Google Earth, one pattern became very clear: overstocked, young (20-40 year old) plantations that had not received thinning and fuels treatments consistently burned with nearly 100% tree mortality. Here is a short, but not exhaustive, list of such plantations, as identified by units on the Alternative 2 maps proposed for plant-and-release treatments: P300, P301, P302, P303, P353 (Cougar Creek Watershed); P198, P199; P038, P042 (South of Tyler Meadows); P146, P147, P148 (Blue Mountain). Given the already high fire danger of 2015, a higher priority should be given to thinning and fuels reduction in overstocked, young plantations that have NOT burned. That would truly reduce the threat of high severity fires in the shortterm, and the potential for even more loss of timbered lands within the National Forest. There is plenty of time to complete fuels hazard treatments and replant in the plantations affected by the 2014 fires, without having to resort to an ESD in those areas. In light of these facts, I oppose any such Emergency Situation Determination.	See response to comment number 17501-2 about the emergency situation determination. Supporting documentation provided with the emergency situation determination submittal describe that in order to address long-term goals for fire risk reduction and habitat improvement that the project implementation needs to be expedited due to the need to have a viable project for implementation. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. There are other project objectives within the Westside Fire Recovery outside of fire safety. In addition, standing snags are described as a safety concern for future firefighting efforts with examples provided in the Fire and Fuels Report. Prioritization of this project compared to others is outside the scope of this project analysis.
236.07 - Fire Behavior Plantations	#17471-1	I believe the sale of the timber that was burned last fall will have far and long standing implications. I believe the sale of this recovery will only serve to reinforce the idea behind fire suppression. After the sale takes place, more tree stands will be replanted in sectioned lots that will again, after several years time, be ripe for a wildfire to quickly rip through the forest costing thousands of dollars in man power, human lives and tax payers money. As the trees will all be of the same maturity and without thinning or prescribed burning, the incidence of wild fires will only continue as our climate changes and the continuation of drought throughout the state occurs.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
236.07 - Fire Behavior Plantations	#18852-28	10) Site preparation and planting will likely assist with a transition away from ecological restoration to one of managed forest plantations, with resultant overstocking, homogeneity and future fire susceptibility, this is particularly out of alignment with LSR designation. This "investment" in timber stand improvement will also negatively effect future flexibility to reinstitute wild land and prescriptive fire to these landscapes.	Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Responses number 18926-18 and number 17111-24.
236.07 - Fire Behavior Plantations	#18878-26	DEIS: Within areas of light vegetative burn severity, the impacts on conifers were often severe, especially to the smaller size and lower crown classes. Within the fire-burned area, approximately 70 percent of all the existing plantations survived the extreme fire conditions of the 2014 Fires. (Pg 111) Comment: Please provide further documentation on how areas of light vegetative burn severity were often severe, yet 70 percent of all existing plantations survived the "extreme" fire conditions of the 2014 Fires. The use of "extreme" is subjective. Does this statement mean to say 70% of plantations survived high fire severity? If so, further documentation should be provided.	Light vegetative burn severity refers to the classification of change derived from the Rapid Assessment of Vegetation Condition after Wildfire (RAVG) data. Although considered low severity, conifers were killed in these areas, primarily understory and smaller diameter trees, which indicated a change in stand structure that is not reflected in the severity classification. This statement is a brief assessment of the current condition not discussed in great detail elsewhere, primarily because management actions are focusing on high severity areas. Within the entire project area, numerous plantations existed prior to the fire. Seventy percent of them survived the 2014 Fires in spite of drought conditions, high temperatures and low relative humidity or what was called "extreme" fire conditions. “Extreme” implies a level of fire behavior characteristics that ordinarily precludes methods of direct control action (National Wildfire Coordination Group (NWCG) glossary of wildland fire terminology (NWCG, n.d.). One or more of the following is usually involved: high rate of spread, prolific crowning and/or spotting, presence of fire whirls, strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically, sometimes dangerously.

Code	Comment Number	Comment Text	Response
236.07 - Fire Behavior Plantations	#18878-27	DEIS: Understory vegetation has been totally consumed or top-killed throughout much of the project area; the degree of mortality is primarily a function of fire intensity. On areas burned at moderate to high intensity levels, mortality is essentially complete. On areas burned at lowintensity levels, if the fire was hot enough to consume the organic layer then understory vegetation, including conifer seedlings and saplings, were also killed. (Pg. 111) Comment: Understory vegetation in the project area consists of various species of post fire sprouting and non sprouting trees and shrubs. The use of subjective phrases such as "mortality is essentially complete" and "understory vegetation, including conifer seedlings and saplings, were also killed" is vague, un-informative and can be construed as utilizing language techniques to draw the reviewer to a pre-determined conclusion.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
236.07 - Fire Behavior Plantations	#5873-104	PLANTATION FIRE BEHAVIOR: "Stands 10 to 60 years old which have been modified by past harvest include the mixed-conifer plantations found throughout the Fire and Fuels analysis area. These stands show potential for very high intensity fires with the likelihood of higher mortality of the existing stand following a wildfire event; this is likely due to the large amount of fine fuels, such as grasses and needle cast, as well as a high shrub components." "The current expected fire behavior of these stands would make suppression of a fire by initial attack resources very difficult. Hand attack would not be feasible. Containment of a fire at a smaller size would be unlikely; the ladder fuel component found in these stands would carry fire into the canopies very quickly, creating the high flame lengths and intensitiesŠ"	See response to comment number 18926-7.
240.01 - Ecosystem, Habitat Health	#17481-25	Use a Mosaic approach of having all Seral stages available within a given geographical area. Should include strategies to return stands to historic conditions	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The project will result in a mix of seral stages, where salvage harvest and site preparation, planting, and release are proposed, the intention is to return the area to its historic conditions. See Chapter 2 of the final EIS for a description of these proposed actions. See the vegetation section of Chapter 3 of the EIS for a description of effects to vegetation.
240.01 - Ecosystem, Habitat Health	#18852-3	As an ecologist and student of the Klamath Mountains, I wish to see the ecological values of our region appreciated and the use of best management practices that are in accord with the long term application of ecosystem management principles.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We have used best available science in project design and analysis, as described throughout the final EIS and supporting documents. Also see the beginning of Chapter 3 of the EIS for a discussion of responsible opposing points of view.

Code	Comment Number	Comment Text	Response
240.01 - Ecosystem, Habitat Health	#5873-48	The agency should carefully review the post-fire science summary prepared by the World Wildlife Fund in 2006. In general traditional forestry has viewed fire as bad and dead trees as a waste. These views have skewed public policies about post-fire logging. However, current scientific understanding recognizes that disturbance and dead trees are in fact critical to forest health. Of the approximately thirty scientific papers on post-fire logging and additional government reports published to date, not a single one indicates that logging provides benefits to ecosystems regenerating post-disturbance. In general, post-fire logging impedes regeneration when it compacts soils, removes "biological legacies" (e.g., large dead standing and downed trees), introduces or spreads invasive species, causes soil erosion when logs are dragged across steep slopes, and delivers sediment to streams from logging roads. Further, a large body of science on disturbance ecology (e.g., recent books on Mt. St Helens and studies in the Yellowstone Ecosystem and elsewhere) indicate that when natural disturbance events are preceded and/or followed by land management activities they often impair the recovery of forest ecosystems. Dominick A. DellaSala 2006. POST-FIRE LOGGING SUMMARY OF KEY STUDIES AND FINDINGS. World Wildlife Fund, February 2006. ftp://frap.cdf.ca.gov/pub/incoming/IMMP/Post%20Fire%20Salvage%20Logging%20Papers/Post%20Fire%20Logging%20Review%202006.pdf	The analysis for the Westside project does not make the argument that treatments are designed to improve the forest by logging. Logging is a tool for meeting the purpose and need for the project. Treatments are designed to mitigate fuel loading in an area that has not burned in a substantial period of time by a human-caused fire. By removing these fuels in strategic areas, fire effects would be moderated in later fires, improving the likelihood that a fire burning in this area in the future may not be stand replacing over such a large, contiguous area and create more of a mosaic across this landscape. Within these constraints, fire is accepted as an important driver of forest health and biodiversity in the Klamath Mountains.
240.01 - Ecosystem, Habitat Health	#5873-52	Karr, James. 2005 Nature doesn't benefit from logging fire-damaged lands | The News Tribune, Tacoma, WA. ftp://ftp2.fs.fed.us/incoming/r5/Klamath/Mt.HebronRestoration/MountHebron.Records/MtHebronRestoration.ProjectRecord/D.%20ScopingComments.Analysis/ArtleyAttachment9.FullArticles/Pub10.Karr2005.Tribune.pdf	Similar to Beschta et al. (2004), Karr et al. (2004) presents a list of recommendations to avoid damage from salvage logging. The Westside analysis is cognizant of these recommendations and has planned and designed the proposed action such that significant old/large trees are retained on slopes and in Riparian Reserves, soils are protected by limiting ground-based skidding and implementing extensive soil and water Best Management Practices, and ecologically sensitive areas such as Riparian Reserves are protected. No new system roads will be constructed for the project and temporary roads needed for the project will be ripped, and closed. In addition, no instream structures are proposed for the project and stream monitoring sites have been established to monitor potential fire and project effects. Properly done salvage logging can lessen the time for ecosystems to recover by getting needed burned overstory on to the ground to provide soil cover, increase soil roughness to reduce erosion and break up water repellant layers, return of nutrients to the soil, and replant burned trees. Soil design features and resource protection measures will be employed to insure erosion levels are low and within forest plan thresholds. All available cover material (less than 3 inches in diameter) from salvage will be utilized to provide erosion protection and return readily available woody material (tree tops, branches, twigs, needles) to the soil. Also, increasing soil roughness through tractor and cable operations will slow surface erosion creating microsites to trap any erosion (Powers 2003).
240.01 - Ecosystem, Habitat Health	#5873-53	[I]n the absence of research specifically addressing the impact of large-scale salvage, I believe there is sufficient evidence to suggest that the risk to nontimber values decreases as the amount of retention increases at either the stand or landscape level (or in some cases both). Jim Snetsinger, Chief Forester. Guidance on Landscape- and Stand-level Structural Retention in Large-Scale Mountain Pine Beetle Salvage Operations. December 2005. http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/stewardship/cf_retention_guidance_dec2005.pdf.	We are uncertain how or why large-scale mountain pine beetle salvage operations in lodge pole stands in Canada relate to the proposed actions or its effects of the Westside Recovery Project, as suggested by the commenter. We acknowledge that non-timber values would be impacted in sufficient snags were not retained; however, this project meets or exceeds snag retention requirements for other potentially affected resources. See a discussion of responsible opposing points of view at the beginning of Chapter 3 of the final EIS. Much of the project is not being harvested for snags; see salvage harvest and roadside hazard treatment acres in Chapter 2 of the final EIS and related pie charts and bar graphs for relative numbers and percentages. Also see the wildlife project design features in Chapter 2 of the final EIS for snag retention. Compared to the other action Alternatives, additional snag retention is also proposed for the final EIS preferred Alternative, Modified Alternative 3. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
240.01 - Ecosystem, Habitat Health	#5873-88	Recognize the effects of compound disturbances such as fire and fire suppression followed by logging and treatment of activity fuels. Compound disturbances have the potential to fundamentally alter an ecosystem structure and function. This study examines the effects of a natural disturbance and a compounded natural and anthropogenic disturbance on soil properties, biogeochemical cycles, and ecosystem reorganization in a windblown and salvage-logged ecosystem in northwestern Colorado. Areas of intact forest are used as a control to compare the disturbance effects. Results indicate that soils in the salvage-logged areas are drier, significantly warmer, denser, and contain less organic matter than soils in blowdown or control areas. Significant amounts of erosion occurred in the salvage-logged areas to produce these results. Furthermore, net nitrogen mineralization rates are lower in soils from salvage-logged areas than in blowdown areas. By contrast, net nitrogen mineralization rates are twice as high in blowdown areas than in control areas. Seedling density, herbaceous cover, and plant species diversity are greatest in blowdown areas, and least in salvaged-logged areas. The results of this four-year study indicate that the mitigation effects of salvage logging significantly alter ecosystem functions and retard the rate of recovery when compared to unlogged blowdown areas. Cristina M. Rumbaitis-Del Rio and Carol A. Wessman. Impact of compound disturbances on N-cycling and forest reorganization in a wind-disturbed and logged forest. Paper presented to the 86th Annual Meeting of the Ecological Society of America, August 6 – 10, 2001. http://abstracts.co.allenpress.com/pweb/esa2001/document/28519.	The cited study is in Colorado. The conditions in Colorado, particularly the fire regime and cycling of dead wood are not the same as the Klamath Province of northern California. See response 5873-72. See also:Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada.Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA.Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID.Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.
240.01 - Ecosystem, Habitat Health	#5873-89	Studying the effects of wildfire and salvage logging on boreal forest insects and nutrient dynamics, Tyler Cobb found that “disturbance combinations … should be avoided whenever possible…” While many studies have examined the effects of single disturbances on biodiversity (e.g., Hunter 1999; Stelfox 1995), there is a growing awareness that independent consideration of disturbances may be insufficient from a sustainable forest management perspective (Lindenmayer and Noss, 2006). Today, forest ecosystems face multiple, often simultaneous, natural and anthropogenic environmental stressors. Disturbance regimes in most forest ecosystems now include environmental stress associated with increasing natural resource extraction (e.g., timber, natural gas, oil, minerals, etc.) (Kennedy 2002; Schneider 2002), pollution (Perry 1994) and global climate change (Flannigan et al., 1998; Li et al. 2000; Overpeck et al., 1990). Thus, forest management models based on emulating natural disturbances like wildfire (Attiwill 1994; Hunter 1993) may be overly simplistic and fail dramatically in application on many landscapes. … Research presented here suggests that combining wildfire and forestry-related disturbances in boreal ecosystems may not only impact beetle diversity, but has significant potential to also impact decomposition and nutrient cycling processes. These effects, in turn, may well affect successional pathways and have broad effects on regeneration Thus, the ecological integrity of these ecosystems may depend, at least in part, on organisms we consider to be either economic “pests” or of no economic significance. …	The cited papers are either general in nature or not applicable to the circumstances of the Westside Fire Recovery Project. The conditions of the boreal forest of Canada are not necessarily the conditions of the Klamath Province of northern California particularly as related to fire regimes and cycling of dead wood.. See Response 5873-72. See also: Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95 Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122 Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91 Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada. Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA. Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID. Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.

Code	Comment Number	Comment Text	Response
240.01 - Ecosystem, Habitat Health	#5873-90	For saproxylic [dead wood dependent] beetle assemblages, the combination of wildfire and forest harvesting (postfire salvage logging) reduced species richness and altered species composition to a greater extent that either disturbance alone. Postfire salvage logging also altered the trophic structure of the saproxylic beetle assemblage and was particularly detrimental for wood- and barkboring species. Through a series of experiments, the abundance of one such species, Monochamus scutellatus scutellatus, was linked to decomposition processes in burned forests. Together, the results of these studies suggest that disturbance combinations should be avoided whenever possible because they may impact not only beetle diversity, but also decomposition processes in forests recovering from wildfire. … Broadly, my results showed that removal of dead wood from burned forests by postfire salvage logging has the potential to alter naturally occurring links between wood-feeding insects and nutrient dynamics in forests recovering from wildfire. … By feeding on burned dead wood, M. s. scutellatus larvae help to begin the process of gradually returning organic materials from standing burned coniferous trees to the soil. My data show that this feeding activity is linked to changes in soil microbial activity, N availability, and the germination and growth of colonizing plants in early postfire ecosystems. … [T]he fact that the development time for M. s. scutellatus is 1 or 2 years (Rose, 1957; Wilson, 1962) suggests that organic nutrient inputs in the frass of this species are somewhat gradual, which may also reduce leaching of N from burned stands. … While M. s. scutellatus and other wood-feeding beetle species may be considered "pests" that rapidly reduce the economic value of salvaged timber (Ross, 1960; Sessions et al., 2004), their role in nutrient cycling and food web dynamics (Hoyt & Hannon, 2002) in burned forests should not be overlooked in the development of guidelines for postfire management. By removing fire-killed trees, postfire salvage logging in boreal ecosystems may be as damaging to saproxylic insect diversity as have intensive forestry and fire suppression in Europe (Grove, 2002; Siitonen, 2001). In addition to biodiversity consequences, the results of this study indicate that postfire salvage logging may also influence nutrient dynamics and succession in regenerating burned forests. Therefore, the long-term persistence of boreal ecosystem function may require the retention of some burned timber. Tyler Cobb. 2007. Boreal Mixed-wood Beetles and the Cumulative Ecological Consequences of Disturbance. PhD dissertation. University of Alberta. Spring 2007.	The cited papers are either general in nature or not applicable to the circumstances of the Westside Fire Recovery Project. The conditions of the boreal forest of Canada are not necessarily the conditions of the Klamath Province of northern California particularly as related to fire regimes and cycling of dead wood. Dead wood in the Klamath Province rarely lasted long enough to decompose (Taylor and Skinner (1997) and Skinner (2002)), . See Response 5873-72. See also:Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada.Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA.Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire, Fairfield, WA, Coeur d'Alene, ID.Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.
240.0101 - Disturbance Regimes	#5873-42	A recent article from respected scientists in one of the world's leading science journals said: … [N]atural disturbances are key ecosystem processes rather than ecological disasters that require human repair. Recent ecological paradigms emphasize the dynamic, nonequilibrial nature of ecological systems in which disturbance is a normal feature and how natural disturbance regimes and the maintenance of biodiversity and productivity are interrelated … Salvage harvesting activities undermine many of the ecosystem benefits of major disturbances. … [R]emoval of large quantities of biological legacies can have negative impacts on many taxa. For example, salvage harvesting removes critical habitat for species, such as cavity-nesting mammals, [and] woodpeckers, … Large-scale salvage harvesting is often begun soon after a wildfire, when resource managers make decisions rapidly, with longlasting ecological consequences…. Lindenmayer, Franklin, Hunter, Noss, et al., ECOLOGY: Salvage Harvesting Policies After Natural Disturbance, Science 2004 303: 1303. http://www.eebweb.arizona.edu/courses/ecol406r_506r/lindenmayer&noss-2005-effectslogging4.pdf	The agency acknowledges the role of fire in the ecosystem; however existing and near future post-fire conditions in much of the project area have deviated from the goals of the Forest Plan and require management. The project is designed to meet the goals of the Forest Plan and the purpose and need of the project. Review Chapter 2 of the EIS for the proposed actions; salvage harvest is not proposed within the majority of the project area, but it is proposed where it has been determined to promote forested conditions, decrease fire risk, improve safety conditions, and address other resource needs, including the improvement of wildlife habitat and watershed conditions. See Chapter 1 of the EIS for a discussion about salvage harvest in Late Successional Reserves. See Chapter 2 for a discussion of the project design features, including the retention of snags, course woody debris, and legacy components for the protection of various resources, including soils and wildlife. Chapter 3 of the EIS discloses both the beneficial and adverse effects of salvage harvesting.

Code	Comment Number	Comment Text	Response
240.0102 - Fragmentation, Connectivity	#18909-111	The Wildlife section of the DEIS touches upon habitat connectivity for fishers, martens and wolverine but fails to provide specific information or names of the watersheds considered. There is no information on two of the four the most important KNF wildlife corridor areas for wildlife, Grider Creek and northern portion of the Whites Fire/Snoozer Roadless area. Grider is well known as an important north to south biological corridor, yet the NEPA analysis fails to take a hard look at the proposed actions on Grider Creek connectivity or the northern area of the Whites Fire. The KNF LRMP at 4-22: Biological Diversity: 6-6 Coordinate proposed management actions within the Klamath bio-region to develop a coordinated management approach for species that move across Forest boundaries. Assure that the most recent scientific information is available for use in project planning. 6-7 Manage for a distribution and abundance of plant and animal populations that contribute to healthy, viable populations of all existing native and desirable non-native species. Maintain populations throughout their historic range. Develop strategies to determine the response of Sensitive species proposed for Endangered or Threatened listing by the United States Fish and Wildlife Service (USFWS) or by the National Marine Fisheries Service as well as indicator species to management activities. The agency is required to look at the bioregion as a whole and to manage for species viability. Protecting a diverse group of different populations of a species is what guarantees both biological diversity and the long-term viability of a species. Many wildlife populations are under incredible threat, and losing them one after another erodes the survivability of the species to which they belong. Small-localized populations of rare species are located throughout the project area and are in critical need of protection. The Westside DEIS did not consider the effects of impacts to localized populations from the proposed treatments on species viability.	Thanks for pointing out this information. It's true the original Wildlife BE did not identify all the watersheds in the connectivity analysis. It only identified the watersheds with connectivity issues and watersheds that changed connectivity status. If no change in connectivity status occurred it was not included. The pacific fisher, marten and wolverine are Forest Service sensitive species. Connectivity and effects to habitat are summarized and disclosed in more detail see the "amendment to the wildlife reports" under the section called "corrections and clarifications to methods". The Forest Plan Standard and Guideline that recommends the collection of information on Sensitive Species is 8-19; this is forest-wide, not project-specific direction.
240.0102 - Fragmentation, Connectivity	#18909-121	On page 52 or the Review of Publically Provided Literature from Scoping, in response to Olsen et al. 201221 the agency states that the project isn't proposing green tree management and implies that the study refers to green trees. 21 Olson, David, DellaSala, Dominick A., Noss, Reed F., Strittholt, James R., Kass, Jamie, Koopman, Marni E. and Allnutt, Thomas F. Climate Change Refugia for Biodiversity in the Klamath-Siskiyou Ecoregion. Natural Areas Journal, 32(1):65-74. 2012. This response is not adequate and did not consider the true meaning of the study, which highlights the importance of an immediate protection of a network of climate change microrefugia. The proposed project would eliminate intact complex forest structure and would increase habitat fragmentation across seventy-five watersheds. Further the agency is proposing to extract live green trees throughout larger units and throughout entire road systems. The DEIS fails to respond to the substantive implications of the Olsen et al. study as emphasized below: Abstract: The Klamath-Siskiyou Ecoregion has been a refuge for species during past climate change events, but current anthropogenic stressors are likely compromising its effectiveness as a refugium for this century's projected changes. Reducing non-climate stressors and securing protection for large, complex landscapes are important long-term actions to alleviate climate change impacts on biodiversity. Equally important is the immediate protection of a network of climate change microrefugia, particularly old growth and intact forests on north-facing slopes and in canyon bottoms, lower- and middle-elevations, wetter coastal mountains, and along elevational gradients. Such areas provide local opportunities for vulnerable species to persist within the ecoregion. We identify a provisional set of 22 highest-priority and 40 high-priority microrefugia that occur mostly outside of existing protected areas and along wetter and lower elevations of the ecoregion. Proposed reserve designs, if fully implemented, would capture most of the recommended microrefugia, although we found 11 important gaps. Most of the region's biodiversity, endemic species, and species vulnerable to climate change are invertebrates, non-vascular plants, and fungi that are largely restricted to persistently cool and moist late-successional forests. Opportunities for climate change response for vulnerable taxa will necessarily be local due to a limited capacity of many species to move to new habitat, even over relatively small distances where land use practices create inhospitable conditions. The ecoregion's distinctive and endemic serpentine-substrate flora also is at risk and possible refugia are sites that will retain wet soil conditions, such as seeps and bogs. At page 65, The Klamath-Siskyou Ecoregion (KSE) contains globally important biodiversity- only five	This comment reflects the opinion of the author related to a journal article, not the content of the EIS. No information other than a general journal article is provided to support the argument that the Westside Fire Recovery Project would eliminate intact complex forest structure or increase fragmentation other than a general comment. The comment expresses a concern that green trees are marked for removal. Most of the trees in the marked for salvage in the Westside Project are dead. The only green trees that would be cut are fire-damaged trees that are likely to die. Trees are marked for retention in proposed salvage units if they have 30% or more chance of survival. Approximately 8,500 "green" trees and legacy trees have been marked for retention throughout the Project. Within roadside hazard treatment areas, fire-damaged trees are retained if they have a 40% or greater chance of survival, except for trees over 45 inches in diameter, which must have only a 5% chance of survival to be retained (EIS Chapter 2). Additional information has been added to the text of the EIS to address actions in Late-Successional Reserves, which serve as refugia on the Klamath National Forest. Appendix E provides an assessment of the fire area within the Late-Successional Reserve land allocation. All table references are to Appendix E. Within the Late-Successional Reserves, about 28,700 acres had moderate - high severity fire of which about 3,870 acres are proposed for salvage in Alternative 3 modified. This represents about 5% of the area within the Late-Successional Reserve fire perimeter These measures would meet short term Late-Successional Reserve objectives because very little of the Westside Fire Recovery Project area is actually in salvage units (Figures 8, 9, 10, 11, and 12) and because snags and coarse woody debris are maintained in sufficient amounts to meet Late-Successional Reserve standards described in the Late-Successional Reserve Assessment (Table 6) and the Forest Plan (Table 7 and 8) where salvage does occur. Figure 12 shows that of the 29,600 acres of stands dominated by trees greater than 24 inches in diameter in the Late Successional Reserves, in all burn severities, 1,750 acres (6% of the size class) would be removed by the Westside Fire Recovery project in salvage harvest units. An estimated additional 240 acres of trees greater than 24 inches in diameter would be removed in moderate - high severity patches of roadside hazard cleanup (Table 3). With salvage units and roadside hazard combined, approximately 2,000 acres of trees greater than 24 inches in diameter in moderate – high burn severity areas would be removed from within the Eddy Gulch and Seiad Late Successional Reserves. Of trees greater than 24 inches in diameter, this represents about 23 percent of the 8,650 acres moderate to high severity burn acres in that diameter class and about 7% of the large tree diameter class in all burn severities in the Late Successional Reserves. Of the trees greater than 24 inches in diameter that are in moderate to high severity burn patches, 77 percent would be retained. Overall, over 90 percent of the trees greater than 24 inches in the Seiad and Eddy Gulch Late Successional Reserves would be retained (Figure 12). Components of late-successional forests (legacy trees, snags, down wood) are retained

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		other temperate forests regions are as diverse or home to as many endemic species and ancient lineages. However, cumulative land use impacts combined with projected climate change could have a profound impact on the ecoregion's species and ecosystems. In the KSE, over a century of land use activities (e.g., logging, mining, livestock grazing, damming of rivers, mining, and human-caused alterations of fire) have resulted in loss or degradation of mesic habitats (DellaSala et al. 1999) that may have previously functioned as refugia over millennia. Impacts include loss of contiguous habitat along intact elevational and other environmental gradients that may facilitate climate-related shifts in natural communities and loss and degradation of most of the mature and old-growth forests (e.g., only about 28% of the historic old-growth forests remain; Strittholt et al. 2006), particularly mesic lowland and mid- elevation habitats (Staus et al. 2002). Increasing prevalence of invasive plants and pathogens facilitated by road building and land use practices poses an additional threat to native species and communities (DellaSala et al. 1999).	within harvest areas in amounts specified in the Forest Plan. Long term Late-Successional Reserve objectives would be met in salvage units because legacy trees, green trees (to the degree they exist) that can provide future snags and coarse wood and larger trees in hydrologic Riparian Reserves, would be retained. Risk-reduction salvage in concert with ridgetop FMZs would increase the probability that snags and Coarse Woody Debris retained would persist within treatment units because it would reduce the amount of surface fuels, and thus reduce future fire severity (Figure 7). In the wildfires that occurred in the 2014 Westside Fire Recovery project area (Beaver, Whites, and Happy Camp fires) over 7,000 acres of functioning nesting-roosting habitat and 9,600 acres of foraging habitat were lost to stand-replacement (i.e. high severity) fire. Thus, it is well established that stand-replacing, high intensity wildfire negatively affects northern spotted owl habitat within the Klamath Province and that the potential for future habitat losses in the Klamath Province is high. Given probable climate change scenarios, the rate of habitat loss from stand-replacement fire is likely to increase. From this, it follows that land managers should consider opportunities to reduce the probability of future large stand-replacement fires. That is the objective of risk-reduction salvage harvest in the Westside Fire Recovery project. See Chapter 3 of the EIS for a discussion of the impacts of this project and this project's consideration of climate change. See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves. See Chapter 2 for a description of the proposed actions, including project design features, for the protection of Late Successional Reserves and their constituent elements. The establishment of a network of climate change microrefugia is beyond the scope of this project. The Klamath National Forest has established a wide variety of protected, specialized habitats for species that may be vulnerable to climate change in the network of Research Natural Areas and Special Interest Botanical Areas that for the most part were unaffected by the fires of 2014, and will not be affected by any treatment units in the Westside Recovery Project. The effects of the proposed actions in Late-Successional Reserves, that act as refugia for a wide variety of organisms, has been addressed in detail above in this response, and in the EIS in Chapter 3.See response to comment number 12346-55.
240.0102 - Fragmentation, Connectivity	#18909-122	At page 66, Fundamental to the development of a robust conservation design are three core-planning elements: (1) reduction of non-climate stressors; (2) protection of complex landscapes; and (3) protection of climate change microrefugia. Taken together, they are the foundation for guiding reserve design and conservation implementation in the KSE. Reducing non-climate stressors across the landscape, such as curtailing or greatly reducing logging and road building, is the single most important action that land managers can take to help the regional biota and ecosystems persist in the face of a changing climate. The release from stressors should be strategically targeted to critical core habitats, old-growth forest microrefugia, and adaptation corridors along environmental gradients. Securing a high level of protection and undertaking ecologically based restoration in degraded areas is important, as well as protection of large, complex landscapes with diverse terrains, soils, microclimates and other environmental gradients. Page 67, In order to maintain pockets of habitat for climate-vulnerable species, conservation attention should be aimed at securing microrefugia that may uniquely provide opportunities for many species to persist and are particularly threatened due to ongoing habitat degradation and rapid warming. Because of the rapid speed of climate change (Loarie et al. 2008, 2009), including warmer temperatures (Koopman et al. 2009) and diminishment of fog (Johnstone and Dawson 2010) in the KSE, opportunities for long-term persistence for many species will be local, likely within a scale of a few kilometers, from the location of present populations. Many species will be unable to shift rapidly enough to areas with more favorable conditions. Moreover, most of KSE's species, distinctive (endemic) species, and those vulnerable to climate change are mesophilic, old-growth forest specialists, largely lesser known taxa (by the public) such as invertebrates, fungi, bryophytes, and other non-vascular plants (Olson 1992; Lattin 1993; Olson 2010; Vicente 2010). The majority of these taxa cannot cross even small distances of terrain with unfavorable conditions (e.g., light, hot, and dry; Frest and Johannes 1993; Niwa and Peck 2002). Thus, protection and restoration of microrefugia around extant populations is essential for the long-term perpetuation of the vast majority of the KSE biota. The ecoregion's endemic serpentine flora (Kruckeberg 1984; Harrison et al. 2006; Sawyer 2007) is also highly vulnerable to projected increases in temperature and drying (Damschen et al. 2010) and some taxa may only persist within persistently wet pockets and seeps surrounded by late seral forests (collectively mature and old growth) that can act as climatic buffers. North-South corridors of contiguous natural vegetation are important for many reasons, such as	This comment provides general literature citations but does not provide any information how those apply to the Project area nor does it provide information specific to the environmental consequences of the proposed action or Alternatives.

Code	Comment Number	Comment Text	Response
		dispersing vertebrates, but a swiftly changing climate will likely limit the ability of most slowly dispersing organisms to move long distances northwards over generations. Page 68, Areas with concentrations of restricted range (i.e., local endemic) species or relict taxa dependent on cool and moist habitats were also evaluated to refine candidate mesorefugia locations and boundaries (i.e., where multiple species boundaries overlap). These include the distribution of Brewer spruce (Picea breweriana), Engelmann spruce (Picea engelmanni), foxtail pine (Pinus balfouriana) (Sawyer 2007), Plethodon and Dicamptodon salamander species and subgoups (Bury 1973; Mead et al. 2005; Steele and Storfer 2006), and numerous other plants (Sawyer 2007) and invertebrates (Olson 1992), such as harvestman (Briggs 1969, 1971ab), millipedes (Gardner and Shelley 1989; Olson 1992), trapdoor spiders (Cokendolopher et al. 2005), and land snails (Frest and Johannes 1993). Page 72, Identifying and protecting microrefugia complements ongoing modeling of range shifts for vulnerable species and natural communities (e.g., Pearson and Dawson 2003; Loarie et al. 2008; Carroll et al. 2010; Damschen et al. 2010; Harrison et al. 2010), studies of climate sensitivity of species, analyses of how a changing climate will affect wide-ranging species, and assessing the cost and cost-effectiveness of alternative conservation actions. Without large natural landscapes in relatively good condition, many of the remaining pockets of old-growth forest may not persist or function well as microrefugia. However, for ensuring a robust reserve design that is responsive to climate change, it is prudent to secure priority old- growth forest microrefugia as swiftly as possible while the more time-consuming and uncertain task of conserving larger landscapes continues. Waiting decades for formal "gazettement" of large protected areas without securing microrefugia now may allow continued degradation of these critical refuges.	
240.0102 - Fragmentation, Connectivity	#3679-5	My comments refer mainly to the Beaver Fire as I live within its boundaries. I am especially concerned about issues of "habitat fragmentation" and "connectivity" because there is so much private land within the fire boundaries. The private lands are already being logged and it is quite a mess up there. However I do I think that the USFS should be able to do a salvage harvest but it needs to be done with the utmost care	Under the preferred Alternative in the final EIS (modified Alternative 3) there would be no salvage harvest in the Beaver Fire area and that Alternative has been designed to reduce effects to northern spotted owl habitat and connectivity. This project has been designed with specific project design features and best management practices to minimize effects to resources from salvage harvest and other project activities. he Forest Service is required to consider the cumulative effects of this project when added to the other actions or projects within the analysis area. The agency reviewed and considered the impacts of the private land actions within the Beaver Fire Area, as described in the "Actions Considered for Cumulative Effects" Appendix of the EIS and throughout Chapter 3 of the EIS (under Cumulative Effects) by resource. As a result of considering these other actions and their impacts during consultation and conferencing with the U.S. Fish and Wildlife Service among other agencies, the Forest Service dropped salvage harvest in the Beaver Fire from the new preferred Alternative (modified Alternative 3, see Chapter 2 for details).
240.0104 - Nutrient Cycling	#5873-56	Part of the natural post-fire recovery process is that beetles eat some trees parts and excrete nutrient-rich frass which enhances the growth of surviving and newly established plants. New science indicates that salvage should be avoided or delayed and snags must be retained well-distributed in order to realize the nutrient-cycling benefits of beetle frass. Beetle droppings—known in the scientific world as frass—are crucial to forests recovering from fire. The tiny piles of droppings, found at the bases of trees, resemble cones of sawdust, and they help nourish the forest floor by increasing microbial activity in the soil. This process can also determine which kinds of trees grow back. "This means that rather than being considered a pest or a nuisance, these beetles are in fact very important to helping burned forests recover," Cobb said. He is concerned, though, because salvage logging is taking the beetles out of the forest before they can do their job; the insects lay their eggs in the dead trees, and the larvae are subsequently destroyed when the wood is processed at sawmills. "That population is being removed from the salvage site and that takes away the mechanism by which the nutrients are returned to the soil." Salvage logging should be delayed after a fire to allow the beetles to complete their life cycle, Cobb said. Betkowski, Bev. 2007. Beetle dung helps forests recover from fire. University of Alberta. Public release date: 3-Dec-2007. http://www.uofaweb.ualberta.ca/rso/news.cfm?story=69803 citing Tyler Cobb. 2007. Boreal Mixed-wood Beetles and the Cumulative Ecological Consequences of Disturbance. PhD Dissertation. University of Alberta. Spring 2007.	This comment is from a study in Alberta, Canada. No evidence is provided as to why this should apply to the conditions of the Klamath Province. We agree that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. Snags and down logs are being left in amounts that are consistent with the Klamath's Forest Plan and are deemed sufficient to maintain soil fertility and species needs (Forest Plan 4-20). The article referenced in this comment suggests that delaying logging or leaving 10-25 percent of the burned timber would allow for nutrients to be returned to the soil by beetles. This project is only proposing salvage harvest on about 4 and percent of the total burned area and just over 10% of the severely burned areas (EIS Chapter 2), so would provide more than the 10-25 percent suggested. Additionally as noted above, Forest Plan guidelines for coarse woody debris will be met on every acre where salvage does occur. In the soils report, the surface organic matter indicator analyzes the impacts of removing coarse wood and is met when sufficient organic matter is available for long term soil productivity. Coarse wood can improve soil productivity by increasing macroorganisms such as dung beetles, which therefore improve soil organic matter. Chapter 3 of the EIS summarizes this information.

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240.02 - Diversity, Extinctions	#15-1	Grider Creek is only one of two wilderness corridors between the Salmon Mountains and the Siskiyous, but the Forest Service seems to have an ongoing program to close up these corridors, both of which are becoming skinny. The Ukonom Creek corridor that the Forest Service recognizes is only a few feet wide along Ukonom Creek. So, really, the Grider Creek corridor is the best available way for biodiversity to be shared between mountain ranges. And you want to close that corridor. People who deminish the importance of these wild corridors puzzle me. Here's a quote from a USFS document from 2001: "First, planners and scientists have been at work for over 2 decades trying to assess biological diversity and species viability. In fact, the agency currently has a process underway looking for a logical option under the existing 1982 regulations and in response to current case law (Schwalbach & Barone 2000). This work has always been fraught with inconsistency and lack of consensus on what is sufficient to comply with laws such as ESA and NFMA. Salwasser points out that the very nature of biodiversity itself creates some of the difficulty because 1) biodiversity is inherently complex, 2) we have incomplete knowledge of most species let alone all the processes through which they function together, 3) inventories are incomplete and inconsistent, 4) models are unrealistic and, 5) population futures are dynamic, uncertain and influenced by more than just the habitats that national forest and grassland managers affect. He concludes that after 2 decades of experience, the problem of addressing biodiversity conservation in a comprehensive and quantitative analytical way may not be technical or analytical in nature but it "may be a foundational problem that rests on our incomplete and inconsistent knowledge about the degree to which habitat conditions affect population conditions of any native plants or animals" (2001). Relevant ecological requirements and population dynamics are largely unknown for many species and will remain so for some time. Animals and plants of commercial value, or those that have pest potential, receive primary attention and research focus rather than the range of biological species in natural areas. Knowledge is "non-existent for the majority of biological diversity" (Salwasser 2001)." So please, just keep it simple and stay out of the Grider Creek drainage all together. You have admitted that you have NO IDEA how important this drainage is in the scheme of things. Just stay out of it, completely.	The level of scientific controversy and uncertainty surrounding the effects of a project are two of the significance factors laid out by the Council of Environmental Quality to determine whether an EIS needs to be prepared for any given project. This project is pursued through the development of an EIS to facilitate the 'hard look' at the project Alternatives in light of the competing scientific views and incomplete information. It is recognized there this is incomplete knowledge or competing scientific views that create scientific uncertainty of the environmental consequences of ecologic and habitat function. In such cases, the Forest Service may proceed in the absence of information so long as it relies on the best available scientific information. A discussion of the competing scientific views identified by Forest Staff and the public is addressed in the beginning of Chapter 3 and in the resource reports available on the project webpage or in the project record upon request. The comment does not disclose how the commenter believes the project will impact Grider Creek and wilderness corridors. In the absence of specific concerns, it can generally be stated that all action Alternatives were designed to protect and promote critical wildlife and fisheries habitat by implementation of wildlife and watershed project design features and compliance with the Forest Plan. The Forest Plan identifies several goals to promote biological diversity throughout the Forest (Forest Plan page 4-6). One of those Forest-wide goals is to “manage for desired compositional, structural, and functional attributes of biologically diverse forest…ecosystems…” The action Alternatives in the Westside Fire Recovery project would create a more biologically diverse ecosystem by promoting regeneration of the forest and reducing future fire risk and severity (see the Fuels section of Chapter 3 of the draft EIS). For example, Alternative 2 would retain biodiversity by both promoting a restored fire-resilient forested ecosystem and retaining the mosaic effect of the fires by treating less than four percent of the burned area (see Figure 2-1 of the EIS). The environmental consequences of taking no action (Alternative 1) in analyzed in detail and displayed by resource in Chapter 3.
240.02 - Diversity, Extinctions	#18851-2	Biological Diversity is the foundation for many forest resources and benefits (including Scenery). There appears to be no tracking of how this project benefits, or impairs KNF westside biodiversity overall.	While it is true that biodiversity is not analyzed as a stand-alone issue at the project level, the extensive analyses in Chapter 3 for vegetation, fire and fuels, terrestrial wildlife, botany and non-native invasive species, range, water quality, aquatic resources, soil, geology, air quality, cultural resources, the social and economic environment, scenery, recreation, wild and scenic rivers, inventoried Roadless Areas, climate change, and short-term uses and long-term productivity all describe the existing condition of biodiversity on the Forest and the expected impacts to that biodiversity. Project components such as matching treatments to specific management areas, leaving small gaps untreated, and leaving snag trees and down wood all support the forest-wide goals of the Forest Plan to incorporate biodiversity into general management. Please see Chapter 3 and individual resource reports for more specific information on effects, and the Forest Plan, page 4-6 for forest-wide biodiversity goals.

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240.02 - Diversity, Extinctions	#5873-46	Salvage logging and replanting will convert a structurally complex landscape into a simplified and biologically depraved landscape. Unsalvaged, naturally regenerated, young stands are one of the rarest forest types in the Pacific northwest, and their biodiversity rivals that of old-growth forests. Indeed, naturally developed early-successional forest habitats, with their rich array of snags and logs and nonarborescent vegetation, are probably the scarcest habitat in the current regional [Pacific Northwest] landscape. Lindenmayer, David B. and Jerry F. Franklin. 2002. Conserving Forest Biodiversity: A Comprehensive Multiscale Approach. Island Press. Washington, DC: 69. See also, DellaSala, D.A., J.E. Williams, C. Deacon-Williams, and J.F. Franklin. Beyond smoke and mirrors: a synthesis of fire policy and science. In review - Conservation Biology	While this comment may be applicable in the context of the Pacific Northwest at a regional scale, the commenter provides no evidence that the Westside Fire Recovery Project area will have a shortage of early seral plant communities. In the Westside Fire Recovery Project Area, about 52,000 acres burned with moderate to high severity where more than 50% of the trees present were killed (EIS Chapter 2). Considerable secondary mortality in fire damaged trees has occurred since the fire because of drought stress and insect attack. Salvage harvest is proposed on about 5,760 acres, with site preparation and planting proposed on an additional 7,130 acres in Alternative 3 Modified. A total of about 12,900 acres (25%) of the 52,000 acres of moderate to high intensity burn would be replanted; about 39,000 acres of areas where most of the trees were killed would remain untreated and would go unimpeded through the long early seral plant community described by the commenter. This includes smaller mosaic burned areas, and all high mortality burn patches that are less than 20 acres in size. This maximizes the heterogeneity that benefits northern spotted owls described by Franklin (2002). Areas that would not be planted also include multiple large patches ranging in size from a few hundred acres to well in excess of 1000 acres of fire-killed older trees in the Grider Creek Inventoried Roadless Area. No fuel reduction treatments will occur in areas that are not site prepped and planted. In the future, as snags fall and become surface fuels, it is probable that many of these untreated areas will reburn multiple times because of high surface fuel loads from dead trees (final EIS Chapter 3-Fuels; final EIS Appendix E, Figure 7). As a result, large areas that are not site prepped and planted will likely remain in an early seral plant community dominated by brushfields for multiple decades. The probability of reestablishing late successional coniferous forests on these landscapes will remain low until surface fuels created by the 2014 fires and subsequent reburns has been consumed. Because Late Successional Reserves have been established to provide high quality habitat for species associated with late-successional forest conditions, management following a stand-replacing event should be designed to accelerate or not impede the development of those conditions (Northwest Forest Plan C-14; Late-Successional Reserve Assessment 1-24). Research has shown that the quickest way to reestablish a coniferous forest after stand replacement fire is by active reforestation (Zhang et. al 2008). Research has also shown that plantations established in areas with high slash loadings burned severely, while those where residual slash had been adequately treated burned with much less severity and intensity or not at all (Thompson, Spies and Ganio, 2007; Weatherspoon and Skinner, 1995; Omi and Kalabokidis 1991). Forest Vegetation Simulation (FVS) modeling (Appendix E, Attachment 1) shows that reforestation will establish forested conditions more rapidly by treating surface fuels and planting trees than by natural succession. It also shows that where surface fuels have been treated by salvage logging and site preparation, the ensuing stand is more resilient to fire than untreated areas. If surface fuels are treated, the risk of future stand replacement fires would be reduced, increasing the probability that planted conifers can persist into the future. In the FVS model, planted stands where fuels had been reduced began to show late-successional stand conditions typical of the Klamath Province with 40% canopy closure and 18 inch diameter at breast height trees in 90 years compared to over 200 years for untreated stands to reach the same stage. Without planting, trees will slowly become reestablished over a period of 10-50 years in severely burned areas, but the probability of a late-successional coniferous forest becoming established is low. It is probable that areas where fuels are not treated will go through several cycles of stand replacement fire until surface fuels have been reduced to the point that a low to moderate fire severity regime has been reestablished. This would maintain areas where fuels have not been reduced in semi-permanent brush fields for decades rather than accelerating the development of late-successional stand conditions. The planted trees in areas where fuels have been successfully reduced are expected to provide “islands” of coniferous forest in a sea of brushfields perpetuated by reburns where fuels have not been reduced. This would provide a measure of vegetative diversity that would not otherwise be present on the landscape. These planted stands have a much higher probability of achieving and sustaining the desired late successional stand condition for the Late-Successional Reserve than do unplanted areas as shown in the FVS modeling.

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240.23 - CWD	#17111-1	Stand-replacement fires provide large pulses of coarse woody debris (CWD) i ncl uding snags and logs, which l ifeboat dependent species and processes u nti l the regenerating forest begins to prod uce large and decay-resistant dead wood structures, which is typically not for a century or more. Since this pulse provides all of the large CWD that is going to be avai lable to the ecosystem for at least the nex t 100 to 150 years, it is not appropriate to use the levels of CWD found in mat ure and old stands of a particular Plant Association Group (PAG) as a guide to levels of CWD that should be retai ned after salvage. Effecti vel y none of the large snags and logs of decay-resistant species can be viewed as being in excess of what is needed to assist in natural recovery to late-successional forest conditions and, hence, appropriate for salvage on land allocations where ecological objectives are pri mary, such as LSRs. Retention of large snags and logs are specificall y relevant to Northern Spotted Owl (NSO) since these structures provide the habi tat that sustai n most of the owl 's forest-based prey species.	We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metric were developed from studies of late successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large “legacy” trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#17460-19	The project design feature throughout the DEIS for fuel loading is stated to be 7- 10 tons per acre, and the "Fire and Fuels Resource Report" published with the DEIS frequently mentions that figure, but most of the discussion in that report specifies that it applied to small diameter woody material less than 3 inches in diameter. Without explanations or justification, the DEIS applies the 7-10 tons per acre figure to all fuels within the project, including larger diameter snags and course woody debris greater than 3" in diameter. While there are a few mentions of coarse woody debris in the DEIS, those occurrences only highlighted the potential for increased fire severity, without any discussion of the benefits and desirability of CWD in late successional areas. The management goals within the LS Rs make frequent mention of the desire for sufficient CWD and standing snags for habitat and wildlife, yet there is no discussion of the optimal amount of CWD to leave behind, nor discussion of balancing an optimal amount of snags and CWD versus future fire concerns outside of the LSRs. Removal of snags and CWD within the LS Rs at this rate destroys that last significant characteristic of the LSRs remaining after the 2014 fires. Left to regenerate naturally, in 50 years, the high fire severity areas within the LSRs will still have significant CWD and snags remaining along with new growth, including both brush and new trees. Under the salvage guidelines, it will be at least 80-100 years before larger snags and CWD begin to accumulate. The USDA's Forest Service publication, "Coarse Woody Debris: Managing Benefits and Fire Hazard in the Recovering Forest," dated July 2003, cited studies 4 recommending between 25-50 large diameter snags (<9" dbh) as being optimal for various woodpecker species that occur within the Klamath National Forest, and another study recommending 40 snags per acre (<15" dbh) both standing and down for all wildlife. These translate into 5-25 tons per acre of CWD for ponderosa pine. Another major point highlighted by this publication is that the larger diameter the CWD, the more tons per acre can safely remain on the landscape without increasing overall fire intensity: "Higher loadings of CWD are acceptable where larger piece sizes predominate, for example in accumulated falldown of old growth trees. Larger piece sizes also are desirable because, faced with decomposition and fire, they persist longer to benefit wildlife and soil productivity. " The tables in the "Fire and Fuels Resource Report" published with the DEIS do not appear to reflect that; the other shortcoming with the tables and analysis in that report is it only analyzes two extremes: no treatment versus (intense) treatment (through timber salvage followed by fuels treatment). Table 23 in the fuels report shows several entries having CWD close to 20 tons per acre having low and moderate resistance to control, so long as the small diameter surface fuels remain at low levels. This is an opportunity for a different approach to optimal recovery with the LSRs, without using salvage logging in the LSRs, by employing periodic fuels treatments of small woody debris, yet the benefits of retaining the CWD would remain. It also allows for a greater retention of snags throughout the project for wildlife habitat.	Larger pieces of large woody debris would persist longer to benefit soil productivity. See Chapter 1 for a discussion of salvage in Late Successional Reserves. See Chapter 2 for a description of watershed project design features that apply to this project. See the beginning of Chapter 3 for a discussion of responsible opposing points of view. See chapter 3 for effects analysis.
240.23 - CWD	#17460-7	The project design feature throughout the DEIS for fuel loading is stated to be 7- 10 tons per acre, and the "Fire and Fuels Resource Report" published with the DEIS frequently mentions that figure, but most of the discussion in that report specifies that it applied to small diameter woody material less than 3 inches in diameter. Without explanations or justification, the DEIS applies the 7-10 tons per acre figure to all fuels within the project, including larger diameter snags and course woody debris greater than 3" in diameter. While there are a few mentions of coarse woody debris in the DEIS, those occurrences only highlighted the potential for increased fire severity, without any discussion of the benefits and desirability of CWD in late successional areas. The management goals within the LS Rs make frequent mention of the desire for sufficient CWD and standing snags for habitat and wildlife, yet there is no discussion of the optimal amount of CWD to leave behind, nor discussion of balancing an optimal amount of snags and CWD versus future fire concerns outside of the LSRs. Removal of snags and CWD within the LS Rs at this rate destroys that last significant characteristic of the LSRs remaining after the 2014 fires. Left to regenerate naturally, in 50 years, the high fire severity areas within the LSRs will still have significant CWD and snags remaining along with new growth, including both brush and new trees. Under the salvage guidelines, it will be at least 80-100 years before larger snags and CWD begin to accumulate. The USDA's Forest Service publication, "Coarse Woody Debris: Managing Benefits and Fire Hazard in the Recovering Forest," dated July 2003, cited studies 4 recommending between 25-50 large diameter snags (<9" dbh) as being	This comment is correct that the 7-10 tons / acre for the desired post-project fuel loading applies to the material that less than 3 inches in diameter. This is the material that most readily carries fire and most readily contributes to fire hazard. A 7- 10 tons / acre fuel loading of 3 inch and smaller material was the level identified in the modeling that would accomplish the Project objectives. We also agree that higher fuel loads can be carried if the material is in larger size classes, however large coarse woody debris is not without risk in terms of fire severity. Larger material burns slower, but causes significant resistance to control. The long burnout time and amount of heat released from combustion in large woody fuels can lead to torching and crown fire. Large numbers of snags and down logs are an issue for management or control of fire and safety of firefighting personnel working in proximity. Heay down fuels can also have a negative effect on soil resources when excessive amounts of Coarse Woody Debris are burned. We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. This comment appears to equate the snag and down wood trajectories of the fire regime of the Klamath Province with that of more mesic areas of the Northwest Forest Plan. That is not correct (See Background, EIS Chapter 1; Appendix E). The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs

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		optimal for various woodpecker species that occur within the Klamath National Forest, and another study recommending 40 snags per acre (<15" dbh) both standing and down for all wildlife. These translate into 5-25 tons per acre of CWD for ponderosa pine. Another major point highlighted by this publication is that the larger diameter the CWD, the more tons per acre can safely remain on the landscape without increasing overall fire intensity: "Higher loadings of CWD are acceptable where larger piece sizes predominate, for example in accumulated falldown of old growth trees. Larger piece sizes also are desirable because, faced with decomposition and fire, they persist longer to benefit wildlife and soil productivity. " The tables in the "Fire and Fuels Resource Report" published with the DEIS do not appear to reflect that; the other shortcoming with the tables and analysis in that report is it only analyzes two extremes: no treatment versus (intense) treatment (through timber salvage followed by fuels treatment). Table 23 in the fuels report shows several entries having CWD close to 20 tons per acre having low and moderate resistance to control, so long as the small diameter surface fuels remain at low levels. This is an opportunity for a different approach to optimal recovery with the LSRs, without using salvage logging in the LSRs, by employing periodic fuels treatments of small woody debris, yet the benefits of retaining the CWD would remain. It also allows for a greater retention of snags throughout the project for wildlife habitat.	from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of snags and coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006), not “stand-replacement or mixed” that is typical in the Coast Range and western Oregon and Washington Cascades. With frequent fire, surface fuels are maintained at low levels – too low for intensity sufficient to produce much stand-replacement fire, except under unusual circumstances. Also, as noted by Taylor and Skinner (1997) and Skinner (2002), dead wood in the Klamath province rarely lasted long enough, even in a low to moderate fire severity environment, to actually decompose because snags and down logs are receptive to embers, and once partially rotted, are easily consumed by fire. In a fire regime dominated by low to moderate severity effects, tree mortality with wildfire is by definition generally low. In the Klamath Mountains, patches of moderate to high severity fire, when they did occur historically, were more likely on upper slope positions and on south and west-facing aspects (Skinner et al. 2006). Patches of high severity would produce a pulse of snags and then eventually down logs, until those logs were consumed by subsequent fires. Because frequent low-moderate severity fires consume wood, it is unlikely that coarse woody debris accumulated to levels seen in more mesic old-growth Douglas fir forests of Oregon and Washington (Taylor and Skinner 1997). In the Klamath Mountains snags and logs were likely clustered in time and space, with long intervals and large areas where dead wood was sparse (Skinner 2002). To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metric were developed from studies of late successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large “legacy” trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves in Riparian Reserves by hand piling and burning. This reduces the small surface fuels that readily ignite and carry fire.Peterson et al. (2015) observed that:“post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels and restoring low and mixed severity fire regimes in dry coniferous forests of western North America and other fire-prone forest types.”See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#18909-131	Coarse Woody Debris (CWD) as described in the KNF LRMP 4-23 &24: 6-16 A renewable supply of large down logs is critical for maintaining populations of fungi, arthropods, bryophytes, and various other organisms that use this habitat structure. Provision of CWD is also a key standard and guideline for American marten, fisher, 2 amphibians, and 2 species of vascular plants. The objective is to provide CWD well-distributed across the landscape in a manner which meets the needs of species and provides for ecological functions. Standards and guidelines would provide for appropriate CWD quantity, quality (such as species, decay stage, and size) and groups of plant associations and stand types, which can be used as a baseline for managers to develop prescriptions for landscape management. An important factor is to provide the CWD within a forest patch so that the appropriate microclimate for various organisms that use this substrate is available. a) Manage to provide a renewable supply of large down logs well distributed across the matrix landscape in a manner that meets the needs of species and provides for ecological functions. Develop models for groups of plant associations and stand types that can be used as a baseline for developing prescriptions. b) Until standards are developed as described above, the following guidelines apply in areas of regeneration harvests and other vegetation manipulation: Maintain 5 to 20 pieces of CWD per acre in various states of decay. The specific amount of materials specified for retention on individual projects shall be determined by the project ID team. At a minimum, the ID team should consider the amount of materials existing on site, the amount of material needed to provide for nutrient cycling and site productivity, the denning needs of wildlife species, and the fire risk as a result of fuel material on site. Attempt to maintain these levels of CWD on site throughout the life of the project or throughout the rotation (if timber harvest is planned.) Leave large logs, conifer and hardwood, sound and cull of at least 20 inches in diameter and about 40 cubic feet in volume when they are available. Most of the logs should be in Decay Class 3, 4 and 5 (defined in the USDA Handbook 553, page 80) with at least 2 logs per acre in decay Class 1 or 2. Do not count logs less than 12 inches in diameter or stumps as CWD. This guideline may be waived in strategic fuelbreak areas or for documented safety reasons. Down logs should reflect the species mix of the original stand. In areas of partial harvest, the same basic guidelines should be applied, but they should be modified to reflect the timing of stand development cycles where partial harvesting is practiced. c) CWD already on the ground should be retained and protected to the greatest extent possible form disturbance during treatment (e.g., slash burning and yarding) which might otherwise destroy the integrity of the substrate. LRMP-4-4, " Carefully conserve resources that cannot be replaced. Cultural resources, soil, species and genetic diversity require special management due to their irreplaceable nature." LRMP 4-39, "Retain snags with the largest DBH as they tend to last longer and make the best wildlife habitat." LRMP 4-100, "LSR - Desired Future Condition - Snags are common and fallen trees visible on the ground, providing for adequate prey species." "Although overstory trees are smaller and less dense, important structural elements such as snags and nesting platforms are present."	Through interdisciplinary discussion, including soils, wildlife and fuels, the project was designed to be consistent with Forest Plan standards and guidelines for Coarse Woody Debris; see Chapter 2 of the EIS under wildlife and watershed project design features. The surface organic matter indicator analyzes the impacts of removing coarse wood and is met when sufficient organic matter is available for long term soil productivity. Coarse wood can improve soil productivity by increasing soil moisture, soil nutrients, soil micro and macroorganisms and organic matter. In addition, coarse wood can increase the survival of vegetation which in addition to coarse wood, provides soil cover and increases soil stability. See Chapter 3 under soil and wildlife of the EIS for a discussion of the effects of this project on course woody debris and related effects. See the Forest Plan consistency checklist for a review of applicable standards and guidelines.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#18909-132	LRMP 4-105, "Following a stand-replacing disturbance, management should retain adequate CWD quantities in the new stand so that in the future it will still contain amounts similar to naturally regenerated stands." "Snags are key habitat for numerous species. They provide forage, cavities for nesting and protection, perch sites, and den sites. Snag characteristics such as state of decay, density size, and species influence their use by wildlife. Snags are also an important structural component of a forest and large snags are considered to be one of the distinctive features of an old-growth forest.-Happy Watershed Analysis, Klamath Nation Forest at page 8. DEIS page 165, no Action alternative: "In the long term, the abundant source of snags will provide a source of woody debris (an important habitat component for the species, especially for the blue-gray tail dropper) for many years. Large woody debris in conjunction with regenerating trees may provide micro-site conditions for these species in the long term (20 years) but the regeneration of habitat will take much more time (beyond the long-term time span for this analysis)." It is not clear in the DEIS how much CWD is proposed for retention. The DIES did not consider how CWD contributes to seedling survival, natural regeneration of manually planted20. All that is shared about CWD retention is that Alternatives 3 and 4 would provide for Threatened and Endangered, Sensitive and Survey and Manage Species. Given the critical importance of CWD on soils, plants and wildlife the DEIS fails to analyze, disclose and take a "hard look" at CWD retention and fails to provide the public with clear information. 20 Castro, Jorge, Allen, Craig D., Molina-Morales, Mercedes, Sara, Maranon-Jimenez, Sanchez-Miranda, Angela and Zamora Regino.Salvage Logging Versus the Use of Burnt Wood as a Nurse Object to Promote Post-Fire Tree Seedling Establishment. JULY 2011. Restoration Ecology Vol. 19, No. 4, pp. 537-544	The soils report for the project analyzes impacts of coarse woody debris removal to soil productivity using the surface Organic Matter indicator. This analysis is summarized in Chapter 3 of the EIS. Coarse woody debris could also indirectly benefit soil productivity if it promotes post fire tree seedling establishment as described in the Restoration Ecology research.We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no “excess” in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (1-5, Table 1-1) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metric were developed from studies of late successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large “legacy” trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves in Riparian Reserves broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm most larger snags because they will not yet have developed the punky surface that is receptive to embers..Peterson et al. (2015) observed that:“post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels

Code	Comment Number	Comment Text	Response
240.23 - CWD	#5873-100	The agencies' NEPA analysis too often lumps all sizes of woody material together for purposes of estimating fire hazard. This leads to arbitrary and capricious decision-making because the availability of fuel to combustion is inversely related to size. Small fuels are hazardous, while large fuels pose little or no hazard. Fuel models do not generally consider fuels larger than 8" in diameter. Commercial salvage logging removes primarily (sometimes exclusively) wood that does not contribute to fire hazard. Large amounts of fuels >8" that can be retained on a given site without detrimental effect. Lumping fuel sizes together prevents the decision-maker from accurately understanding the actual magnitude of the risk from logging or not logging. If fuels must be removed, the agency should remove the smaller fuels that are most hazardous and leave the largest logs that are least flammable and most valuable for habitat and other ecological services. The Forest Service own research shows that pound-for-pound small fuels are far more hazardous than large fuels, and that if the agency would remove more small fuels they could safely leave more large logs that are beneficial to wildlife: Small and large downed woody fuels contribute differently to the various elements of fire hazard. … Large woody fuels have little influence on spread and intensity of the initiating surface fire in current fire behavior models… [T]he spatial distribution of snags was highly variable... … For cavity-nesting birds, up to 25 tons per acre may be desirable depending on species …. For small mammals, more than 30 tons per acre is best. … To summarize the negative values, fire hazard including resistance-to-control and fire behavior reach high ratings when large fuels exceed about 25 to 30 tons per acre in combination with small woody fuels of 5 tons per acre or less. Excessive soil heating is likely at approximately 40 tons per acre and higher. Thus, generally high to extreme fire hazard potential exists when downed CWD exceeds 30 to 40 tons per acre. Consideration of these positive and negative aspects indicates that the optimum quantity of CWD is about 5 to 20 tons per acre for warm dry ponderosa pine and Douglas-fir types and 10 to 30 tons per acre for cool Douglas-fir and lodgepole pine types and lower subalpine fir types. The recommended optimum ranges of CWD quantities (fig. 2) should be modified by consideration of other factors such as quantity of small woody fuel, diameter of CWD, landscape level needs, and ecosystem restoration objectives. … Higher loadings of CWD are acceptable where larger piece sizes predominate, for example in accumulated falldown of old growth trees. Larger piece sizes also are desirable because, faced with decomposition and fire, they persist longer to benefit wildlife and soil productivity. Unfortunately, the relationship between quantity and size of CWD and the various measures of fire hazard is largely undefined. Thus, it is a matter of judgment to consider that the larger the diameter of downed CWD the greater the loading that could be allowed without undesirable fire effects. … surface area.... This suggests that where CWD comprises predominately 3- to 6-inch material, the optimum quantity is less, perhaps by 5 tons per acre or more, than for larger sized material.... … The probability of a reburn occurrence, which is small for a particular site but high over a large area … … [S]ome general statements about the effects of a reburn during high to extreme burning conditions with low fuel moistures can be made: 0 to 10 Years After First Fire—High severity fire is unlikely because duff and downed woody fuels that support prolonged burning would be absent. Large woody fuels would still be accumulating through falldown, and they would not have decayed enough to support smoldering combustion, which can extend the period of downward heating. If salvage operations leave concentrations of small woody fuels, high severity burning could occur where the fuels are concentrated. … … … The time interval chosen for predicting CWD should be long enough for a new immature or mature forest to develop.	The comment is referencing findings in the previous paragraph that didn't get included in this comment. Here is the study. Amaranthus, M.P.; Parrish, D.S.; and D.A. Perry. 1989. Decaying Logs as Moisture Reservoirs After Drought and Wildfire. In: Alexander, E.B. (ed.) Proceedings of Watershed '89: Conference on the Stewardship of Soil, Air, and Water Resources. USDA-Forest Service Alaska Region. RIO-MB-77. p. 191-194. The Fire and Fuels Report breaks out woody material by size class. This was done to help analyze effects by measurement indicator. We agree that small size classes (material less than 3") contributes to fire spread, fire risk and fire hazard. Large woody material (material greater than 3") can lead to a decrease if fire suppression capability and increase the intensity and severity of future wildfires. It is anticipated that 5 to 20 tons per acre will occur after salvage logging and associated fuel treatments -- with the higher end of 20 tons per acre in areas where larger trees and downed wood are present on the landscape. The intent of the fuels treatments are to reduce the excessive amounts of fuel loading while leaving some of the large woody material to mitigate concerns of other resources such as soils and wildlife. The reduction in fuel loading is anticipated to still meet the desired conditions of the Fire and Fuels Resource. An analysis of fuel loading and associated effects are summarized in the EIS (Chapter 3, Fire and Fuels) and further information on this can be found in the Fire and Fuels Report.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#5873-24	"Removal of legacies is most profound long-term impact" because of the "Importance of Coarse Wood: • Habitat for species • Organic seedbeds (nurse logs) • Modification of microclimate • Protection of plants from ungulates • Sediment traps • Sources of energy & nutrients • Sites of N-fixation • Special source of soil organic matter • Structural elements of aquatic ecosystems"	It is recognized that coarse wood can improve soil productivity by increasing soil moisture, soil nutrients, soil micro and macroorganisms and organic matter. Course wood also traps hillslope sediment, and increases the survival of vegetation which provides soil cover and increases soil stability. Field observations of large down woody material within the proposed treatment units indicate that approximately 10 percent of large down logs, greater than 8 inch diameter, are providing erosion control and trapping sediment. As logs decay and more trees fall, this number could increase. The soils report for the project analyzes the impacts to surface organic matter and is summarized in Chapter 3 of the EIS. To clarify, no salvage harvest is proposed within Riparian Reserves. However, other treatments, including site preparation and planting are proposed within Riparian Reserves, as developed by the interdisciplinary team for the benefit of Riparian Reserves. Roadside hazard treatments are proposed within Riparian Reserves to address safety and access needs; however, project design features, such as Botany-4, Watershed-12 & 13, are incorporated into the proposed action and its Alternatives, which leaves felled hazard trees within Riparian Reserves for large woody debris recruitment and the protection of soil. For more information on how the project addresses concerns related to the structural aquatic habitat see the Aquatic Resources section of Chapter 3 and the Aquatic Conservation Report, Aquatic Conservation Strategy objectives 1 through 9.
240.23 - CWD	#5873-39	"Many natural young and mature stands have some of the attributes of old-growth stands that may not be present in young, managed stands. Perhaps the greatest difference between natural and managed stands is the lower number and volume of large snags and logs in managed plantations (Spies and Cline 1988). Many young natural forests less than 80 years old have high amounts of carry-over of woody debris..." Thomas A. Spies and Jerry F. Franklin 1991. The Structure of Natural Young, Mature, and Old-Growth Douglas-Fir Forests in Oregon and Washington in Leonard F. Ruggiero, Keith B. Aubry, Andrew B. Carey, and Mark H. Huff, technical editors 1991. Wildlife and Vegetation of Unmanaged Douglas-Fir Forests. General Technical Report PNW-GTR-285. http://www.fs.fed.us/pnw/pubs/gtr285/	The agency acknowledges the need to retain legacy components within an Late-Successional Reserve. See Chapter 1 for a discussion of salvage harvest in Late Successional Reserves. See Chapter 2 for a description of soils and wildlife project design features related to snag retention and coarse and large woody debris retention. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.Spies and Cline 1988 "...compares effects of green tree harvest with no post treatment on wildfire. The Westside Proposed Action does not propose the harvest of "green" trees. See response to comment number 12346-55. In proposed salvage harvest units, Project Design Features provide for the retention of snags and down wood to meet ecosystem needs.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#5873-69	The agency cannot take a hard look at the issues of snag habitat and complex young forests without considering the dynamics of snags and dead wood. Spies et al. (1988) reported that amounts of CWD were high in the youngest successional stages, were lowest in 60-80-year-old forests, and were high in old stands (< 500 years). After 500 years CWD amounts declined to an intermediate level. Spies and Franklin (1988) reported that CWD input may be low in young stands because of the small size of dead and dying stems. Volumes in these stands are often high, however, due to residual CWD from the previous stand. Lofroth, Eric. 1998. The dead wood cycle. In: Conservation biology principles for forested landscapes. Edited by J. Voller and S. Harrison. UBC Press, Vancouver, B.C. pp. 185-214. 243 p. http://www.for.gov.bc.ca/hre/deadwood/DTrol.htm.	We agree that the EIS must consider the dynamics of snags and down wood. That discussion needs to be site-specific and consider the conditions of the local and regional environments. These topics are addressed at length in the fuels, wildlife and soils sections of Chapter 3. The comment as written provides no information specific to the circumstances the Westside Fire Recovery Project. Most of the area of the Northwest Forest Plan lies in the Oregon and Washington Cascades and Coast Ranges. The Mediterranean climate dry forests of the Klamath Province in northern California are not the same as the mesic forests of western Oregon and Washington. There is often a mistaken presumption (suggested by the author's reference to 500 year Coarse Woody Debris cycles) that the conditions described for those forests apply to forests of the Klamath Province as well. Key old-growth structural attributes of the Coast Range and Oregon and Washington Cascades include large live old trees, a large number of snags-of various ages, a multilayered canopy, and moderate to high accumulations of logs or coarse woody debris on the forest floor (Franklin, 1981). The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006). In a fire regime dominated by low to moderate severity effects, tree mortality with wildfire is by definition generally low. In the Klamath Mountains, patches of moderate to high severity fire, when they did occur historically, were more likely on upper slope positions and on south and west-facing aspects (Skinner et al. 2006). Patches of high severity would produce a pulse of snags and then eventually down logs, until those logs were consumed by subsequent fires. Because frequent low-moderate severity fires consume wood, it is unlikely that coarse woody debris accumulated to levels seen in more mesic old-growth Douglas fir forests of Oregon and Washington (Taylor and Skinner 1997). In the Klamath Mountains snags and logs were likely clustered in time and space, with long intervals and large areas where dead wood was sparse (Skinner 2002). Because of fire frequency in the Klamath Province it is unlikely that dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels.

Code	Comment Number	Comment Text	Response
240.23 - CWD	#5873-70	The agency cannot take a hard look at the issues of snag habitat and complex young forests without considering the dynamics of snags and dead wood. Spies et al. (1988) reported that amounts of CWD were high in the youngest successional stages, were lowest in 60-80-year-old forests, and were high in old stands (< 500 years). After 500 years CWD amounts declined to an intermediate level. Spies and Franklin (1988) reported that CWD input may be low in young stands because of the small size of dead and dying stems. Volumes in these stands are often high, however, due to residual CWD from the previous stand. Lofroth, Eric. 1998. The dead wood cycle. In: Conservation biology principles for forested landscapes. Edited by J. Voller and S. Harrison. UBC Press, Vancouver, B.C. pp. 185-214. 243 p. http://www.for.gov.bc.ca/hre/deadwood/DTrol.htm.	To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (Tables 3-1, 3-2, 3-3) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metrics were developed from studies of late successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape, would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed trees and snags is likely to create fuel loading that would actually increase the probability of future high-severity fire that would consume snags and down wood (Skinner et al. 2006; Figure 7 of Appendix E; Fuels section of this Chapter of the final EIS). Because of fire frequency in the Klamath Province, it is highly unlikely that any dead wood could persist for 80 to 100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by:• Retaining large “legacy” green trees wherever they occur. By virtue of their location and/or inherent resistance to fire, large green trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian Reserves. This has the effect of retaining the larger trees, on average, on the landscape in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity-fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7 of Appendix E). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels are treated. This reduces the small surface fuels that readily ignite and carry fire but is unlikely to harm most of the larger snags because they will not yet have developed the surface that is receptive to embers.Peterson et al. (2015) observed that: “…post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels and restoring low and mixed severity fire regimes in dry coniferous forests of western North America and other fire-prone forest types.”Leaving all of the dead wood created by the 2014 West Side Fires is:• in excess of amounts typically found in the Klamath Province (see response to issue 1 above); • in excess of amounts required in the Forest Plan; and• likely to create unacceptable fuel loads in the future. The Westside Fire Recovery project has a higher probability of retaining large structures until the next stand is capable of producing them than does taking no action (Alternative 1) because salvage of fire-killed trees reduces the severity of future fires that would likely kill surviving green trees and consume snags and down wood present on the landscape (Fuels and Vegetation sections of this Chapter of the final EIS; Appendix E)See response 5873-72, EIS Chapter 3, Responsible Opposing Views and Agency’s Responses to Issues Raised and Appendix E.See Also:Knapp, E. J. 2015. Long-term dead wood changes in a Sierra Nevada mixed conifer forest: Habitat and fire hazard implications. Forest Ecology and Management 339 (2015) 87–95Ritchie M.W. , E. E. Knapp, C. N. Skinner.2012. Snag longevity and surface fuel accumulation following post-fire logging in a ponderosa pine dominated forest. Forest Ecology and Management 287 (2013) 113–122Peterson , D. W., E. K. Dodson and R. J. Harrod. 2003. Post-fire logging reduces surface woody fuels up to four decades following wildfire Erich K. Forest Ecology and Management 338 (2015) 84–91Skinner, C. N. 2002. Influence of fire on the dynamics of dead woody material in forests of California and Southwestern Oregon. Pages 445-454 in Symposium on the ecology and management of dead wood in western forests, November 2-4, 1999, Reno, Nevada.Skinner, C. N., A. H. Taylor, and J. K. Agee. 2006. Klamath Mountains bioregion. Pages 170-194 in N. G. Sugihara, J. W. van Wagtendonk, K. E. Shaffer, J. Fites-Kaufman, and A. E. Thode, editors. Fire in California's Ecosystems. University of California Press, Berkeley and Los Angeles, CA.Taylor, A. H., and C. N. Skinner. 1997. Fire regimes and management of old-growth Douglas fir forests in the Klamath Mountains of Northwestern California. Pages 203-208 in Fire Effects on Threatened and Endangered Species and Habitats. International Association of Wildland Fire,

Code	Comment Number	Comment Text	Response
			Fairfield, WA, Coeur d'Alene, ID.Taylor, A. H., and C. N. Skinner. 1998. Fire history and landscape dynamics in a late-successional reserve, Klamath Mountains, California, USA. Forest Ecology and Management 111:285-301.""
240.24 - LWD	#12346-15	On page 23 of the ACSOR the Forest Service mistakenly contends that the project will have "no effect" on large wood recruitment to streams because some (fish bearing) streams will receive a two tree length buffer and some (non fish-bearing) streams will receive a one tree length buffer. In fact, as acknowledged on page 34 of the DEIS, the Forest Service anticipates that hazard trees will be removed more than 250' feet above some road locations due to "slope" considerations. The agency may not simultaneous claim that large wood may travel more than 250' down slopes to reach a road, but that it can only travel one tree length to reach a stream. The aquatic ecosystems of both fishbearing and non-fish bearing streams benefit from large wood recruitment of the kind that the Forest Service claims happens to roads located more than 250' downhill of hazard trees.	Project design features that address this concern have been modified to require retention of large wood near all streams. There is no harvest planned in hydrologic Riparian Reserves except where roadside hazard units intersect Riparian Reserves. The only reason material would be removed from a hydrologic Riparian Reserves is to facilitate safe and reasonable management of the transportation system and/or to reduce fuels adjacent to the road. Within 25 feet of all streams and springs all trees, regardless of size, would be retained. Between 25 feet and one tree length of all streams, only hazardous trees between 14 and 26 inches in diameter can be removed. Any tree deemed a hazard to the road that is above 26 inches in diameter would be felled and left on-site. Below roads, hazard trees that could reach the stream if felled that direction would be retained. See Project Design Features for watershed in Chapter 2.

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240.24 - LWD	#17111-11	In summary, general salvage of large snags and logs is clearl y antithetical to the goal of rapid recovery of fully functional late-successional forest habitat and inappropriate within the Late-Succesional Reserves. If large fuels are viewed as a critical fire control issue, then this could be dealt with by creating appropriate Fuel Management Zones or snag-free corridors.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Only a small fraction of the project area is proposed for salvage harvest. Within these units, general snag retention and the retention of large snags and other legacy components is proposed. See Chapter 2 under project design features of the final EIS for details. See response to comment number 18918-22.See response to comment number 17111-11.See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
240.24 - LWD	#18852-6	Secondly, the project plan does not fully disclose the key attributes and benefits of large woody debris in our ecosystem as standing snags, downed wood for slope stabilization, or as an key attribute within our tributaries and riverine environments (though it is mentioned).	The Forest concurs that downed wood is a key attribute to stream and riverine environments. This is why no salvage harvest is proposed within hydrologic Riparian Reserves for any project action Alternative. In addition, Project Design Features establish that hazard trees >26" diameter at breast height within the first site-tree distance of all streams (fish-bearing, perennial nonfish-bearing, and intermittent) will be retained on-site to provide for riparian zone and aquatic function and habitat.
240.24 - LWD	#5873-135	This LSR is already severely over-harvested and therefore likely to be severely deficient in large woody debris across the landscape. This disturbance event is a welcome site of LWD build-up that helps to balance out the overall shortage in the analysis area. The NEPA document did not disclose this cumulative/landscape perspective.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The commenter provides no evidence to support the contention that the Late-Successional Reserve was over-harvested, and as a result is severely deficient in coarse woody debris. The Klamath National Forest Late-Successional Reserve Assessment does not support the assertion that the area is severely over-harvested or that the Late-Successional Reserve is severely deficient in large woody debris across the landscape. The National Environmental Policy Act document did not provide this perspective because the Forest Service does not believe the Late Successional Reserves are severely deficient in large woody debris. If anything, the opposite is true because of a century of fire suppression. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve."

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240.24 - LWD	#5873-146	Salvage logging in LSRs must retain typical amounts of large woody debris. Retaining large woody debris is especially important in LSRs because many spotted owl prey species are associated with down wood including flying squirrels, red-backed voles, bushy-tailed woodrat, dusky-footed woodrat, Douglas' squirrel, Townsend's chipmunk. Carey, Andrew B. November 1991. The biology of arboreal rodents in Douglas-fir forests. PNW-GTR-276. Portland, OR. in Huff, Mark H.; Holthausen, Richard S.; Aubry, Keith B., tech. coords.; Biology and management of old-growth forests. http://web.archive.org/web/20030406073837/http://www.fs.fed.us/pnw/pubs/gtr276.pdf. Sztukowski and Courtney. SEI. 2004. Appendix 4: Summary of Prey Biology. in Courtney, Blakesly, et al. 2004. Scientific Evaluation of the Status of the Northern Spotted Owl. http://www.sei.org/owl/finalreport/Appendices.pdf. The Northwest Forest Plan ROD provides Standards & Guidelines for salvage logging in LSRs that include: "Province-level plans will establish appropriate levels of coarse woody debris and decay rates to be used. Levels will be 'typical' and will not require retention of all material where it is highly concentrated, or too small to contribute to coarse woody debris over the long timeframes discussed." Pp C-14 – C-15. The agencies too often provides only minimal amounts of large woody debris in salvage sales and the agencies fail to consider the fact that abundant large woody debris is "typical" after fire and retaining all large wood is necessary to sustain LWD levels over time. "Legacies of snags, logs, and other woody debris are typically very large following an intense natural disturbance …" Dr. Jerry F. Franklin, Professor of Ecosystem Studies, College of Forest Resources, University of Washington, July 15, 2004. TESTIMONY FOR THE RECORD ON OVERSIGHT HEARING ON "RESTORING FORESTS AFTER CATASTROPHIC EVENTS" BY HOUSE COMMITTEE ON RESOURCES, SUBCOMMITTEE ON FOREST AND FOREST HEALTH. (emphasis added). According to Jerry Franklin, after a fire there is no ecological excess of large wood and that if you remove some you are taxing the ecological recovery processes. There is a price to pay and LSRs not the place for that.	We agree that retention of large structures is beneficial for northern spotted owls and many other species as described in the provided literature citations, and that any material over time would serve an ecological function for the simple reason that there is no "excess" in nature. We also agree that we should strive to maintain large structures that would persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. Province level plans were never developed to provide additional guidance for retention of coarse woody debris and decay rates. In the absence of other guidance, to determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (3-1, 3-2, 3-3) also provides metrics for snags and coarse woody debris that closely match the values in the Forest Plan. These values were developed from studies of late successional and old-growth forests. The commenter fails to provide evidence that these amounts are not adequate on the Klamath National Forest. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large "legacy" trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels within units are burned. This reduces the small surface fuels that readily ignite and carry fire.Appendix E, Figure 12 shows that of the 29,600 acres of trees greater than 24 inches in diameter in the Late Successional Reserves, in all burn severities, 1,750 acres (6% of the size class) would be removed by the Westside Fire Recovery project in salvage harvest units. An estimated additional 240 acres of trees greater than 24 inches in diameter would be removed in roadside hazard cleanup (Table 3) in moderate – high severity burn areas. With salvage units and roadside hazard combined, approximately 2,000 acres of trees greater than 24 inches in diameter would be removed within the Eddy Gulch and Seiad Late Successional Reserves from moderate – high severity burn areas. Of trees greater than 24 inches in diameter, this represents about 23 percent of the 8,650 acres moderate - high severity burn acres and about 7% of the large tree diameter class in all burn severities in the Late Successional Reserves. Of the trees greater than 24 inches in diameter that are in moderate to high severity burn patches, 77 percent would be retained. Overall, over 90 percent of the trees greater than 24 inches in the Seiad and Eddy Gulch Late Successional Reserves would be retained.

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240.24 - LWD	#5873-61	Briefly meeting management plan snag targets is grossly inadequate. Historically, a mosaic of recent and not-so-recent fires, left lots of "snag patches" and patchy accumulations of down wood of various sizes and decay-stages. These snag patches provided tremendous habitat value for a whole host of wildlife species, include birds, mammals, amphibians, insects. 96 species are known to be associated with snags and 86 species are associated with down wood. Most of these species depend upon or prefer large snags and wood. With aggressive salvage policies that continue to this day, these snag patches are an under-represented feature on the landscape. The agency's snag retention guidelines are based on wildlife needs, but fail to consider or analyze the need to large snags and large down logs for shade, water storage, disturbance (via falling and sliding), nutrient storage, channel forming, sediment trapping, soil conservation, underground processes, etc.	See Chapter 1 of the EIS for a discussion of salvage harvest in Late Successional Reserves. The project is retaining snags at a level that meets or exceeds the Forest Plan standards and guidelines for snag retention and Late-Successional Reserve and consistent with the northern spotted owl recovery plan. See the wildlife section of Chapter 3 of the EIS and the submittal to the regional ecosystem office by the Forest Service for details. Much of the project is not being salvage harvested and there is no timber salvage proposed for hydrologic Riparian Reserves. Snags are also being retained within snag retention areas within and adjacent to treatment units. See Chapter 2 of the EIS for applicable project design features under wildlife. In response to Endangered Species Act consultation with the U.S. Fish and Wildlife Service and other consultation and public comments, the preferred Alternative is the modified Alternative 3; see Chapter 2 for a description of proposed treatments and additional snag retention incorporated into this Alternative. The agency recognizes the importance of snag retention for the benefit of wildlife species and other resource components and functions. Shade is considered in the hydrology report and aquatic resources (hydrology) section of the EIS, and potential stream channel shade produced by burned trees was considered. Additionally, the 2014 wildfires did not burn with high severity significantly along project area streams with only up to 3% of perennial stream miles burned at high severity in the Whites Fire Area (Table 15 of the hydrology report) and the Happy Camp Complex and Beaver Fire areas having < 3% of perennial stream miles burned high severity. These fire effects mean that stream shading in the project area has largely been maintained post-fire. Effects of the proposal on terrestrial and aquatic resources is disclosed in Chapter 3 of the EIS and supporting documents. In the soils report, the surface organic matter indicator analyzes the impacts of removing coarse wood and is met when sufficient organic matter is available for long term soil productivity. Coarse wood can improve soil productivity by increasing soil moisture, soil nutrients, soil micro and macroorganisms and organic matter. In addition, coarse wood can increase the survival of vegetation which in addition to coarse wood, provides soil cover thereby increasing soil stability and conserving soil organic matter. See response to comment number 5873-72 about in response to concerns about the concern about snag retention not being adequate.
240.24 - LWD	#5873-64	In Congressional testimony in July 2004, Jerry Franklin said: It is sometimes argued that following a stand-replacement fire in an old-growth forest that snags and logs are present in "excess" of the needs of the site, in terms of ecosystem recovery. In fact, the large pulse of dead wood created by the disturbance is the only significant input of woody debris that the site is going to get for the next 50 to 150 years—the ecosystem has to "live" off of this woody debris until the forest matures to the point where it has again produced the large trees that can become the source for new snags and logs (Maser et al. 1988). Dr. Jerry F. Franklin, Professor of Ecosystem Studies, College of Forest Resources, University of Washington. July 15, 2004. TESTIMONY FOR THE RECORD ON OVERSIGHT HEARING ON "RESTORING FORESTS AFTER CATASTROPHIC EVENTS" BY HOUSE COMMITTEE ON RESOURCES, SUBCOMMITTEE ON FOREST AND FOREST HEALTH. http://www.signaloflove.org/clearcutting/reports/fire3/Franklin%20Jerry%20July%202004%20testimony.pdf. Similarly, Johnson & Franklin's 2008 Forest Plan for the Klamath Tribes says of large fires — Such fires do generate a large pulse of dying, dead and down material. After a stand-replacement fire, that pulse of large wood is all of the large wood that the recovering ecosystem is going to get for the next century or more—i.e., until trees of large size are once again a part of the stand. Some of this dead wood legacy will persist and fulfill important functional roles in the recovering forest for many decades and, in the case of the largest and most decay resistant material, even for a century or more.	This comment accurately reflects Dr. Franklin's testimony, however Dr. Franklin's comments are not necessarily applicable to the circumstances of the Westside Fire Recovery Project. We agree that retention of large structures is beneficial for northern spotted owls and many other species, and that any material over time would serve an ecological function for the simple reason that there is no "excess" in nature. We also agree that we should strive to maintain large structures that could persist until the next stand is capable of producing large material. That is a requirement of the Forest Plan (4-87; MA 5-30). Retention however, of all of the dead wood now present on the landscape would create an undesirable risk of future high severity fire that is not consistent with the historical fire regime of the Klamath Province, the objectives of the Forest Plan or development of desired late successional stand conditions in the current Late-Successional Reserve land allocation (EIS Chapter 3 – Fuels). We do not agree that all fire killed trees, or all large fire killed trees must be retained. This comment appears to equate the snag and down wood trajectories of the fire regime of the Klamath Province with that of more mesic areas of the Northwest Forest Plan. That is not correct (See Background, EIS Chapter 1; Appendix E). The fire regime of old-growth Douglas fir dominated forests of the Klamath Mountains differs from more mesic old-growth Douglas fir forests of Oregon and Washington (described in Franklin et al. (1981)) in fire frequency, fire severity, and structural attributes such as amount and persistence of snags and coarse woody debris (Taylor and Skinner 1997). The characteristic fire regime of the Klamath Mountains is actually one of frequent low to moderate intensity fire with low to moderate severity effects (Skinner et al. 2006), not "stand-replacement or mixed" that is typical in the Coast Range and western Oregon and Washington Cascades. With frequent fire, surface fuels are maintained at low levels – too low for intensity sufficient to produce much stand-replacement fire, except under unusual circumstances. Also, as noted by Taylor and Skinner (1997) and Skinner (2002), dead wood in the Klamath province rarely lasted long enough, even in a low to moderate fire severity environment, to actually decompose because snags and down logs are receptive to embers, and once partially rotted, are easily consumed by fire. In a fire regime dominated by low to moderate severity effects, tree mortality with wildfire is by definition generally low. In the Klamath Mountains, patches of moderate to high severity fire, when they did occur historically, were more likely on upper slope positions and on south and west-facing aspects (Skinner et al. 2006). Patches of high severity would produce a pulse of snags and then eventually down logs, until those logs were consumed by subsequent fires. Because frequent low-moderate severity fires consume wood, it is unlikely that coarse woody debris accumulated to levels seen in more mesic old-growth Douglas fir forests of Oregon and Washington (Taylor and Skinner 1997). In the Klamath Mountains snags and logs were likely clustered in time and space, with long intervals and large areas where dead wood was sparse (Skinner 2002). To determine how much dead wood should be retained on the landscape, we use the Guidelines provided by the Forest Plan for snags (4-30, Table 4-4) and coarse woody debris (4-23). The Late-Successional Reserve Assessment (Tables 3-1, 3-2, 3-3) also provided metrics for snags and coarse woody debris that closely match the metrics in the Forest Plan. These metrics were developed from studies of late

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			successional and old-growth forests. Since the Forest Plan was developed in 1995, new research has shown that even the amounts of snags and coarse wood debris noted in the Forest Plan may be excessive for the Klamath Province when compared to historical norms. Skinner et al. (2006) observed that: "Quantities of large woody material for standards and guidelines were developed from contemporary old-growth forests that had experienced many decades of fire suppression. These quantities of woody material were probably unusually high compared to typical pre- fire suppression values. Consequently, a management emphasis on meeting or exceeding standards and guidelines for dead woody material has and will increase fire hazard over time and threatens the very habitat the standards and guidelines were designed to improve." - Skinner et al. (2006).This suggests that even the levels of snag and coarse woody debris retention described in the Forest Plan, which are far lower than the post-fire conditions of current landscape would increase the risk of future stand replacement fire above historical levels. As previously noted, retaining all of the fire-killed snags, is likely to create fuel loading that would actually increase the probability of future high severity fire that would consume snags and down wood (Skinner et al. 2006; Appendix E Figure 7; EIS Chapter 3 - fuels). Because of fire frequency in the Klamath Province it is highly unlikely that any dead wood could persist for 80-100 years until the next stand is capable of producing large wood (Taylor and Skinner 2007; Skinner 2002) without effective reduction of surface fuels. The Westside Fire Recovery Project seeks to meet the objective of retaining large material until the next stand is capable of producing such material by• Retaining large “legacy” trees wherever they occur. By virtue of their location and / or inherent resistance to fire, these trees are most likely to persist until the next stand can develop large structures.• Retaining snags in Riparian areas. This has the effect of retaining the larger trees, on average on the landscape, in locations that historically burned with less intensity. Large snags are more likely to persist than small snags. • Designating additional snag retention areas in association with Riparian Reserves (see map packet) or in pockets of larger trees. Emphasis for additional snag retention areas was placed on lower slopes that historically have burned with lower intensity.• Reducing fuels around Riparian Reserves and snag retention areas by salvage harvest and follow-up activity fuel treatment. By reducing surface fuels, the risk of future high severity fire affecting remaining snags and down wood is reduced (Figure 7). • Treating small fuels in Riparian Reserves by broadcast burning at the time that activity fuels within units are burned. This reduces the small surface fuels that readily ignite and carry fire.Peterson et al. (2015) observed that:“post-fire logging can serve as an effective tool for managing fuel loadings in forests regenerating after high severity wildfires. By strategically applying and varying post-fire logging treatments within landscapes, post-fire logging could reduce woody fuels and help reduce threats to human health, property, and ecosystem services from unacceptable future wildfire behavior and effects. If applied using best management practices and with consideration for possible environmental impacts and meeting other management objectives, post-fire logging could serve as an effective option – along with mechanical thinning, prescribed fire, and managed low to mixed severity wildfires – for reducing fuels and restoring low and mixed severity fire regimes in dry coniferous forests of western North America and other fire-prone forest types.”
241 - Vegetation	#18909-19	The Joint Fire Science Program Final Report did have relevant Key Findings and Implications that were not considered, (emphasis added), in the DEIS as follows: Predicting Post-Fire Regeneration Needs: Spatial and Temporal Variation in Natural Regeneration in Northern California and Southwest Oregon. Key Findings: * On most sites, natural regeneration of conifers was abundant 10 to 20 years after high severity forest fire in the Klamath-Siskiyou region of northern California and southwest Oregon. * Natural regeneration was most limited on the drier, hotter sites (low elevation, eastern Klamath Mountains). * Natural regeneration of conifers was usually abundant up to 450m from living trees. It was difficult to find places more than 450m from living trees. * Conifers continued regenerating 10-15 years after the fire. * While most conifers were still within the shrub matrix, many were already well above the shrub layer. Even those still within the shrub canopy had reasonable height growth and good live crown ratios (average 68%) suggesting they would survive and grow above the competing vegetation. * Nine to 19 years after high severity wildfire, average conifer density varied among forest types, for example, the True Fir zone 2,454 (±529 stderr) trees/ac. (median 2,104), Douglas-fir/Tanoak zone 1038.4 (±stderr 266.3, n=18) trees/ac. (median 725.4) and lowest in the mixed conifer zone at 775.3 (±stderr 181, n=62) trees/ac (median 223.5). * Shrub cover was always dense. * Hardwood regeneration as stump sprouts was also abundant except at higher elevations. Key Implications: * Most post-fire areas in the Klamath Mountains are well stocked with successful regeneration within 10 to 20 years of a fire so planting is not required to assure a future forest. * The hottest, driest sites in the region require planting to either assure stocking or to secure a pine component to the forest. * A companion study (Masters Thesis) is showing that planting after these same fires did increase both conifer and hardwood tree size by age 20 but only by modest amounts.	The Joint Fire Science Program Final Report was considered in the Environment Consequences section of the EIS: "Successful natural regeneration in one to two decades, though highly variable, has been documented following stand-replacing fires in the Klamath Province within white fir, Douglas-fir, and Douglas-fir/tanoak stand types (Shatford, Hibbs and Puettman 2007; Joint Fire Science Program Final Report, Project 05-2-1-40 2009)"The findings of Shatford et. al. 2007 have been considered in the Vegetation Effects section of the EIS: "Although natural regeneration of conifer species has occurred elsewhere, following more typical wildfire site conditions, the project area has a higher percentage of acres burned at high intensities than more typical historic patterns, resulting in prolonged regeneration periods and variable stocking patterns on unplanted sites (Shatford et al. 2007)." The action Alternatives would remove primarily dead vegetation and may damage live trees or plants during harvest operations, but the extent of damage would be localized and long term effects to vegetation would be negligible. The range, sensitive plants, soils, watershed and wildlife sections disclose any localized effects on specific vegetation. While studies following wildfire indicate that regeneration tends to be highest in low to moderate severity patches (Lentile et al. 2005), Bonnet et al. (2005) found that seedling establishment was very successful in patches of high severity that were within 39.4 ft. (12 m) of unburned forest canopy. The ability of a forest to regenerate on its own after a stand replacing fire is highly dependent upon available seed sources. As patch sizes increase, the distance to the nearest seed source increases and seed availability drops off at an exponential rate (Bonnet et al. 2005).

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241 - Vegetation	#18909-20	The DEIS on page 112 states: "More typically, vegetation is likely to go through an extensive time-period of hardwood- and brush-dominated site occupancy (Zhang, Webster, Powers and Mills 2008). Reforestation will slowly occur naturally but may take many decades to replace brushfields (Zhang et al. 2008)." As we have seen from the Shatford et al. study, this claim is not entirely true. Further, the Zhang et al. 2008 paper looks at intensively managed industrial timberland in Sierra Nevada mixed conifer stands located in northeastern California, southeast of Mt. Shasta. Looking at Ponderosa pine industrial timber lands, that also utilized "hack and squirt" methods and used the herbicide Hexazinone for over sixteen years, is of no relevance to the claim made in the DEIS. Zhang et al. 2008 states, "If wood production is a primary goal, decisions must follow quickly and be based on regulations and management knowledge to avoid wood decay in salvageable material and site occupancy of aggressive shrub vegetation." We remind the agency that wood production is not a primary goal for Riparian Reserves e.g., unstable and potentially unstable areas or Late-Succesional Reserves, which constitute a vast majority of larger units proposed for logging in the project area. We do not disagree that hardwood and brush species grow in post fire but we do disagree with the claim that it is an extensive time period or that reforestation may take many decades. This type of language throughout the vegetation section and the DEIS, lead to false claims not supported in science, hence misleading and misinforming the public.	The draft EIS quote is accurate and is reflective of best available science Zhang et al. 2008 was referring to natural regeneration under no action, which is relevant to the no action Alternative considered in the EIS. Likewise, the no action analysis of the draft EIS states that, "Without salvage, site preparation and planting, severely burned stands will likely be replaced by shrubs and brush (Skinner, Taylor and Agee 2006); regeneration of conifers and restoration of forested wildlife habitat may take decades." No herbicide use is proposed with this project, so this part of the comment is outside the scope of this project; see Chapter 2 of the EIS for a description of proposed actions. Likewise, timber production is not the primary goal of this project; see Chapter 1 of the EIS for a description of the purpose and need of this project. The salvage harvest proposed is largely within Late-Successional Reserve and is being proposed to promote Late-Successional Reserve conditions, as described in the "salvage in Late-Successional Reserve" section of Chapter 1 of the EIS. No salvage harvest is proposed in hydrologic Riparian Reserves; see Chapter 2 of the EIS for a description of proposed actions. Salvage harvest is proposed in geologic Riparian Reserves; see the aquatic resources analysis in Chapter 3 of the EIS and the Aquatic Conservation Strategy analysis in the Appendix of the EIS for a description of how treatments are consistent with Aquatic Conservation Strategy objectives of the Forest Plan.
241 - Vegetation	#18909-23	The Vegetation Direct and Indirect Effects section of the DEIS for Alternative 2 states on page 114: "Therefore, effective fuel treatment is an essential component of sustainable reforestation in the Klamath Province (Peterson et al. 2014)." As noted above, the DEIS fails to consider the magnitude or timing of the proposed project. The DEIS analysis seems to rely on the assumption that all activity fuels treatments and other fuels reduction would take place on 100% of the project area. There is no guarantee that fuels reduction would take place, especially given that only 32% of the funding would be provided from timber sale receipts. Further, as noted in the Fire and Fuels section of the DEIS page 122, helicopter logging, nearly 50% of the project area, leaves the greatest amount of fuel loadings and activity slash can be extremely difficult to treat.	Thank you for your comments on the Westside Fire Recovery Project. Comments that state a position for or against a specific action are appreciated as it gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See response to comment number 18878-16 about project funding for implementation. Treatment of fuels and proposed harvest systems are considered in the Fire and Fuels Environmental Consequences section Chapter 3 of the EIS: "The short term effect of logging is an elevated surface fuel loading from broken tops and branch wood. The greatest fuel loadings post-harvest is expected to occur within helicopter units, followed by cable and ground based units. However, post logging activity breaks the structure and composition of the fuel bed. Upon completion of fuel reduction activities, ground based units would be expected to reduce the greatest amounts of surface fuels due to the ease of facilitating piling and other fuels reduction activities on gentler slopes. Steeper slopes (greater than 40 percent) would be anticipated to require hand piling and or broadcast burning to achieve desired surface fuel loadings of less than 10 tons/acre. Compared to ground-based and cable units, within helicopter units or those areas on steep slopes, larger diameter (greater than 3" diameter) fuels may have increased loads as these fuels can be difficult to pile by hand."
241.02 - Invasive, Noxious Plant Species	#18926-19	Non-native Invasive Plant Species! The project has a high risk potential for the introduction and spread of non-native invasive species, which are likely to persist long term. This is due to the high level of ground disturbing activities and increased vectors. There are 995 acres of known non-native invasive plant populations for 12 different species in the project area.! ! A non-native invasive plant project design feature would require removal of the top few inches soil on approximately 24 landings, resulting in major decreases to soil organic matter on landings. Cumulatively there are 8 grazing allotments that overlap treatment units and may contribute to the long-distance dispersal of infestations in the project area.! The Forest Service has a duty to reduce and eliminate noxious weeds on our public lands and the DEIS does not fully consider or analyze the long-term affects to our watersheds and native plant species. ! !	The draft EIS acknowledges the high risk of introduction and spread of noxious weeds for the project area, in all Alternatives, including no action, in the Botany and Non-native Invasive Plant section of Chapter 3. The project design feature for the use of potential landings suggesting removal of material from landings is not required, but will be evaluated at the time of use, and is not the only option for the prevention of spread. The effects of blading potential landings has been evaluated in the soils report, also in Chapter 3. The project design features incorporated into the proposed actions are intended to prevent long term effects to watersheds and native plants by reducing the risk of introduction and spread. The eight grazing allotments that overlap treatment units are considered in the cumulative effects analysis and displayed under the Environmental Consequences section within the Botany and Non-native Invasive Plant section of Chapter 3.
241.02 - Invasive, Noxious Plant Species	#5873-122	Logging and elevated road use are also primary vectors for the dispersal and establishment of noxious weeds (USFS, 1999; 2000b). Noxious weed establishment can increase erosion and sediment delivery and impede the recovery of native vegetation USFS (2000a). This is of special concern in burned landscapes because noxious weeds are well-adapted to disturbed environments.	The draft EIS acknowledges the high risk on non-native invasive plant introduction and spread in the Botany and Non-native invasive plant section in Chapter 3. Project design features identified as non-native invasive species-1 through non-native invasive species-5 in Chapter 2, Project Design Features subheading, were included to reduce this risk.

Code	Comment Number	Comment Text	Response
241.03 - Forest Health, Insect/Disease	#12354-8	March 2015 published study in PNAS shows that pine beetle infestation does not increase area burned. This is rather conclusive proof that any argument for post-fire logging is false, or worse, corrupted by unscientific USFS practices, or yet worse, corruption by relationship with logging companies. Hart, Sarah J., Tania Schoennagel, Thomas T. Veblen, and Teresa B. Chapman. "Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks." Proceedings of the National Academy of Sciences (2015): 201424037. From the Abstract: "Here, we show that the observed effect of MPB infestation on the area burned in years of extreme fire appears negligible at broad spatial extents. Contrary to the expectation of increased wildfire activity in recently infested red-stage stands, we found no difference between observed area and expected area burned in red-stage or subsequent gray-stage stands during three peak years of wildfire activity .... Although MPB infestation and fire activity both independently increased in conjunction with recent warming, our results demonstrate that the annual area burned in the western United States has not increased in direct response to bark beetle activity. Therefore, policy discussions should focus on societal adaptation to the effects of recent increases in wildfire activity related to increased drought severity." In short, the evidence is entirely against salvage logging.	The referenced "Area Burned in the Western United States is Unaffected by Recent Mountain Pine Beetle Outbreaks" (Hart et. Al 2014) presumes large mountain pine beetle outbreaks have previously occurred prior to fire. That is not the case for the analysis area evaluated in the Westside EIS. This comment is not relevant to this project. The need for salvage harvest in this project is because of wildfire and not beetle infestation.
241.03 - Forest Health, Insect/Disease	#12354-9	I have additional concerns about zoonotic disease resulting from species which may irrupt. Many play host to arthropods which could significantly increase levels of Lyme disease, and should habitat be destroyed for certain predators, some viral diseases which can pose serious dangers to hu mans are carried by rodents, which, as you know, can quickly increase without normal predation. Predators take time to reestablish themselves when heavy human interference/habitat modification occurs. Roading, destruction of interior forest and of natural forest structure, place responsibility directly upon agencies causing the above problems.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The effects of the proposed actions are described throughout Chapter 3 of the EIS.
241.03 - Forest Health, Insect/Disease	#17939-1	I mentioned the recent study showing that pine beetle infestations do not affeect total area burned; here is the correct reference - it was Proceedings of the National Academy of Sciences (PNAS): Hart, Sarah J., Tania Schoennagel, Thomas T. Veblen, and Teresa B. Chapman. "Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks." Proceedings of the National Academy of Sciences (2015): 201424037. From the Abstract: "Here, we show that the observed effect of MPB infestation on the area burned in years of extreme fire appears negligible at broad spatial extents. Contrary to the expectation of increased wildfire activity in recently infested red-stage stands, we found no difference between observed area and expected area burned in red-stage or subsequent gray-stage stands during three peak years of wildfire activity…. Although MPB infestation and fire activity both independently increased in conjunction with recent warming, our results demonstrate that the annual area burned in the western United States has not increased in direct response to bark beetle activity. Therefore, policy discussions should focus on societal adaptation to the effects of recent increases in wildfire activity related to increased drought severity."	The referenced "Area Burned in the Western United States is Unaffected by Recent Mountain Pine Beetle Outbreaks" (Hart et. Al 2014) presumes large mountain pine beetle outbreaks have previously occurred prior to fire. That is not the case for the analysis considered under the Westside EIS.

Code	Comment Number	Comment Text	Response
241.03 - Forest Health, Insect/Disease	#18909-8	We are concerned with multiple inconsistencies, reliance on unrelated studies, and that the temporal bounding used as the basis for analysis in the vegetation section of the DEIS is skewed and missing years 6-39. The DEIS at page 110 states, "Long-term temporal bounding is for an estimated 40-100 years from project implementation and is based on the maximum time for reduction of surface woody fuels following fire (Peterson, Dodson and Harrod 2014)." How is it that the KNF can choose to eliminate these important years from the vegetation assessment? The DEIS often relies on the Peterson et al. study. From Peterson et al. 2014: "Harvesting fire-killed trees may reduce future surface woody fuels and related fire hazards, but the magnitude and timing of post-fire logging effects on woody fuels have not been fully assessed." Thus, the study on which the DEIS relies itself acknowledges that the proposed actions are not fully supported by science. The DEIS fails to consider the magnitude or timing of the proposed project. The DEIS analysis seems to rely on the assumption that all activity fuels treatments and other fuels reduction would take place on 100% of the project area. However, there is no guarantee that fuels reduction would take place. Further, as noted in the Fire and Fuels section of the DEIS page 122, helicopter logging, nearly 50% of the project area, leaves the greatest amount of fuel loadings and activity slash which can be extremely difficult to treat.	As per the Vegetation section Chapter 3 of the EIS: "Both short-term and long-term effects will be considered in this analysis. Short-term temporal bounding is the time period in which treatments occur from harvest activity, site preparation, and planting; this is about one to five years because effects on regeneration will begin to be visible during this time period. Long-term temporal bounding is for an estimated 40-100 years from project implementation and is based on the maximum time for reduction of surface woody fuels following fire (Peterson, Dodson and Harrod 2014) and computer-generated modeling that showed stand conditions approaching the desired late-successional characteristics." The effects analysis is based upon the fuels treatments proposed by Alternative. See Chapter 3 of the EIS and the fuels report for methodologies and assumptions.
241.03 - Forest Health, Insect/Disease	#19058-1	These organizations need to understand how their efforts will destroy what they think they are trying to save. Please. They need to be educated on the diseases that these burned timber will get if not removed. The sad part is not only will this timber go to waste but the disease that infest the burned timber will quickly spread to what is left of healthy timber.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge that dead trees not removed will result in an increase of insect and disease. The effects of the proposed actions are described throughout Chapter 3 of the EIS, especially the vegetation section, for a discussion of vegetation and insects and disease.
241.03 - Forest Health, Insect/Disease	#19079-6	Where in the DEIS does it count the bugs? What categories, which stands of timber, be it green, half burnt or hot burned is it documented the detection or the evidence where the bugs are? I believe the bugs are one reason for the call for an emergency fast tract DEIS reporting which leaves the public with less time to appropriately respond to DEIS document. What are the man hours required and expended for gathering this data? What are the results of this research?	"A substantial portion of the trees within moderate severity areas have either been killed by fire or are expected to experience high mortality due to fire injury, insects, and the effects of prolonged drought. Continued overall low levels of rainfall and particularly low snowfall amounts this winter are not alleviating drought conditions in northern California...dry conditions will further decrease the survivability of fire damaged trees, even in areas that burned in lower severity" (p. 4-5 of the draft EIS). The project is consistent with National Environmental Policy Act regulations for site-specific analysis of the effects of the proposed action; there is no requirement or expectation for the agency to conduct research analysis for National Environmental Policy Act compliance.
242.01 - Timber Receipts/ Revenue	#18878-43	DEIS: While modeling predicts an expected increase in surface fuels less than 3 inches diameter at breast height as compared to the alternative 1, after implementation of proposed 11 of22 activities, modeling results predict that within ten years alternative 2 will continue to promote low accumulations of surface fuel loadings would be reduced. (Pg.124) Comment: The projected shortfall in post salvage treatment from timber receipts analysis should have been conducted to determine surface fuel loading and revegetation in those scenarios. Once again Klamath National Forest should have been upfront with their plan where timber receipts do not fully cover fuel treatments to reduce surface fuel loading and other necessary follow-up activities. The economics should have been analyzed throughout the DEIS in terms of impacts to the project and the landscape. The above statement seems to contradict what is stated in the Fire Behavior Synopsis (Pg. 125) "When compared to alternative 1, proposed treatments in alternative 2 effectively reduce fuel loading in the short and long term which in turn reduces fire behavior."	Site preparation and planting are planned actions after salvage harvest; see Chapter 2 of the EIS for a description of proposed actions. Receipts from the timber sale are not expected to fully cover expenses for these actions. However, appropriated funding and other funding sources are expected to help cover costs associated with this project. See response to comment number 18878-16 about project funding for implementation. Since proposed follow up fuels treatments would occur post-salvage harvest, there would be less fuel loading in proposed units compared to Alternative 1. Not doing follow-up fuels treatments is not being proposed, and therefore, not analyzed. Proposed salvage logging will increase surface fuel loading in the short-term until planned fuel treatment activities occur. When proposed fuels treatments occur, a reduction in fuel loading in the short term and long term will reduce fire behavior when compared to Alternative 1. For further information, see Vegetation report and Social Economics report in the EIS.

Code	Comment Number	Comment Text	Response
242.01 - Timber Receipts/ Revenue	#18934-13	Timber Volume The lack of any data related to projected or estimate timber volumes from the project as well as individual units makes it impossible to determine the actual scale of timber removal in any given area. Without reasonably accurate timber volume and market value estimates, it is impossible to judge whether economic justifications for an Emergency Situation Determination (ESD) are valid. There are no documents available to the public that address the economic components of the Forest's request for an ESD, making public assessment of this issue impossible. Additionally the scope and scale of this project calls into question whether the Forest has the resources on hand to be able to pull off this project if implemented. The strain on the forest staff and the effect on other important project work has been noticed across all departments just for the creation of the Scoping Document and DEIS for this project. What elements will be left out due to lack of funds, or resources? How effective can those in charge of making sure that the treatments outlined in the final EIS are implemented as they are planned. Even with the much smaller Salmon Salvage project we found many inconsistencies from design to implementation and were told that there simply weren't the resources available to regulate the contractors who were implementing the project. How will the KNF assure that the project is implemented as designed?	The estimated volume to be removed for this project is stated in Chapter 3 of the EIS under the Vegetation section and the estimated value of timber to be removed is stated in Chapter 3 of the EIS under the Social and Economic Environment. Project design features to address project objectives , to minimize resource impacts, and to ensure compliance with the Forest Plan and applicable laws and regulations can be found in Chapter 2 of the EIS, section Project Design Features. See response to comment number 18878-43 about implementation funding. The Forest Service has timber contracting representatives to ensure that implementation of the project meets what is proposed during National Environmental Policy Act. Also see the monitoring section in Chapter 2.
242.02 - Timber volume/output	#18934-13	Timber Volume The lack of any data related to projected or estimate timber volumes from the project as well as individual units makes it impossible to determine the actual scale of timber removal in any given area. Without reasonably accurate timber volume and market value estimates, it is impossible to judge whether economic justifications for an Emergency Situation Determination (ESD) are valid. There are no documents available to the public that address the economic components of the Forest's request for an ESD, making public assessment of this issue impossible. Additionally the scope and scale of this project calls into question whether the Forest has the resources on hand to be able to pull off this project if implemented. The strain on the forest staff and the effect on other important project work has been noticed across all departments just for the creation of the Scoping Document and DEIS for this project. What elements will be left out due to lack of funds, or resources? How effective can those in charge of making sure that the treatments outlined in the final EIS are implemented as they are planned. Even with the much smaller Salmon Salvage project we found many inconsistencies from design to implementation and were told that there simply weren't the resources available to regulate the contractors who were implementing the project. How will the KNF assure that the project is implemented as designed?	See response number 18934-13.The project and the emergency situation determination approval are compliant with the regulations at 36 CFR 218.21. The emergency situation determination proposal and approval are in the project record and available on the project's webpage. Staffing and the Salmon Salvage project are outside the scope of this analysis. The Forest Service conducts effectiveness monitoring of Best Management Practices and has contracting officers who ensure implementation meets requirements, as proposed. Projected estimated timber volumes for action Alternatives are provided as a basis for the economic analysis in the social and economic section of Chapter 3 of the draft and final EIS and in the referenced economic resource report. The Record of Decision will include a commitment to implementation of the project as designed, and implementation of the project will be monitored.
242.02 - Timber volume/output	#19-5	To meet your stated objectives, it will be important to complete your NEPA analysis as quickly as possible to allow for salvage logging to take place in the 2015 operating season. There will likely be only five months that operations cab feasibly take place on this project, (July 2015-November 2015). This means that each one month delay in starting timber operations will reduce the amount of work that can be accomplished on this project by 20%!	See response number 28-3
242.03 - Timber Implementation/Contracting	#12368-2	To delay this action will mean that all the salvage logs will become useless to potential bidders.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment aligns with the purpose and need of the project; the agency is consulting with regulatory agencies in order to expedite the timeline to the extent possible.

Code	Comment Number	Comment Text	Response
242.03 - Timber Implementation/Contracting	#1-3	I would like to encourage the Forest Service to be aggressive as possible in the sale of timber within this project. Projects of this natural are essential to health and well being not only of our public forest but also the social and economic health of our rural communities. I would also like to encourage the Forest Service to make the work in this project available to as many bidders as possible. It is a fact that, the smaller the sale and the bigger the wood the higher the value returned to the Forest Service and public. The smaller the sale the more people that can participate. I would also like to encourage the Forest Service to move as fast as possible on any fire salvage so that value of the timber can be retained. Selling only smaller diameter trees is discriminatory against small local mills that need large diameter logs to create special products. Having only large sales is discriminatory against small producers that cannot afford the expensive of larger sales. I believe these types of projects to be an important part of or the Forest Services responsibilities to our local communities. I look forward to the opportunity to bid on these sales as they become available.	See response number 28-3. Your comment has been acknowledged; however, the specifics of contracting for implementation are outside the scope of this project. See response to comment number 18878-43 about implementation funding.
242.03 - Timber Implementation/Contracting	#13-5	If you decide to include any traditional logging by ground based, cable or helicopter logging systems please include full logging slash reduction IN THE TIMBER SALE CONTRACT because otherwise most of it will not get done and you will be creating increased future fire risks to firefighters, watersheds, forest residents (human and non-human) and the forest itself. Even collecting "brush disposal" funds does not deal with the logging slash because over time "administrative overhead" consumes most of these funds.	How contracts or their specifications are written or packaged for this project is outside the scope of this analysis. See response to comment number 18878-43 about implementation funding. Following salvage harvest of dead trees Site Preparation treatments will occur to reduce fuel loadings. Site preparation treatment descriptions can be found in Chapter 2 of the EIS in the Site Preparation section.
242.03 - Timber Implementation/Contracting	#17509-2	Murphy Company would like to see all salvage timber sales be economically viable. We hope that the most appropriate harvesting systems are prescribed to help achieve an economically viable sale. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential bidders, thus driving the bid value down. Including language in the EIS that specifies damage tolerance levels rather than firm restrictions gives the operator flexibility to utilize their equipment to its maximum efficiencies. For example, quantifying a residual stand damage threshold rather than entirely restricting activity during certain months (or restricting log lengths) will allow an operator the flexibility to alter their yarding techniques to meet the threshold throughout the seasons instead of having to completely shut down during certain months.	See response number 28-3
242.03 - Timber Implementation/Contracting	#18852-26	8) Marking guidelines; USFS "Full mark" vs. "Designation by description" is not clearly stated in this report. Allowing contractors to select trees for harvesting appears to allow for a definite conflict of interest between private profit incentives and resource values. This would also be indicative of the inability of USFS personnel to site specifically determine tree selection and retention, due to the large areas and difficult terrain involved in the project.	Designation by description and "Full Mark" are implementation techniques and are not a part of this environmental analysis. The guidelines in Report #RO-11-01 "Marking Guidelines for Fire-Injured Trees in California" (Smith & Cluck, 2011) are stated in Chapter 2 of the EIS under Alternative 2, Salvage Harvest description describe which trees are considered for harvest.
242.03 - Timber Implementation/Contracting	#19-6	- Limit or work to eliminate any limited operating period. Any delay to operations will have a direct effect on merchantability/value of the material to be removed.	The proposed actions are required to meet law, regulation, and policy. We appreciate your concerns with limited operating periods. We have been consulting with Fish and Wildlife Service per Endangered Species Act requirements in order to minimize the application of LOPs to the extent possible, while retaining essential protection of species. For those LOPs in place, surveys are currently being conducted and LOPs can be lifted if surveys determine no reproduction of those species for the year of action.

Code	Comment Number	Comment Text	Response
242.03 - Timber Implementation/Contracting	#4-5	Salvage o Longer term contracts – to salvage timber that dies after sale is marked o Adjust DBH and top size of timber as wood quality deteriorates – industry indicates that sales would be more attractive o Y.U.M. and treat units for fuel reduction	The agency recognizes that timber decays, as is described in Chapter 1 and 3 of the EIS. Following salvage harvest of dead trees, site preparation treatments are proposed to reduce fuel loadings. Site preparation treatment descriptions can be found in Chapter 2 of the EIS in the Site Preparation section. Contracting is outside the scope of this analysis.
244 - Domestic Livestock	#17481-16	Some of the grazing allotments were hit hard by the fires and could use some replanting of native forage species. Restore grazing meadows.	The Range Specialist Report states "The most intense burning occurred where dense closed canopy forest dominated the landscape... Direct effects of the burn on meadows were minimal. Most meadows were either unburned or lightly burned in some areas. In general, the fire did not produce serious mortality on primary rangeland to the point of altering existing conditions." While there are some areas within the allotments that could benefit from seeding of native forage species, it does not meet the purpose and need for this project. Many meadows that experienced a light-moderate burn will regenerate on their own.
244 - Domestic Livestock	#17481-23	Table of Alternatives: "No impact on forage" needs to be altered.	The "no impact on forage" has been changed to "no additional increase of forage" in the effects for Rangeland Resources.
244 - Domestic Livestock	#17481-34	o Livestock grazing as a fuel reduction and meadow retention tool	Livestock will continue to graze areas within allotment boundaries and will continue to provide these benefits.
244 - Domestic Livestock	#17481-43	How many range improvement were lost? Can they be included in recovery?	No range improvements were lost during the fire. Range-1 project design feature will require that any improvements damaged by project logging or fuels operations will be repaired or replaced.
244 - Domestic Livestock	#17481-48	Address moving animals mechanically due to access.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. However, the movement of cattle is outside the scope of the project. Cattle allotments are managed under existing permits and annual operating procedures are adjusted annually as needed to project rangeland conditions.

Code	Comment Number	Comment Text	Response
244 - Domestic Livestock	#17481-51	DEIS P. 69 states for Alternative 1: "There would be no effect on the availability of forage and a neutral effect on rangeland condition." Comment: This cannot be an accurate statement, given the long-term effects that future severe fires will likely have on the soil and vegetation. DEIS p. 80 - Project Design Features. Comment: Have ranchers been consulted regarding range improvements potentially lost in the fires? If structures have been lost, a discussion of funding and carrying out their replacement in a timely fashion is in order. DEIS p. 178 and p. 183 states regarding invasive species: "There are 8 grazing allotments that overlap treatment units and may contribute to the long-distance dispersal of NNIS infestations in the project area... The added cumulative effects of grazing to Alternative 1 would likely increase the risk of NNIS introduction and spread. Comment 1: Extensive research has been done showing grazing can be used as a tool to control invasive species in various ecosystems. This DEIS ignores that fact. Grazing can be used to control invasive weeds (Olson and Lacey 1994, Walker et al.1994, Launchbaugh, K. 2007). Other research suggests that livestock grazing helps prevent invasion by non-native grasses, which threaten plant biodiversity on the land. Grazing can be used to control brush, which also benefits wildlife, helping more grass to take root and decreasing the spread of weeds such as cheatgrass, a highly flammable invasive weed. A study in the Journal of Rangeland Management concluded that "from an ecological standpoint we can argue that if we remove the grazing infrastructure from public rangelands, we would see some adverse consequences. We'd see less variety and too much ground cover, for example, as well as more cheatgrass and the potential for more range fires." Comment 2: Also, grazing is an effective tool in restoring burned areas. Evidence of such successes is seen in some of the literature. A fire science brief from 2011 indicated that a study of successful seeding treatments found that 83 percent had used non-native species (i.e., grasses and cereal grains) (Evaluating the Effects and Effectiveness of Postfire Seeding Treatments in Western Forests Joint fire science programs. Fire Science brief. Fire Science Brief Issue 147 December 2011 Page 1 www.firescience.gov) Comment 3: Reseeding with an appropriate mixture should be accomplished to reduce the probability of noxious weed invasion. Non-native grasses sometimes have the best chance of establishing themselves (in lieu of invasives). Additionally, native seedings can be much more expensive with much lower success rates. DEIS p. 187 states, "The method used to determine effects on rangeland resources included a qualitative comparison of each alternative's likelihood of affecting the amount of forage available for livestock use and rangeland condition. Existing rangeland conditions were determined through field visits, monitoring data, and historical records for each allotment. Comment: The DEIS should address grazing's effect on vegetation (preventing brush, aiding in recovery), not just alternatives' effect on forage for grazing. See research references above. DEIS p. 188 states, "Seiad/Johnny, South Klamath, and Scott Bar Mountain will not be discussed further as they are vacant and are not expected to be restocked within the next 10 years." Comment: USFS should explore restocking options based on local producer interest. This will aid in long-term resource protection and promote the purposes of this DEIS.	The "no impact on forage" has been changed to "no additional increase of forage" in the effects for Rangeland Resources. Fires, such as this one generally burned with low severity on primary rangelands. The Range Specialist Report states "The most intense burning occurred where dense closed canopy forest dominated the landscape... Direct effects of the burn on meadows were minimal. Most meadows were either unburned or lightly burned in some areas. In general, the fire did not produce serious mortality on primary rangeland to the point of altering existing conditions." No range improvements were lost during the fire. Range-1 project design feature will require that any improvements damaged by project logging or fuels operations will be repaired or replaced. We are not proposing to limit livestock grazing in any active allotment overlapping project units as part of the Westside Fire Recovery Project. Grazing can be used as an effective control of selected species of noxious weeds under specific controlled conditions and during the appropriate time of year. In an open range grazing system, as is present on the Forest, cattle can and will continue to help control non-native annual grasses, such as cheat grass, and understory vegetative growth but are not effective for noxious weed control. The areas of active allotments burned last year are not “rangeland” in the classical sense, but predominantly forested areas with intermittent shrubby openings and meadows where the heaviest use is. In an open range system, cattle often only consume the rosette stage and/or tops of noxious weeds in passing, when they are palatable early in the season, and do not remove or kill the plant (especially dicots, which are primarily what we are referring to in the Non-native Invasive species report). Without complete removal of the root system many weeds can persist for multiple generations resulting in increased plant vigor and population size. Additionally, grazing of above ground vegetative parts makes it much more difficult for noxious weed crews to identify and remove plants in the field, and often stimulates re-sprouting of reproductive parts of the plant. Many noxious weeds are also capable of producing a second generation of flowers and subsequently seeds, if seasonal conditions are appropriate, potentially mitigating the effects of the cattle grazing all together. If cattle are still actively grazing an area once noxious weeds have set seed, they can very easily contribute to dispersal, either through ingestion or by transport on their fur. UPDATED 7/7/2015 We do not refute the fact that livestock can be used in certain circumstances as a tool to help restore burned areas, and the Westside Project will not remove livestock grazing from theses allotments. The fire science brief "Effects and Effectiveness of postfire seeding treatments in Western Forests" indicates seeding may or may not help prevent weeds, "Out of 11 papers that evaluated the effectiveness of seeding to curtail non-native plant invasions, 54 percent indicated that seeding treatments were effective and 45 percent indicated that the treatments were ineffective. Of those treatments that were regarded as effective, however, 83 percent used non-native species (i.e., grasses and cereal grains)". While there are some areas within the allotments that may benefit from seeding of forage species, it does not meet the purpose and need for this project. Many meadows that experienced a light-moderate burn will regenerate on their own. Permitting grazing is not a part of the purpose and need of this project, however vacant allotments are being assessed for grazing suitability in other projects.

Code	Comment Number	Comment Text	Response
244 - Domestic Livestock	#17481-52	DEIS P. 191 states: "To allow for post-fire recovery of vegetation, livestock grazing areas will be modified within the project area where necessary. For the Middle Tompkins allotment, livestock grazing permits will not be authorized until 2016 or later. Lake Mountain and Dry Lake allotments will be monitored prior to the 2015 grazing season to determine if vegetation has recovered enough to support grazing and grazing won't hinder tree establishment. If grazing is allowed, animals may be turned out at a later date and/or the season may be shortened in the fall to allow for optimal vegetation recovery and the most beneficial use of livestock grazing. These modifications for post-fire livestock use of rangelands will be variable based to rangeland conditions and climate as observed by rangeland managers." Comment: Economic factors should be included in this statement. Allowing for "optimal vegetation recovery" must be balanced with producers' economic needs-which will best promote the purposes of this DEIS in the long term. DEIS p. 193 states: "Where capable rangeland overlaps with salvage logging or fuels treatments, the project will likely provide new areas of transitory range. This will temporarily (5-10 years) increase the amount of forage available for livestock and wildlife, encourage animals to disperse on the landscape, and decrease grazing pressure on primary rangelands. Comment: This "temporary" increase in forage is reflective of the historic landscape, which USFS should strive to recover. Livestock should be used as a tool to recover meadows now taken over by brush and conifer encroachment. USFS admits in this DEIS that the hottest parts of the fire took place where the canopy was heaviest. Reestablishing meadows is important to prevent future catastrophic wildfires; to promote wildlife habitat; and to promote economic stability in the area. DEIS p. 230 states "Further, annual operating instructions provided to permittees will limit permitted grazing activities as needed to minimize impacts, not only to rangeland health but also to soil conditions (see range section of this chapter and the Rangeland resource report)." Comment: We understand the importance of allowing flexibility to range managers via annual operating instructions (AOIs). However, those AOIs should be developed in close coordination with the permittee and, when requested, local government in order to ensure an AOI does not pose financial and logistic threats to the permittee. DEIS p. 250 - Social and Economic Environment section Comment: The importance of livestock grazing is not included here. This sector is of great socio-economic importance in the area. USFS should recognize in this section that activities such as rebuilding range improvements; reseeding; and preventing future catastrophic fire are important to our economy and culture	This decision does not include timing of grazing on the allotments: it is an administrative process. The statement on draft EIS pg.191 was only used to disclose what kind of grazing management will occur. Livestock grazing will continue to be a multiple use on these lands and will continue to be used as a tool for fine fuel reduction. While there are some areas within the allotments that may benefit from seeding of forage species, it does not meet the purpose and need for this project. Many meadows that experienced a light burn will regenerate on their own. AOI's are an administrative process and not a part of this decision. However, Annual Operating Instructions are generally developed with input from the Permittees. The importance of livestock grazing is not included in the socio economic report as grazing is not part of the purpose and need. Grazing is considered only in a context of what effect project actions will have on rangelands.
244 - Domestic Livestock	#18909-93	The DEIS states that to allow for post-fire recovery of vegetation, livestock grazing areas will be modified within the project area where necessary. For the Middle Tompkins allotment, livestock grazing permits will not be authorized until 2016 or later. Lake Mountain and Dry Lake allotments will be monitored prior to the 2015 grazing season to determine if vegetation has recovered enough to support grazing and grazing won't hinder tree establishment. If grazing is allowed, animals may be turned out at a later date and/or the season may be shortened in the fall to allow for optimal vegetation recovery and the most beneficial use of livestock grazing. These modifications for post-fire livestock use of rangelands will be variable based to rangeland conditions and climate as observed by rangeland managers. While we encourage the recovery of our wild places, grazing cattle continues to be one of the most harmful practices on our national forests and certainly on the KNF. There is little confidence the agency will follow through with its commitments. Five years of monitoring and documenting grazing allotments on the KNF has shown the consistent failure to meet water quality and KNF Forest Plan standards.	Please see the "Allotment Monitoring Section" within the Rangeland Specialist Report. Most areas are meeting water quality standards and Forest Plan Standards. Livestock grazing will continue to be managed to respond to variable conditions.
250.01 - Public Access	#18872-1	Safe Forest access (Public Domain) will assist with addressing worker and public safety, safe forest access will benefit the public, Shasta nation and when needed fire suppression traffic to previously inaccessible areas. The benefits that the public, hunters and fire suppression personnel will experience is in agreement with availability of public domain to all.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
250.01 - Public Access	#18872-9	plus identifying and repairing access routes in the forests	The action alternatives analyzed respond to the need to provide safe egress for the public and employees on Forest system roads and trails though the removal hazard trees.
260 - Recreation	#17501-3	I hike the PCT through the Marble Mountains all the way to the Kangaroo Roadless Area and into the Siskiyou Mountains on a regular basis and I am very concerned with how this logging will affect people hiking on the trail and the viewshed of the trail. I urge you to drop all Westside Project Units that are along the PCT or would be visible from this internationally renowned and beloved national treasure.	The Recreation and Scenery Project Design Features identified in Chapter 2 of the EIS address protecting and maintaining recreational access and settings, and providing visitor information about trails closures, or setting changes.
260 - Recreation	#18918-10	A number of rivers and stream segments in northwestern California are designated as "Wild and Scenic Rivers". Please examine rivers and streams (and their segments) which fall under the Wild and Scenic Rivers Act to determine the Outstandingly Remarkable Ecological Values for which the segment / watercourse was designated. Please also determine what OREVs prompted the proposal to nominate some rivers / streams / segments for inclusion under the National Wild and Scenic Rivers Act. Sometimes those OREVs are "Scenery" and "Fish" - but there could be others since I have not had time to look up the OREVs on all current or proposed segments relating to the WFRP.	The 1995 Forest Plan identifies all Outstandingly Remarkable Values for both designated and recommended wild and scenic rivers on the Forest. The Wild and Scenic Rivers Report lists these Outstandingly Remarkable Values by river segment and analyzes effects to these Outstandingly Remarkable Values.

Code	Comment Number	Comment Text	Response
260 - Recreation	#18926-20	Visual Quality Objectives (VQO) ! The project proposal does not adequately protect the Scenery values of the forest, or its local residents and tourists, primarily because it fails to apply standard wildfire restoration scenery protection measures, such as those recently applied on the Mt Hebron Fire Recovery Project. ! These include:! Retention of a representative pattern of standing dead trees within all High and Moderate Sensitivity views, with the specific purpose of retaining the forest's natural scenic character, and retaining visible evidence of the forest's natural wildfire processes. ! 2) Reduce the height and scenery impacts due to project-created stumps, skidding and yarding activities.! These protection measures have proven to be fully implementable, produce negligible effects upon other resource objectives, and consistently benefit resources such as wildlife and watershed. If these measures are not applied, adverse LONG TERM scenery impacts would persist along many of the Forest's most highly valued recreational settings and tourism attractions.! ! The project's Scenery report is helpful and informative in many respects, however has some important shortcomings that have very likely adversely influenced the Project's scenery outcomes:! ! Page 13 & 14 of the report incorrectly implies that Visual Resource Management S&G 11-7 indicates that the Klamath Forest Plan's intent is for an unlimited period of delay allowed in meeting Forest VQOs, "to recover forest vegetation". However, Klamath Plan VRM S&G 11-3 more specifically states "Visual objectives may be foregone in the short-term, following extreme natural events." Thus, long term scenery impacts to sensitive views, such as the excessive removal of fire killed trees, or persistence of visible tall stumps, etc are not consistent with this more specific S&G. These long term scenery impacts must therefore be prevented by protection measures consistent with those applied by the KNF's recent Mount Hebron project (included requirements for retaining a representative % of the standing dead trees in natural appearing patterns of individual trees and clumps).! ! The project's Scenery Report fails to provide any illustrative photographs to visually communicate the project's scenery conditions and the potential effects of its alternatives. It is unreasonable to expect the reforestation planning team member, decision-maker, or interested citizen to translate the Scenery Report's technical jargon of "VQOs" or narrative Scenic Character descriptions into what one would actually see in these important Klamath National Forest recreation settings. The few local photographs provided by other sections of the Westside Fire Recovery document are helpful but lack the necessary scenery translation to communicate existing scenery conditions, Forest Plan scenery requirements, and scenery effects from proposed alternatives. Failure for the Scenery Report to provide pertinent photography, even at a summarized representative level for this large project, prevents readers from being able to determine whether the scenery they value is adequately protected.! Forest Scenery is a primary element of Siskiyou County's quality of life, recreation settings, tourist attractions and unique identity. This project would potentially affect the scenery within 60 precious views, include at least 4 Wild and Scenic Rivers, 1 Scenic Byway, 1 National Scenic Trail, 5 campgrounds, 7 recreational trails, 7 river accesses, 4 mountain top lookouts, and several local communities. There is no reasonable excuse on earth that the scenery protections identified above should not be fully implemented, to protect these views from the project's proposed long term eyesores. Even a project as large and potentially scenery-impacting as this CAN be done in a way that protects these important quality of life values. It just takes the commitment to do so, and the FS Mission of Public Service demands it.! !	The Forest does not have a standard list of wildfire restoration scenery protection measures. Project design features (project design project design features) are developed specifically on a project by project basis. Additional Recreation and Scenery project design project design features have been developed to reduce effects to recreation settings and scenery. However some long term effects to scenery would exist after project implementation and are identified in the Scenery Amendment Report. The Westside Fire Recovery Project proposes treatments on approximately 7 % of the 183,000 acres burned; thus 93% or 100,000 acres would display visible evidence of the forest 's natural wildfire processes. Illustrative photographs are not required by law, policy, regulation or the Forest Plan to be included in the Scenery Report. The Forest Plan Standard and Guideline number 11-7 referenced in the comment was truncated, rather Standard and Guideline number 11-7 reads in full "In the case of recovery activities after extreme catastrophic events such as intense wildland fires, time periods to achieve the Visual Quality Objectives stated in Forest-wide and Management Area Standards and Guidelines may be extended. This would be necessary where previously unnoticed scenery alterations are exposed to view due to loss of vegetative screening, or during timber salvage activities where recovery of forest vegetation is determined to be of greater importance than achievement of Visual Quality Objectives within the time periods established." The Forest interpretation is that Standard and Guideline number 11-7 takes precedence over Standard and Guideline number 11-3. Standard and Guideline 11-7 states "...time periods....may be extended" without any qualifying time limitations. The total number of potentially affected viewsheds have been revised from 60 to 62 and are identified in the Scenery Amendment Report.

Code	Comment Number	Comment Text	Response
260 - Recreation	#18926-25	The Klamath, Scott and North Fork Salmon River are Wild and Scenic Rivers all known for their outstandingly remarkable fisheries values. Elk Creek, Kelsey Creek and South Russian Creek are eligible for inclusion to the Wild and Scenic River system.! The project proposes: * 425 acres of logging units and 379 acres of roadside in the Klamath River corridor! * 17 acres of units and 491 acres of roadside in the Scott River corridor ! * 83 acres of units and 250 acres of roadside in the North Fork Salmon corridor! * 599 acres of roadside logging in Elk Creek corridor! * 41 acres of units and 7 acres of roadside in Grider Creek corridor! * 1 acre unit and 122 acres of roadside in South Russian Creek corridor! ! Elk Creek is also recognized for geologic and wildlife values because the Siskiyou Mountains Salamander has been found there. Grider Creek is recognized for its undisturbed old growth mixed conifer forests and for wildlife because bald eagles and peregrine falcons nest there. South Russian Creek- fed from the Russian Wilderness is recognized for its magnificent stand of old growth Engleman Spruce and for pristine water quality. The DEIS states that, "Analysis determined that all action alternatives would protect the outstandingly remarkable values and would be fully compliant with all Wild and Scenic River Act protection requirements and Forest Plan Standards and Guidelines. Select information on resource effects for outstandingly remarkable values is reiterated in this report as taken from the Aquatic Resources, Hydrology, Wildlife, and Scenery reports. For complete details see those reports." These reports and the DEIS fail to meet requirements of the KNF Forest Plan Standards and Guidelines and thereby failing to protect Wild and Scenic River values, such as fisheries, wildlife, recreation, scenery, geology, history, cultural features, or other values including ecology.! !	The comment lacks sufficient information regarding which Forest Plan standards and guidelines they state are being violated, therefore the Forest is unable to respond specifically to the commenters concerns, other than to state that the project was planned in compliance with the Klamath Forest Plan. The Forest Plan consistency checklist is located in the project file and available upon request.
260 - Recreation	#18927-3	Impacts to Wild and Scenic Rivers and Candidate Streams We are also concerned about activities proposed in existing and USFS recommended Wild and Scenic Rivers. The project proposes logging, fuels treatment, and site preparation within and adjacent to the existing Klamath, Scott, and North Fork Salmon Wild and Scenic Rivers and their watersheds, as well as segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the USFS for Wild and Scenic protection. The DEIS admits that there will be at least temporary loss of scenic quality within and along some existing and recommended Wild and Scenic River corridors. A range of vegetation management and timber harvest practices are allowed in Scenic and Recreational River corridors, "…if these practices are designed to protect users, or protect, restore, or enhance the river environment, including the long-term scenic character." (FSH 1909.12, Chap. 80, Sec. 82.53 [9][b]). The Project analysis has failed to adequately make the case that all of the activities proposed in and adjacent to Scenic and Recreational River corridors meet these important guidelines. Particularly disturbing is the project focus on traditional post fire "fixes" such as salvage logging, as well as site preparation for new plantations and post-planting release to reduce competition from other vegetation. We are concerned that the overall plan perpetuates the USFS' century-old exclusion of fire, reliance on plantation forestry, and increasing timber yields. This approach has only served to degrade the biological diversity, scenic character, recreational values and Native American cultural values of the Klamath-Siskiyou region.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The comment as written expresses general concerns but provides general comments and no substantive evidence that the proposed Westside Fire Recovery Project would not meet the guidelines in the for management of Scenic or Recreational Rivers in the Klamath National Forest Plan. Management Area 12 in the Forest Plan (4-117) provides management direction for designated and recommended Scenic Rivers. Guideline MA 12-20 (Forest Plan 4-119) notes that "salvage of trees killed by wildland fire....or other natural processes is permitted consistent with area management goals. Management Area 13 (Forest Plan 4-120) provides Management Direction for designated and recommended Recreational Rivers. Guideline MA 13-15 (Forest Plan 4-122) notes that "Lands may be managed for a full range of silvicultural uses to the extent currently practiced." From these citations, it is evident that salvage operations are not inconsistent with the management direction for Scenic and Recreational Rivers. See Chapter 3, Recreation for additional discussion. Users will be protected during project implementation with safety signing at river accesses, flaggers stopping rafters, and public notifications on Web pages and news releases. The reforestation of some burned areas in the river corridors would occur in salvage units and site preparation and planting areas where conifers were historically found. These treatments would speed up recovery by 50 years or more to a conifer dominated forest, thereby meeting desired future conditions for scenic character. The Forest is analyzing a range of Alternatives, including a no action Alternative, wherein no salvage, site preparation, planting or fuels treatments will occur. The no action Alternative serves as a comparative basis to evaluate the action alternatives against. Refer to the Vegetation section of Chapter 3 for more information on the environmental consequences of the 5 Alternatives analyzed in detail. The reference noted in the comment is corrected here as Forest Service Handbook 1909.12, Chap 80, Sec. 84.3, [9], [b] which states: "Scenic and Recreational Rivers. A range of vegetation management and timber harvest practices are allowed, if these practices are designed to protect users, or protect, restore, or enhance the river environment, including the long-term scenic character."

Code	Comment Number	Comment Text	Response
260 - Recreation	#18934-17	The Scenery Resource Report incorrectly assumes that the North Fork Salmon River Road (1C01), which is actually named Sawyers Bar Road, is a proxy for visibility from the North Fork Salmon River (page 1). In reality, the viewshed from the river is quite different than that from the road not only for the parallax differential but because sightlines are much longer both in the upriver and downriver directions from the river and because the lack of vegetation over the river channel allows for greater views up the side canyon slopes. These differences account for a significantly expanded viewshed from the river that is not at all approximated along the roadway. The identical assumption was made in the methodology of the Scenery Resource Report and EA for the 2014 Salmon Salvage project, which is also visible from the North Fork Salmon River, and on-the-ground post-project assessment from the waterway of the North Fork Salmon River indicates that the use of the roadside views as a proxy for the river views was entirely incorrect. In fact, a significant number of Salmon Salvage units deemed not visible from the river are, in fact, plainly visible from the river. Further, neither the Westside DEIS nor the accompanying Scenery Resource Report nor the Wild and Scenic Rivers Resource Report make any specific mention of which salvage units, roadside hazard tree removal areas, or other project features are visible from the North Fork Salmon River or any other viewpoints within the project area. In fact, the Scenery Resource Report acknowledges that there has been absolutely no on-the-ground assessment of the project's impacts to scenery at any of the listed viewpoints or Wild & Scenic Rivers. Taken together, the erroneous assumptions, lack of specificity, and absence of any field verification in the Scenery and Wild and Scenic Rivers analysis amount to an insufficient assessment and disclosure of the project's impacts in these areas. In particular, salvage units 409, 411, and 415 will highly impact the scenic integrity of the North Fork Salmon River due to their locations immediately adjacent to and above the river. Limiting tree removal in unit 411 to that already programmed for hazard tree removal would significantly decrease the visual impact to the river corridor. The placement of unit 409 and 411 diagonally across the river from each other means that river recreationalists will travel through an extensive clearcut corridor that will visually persist for much longer than MA-13 Partial Retential VQO guidelines permit.	It is recognized that the viewshed from the river is different than that from the road. These differences are acknowledged in the Scenery Resource Report " Differences in elevation, adjacent vegetation, topographic screening, slope position, and horizontal alignments were factors considered in determining visibility and effects from the river perspective." Five additional field reviews occurred between the draft EIS and the final EIS; results have been incorporated into the Scenery, Wild and Scenic Rivers, and Recreation Reports. Specific mention of salvage units 409, 410, 411, 412, and 415 that would be visible from the North Fork Salmon River has been noted. The retention of trees in Riparian Reserves in unit 411 would break up the unit to a scale consistent with other openings in the characteristic landscape. The North Fork Salmon River viewshed is managed with a Partial Retention Visual Quality Objective, where management activities may be noticeable but subordinate to the characteristic landscape. As noted in the Scenery and Scenery Amendment Reports, "The disturbances associated with various project activities such as soil disturbance, stumps, burnt vegetation, etc. would recover in three years' time with seasonal leaf and needle cast, weathering (graying) of tree stumps and chips, and resprouting of vegetation or "greening up. Hence all activities would appear near natural and meet their assigned Visual Quality Objectives."
260 - Recreation	#3678-27	Scenery – No Action direct and indirect effects "Decay and wind disturbance would lead to the smaller diameter, fire-killed trees falling down within the first ten years, with the majority of all trees falling down within the next 20 years (Russell et al. 2006). Standing trees would provide visual clues of the past fires for decades. As dead trees fall, the scenic character of areas once-forested would change becoming much more open. Extremely high fuel loads would develop creating a landscape that is susceptible to a high intensity, high severity fire. In many areas these conditions would likely create a long term vegetation change away from a conifer-dominated vegetation type towards a shrub-dominated ecosystem. Observation: Mr. Talley, never before have I encountered a landscape architect or recreation specialist who said the scenery will be enhanced when the area is logged as you have done here.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
260.02 - Rec. Resource Usability	#17481-15	I applaud the work being done on the Pacific Crest Trail and recommend to include other trails in the plan, or state what has been done or is planned to be done. These trails are needed for access to the wilderness for recreation and livestock grazing. There will be the likelihood of large trees and landslides closing these trails for years to come.	Hazard Trees associated with trails within the project area will be addressed separately from this project as part of routine trail maintenance. Trail-side hazard trees will be prioritized and treated based on risk level including probability of tree failure and probability of a target. Selective treatment of hazard trees along trails allows for protection of scenery and the recreation setting. The Recreation and Scenery Project Design Features identified in Chapter 2 of the EIS address protecting and maintaining recreational access and settings, and providing visitor information about trails closures, or setting changes.
260.02 - Rec. Resource Usability	#17481-47	Campsite safety around lakes and trail camps.	This can be considered campground maintenance under a separate CE and National Environmental Policy Act. Some campground treatments are being considered within the scope of this analysis. Campgrounds, lakes, and trail camps outside of the project area are outside the scope of analysis.

Code	Comment Number	Comment Text	Response
260.02 - Rec. Resource Usability	#17481-5	I have some concerns about defending this plan. There is a lot of salvage volume proposed in the vicinity of the Pacific Crest Trail. There is little mention of recreation. Mitigation needs to address potential for further disruption for hikers. Are the roads around Cold Spring depicted accurately? Proposed temp construction in that area near PCT need to be defended in terms of affects to recreational use. That is with trail closures due to fire in 2012 as well as 2014. Now the movie is out the PCT is getting international attention and powerful support. Since the book "Wild" was published, PCT use has increased exponentially each season. If proposed treatments can make the trail safer in future and prevent future disruption of use, may want to highlight.	The Recreation Report has been updated with additional recreation effects analysis to PCT trail users, including effects to viewsheds and disruptions to hikers during project implementation. Additional field review has verified that the locations for two segments of the Pacific Crest Trail have been displayed incorrectly on project maps. The revised trail alignments are identified and displayed on Figures 7 and 8 of the Recreation Resource Report. These new trail locations will need to be surveyed and mapped to current GIS standards before incorporation into the Forest's Trails corporate data layer. Recreation and Scenery Project Design Features (see Chapter 2 of final EIS for a complete listing) have been added which will protect the trail from harvest and machine access.
260.02 - Rec. Resource Usability	#18873-1	concerns associated with potential impacts to the viewshed of the PCT and experience of the trail user. There are two areas where operations associated with the proposed action could have significant impacts on the PCT, one is the section of PCT that is co-aligned with the Grider Creek Road immediately north of the Grider Creek campground. The second is the section nearest the Cold Spring Trailhead immediately north of the Marble Mountains Wilderness boundary. The section of the PCT on the Grider Creek Road presents challenges and those challenges will only be magnified when confronted with the possibility of a logging operation and the associated increase in vehicle traffic the PCT users will encounter. It will be important that the Forest staff and PCTA work together to identify a viable strategy for PCT users to safely navigate the road section during the logging operation. One idea that I have discussed with PCT leadership and Forest staff is the possibility of a 'road block' for trail users at either end of the affected section of the Grider Creek Road. While we wouldn't want to delay trail users for more than a couple hours, if trail users were provided water, a shaded place to wait, and accurate information regarding the delay that could be a viable strategy. I stand ready and willing to work closely with Forest staff to come up with the best solution.	The Recreation and Scenery Reports have been updated to include additional viewshed and recreation experience effects analysis to PCT trail users. Forest representatives met on-site with the commenter on May 13, 2015 to address the commenter's concerns. Additional project design project design features were developed (see Chapter 2 of final EIS for a complete listing) to minimize effects to PCT trail users at the Cold Springs Trailhead and Grider Creek Road. At the Grider Road where it is co-aligned with the PCT, delays during project implementation to PCT hikers (as well as other recreationists) are typically expected to be 15-20 minutes up to several hours. Safety signing will be placed along the PCT advising hikers of "logging operations ahead" and on the Grider Creek Road advising log truck drivers of "hikers on roadway".
260.02 - Rec. Resource Usability	#18883-14	Please show the Pacific Crest Trail (PCT) and other major trails connecting parking areas to the PCT on all maps. No work on or near the PCT or other trails should be allowed either in a planning document or on the ground during adjacent activity. Hikers and others using trails like to have snags and woody debris within at least 100 feet of each side of trails for shade and rest areas. No harvesting or equipment access should be allowed to occur within at least 100 feet of each side of these trails or campsites.	The Pacific Crest Trail was included in all maps, but was not specifically labeled or highlighted in the Draft EIS. The display of the Pacific Crest Trail has been highlighted on all maps in the final EIS. Also "Recreation Features" maps for the Beaver Fire, Happy Camp Complex, and Whites Fire have been added to the Recreation Amendment Report (see Figures 1-6). These maps display the Pacific Crest Trail as well as campgrounds, dispersed campsites, other trails, trailheads, and river accesses by project area. Recreation and Scenery Project Design Features (see Chapter 2 of final EIS for a complete listing) have been added which will protect the trail from harvest and machine access. The boundary of unit number 224 has been moved 50 feet away from the PCT. As agreed upon in the 05/13/15 field review between Forest representatives and the Pacific Crest Trail Association, no roadside hazard trees would be removed adjacent to the PCT out to a distance of 15 feet. No salvage harvest would occur within 50 feet of the trail. No marking paint would be visible from the PCT. The large format and 11 x 17 maps have been updated to include the Pacific Crest Trail with a bolder line, labeled "Pacific Crest Trail" and is currently itemized in the legend for the final EIS. Also "Recreation Features" maps for the Beaver Fire, Happy Camp Complex, and Whites Fire have been added to the Recreation Amendment Report (see Figures 1-6). These maps display the Pacific Crest Trail as well as campgrounds, dispersed campsites, other trails, trailheads, and river accesses by project area. Recreation and Scenery Project Design Features (see Chapter 2 of final EIS for a complete listing) have been added which will protect the trail from harvest and machine access. The boundary of unit number 224 has been moved 50 feet away from the PCT. As agreed upon in the 05/13/15 field review between Forest representatives and the Pacific Crest Trail Association, no roadside hazard trees would be removed adjacent to the PCT out to a distance of 15 feet. No salvage harvest would occur within 50 feet of the trail. No marking paint would be visible from the PCT. Project design features have been incorporated that will protect the PCT trail.
260.03 - Wild and Scenic Rivers	#18876-1	Please avoid this plan, and all activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
260.03 - Wild and Scenic Rivers	#18909-99	The Klamath, Scott and North Fork Salmon River are Wild and Scenic Rivers all known for their outstandingly remarkable fisheries values. Elk Creek, Kelsey Creek and South Russian Creek are eligible for inclusion to the Wild and Scenic River system. The project proposes: * 425 acres of logging units and 379 acres of roadside in the Klamath River corridor * 17 acres of units and 491 acres of roadside in the Scott River corridor * 83 acres of units and 250 acres of roadside in the North Fork Salmon corridor * 599 acres of roadside logging in Elk Creek corridor * 41 acres of units and 7 acres of roadside in Grider Creek corridor * 1 acre unit and 122 acres of roadside in South Russian Creek corridor Elk Creek is also recognized for geologic and wildlife values because the Siskiyou Mountains Salamander has been found there. Grider Creek is recognized for its undisturbed old growth mixed conifer forests and for wildlife because bald eagles and peregrine falcons nest there. South Russian Creek- fed from the Russian Wilderness is recognized for its magnificent stand of old growth Engleman Spruce and for pristine water quality. The DEIS states that, "Analysis determined that all action alternatives would protect the outstandingly remarkable values and would be fully compliant with all Wild and Scenic River Act protection requirements and Forest Plan Standards and Guidelines. Select information on resource effects for outstandingly remarkable values is reiterated in this report as taken from the Aquatic Resources, Hydrology, Wildlife, and Scenery reports. For complete details see those reports." However, these reports and the DEIS fail to meet requirements of the KNF Forest Plan Standards and Guidelines and thereby failing to protect Wild and Scenic River values, such as fisheries, wildlife, recreation, scenery, geology, history, cultural features, or other values including ecology.	See response to 18926-25.
260.03 - Wild and Scenic Rivers	#19076-5	Addressing such a large area in one general document should address existing And proposed Wild & Scenic Rivers.	Procedural. The site specific effects to designated and recommended Wild and Scenic Rivers have been addressed for the project. See Chapter 3 of the final EIS.
260.03 - Wild and Scenic Rivers	#19076-8	We are particularly concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection.	To clarify, there are no activities proposed within areas designated as Wild Rivers. In the management of Scenic and Recreational Rivers the Forest is guided by Forest Service Handbook 1909.12, Chap 80, Sec. 84.3, [9], [b] which states: "Scenic and Recreational Rivers. A range of vegetation management and timber harvest practices are allowed, if these practices are designed to protect users, or protect, restore, or enhance the river environment, including the long-term scenic character." Users will be protected during project implementation with safety signing at river accesses, flaggers stopping rafters, and public notifications on Web pages and news releases. The reforestation of some burned areas in the river corridors would occur in salvage units and site preparation and planting areas where conifers were historically found. These treatments would speed up recovery by 50 years or more to a conifer dominated forest, thereby meeting desired future conditions for scenic character. The Forest is analyzing a range of Alternatives, including a no action Alternative, wherein no salvage, site preparation, planting or fuels treatments will occur. The no action Alternative serves as a comparative basis to evaluate the action alternatives against. The effects to designated and proposed scenic and recreational rivers are analyzed and displayed in Chapter 3 of the EIS.
270.02 - Wilderness, Roadless Character	#14120-1	So much of our wilderness has already been ruined by development, drilling, pollution, and logging. Enough is enough! The wilderness is supposed to be a place of peace and quiet for us, and the wildlife which live in it!	There are no treatments proposed in Wilderness areas under any Alternative.
270.02 - Wilderness, Roadless Character	#14120-3	PLEASE save the wilderness for all future generations before it is permanently ruined. Some damage cannot be undone!	See response to number 14120-1.

Code	Comment Number	Comment Text	Response
270.02 - Wilderness, Roadless Character	#17312-2	In addition, I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Activities proposed in inventoried Roadless Areas of the Westside Fire Recovery project include roadside hazard treatments, along roads that currently exist in inventoried Roadless Areas or along roads that border the inventoried Roadless Areas. Other activities are treatments along roads to reduce fuel accumulations and some site preparation and planting of conifers using only hand treatments. There are no salvage logging activities proposed within Inventoried Roadless Areas. The effects of these activities are disclosed in the inventoried Roadless Area section of Chapter 3 of the EIS. Areas proposed for wilderness designation in proposed wilderness legislation are managed according to the standards for the management area in which they occur as defined by the Forest Plan.
270.02 - Wilderness, Roadless Character	#17322-3	We have very few "roadless" areas left and once they are segmented and damaged by roads, the integrity of the ecosystem is damaged for ever. I am opposed to any logging and mechanical entry into roadless areas, including areas proposed in legislation introduced by Senator Barbara Boxer in 2002 and 2006 for addition to the Marble Mountain and Russian Wilderness areas.	Same response as number 17312-2
270.02 - Wilderness, Roadless Character	#17368-1	We need roadless areas. What man has not discovered he has not destroyed. We need to allow nature to 'salvage' this timber.	Same response as number 17312-2
270.02 - Wilderness, Roadless Character	#17436-1	My family recreates (hiking, camping, and kayaking)every year in this area of California. We need to treasure and protect it from any further development. Keep this area roadless and wild.	No new development is being proposed in this project in Roadless Areas, only post-fire restoration and recovery. The Recreation and Scenery Project Design Features identified in Chapter 2 of the EIS address protecting and maintaining recreational access and settings, and providing visitor information about trails closures, or setting changes.
270.02 - Wilderness, Roadless Character	#17481-33	* Wilderness o Trails maintenance and hazards (possibly chainsaw exemption in burned area) o Erosion control - burned trails o Trailhead and campsite hazards	See response to comment number 17-1.Hazard Trees associated with trails within the project area will be addressed separately from this project as part of routine trail maintenance. Trail-side hazard trees will be prioritized and treated based on risk level including probability of tree failure and probability of a target. Selective treatment of hazard trees along trails allows for protection of scenery and the recreation setting. Erosion control is part of project design for proposed actions; see chapter 2 watershed project design features.
270.02 - Wilderness, Roadless Character	#17481-45	Take another look at access for non-commercial property as related to released roadless areas.	It is unclear what the concern is about non-commercial property access as it relates to this project and released Roadless Areas.

Code	Comment Number	Comment Text	Response
270.02 - Wilderness, Roadless Character	#18857-5	No salvage logging or planting units within Inventoried Roadless Areas (IRA), including the Grider, Tom Martin, Russian, Snoozer, Kelsey, or Johnson Roadless Areas.	See response to number 17312-2.
270.02 - Wilderness, Roadless Character	#18876-1	Please avoid this plan, and all activities that could harm existing and proposed Wild & Scenic Rivers, water quality and threatened salmon, and roadless areas that provide refuge for wildlife.	See response to number 18913-3.
270.02 - Wilderness, Roadless Character	#18883-24	There should be a half mile no disturbance zone outside the boundary of all Wilderness, Backcountry, Research Natural Areas, Recommended Wild Rivers, and Inventoried Roadless Areas to protect the scenic beauty and allow for natural regeneration of natural forest conditions.	This comment reflects the opinion of the author, not the requirements of the Forest Plan. The commenter has recommended a no disturbance zone around areas of special concern that is not consistent with the Forest Service Manual 2320.3(5) which does not require buffers around wilderness. For other areas, this recommendation is not in line with the Forest Plan final EIS; none of the Alternatives, including the one selected for the Forest Plan, include blanket requirements to buffer reserves (Forest Plan final EIS, Appendix K, page K-36). No site-specific amendment to the Forest Plan is considered for the Westside project.
270.02 - Wilderness, Roadless Character	#18883-24	Roadless areas provide many important ecological and social values. Chapter 3, pages 3-7 of the Roadless Area Conservation FEIS offers an excellent summary of these values: Clean water for domestic, agricultural, and industrial uses, that helps to maintain abundant and healthy fish and wildlife populations, and that provides the basis for many forms of outdoor recreation; Undisturbed or less disturbed habitat that conserves native biodiversity by providing areas where nonnative invasive species are rare, uncommon, or absent; Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land; Opportunities for people to enjoy high-quality non-motorized recreation activities, including hiking, camping, mountain biking, picnicking, wildlife viewing, hunting, fishing, cross-country skiing, swimming and whitewater boating; "Reference landscapes" that can provide comparison areas for scientists seeking to evaluate and monitor the differences between natural settings and more intensely managed areas; High quality scenery that contributes directly to local tourism and to real estate values in neighboring communities; and Many important Native American cultural sites and valuable historical resources. The EIS failed to discuss any of these values because the USFS fails to acknowledge that it is proposing to log roadless areas. Once again, we request that all salvage, site-preparation and replanting not occur in any IRA or in the roadless lands mapped by CalWild. Please keep these areas intact so that their future can be considered in the forthcoming revision of the KNF LRMP. We do not, however, object to the use of fire, including prescribed fire, to manage these landscapes	The disclosure of effects of project Alternatives and proposed activities on inventoried Roadless Areas has been expanded in Chapter 3 of the final EIS and an amendment to the summarized and referenced amendment to the inventoried Roadless Area resource report. The disclosure of the effects of cutting and possibly removing and selling trees that are removed along roadsides is included in these documents. The effects of site preparation and planting are also discussed in the IRA section of Chapter 3 of the final EIS; potential negative effects are minimized or eliminated by the implementation of a project design feature displayed in Chapter 2 of the final EIS. None of the proposed activities will harm the roadless character of inventoried Roadless Areas or preclude future designation of these areas.

Code	Comment Number	Comment Text	Response
270.02 - Wilderness, Roadless Character	#18926-14	Risk is Significant in Dust Abatement In Taking Water From the Source for Watering Roads and Other Uses The DEIS incorrectly states on page 295 that, "Minor and insignificant direct effects from water drafting. Over-all effects to sediment, stream shade, and temperature from project treatments are expected to be discountable and effects to aquatic species are expected to be minor under all action alternatives" Using water for dust abatement or other project uses from streams and rivers may add to the dewater of these sources because the conditions presented in the 4th year in the on-going drought in our region is a significant action that should be discussed and disclosed in the Final Environmental Statement and in the related decision notice! ! Roads Should Not Be Used For Salvage Logging in LSR! Impacts to Roadless Areas Page 299 of DEIS states, " The effects of the project on the currently roadless portions of IRAs and the portions that include roads are analyzed and disclosed separately because retaining roadless character is difficult, if not impossible, in areas of IRAs that already include roads." How many of these roads are in LSR? These roads should be dropped from prescriptive use for salvage logging as they are in LSR designations and would be inappropriate to use for salvage logging. ! !	Controlling dust on forest roads during management operations is a safety issue for the public and those involved in the operations. See response to comment number 18878-47 for more information on water drafting and the monitoring team. As noted in the inventoried Roadless Area section of Chapter 3 of the final EIS, no salvage harvest will occur in these areas. Dead trees that are a roadside hazard will be cut and removed in these areas, primarily in the sections that were determined to no longer exhibit roadless character by the 1995 Forest Plan as disclosed in the expanded inventoried Roadless Area section of Chapter 3 of the final EIS. A discussion of logging in Late Successional Reserves in included in the expanded Chapter 1 of the final EIS.
270.02 - Wilderness, Roadless Character	#18927-5	We are particularly concerned about proposed activities within and adjacent to roadless areas that could adversely impact their potential wilderness character. Some of the areas slated for mechanical entry in this Project were proposed for addition to the Marble Mountain and Russian Wilderness areas in legislation introduced by Senator Barbara Boxer in 2002 and 2006. We thank the USFS for not proposing to log inventoried roadless areas (IRA) within the project area. We also thank the USFS for discussing IRAs and impacts to IRAs in the EIS. The problem, however, is that roadless lands extend beyond the boundaries of the IRAs. The Roadless Area Review and Evaluation (RARE) surveys from the 1970s that produced the current system of IRAs are now badly out of date for a variety of reasons, including: ? The many miles of road decommissioning that has occurred since that time; ? Vehicle route designation efforts, especially the recent Motorized Travel Management process; The recovery of lightly-damaged areas so that they now meet the naturalness criteria described in the Wilderness Act of 1964; The acquisition of land that was private during the RARE surveys; and The fact that there have been more recent surveys of wilderness-eligible land conducted by non-governmental organizations such as the CalWild that have mapped many "new" roadless areas or extensions of IRAs. Regarding the last point, from 1998-2001 CalWild conducted a "Citizens Wilderness Inventory" (CWI) to arrive at a more accurate reckoning of roadless land in the Golden State. The CWI identified 7.4 million acres of land in over 300 separate areas that still qualify for Wilderness designation on federal lands in California. This total included 5,254,228 acres of NFS land, which is 16 percent more than the 4,417,000 acres of RARE IRAs that existed at the time of the 2001 Forest Service Roadless Area Conservation Final Environmental Impact Statement (RAC FEIS). Since that time, we have been encouraging individual national forests to take a fresh look at their roadless areas when they initiate forest plan revision processes. In fact, this is a requirement of the new USFS planning regulations. Since the KNF has not yet begun to revise its Land and Resource Management Plan (LRMP), we have not raised the issue of a new roadless inventory until now. On the KNF, during the CWI we identified a much larger Grider Creek Roadless Area than was identified during the RARE surveys. The difference between what we surveyed in 2001 and what the USFS identified during the 1970s is shown in the map at left. The blue area is the Grider Creek Roadless Area as mapped by CalWild, while the IRA boundary identified by the USFS during RARE is shown in red. It was this larger area that was proposed as an addition to the Marble Mountain Wilderness in Senator Barbara Boxer's California Wilderness Heritage Act of 2002. While we strongly encourage the USFS to adopt an alternative similar to the one proposed by the Karuk Tribe, if Alternative 2 is pursued, we request that the following units be dropped from the proposed project so as to not damage the Grider Creek Roadless Area as mapped by CalWild: 50, 51-1, 53-1, 61, 226, 228-4, 228-5, 520, 525-2, P175, P191A, P192, P228, P229 and P321. CalWild also identified the true extent of Wilderness-caliber roadless lands in the Tom Martin region. As is shown on the map at right, the Tom Martin Roadless Area as mapped by CalWild (in blue) is significantly larger than the version of IRA of the same name mapped almost four decades ago. Again, while we encourage you to adopt the alternative approach advocated by the Karuk Tribe, if Alternative 2 is pursued,	Identifying and evaluating Roadless Areas other than those that are already codified through the Roadless Area Review and Evaluation (RARE) II process as "inventoried Roadless Areas" is beyond the scope of this project. An evaluation of the effects of proposed treatments identified in this comment is addressed in various resource sections of Chapter 3 of the EIS. The Karuk Alternative is addressed in Chapter 2 of the EIS.

Code	Comment Number	Comment Text	Response
		we request that the following units be dropped from the proposed project so as to not damage the Tom Martin Roadless Area as mapped by CalWild: 033-1, 034, 035, 036, 039, 040, 501-1-1, 508, 508-1, 508-3, 508-4, 508-4-1, 509 and 510. CalWild also identified the true extent of Wilderness-caliber roadless lands adjacent to the Russian Wilderness. As is shown on the map at right, the Russian Roadless Areas as mapped by CalWild (in black hatches) is significantly larger than the version of Russian IRAs mapped almost four decades ago. Much of this area was proposed as additions to the Russian Wilderness in Senator Boxer's 2002 bill. Again, while we encourage you to adopt the alternative approach advocated by the Karuk Tribe, if Alternative 2 is pursued, we request that the following units be dropped from the proposed project so as to not damage the Russian Roadless Areas as mapped by CalWild: 401-1, 406, 407, 407-1 and 426.	
270.02 - Wilderness, Roadless Character	#18927-6	We are vehemently opposed to the following elements of the Klamath National Forest proposal to: * Build 22 miles of new permanent and temporary roads, especially given the conflict with this has with the Klamath National Forest mandate to create a "minimum system" road network under Subpart A of Travel Management Rule in 2015. Roads across the Forest are a major source of erosion and sediment, which degrades water quality and cements spawning gravels for native fishes. This new road network has the potential to affect more than 3,000 acres in the Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers, as well as proposed Wild and Scenic sections of the Elk, Grider, and South Russian Creek. 6,300 acres of roadless lands are also affected by construction of these new roads, which we find unacceptable if we are to meet state and federal objectives that better enhance headwater habitat for trout, salmon and steelhead.	See response to comment number 18913-3

Code	Comment Number	Comment Text	Response
270.02 - Wilderness, Roadless Character	#19076-9	We are opposed to any logging and mechanical entry into Roadless areas (some of which have been proposed in legislation as additions to the Marble Mountain W1J.derness and Russian Wilderness Areas, although the DEIS stat.es no entry into roadless areas.	The final EIS clarifies that no salvage harvesting and no road construction will occur in inventoried Roadless Areas. However, there will be roadside hazard treatment (salvage logging along roadways to reduce hazards) within IRAs as proposed. The effects of roadside hazard treatments, site preparation and planting using hand treatments, and fuels reduction treatments (including prescribed burning and fuelbreak construction) on the roadless character of inventoried Roadless Areas is disclosed in Chapter 3 of the EIS.
270.02 - Wilderness, Roadless Character	#3681-1	The Grider and Ukonom Roadless areas are the only wilderness connecting corridors between the Salmon Mountains and the Siskiyou Mountains. Enclosed is a map showing the outlines of these wild corridors. Many times in the DEIS the Forest Service says there will be NO cumulative impacts for the proposed action. That is absolutely a lie. The proposed action will contaminate one of only two biodiversity corridors between the Salmon Mountains and the Siskiyou Mountains. I cannot express how concerned I am about this. Evidently the Forest Service doesn't understand what a cumulative impact is. Please take the time to open my file and consider that YOU WILL HAVE A DEVASTATING IMPACT if you proceed with your proposed action.	The Ukonom and Grider Inventoried Roadless Areas (IRA) are not congressionally designated Wilderness areas, but rather as IRAs, they are subject to evaluation for potential wilderness designation. Cumulative Effects, as described in the Analyzing Environmental Consequences section of Chapter 3, result when the incremental effects of actions that overlap in time and space and are added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions. Past activities contributing to the existing condition are considered in the affected environment. Present and reasonably foreseeable future actions are assessed along with the effects of the proposed action to determine whether significant cumulative effects may occur. To clarify, salvage logging is not proposed in any of the Alternatives within Inventoried Roadless Areas. As shown in Table 2-40, Alternatives 1 and 5 do not include planting in inventoried Roadless Areas, whereas Alternatives 2 through 4 include about 490 acres of site preparation and planting, with methods designed to minimize disturbance. Please see the IRA section of Chapter 3 for further details on effects. The IRA project design feature (IRA-1) identified in Chapter 1 of the EIS, is applied to Alternatives 2 through 4 to minimize negative impacts of planting on IRA characteristics by specifying that site preparation and planting within IRAs will be by hand and not include ground-based mechanical equipment. Few, if any, projects on the Forest include any treatments in IRAs. The consideration of the direct, indirect and cumulative effects to IRA characteristics, which are defined in 36 CFR Part 294, are provided in the Inventoried Roadless Area section of Chapter 3.
270.04 - Private Property/Inholdings	#17481-32	I support the Westside Fire Recovery Project (Alternative 2) and the attempts at improving the health and safety of the relevant forests, their residents, and workers. As a resident of Sawyers Bar on the Salmon River of Siskiyou County, CA, a Shasta Nation tribal member, a Salmon River Volunteer Fire and Rescue member, a retired timber faller, a commercial sixth generation packer and guide, hunter, fisherman, former Forest Service firefighter, supporter of watershed management, and a member of both the citizens and county supervisors steering groups I feel the need to comment. Recommendations * Expand treatment adjacent to private property o Rainbow Mine - west and north boundaries o Finley Camp - Westside adjacent o Mouth of Hickey Gulch - both sides of N.F. Salmon River eastward o Uncle Sam Mine - west ridgetop between White's and Eddy's Gulch o Taylor Hole	Thank you for your comments on the Westside Fire Recovery Project.. Alternative 3 Modified proposes additional hazardous fuels treatment proposed by the Karuk Alternative and to address WUI needs adjacent to private property. In Modified Alternative 3, approximately 55 acres of treatment in the Rainbow Mine area are proposed. See response to number 25-1.
270.04 - Private Property/Inholdings	#18874-4	Wildland Urban Interface Treatment is shown in Alternatives 2 and 5 adjacent to the Maplesden Ranch in the same quarter section. This treatment would also reduce fire intensity in the future. Temporary access from the north via 47N56 to these two project areas (through the Maplesden Ranch) could be granted by temporary written agreement.	Thank you for your offer of temporary access.
270.04 - Private Property/Inholdings	#25-1	Clean up dead, fire burned trees on my property plus more importantly dead trees & needles on your property, close by & adjacent to my property. John Morone 27729 Scott River Rd. Scott Bar 530 496 3284	Treatments on private property are beyond the scope of this project. Treatments on the Forest to reduce fuel accumulations are part of each Alternative.

Code	Comment Number	Comment Text	Response
280.01 - Jobs	#17434-2	Even better, the jobs created through adoption of the Tribe's proposal will be long-term, sustainable opportunities rather than the short-term ones that would be utilized in the DEIS proposal.	Thank you for your comments on the Westside Fire Recovery Project. Chapter 2 of the final EIS includes a discussion of how the Karuk Alternative was considered and incorporated into the preferred Alternative. See the social and economic section of Chapter 3 of the EIS for a discussion of jobs.
280.01 - Jobs	#18852-41	24) Job creation as a result of this projects implementation should prioritize locally available workforces, total jobs created should not give the impression of a lasting influence to local economies as this is a short-term project (stated clearly by the DEIS, based upon the need to maximize commodity benefits before timber quality deteriorates).	The social and economic section of Chapter 3 of the final EIS includes the direct, indirect and induced economic value, including jobs. The duration of jobs under all Alternatives is included in this section; the economic effects of the Karuk Alternative are disclosed in Chapter 3 of the final EIS. The contract award process is beyond the scope of the National Environmental Policy Act analysis, however comments that state a position are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action.
280.01 - Jobs	#18853-3	ACL represents the largely family-owned, multi-generational loggers and log truckers of California. Loggers and log truckers are the infrastructure for timber harvesting in California, and can provide the workforce for coming developments in the battle against climate change, in the development of woody biomass alternative fuel, and in forest fire prevention, firefighting and clean-up. But we are losing an increasing number of the hard-working and skilled people who perform these tasks. The timber harvesting season is short, existing regulatory requirements are costly, and loggers must look to make a living and pay for government regulation in a short window of time to continue in the trade. As workers quit or retire, a new generation is leery of stepping up to replace them.	The social and economic section of Chapter 3 of the final EIS includes the direct, indirect and induced economic value, including jobs. The ACL is beyond the scope of the National Environmental Policy Act analysis, however comments that state a position are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action.
280.01 - Jobs	#18869-4	Look no further than the communities within 150 mile and see the need for the jobs that would be created. Please consider the human race when making your decision. These commonities will further deteriorate without this work opportunity. Since we can't log live trees, lets harvest the dead one and put the resource to good use. Creating job, supporting the local folks and businesses.	The purpose and need of the project as described in Chapter 1 includes maintaining and/or creating jobs in forest management and providing timber to the local mill which are major employers of these rural communities. The proposed activities to address this include salvage harvest of fire-killed trees in selected areas, and salvage of fire-killed and other hazard trees along roadways and near infrastructure. The social and economic section of Chapter 3 of the EIS includes the direct, indirect and induced economic value, including jobs.
280.02 - Local Economics	#12334-2	The regrowth of a forest ensures tourism revenue and a healthier forest.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. We acknowledge the comment.

Code	Comment Number	Comment Text	Response
280.02 - Local Economics	#17111-9	One of the major motivating factors in conducting salvage logging in the Westside fire area - including the LSRs - seems to be economic and not ecologic (DEIS, 10-11), which is further indicated by the Chief s "Emergency Situation Determination" and the "Alternative Arrangements" secured from the Council on Environmental Quality. The NWFP specifically directs that, "Salvage will not be driven by economic or timber sale program factors" in LSRs (NFP SFEIS F-21). The teams that put together FEMAT and the NWFP specifically wanted the LSRs to be exempted from the pressures of programmed timber harvest, because the primary drivers in LSRs were ecological and not economic. Hence, it would seem that the salvage proposed within LSR segments as part of the Westside Salvage Project is inconsistent with the goals and principles of LSR management.	The question of salvage in Late Successional Reserves was anticipated in the development of the Northwest Forest Plan and was squarely addressed in the Northwest Forest Plan ROD. The report of the Forest Ecosystem Management Assessment Team provided the basis for the Northwest Forest Plan. Forest Ecosystem Management Assessment Team considered salvage with three different prescriptions, ranging from no salvage, to salvage with minimum guidelines. Prescription 2, (Forest Ecosystem Management Assessment Team II-18) which limited salvage in Late Successional Reserves was carried through to the Northwest Forest Plan ROD. “Valuable trees that are dead can be used for commercial purposes with the attendant employment and economic benefits. …Increased fire danger or risk to insect and disease resulting from large accumulations of dead trees can be reduced in an economically feasible fashion. Avoided are the perceptions of economic waste if patches of dead trees are not salvaged.” (Forest Ecosystem Management Assessment Team II-18) The topic of salvage in Late Successional Reserves generated public responses in the Northwest Forest Plan requesting salvage be restricted only to Adaptive Management Areas. The Secretaries of Agriculture and Interior, the signing officials for the Northwest Forest Plan, noted their logic for salvage in Late Successional Reserves in the Response to Comments (Northwest Forest Plan ROD, Page 66): “Salvage is not required to be beneficial, but is designed to permit recovery of a timber volume in those instances where catastrophic events clearly kill more trees (resulting in more snags and down logs in the short and long term) than are needed to maintain late successional conditions.” See Chapter 1 of the EIS for a discussion about salvage in Late Successional Reserves. Also see Chapter 1 of the final EIS for a discussion of emergency situation determination and Alternative arrangements. Since the draft EIS comment period, the agency has decided not to seek additional Alternative arrangements for elimination of the 90-day wait period between draft and final EIS or the 30-day wait period between final EIS and ROD. The purpose and need for the Westside Fire Recovery project includes ecologic and economic factors as stated in Chapter 1 of the final EIS. Standards for managing in Late Successional Reserves are provided in the Forest Plan (pages 4-86 through 4-88) and are followed in this project. Economics are not the driving factor in determining whether or not the project will be implemented in reserves. As stated in the Forest Plan (page 4-86), "Thinning and other silvicultural treatments inside reserves are subject to review by the Regional Ecosystem Office to ensure that the treatments are beneficial to the creation of late-successional forest conditions." The Westside Fire Recovery project has been submitted to the Regional Ecosystem Office for review. The Forest Plan also emphasizes that management activities focused on reduction of "insect, disease and fire threats" are encouraged in Late Successional Reserves; therefore, salvage harvest proposed within Late-Successional Reserve segments is consistent with the goals of Late-Successional Reserve management on the Forest. The statement, in response to a comment on the Northwest Forest Plan EIS, states that "Salvage in Late Successional Reserves will be permitted only where operations will not diminish the quality of late-successional habitat, where stand-replacing disturbance events exceed 10 acres, and under a number of other conditions listed in SEIS Appendix B5, Recovery Plan Standards and Guidelines. Salvage will not be driven by economic or timber sale program factors." The conditions listed in the SEIS, Appendix B5, are those reiterated in the Forest Plan on pages 4-86 through 4-88. The social and economic effects of the project Alternatives as disclosed in the social and economic section of Chapter 3 of the EIS.
280.02 - Local Economics	#17349-3	plus creating the critically important social/economic benefits from local employment, and increased 25% funds for schools and roads.	The social and economic effects section of Chapter 3 of the EIS discloses effects of Alternatives on local employment and economic returns to Siskiyou County for schools and roads.
280.02 - Local Economics	#17359-2	Moreover, if the Klamath logs these trees, it would condone and facilitate the persistent hopes of certain economic factions for periodic influxes of large-diameter timber, which will remain until the Forest Service commits to stop logging these largest trees. By proposing to log these trees, the FS is implicitly endorsing a model of ecosvstem management that will lead only to greater social conflict and tension with the science of fire ecology. This will certainly not be the last fire to occur in the Klamath's roadless forests, inside or outside its old-growth and roadless jewels. In addition, the market for wood and pulp is currently low, and many reqent FS sales have been under-priced due to the attendance of only one or a few bidders. The assistance of the FS in such a "supply-side" timber market is profoundly unhelpful to a country that should be seeking greater efficiency and conservation of our wood and fiber resources, rather than wasting these resources at artificially low prices.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
280.02 - Local Economics	#17481-46	Economics through tourism and recreation has not been addressed - position should be to not allow agency to say wilderness does not have economic value.	The effects of the project Alternatives on recreation are disclosed in the Recreation section of Chapter 3 of the EIS, and the effects on scenery are disclosed in the Scenery section of Chapter 3 of the EIS. These two factors are primary components of appeal to tourists (National Visitor Use Monitoring report 2012). The economic value of Wilderness is outside the scope of this project since no activities are proposed in Wilderness.
280.02 - Local Economics	#18852-2	As a resident of the Happy Camp area, I wish to see a long-term forest products industry which is well planned and implemented, ideally where value-added products are created and not just an industry where commodity logs are shipped to mills outside of our area.	The Forest Plan supports a well-planned forest products industry but developing a value-added industry is beyond the scope of the Westside Fire Recovery project.
280.02 - Local Economics	#18853-4	The timber industry provides good middle-class jobs in rural communities where the unemployment rates are well above those of the rest of California, and where, in recent years, the once-robust timber economy has been transformed, on the North Coast, in the Sierra, and in practically every pocket of rural timberland California by a "replacement" economy of illegal drug production that is criminal, lethally dangerous to timber workers, hikers, campers, and government employees alike; that presents an increased risk of wildfire thanks to illegal campfires, chemical explosions and other risks; and that has no regard for environmental safeguards as water quality, species, and habitat are destroyed.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
280.02 - Local Economics	#18857-2	Purpose and Need for Action: The stated "Purpose and need for action" appears to be economic rather than ecologically based. I understand that you must manage the forest for various competing interests. As someone who has derived the bulk of my livelihood as a forest products producer and/or consumer I have concerns about this stated need for action. I spoke at the meeting with your staff regarding bidding qualifications to participate in the sale of the proposed project and it was clear that the qualifications due to bonding capacity and performance capacity in general are unattainable for the local small forester and timber business owner to truly participate in a way that directly benefits them. To be clear, I personally don't have interest in bidding on this project or its units. My concern is that the Forest Service is painting the false picture that somehow the economic benefits of this project are designed to be beneficial to the local communities economically. I'm not sure how that is possible when the treatment required can only be undertaken by large out of area corporations? The stated purpose of "a project that is economically viable…and benefiting our local communities" should come with some baseline criteria. If the desired result of the forest "recovery" is truly as you have stated please undergo some sort of formal review and/or sidebar development with the community as it pertains to economic recovery and community benefit. For instance, I propose the following questions be answered yes to truly satisfy the stated need: * Are the majority of project bid winners residing in the community? * Do the bid winners pay taxes in the local community? * Are the bid winning companies required to hire local labor? * Is the majority of the resulting harvest available for purchase within the bioregion? * Are the bonding requirements low enough to allow for local and regional business to participate? * Does the project support the local economy as it now functions? * Does the project support and strengthen other local and regional economic activities including Tourism? * Are there restrictions on log exports? I'm sure the community would willingly add to this list. Without a framework to manage the true benefit to the community, the desired results are really just talking points to divide the factions of the community that are pro salvage vs. pro environment. This has worked for the Forest Service in the past, but these issues are far more nuanced than currently being described in the various alternatives. The community and the forest stakeholders, including the Timber Industry really deserve more from the Forest Service in this regard.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. The full purpose and need for action is disclosed in Chapter 1 of the EIS. As described, there are three parts of the purpose and need, including ecological, economic, and social/safety needs for action. Contract development and awards for implementation are outside the scope of the analysis for this EIS; however, it is likely that the project will be split into multiple sales, which could address some of your concerns related to bonding or the feasibility of implementation within required time frames of contract(s). The comment regarding economic benefits and the local community is a position statement, not supported by scientific rationale. In terms of benefits to the local communities wildfire protection is addressed in the fire and fuels section of Chapter 3 of the EIS; benefits to safety and to the economic returns to Siskiyou County are addressed in the social and economic section of Chapter 3 of the EIS .As shown in Table 3-26, Alternative 2 would provide the greatest number of jobs as well as the most amount of revenue from timber sales and to the county.
280.02 - Local Economics	#18869-2	Using best practices coupled with cutting ease equipment the community could realize an economic gain while extracting a natural resource	The relationship of this comment to the environment effects of the project is unclear.

Code	Comment Number	Comment Text	Response
280.02 - Local Economics	#18926-28	The social and economic impacts to public trust resources such as clean water, wildlife, fisheries and carbon storage were not evaluated.!	Social and economic impacts of project Alternatives to clean water, wildlife, aquatic resources, and carbon storage are qualitatively included in the hydrology (water quality), wildlife, aquatic resources, vegetation and climate change sections of Chapter 3 of the EIS. The sections have been expanded between the draft and final EIS to provide more information on effects to these resources.
280.02 - Local Economics	#18926-29	Only 32% of the cost for the fuels treatments and the site prep and plant would be captured. This leaves a small chance that these activities, that the DEIS relies on for reducing fuels and "restoring" forests faster, would actually happen. The increased fire danger from not treating activity fuels and small fuels around communities is not considered	Additional funding sources will augment treatment of activity fuels. See response to comment number 18878-43 about implementation funding. The Westside Fire Recovery Project proposes to treat all activity-generated fuels; therefore, analysis of Alternatives incorporates treating activity-generated fuels. This can be compared to the effects of Alternative 1, in which no treatments is proposed. Position statement. The economic analysis of the effects of the project includes a discussion of the percentage of dollars provided by each Alternative that will be available to implement fuels reduction activities. As noted in Chapter 2 of the EIS, treatment of activity fuels will be included in salvage and roadside hazard sales. Other fuels reduction activities will be implemented within 10 years.
280.02 - Local Economics	#18926-34	How much funding would be generated from the treatments outlined in the Karuk Alternative? An update of the Environmental Impact Statement (either in a the Draft or Final) should reflect these funds. ! ! Generating the income for Siskiyou County in its communities and providing jobs is consistent with the purpose and need, but it should be generated in a manner that protects life, first, and second protect private, public and tribal improvements and private property is buffered with a third priority on resources. Maximum income for the communities and in Siskiyou county would be available on the products that can be utilized. as is consistent with the protection, in prioritized order of: life, property, and resources ! !	See response to comment number 18878-43 about implementation funding. Many components of the Karuk Alternative have been incorporated into Modified Alternative 3, as described in Chapter 2 of the final EIS.
280.02 - Local Economics	#19006-1	As a possible purchaser of some of the timber from this project this is critically important to our mill and the recovery of veneer from the logs that would come from this project. We can't stand to loose the majority of the veneer from this timber to the worms and insects that will destroy their value over the next year.	Statement of support. Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. To expedite the process, an Emergency Situation Determination was requested by the Forest and issued by the Chief of the Forest Service for this project; see Chapter 1 of the final EIS. See response to comment number 17501-1 and 2. See response to number 12368-1. Effects of all Alternatives are analyzed based on implementing the project in time to maximize the opportunity to recover forest products.
280.02 - Local Economics	#19157-6	Encourage the use of Small Business Timber Set Aside Program.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This is a matter of implementation, not of analysis; however, the comment has been acknowledged.
280.02 - Local Economics	#23-3	Consider the economic benefit that would result from Salvage Logging to the immediate and surrounding communities. This economic benefit also includes the increase in the tax base of the area to help pay for needed public services: roads, public safety, schools, and health departments.	See response to comment number 18869-4.
280.02 - Local Economics	#8825-1	The cumulative impacts of logging in sensitive ecosystems must be assessed using the best science. Fires and drought must be included in any comprehensive plan. Planning for a drought of at least ten years must be studied and included in any Logging plan. Plan for the future not a short term economic gain. Economic costs must also be included in this plan. Cost of fire fighting, water diversion and the loss of tourism must be adequately assessed in this plan.	Cumulative effects (impacts)of all Alternatives, as defined by the Council on Environmental Quality National Environmental Policy Act regulations at 40 CFR 1500-8, are analyzed in Chapter 3 of the EIS. Cumulative impacts are those created by adding the effects of the proposed project to the impacts of past, present, or reasonable foreseeable future actions, not of events such as fire or drought. Fire fighting is outside the scope of this project. The only water diversion proposed in this project is related to watering the roads for dust abatement; for this, there is a watershed project design feature in Chapter 2 of the EIS and effects are analyzed for in the hydrology and aquatic resources sections in Chapter 3 of the EIS. See the social and economics section of Chapter 3; the project will improve safety conditions and road access for the recreating public. The effects of the project on recreation opportunities are disclosed in the recreation section of Chapter 3 of the final EIS, and the effects to scenery are disclosed in the scenery section of that Chapter; these are a proxy for effects on tourism. As described in the purpose and need in Chapter 1 of the EIS, the project is designed to address the needs for future forested conditions for improved long-term habitat and watershed conditions. See response to 17481-46.

Code	Comment Number	Comment Text	Response
280.05 - Social - Other	#17481-7	All Project Plans in the recovery area should include the Socioeconomic effects and the planned mitigation.	Social and economic impacts of project Alternatives are disclosed in Chapter 3 of the EIS; these impacts include implementation of project design features (mitigation measures) as described in Chapter 2 of the EIS.
280.05 - Social - Other	#18878-65	Social and Economic Environment DEIS: The indicators used for the social analysis include lifestyles, values, beliefs, health and safety of individuals and communities. (Pg. 251) The American Indian population is a greater percentage of the population in Siskiyou County than in the State of California; therefore, potential impacts of management actions on the American Indian population will be disclosed. (Pg. 253) There will be no disproportionate effects on American Indians (Pg. 256) Comment: Since admittedly, "The American Indian population is a greater percentage of the population in Siskiyou County than in the State of California." In addition, it can be argued Karuk Tribal Members are the largest sub-set of Native Americans to be impacted by the proposed action. Lastly, the Karuk Tribe is Federally Recognized with a fully developed and functional tribal government. To our knowledge no effort to contact or coordinate the drafting of this section has occurred. We have to wonder how the author of this section reached a one sentence conclusion that there will be no disproportionate effects on "American Indians", let alone Karuk Tribal Members. It is our conclusion the analysis failed to take into account the social and economic impacts on "American Indians".	Environmental justice is defined in the 1994 executive order on Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations (EO12898). The 1995 USDA Department Regulation on Environmental Justice (5600-002) define what this means to USDA agencies, including the Forest Service: "Environmental Justice means that, to the greatest extent practicable and permitted by law, all populations are provided the opportunity to comment before decisions are rendered, are allowed to share in the benefits of, are not excluded from, and are not affected in a disproportionately high and adverse manner by, government programs and activities affecting human health or the environment." Chapter 1 of the final EIS provides details on opportunities all populations have to comment on the Westside Fire Recovery project. Opportunities for federally recognized American Indian tribes, including the Karuk, to comment and provide information to be considered, are provided through the consultation process as noted in the final EIS. The Forest consulted with the Karuk on the effects of the project to? cultural resources, including effects on tribal traditional use-areas and plants; project design features and mitigation measures were developed to minimize or eliminate these effects, which are disclosed in the cultural resources section of Chapter 3 of the final EIS. Effects on cultural plant collecting areas are disclosed in the botany section of Chapter 3 of the final EIS; negative or adverse effects are minimized or eliminated through implementation of project design features displayed in Chapter 2 of the final EIS. The expanded disclosure of social and economic effects of the project in the social and economic effects section of Chapter 3 of the final EIS references the information provided in the cultural resources and botany sections. The expanded legal and regulatory compliance section of this Chapter discusses compliance of the project with EO 12898.
280.05 - Social - Other	#18909-105	Only 32% of the cost for the fuels treatments and the site prep and plant would be captured. This leaves only a small chance that these activities, which the DEIS relies on for reducing fuels and "restoring" forests faster, would actually happen. The increased fire danger from not treating activity fuels and small fuels around communities is not considered. The Forest Service has a long record of selling timber that is worth less than logging costs, generating large economic burdens for taxpayers and the overall economy16. The GAO Biscuit project report17 has clear relevance to the Westside project. The report concluded on page 57, that "[i]t remains to be seen how much of the other recovery work - wildlife habitat rehabilitation, fuel management zones, monitoring and the adaptive management study - will be accomplished given the lack of funding and schedules." 16 Niemi, Ernie. Economic Risks of Salvage Logging: the Biscuit Fire. ECONorthwest, March 2004. 17 General Accounting Office Biscuit Fire Recovery Report-Analysis of Project Development, Salvage Sales, and Other Activities. September 2006 GAO-06-967 The social and economic impacts to public trust resources such as clean water, wildlife, fisheries and carbon storage were not evaluated. We agree that it is hard to put a price on the source of sustenance and a quality life. Helicopter logging and 'salvage' logging in general would extract the largest trees, leave the small trees creating a deep sea of slash and flammable fuels. The Salmon Salvage timber sale, implemented last year on the KNF is a testament to that. The same forest managers are scratching their heads trying to figure out how to deal with all that slash. The KNF is considering dropping fire from a helicopter to engulf the flammable ground fuels left behind from logging on these steep mountain slopes. Logging in this manner does not create fire safe communities. It puts communities at risk with immeasurable ecological costs. The DEIS fail to meet the forest wide Economic Goal in the KNF LRMP (2010) at page 4-9 which states, "Promote the economic stability of local communities. Develop partnerships with local and Regional agencies, groups, or individuals to promote economic stability." "Promote the development of non-traditional Forest-based resources that could contribute to the economic stability of the area. Emphasize the harvest of wood fiber (biomass), fishing and wildlife viewing, harvest opportunities, and recreational opportunities, while meeting resource management goals. Highlight the importance of a visually pleasing setting to support local economic development strategies that focus on recreation opportunities or tourism." (Emphasis added). The DEIS fails to consider the actual costs of the NEPA planning thus far and the costs of all the mechanized and manual treatments throughout the 218,600 acre planning area.	See response to comment number 18878-43 about implementation funding. See response to comment number 18926-29 for response to the first three sentences and number 18926-28 and number 18934-13 for other sections of the comment. Consistency with Forest Plan economic standards is disclosed in the Forest Plan consistency checklist, summarized and referenced in the social and economies section of Chapter 3 of the EIS. As noted there, most economic goals are beyond the scope of this project. The costs of National Environmental Policy Act planning are beyond the scope of the environmental effects of the project; costs of treatments are included in the costs of the project that are disclosed in the social and economic effects of Alternatives in Chapter 3 of the EIS.

Code	Comment Number	Comment Text	Response
282.0103 - Traditional Way of Life	#18872-7	The Shastas have maintained these magnificent forests in our Native lands as has other tribes throughout the United States of America. Tribal burning in the fall throughout the centuries has created a logical common sense approach, and the only method to preserve these forests. Since the creation of the Forest Service and illogical forest practices we have forests with catastrophic fire and fuel load conditions. As a guide to follow back to pristine forest conditions every recovery action plan must be on a journey back to native conditions.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. This project incorporates underburning and addresses fuels conditions, as described in Chapter 2 of the final EIS.
282.0105 - Scenery, Visual Resources	#12346-69	The scenery analysis contained at 275 of the DEIS indicates that the KNF intends to conduct salvage logging activities across the Tom Martin Peak and Bear Lake Trails as well as at the Tyler Meadows and Cold Springs trailheads such that attainment of VQOs will not meet Forest Plan standards. Similarly, page 290 of the DEIS acknowledges that proposed logging units within Wild and Scenic (and eligible) corridors for the Klamath, Scott, North Fork Salmon Rivers and Grider Creek will not achieve the VQO time period objectives.	The Forest does not have a standard list of wildfire restoration scenery protection measures. Project design features (project design project design features) are developed specifically on a project by project basis. Additional Recreation and Scenery project design project design features have been developed for Modified Alternative 2 to reduce effects to recreation settings and scenery. However some long term effects to scenery would exist after project implementation and are identified in the Scenery Amendment Report. The Westside Fire Recovery Project proposes treatments on approximately 7 % of the 183,000 acres burned; thus 93% or 100,000 acres would display visible evidence of the forest 's natural wildfire processes. The Forest Plan Standard and Guideline number 11-7 reads in full "In the case of recovery activities after extreme catastrophic events such as intense wildland fires, time periods to achieve the Visual Quality Objectives stated in Forest-wide and Management Area Standards and Guidelines may be extended. This would be necessary where previously unnoticed scenery alterations are exposed to view due to loss of vegetative screening, or during timber salvage activities where recovery of forest vegetation is determined to be of greater importance than achievement of Visual Quality Objectives within the time periods established." The Forest interpretation is that Standard and Guideline number 11-7 takes precedence over Standard and Guideline number 11-3. Standard and Guideline 11-7 states "...time periods....may be extended" without any qualifying time limitations.
282.0105 - Scenery, Visual Resources	#17312-1	I am particularly concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection.	See response to comment number 18927-3.
282.0105 - Scenery, Visual Resources	#17322-1	In particular I am very concerned about proposed activities that could adversely impact the existing Klamath, Scott, and North Fork Salmon Wild & Scenic Rivers and segments of Elk Creek, Grider Creek, and South Fork Russian Creek recommended by the Forest Service for Wild & Scenic protection.	See response to number 18927-3
282.0105 - Scenery, Visual Resources	#17460-9	The "Recreation Resource Report" is puzzlingly inadequate. Somehow it manages to conclude that the impacts to recreation in Alternatives 2, 3, 4, and 5 are all the same. Here are two obvious differences between alternatives that were missed in the report; other examples can easily be found: 1. Camping at Grider Creek Campgrounds will be significantly impacted by the noise, dust, and salvage harvest activity under Alternative 2 by salvage operations in units 61, 62, 62-1 , and 62-2. Views will also be impacted for decades; these impacts will also affect local users of the Pacific Crest Trail. No such local disturbance would occur under Alternative 5. 2. Camping and hiking along the Pacific Crest Trail in the Cliff Valley area of the Grider Creek watershed will be impacted by noise, dust, and activity under Alternative 2 salvage operations in units 224, 228 x, and 229 x; some of these units border the PCT directly. Views, again, will be impacted for decades by clearcuts directly adjacent to the PCT. No such local disturbances would occur under Alternative 5. Similarly, recreation at Tyler Meadows would be affected by adjacent salvage operations, some units of which are flagged for salvage right up to the edge of Tyler Meadows. At a minimum, some setback of salvage units directly bordering Tyler Meadows should be implemented, for both wildlife connectivity, and to preserve its scenic views. These examples of the failure of the "Recreation Resource Report" to distinguish differences in impacts between Alternatives 2-5 are by means exhaustive.	This oversight in the Draft analysis has been corrected in the Recreation, Scenery, and Wild and Scenic Rivers Reports. We dropped some units on the north side of Tyler meadow against the wilderness boundary. We'll discuss marking some additional snags along Tyler meadow with our implementation team. Thank you, this is a good idea.

Code	Comment Number	Comment Text	Response
282.0105 - Scenery, Visual Resources	#18851-4	The project proposal does not adequately protect the Scenery values of the forest, or its local residents and tourists, primarily because it fails to apply standard wildfire restoration scenery protection measures, such as those recently applied on the Mt Hebron Fire Recovery Project. These include: 1) Retention of a representative pattern of standing dead trees within all High and Moderate Sensitivity views, with the specific purpose of retaining the forest's natural scenic character, and retaining visible evidence of the forest's natural wildfire processes. 2) Reduce the height and scenery impacts due to project-created stumps, skidding and yarding activities. These protection measures have proven to be fully implementable, produce negligible effects upon other resource objectives, and consistently benefit resources such as wildlife and watershed. If these measures are not applied, adverse LONG TERM scenery impacts would persist along many of the Forest's most highly valued recreational settings and tourism attractions. The project's Scenery report is helpful and informative in many respects, however has some important shortcomings that have very likely adversely influenced the Project's scenery outcomes:	See response to comment number 18926-20.
282.0105 - Scenery, Visual Resources	#18851-5	Page 13 & 14 of the report incorrectly implies that Visual Resource Management S&G 11-7 indicates that the Klamath Forest Plan's intent is for an unlimited period of delay allowed in meeting Forest VQOs, "to recover forest vegetation". However, Klamath Plan VRM S&G 11-3 more specifically states "Visual objectives may be foregone in the short-term, following extreme natural events." Thus, long term scenery impacts to sensitive views, such as the excessive removal of fire killed trees, or persistence of visible tall stumps, etc are not consistent with this more specific S&G. These long term scenery impacts must therefore be prevented by protection measures consistent with those applied by the KNF's recent Mount Hebron project (included requirements for retaining a representative % of the standing dead trees in natural appearing patterns of individual trees and clumps). In addition, the project's Scenery Report fails to provide any illustrative photographs to visually communicate the project's scenery conditions and the potential effects of its alternatives. It is unreasonable to expect the reforestation planning team member, decision-maker, or interested citizen to translate the Scenery Report's technical jargon of "VQOs" or narrative Scenic Character descriptions into what one would actually see in these important Klamath National Forest recreation settings. The few local photographs provided by other sections of the Westside Fire Recovery document are helpful but lack the necessary scenery translation to communicate existing scenery conditions, Forest Plan scenery requirements, and scenery effects from proposed alternatives. Failure for the Scenery Report to provide pertinent photography, even at a summarized representative level for this large project, prevents readers from being able to determine whether the scenery they value is adequately protected. Forest Scenery is a primary element of Siskiyou County's quality of life, recreation settings, tourist attractions and unique identity. This project would potentially affect the scenery within 60 precious views, include at least 4 Wild and Scenic Rivers, 1 Scenic Byway, 1 National Scenic Trail, 5 campgrounds, 7 recreational trails, 7 river accesses, 4 mountain top lookouts, and several local communities. There is no reasonable excuse on earth that the scenery protections identified above should not be fully implemented, to protect these views from the project's proposed long term eyesores. Even a project as large and potentially scenery-impacting as this CAN be done in a way that protects these important quality of life values. It just takes the commitment to do so, and the FS Mission of Public Service demands it	See response to comment 18926-20.
282.0105 - Scenery, Visual Resources	#18857-11	No salvage logging in designated or recommended Wild and Scenic River segments.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. Management Area - 3 "Recommended and Designated Wild River" is listed in Table 1-5 of the draft EIS because of its occurrence within the project boundary. However no project treatments are proposed within the Wild River corridor. Table 1-5 of the final EIS has been revised to clarify that no project treatments are proposed in this management area. The Wild and Scenic River report describes effects of the project. .

Code	Comment Number	Comment Text	Response
282.0105 - Scenery, Visual Resources	#18873-2	The section of PCT near the Cold Springs Trailhead presents a different set of challenges. As the PCT follows the ridge line just north of the Marble Mountains Wilderness boundary, there are project units proposed to be in close proximity to the trail as well as a temporary road. In reviewing the map associated with the DEIS, it appears there are a total of eight units that the PCT either passes through or along a unit boundary. The Unit numbers are as follows; 224, 228-1, 228-3, 229-1, 229-2, 229-3, P321, and P323. In addition, based on my map review it looks as though the temporary road to be built to access the 228 Units is quite close to the trail. The Recreation Resource Report associated with the DEIS references the Visual Quality Objectives associated with the project, however it is not very specific in regards to the visual impacts on the PCT where the Units referenced above are in close proximity to the trail. I respectfully request that the Forest consider including more specific visual mitigations for the PCT in the Final EIS. For example, cutting stumps as low to the ground as is feasible and angling the cut faces away from the trail would help to minimize visual impacts to the trail in the short term. In addition, hand raking ground disturbance associated with the logging activity would also help maintain the scenic integrity of the PCT. And perhaps most importantly, a project of this scale warrants a field visit with Forest staff. I can personally commit to making myself available in a timely manner for field visits to the Cold Springs area to preview the Units listed above as well ground truth the existing roads and proposed road in the area and the potential impacts on the PCT. As a point of reference, the Hat Creek Ranger District of the Lassen National Forest implemented the visual mitigation measures below during a similar timber operation near the PCT following the Reading Fire: * Protect NFS trails, including the Pacific Crest National Scenic Trail, from damage during implementation of the proposed activities. * Equipment crossings would be limited to designated crossings. The trail tread would be restored at crossings. * No leave-tree marking would be applied within 150 feet of NFS trails falling within Retention (R) and Partial Retention (PR) VQO classes. * Stumps would be cut to a maximum of 8 inches within 50 feet of NFS trails. * To minimize soil displacement, avoid turning equipment within 50 feet of NFS trails. * Activity-generated fuels created within 150 feet of NFS trails, viewpoints, and other high-use areas would be piled and burned or removed within one year of operations. Piles would be located a minimum of 100 feet from trails and trailheads. * In areas of high recreational use, some vegetation, where available, would be left along the edge of trails and roads. Residual vegetation can act as a visual barrier to discourage future unauthorized routes. I look forward to speaking with Forest staff about how similar mitigation measures could be implemented during the Westside Forest Recovery project implementation.	Recreation and Scenery Project Design Features (see Chapter 2 of final EIS for a complete listing) have been added which will protect the trail from harvest and machine access. The boundary of unit number 224 has been moved 50 feet away from the PCT. As agreed upon in the 05/13/15 field review between Forest representatives and the Pacific Crest Trail Association, no roadside hazard trees would be removed adjacent to the PCT out to a distance of 15 feet. No salvage harvest would occur within 50 feet of the trail. Stumps will be cut 6" or lower and angle cut away from the PCT. No marking paint will be visible from the PCT.
282.0105 - Scenery, Visual Resources	#18878-13	Table 1-5 pg 9. "MA3 Recommended and Designated Wild River DEIS: Ecological processes shall shape the vegetative patterns within the management area. The salvage of dead trees, or the reforestation of these areas following catastrophes, should not be permitted. Schedule no timber harvest from this management area (pp. 4-78 to 4-79)" Comment: In addition to the above, on page 4-88 of the Klamath National Forest Land and Resource Management Plan, Grider Creek is portrayed as a "Designated & Recommended Wild River". The stated Desired Future Condition pg. 4-90 indicates "Viewers see fire scars from the rivers, evidence of the ecological processes that shape the vegetative patterns viewed from the river." Since the vast majority of salvage harvest is to occur in the Grider Creek watershed the Refined Proposed Action deviates from the Desired Future Condition.	Management Area - 3 "Recommended and Designated Wild River" is listed in Table 1-5 of the draft EIS because of its occurrence within the project boundary. However no project treatments are proposed within the Wild River corridor. Table 1-5 of the final EIS has been revised to clarify that no project treatments are proposed in this management area.

Code	Comment Number	Comment Text	Response
282.0105 - Scenery, Visual Resources	#18909-102	KNF LRMP page 4-7, Manage visual resources to conserve the natural scenic character of the Forest. Meet the Forest Plan's adopted visual quality objectives (VQOs). Emphasize management of the visual resource seen from communities, high-use recreation areas and major roads and trails. Conserve the inherent scenic attractiveness of distinctive landscapes. This includes units located in the foreground of Highway 96, Klamath Wild and Scenic River, Tyler Meadows Trailhead, Cold Springs Trailhead, Grider Creek, Grider Creek Campground, Grider Creek road, and the Pacific Crest Trail. The DEIS fails to consider the diminished visual quality from the Marble Mountain and Russian Wilderness Areas and areas visible from the Pacific Crest Trail. The project would create large openings with line and texture contrasts with adjacent burned or forested areas. Units and roadside treatments in Retention Visual Quality Objective (VQO) areas would likely not meet the visual quality standards. Recreation settings would also be would be adversely affected. While an exception is allowed under the KNF Forest Plan Standards and Guideline 11-7 which states "In the case of recovery activities after extreme catastrophic events such as intense wildland fires, time periods to achieve the VQOs may be extended. This would be necessary where previously unnoticed scenery alterations are exposed to view due to loss of vegetative screening, or during timber salvage activities where recovery of forest vegetation is determined to be of greater importance than achievement of VQOs within the time periods established." However, clearcut logging is not a recovery activity and the visual quality of these naturally recovering stands is already meeting visual quality objectives.	As noted in Tables 3-27 and 3-30 of the draft EIS and in a similar section in the final EIS, multiple wilderness trails are considered in the scenery analysis. These trails include Hogan Lake, South Russian Creek, Statue Lake, Twin/Big Blue/Paynes Lake and the Pacific Crest Trail.
282.02 - Health, Safety	#17-1	Our unit of the Backcounty Horsemen of California supports the Klamath National Forest Westside Fire Recovery Project as it is written in Draft Form, with one exception. The Top of the State Unit of BCHC would like to add Hazard tree removal to the KNF system of trails that are in the affected areas, included in the proposed action. These trails receive hundreds of Visitors each year and burned trees deemed "hazard trees" adjacent to these trails should be removed and included in this project. The public using these trails should have the same safety precautions in effect as persons traveling the State Highways and County Roads. Waiting for these trees to fall naturally may take years and will jeopardize trail user safety.	Hazard Trees associated with trails within the project area will be addressed separately from this project as part of routine trail maintenance. Trail-side hazard trees will be prioritized and treated based on risk level including probability of tree failure and probability of a target. Selective treatment of hazard trees along trails allows for protection of scenery and the recreation setting.
282.02 - Health, Safety	#2-1	The first thing to notice skimming the deis for the westside project is the constant mention of public and worker safety. As of the date of the draft release, Highway 96 and county roads inside KNF are perfectly safe to travel. Most road threatening snags have been removed and access is not dependent on any of the deis alternatives. I also assume that main USFS roads have already been treated for safety hazards or are well into the process of being treated. So talking about treating public roads for safety hazards as part of the deis should be limited to the public roads that have not been treated. Also, the deis over-states the danger to workers and the general public from falling snags. Really, the movement of log trucks along narrow roads will be much, much more of a hazard to the public than any falling snag could be. The main hazard to workers in the woods will be from heavy equipment and chain saws. Also, road dust is a huge contributor to lung disease, and more traffic on dirt roads will definitely impact worker health. As a property owner near the fire line, I am very concerned about health hazards the proposed logging poses for me and my family.	The socio-economic section of Chapter 3 of the final EIS expands on the effects on Alternatives on safety of the public, forest workers, and travelers along roads. Safety of workers using heaving equipment and chain saws is part of implementation of projects. An expanded discussion of the effects of the project on dust is discussed in the air quality section of Chapter 3 of the final EIS.

Code	Comment Number	Comment Text	Response
282.02 - Health, Safety	#5873-11	Hazard tree removal is far too aggressive. Removing trees along roads that receive little use will sacrifice significant ecological values to gain little in terms of safety. Reaching out 250' on each side of roads is not necessary. The probability of hazard trees hitting roads decreases significantly beyond 100 feet. Hazard tree removal must be limited to imminent hazard trees within 150 feet of well-travelled roads. The FS should consider alternatives such as keeping workers out of the hazard zone around valuable wildlife trees (i.e., all large snags), closing less well-used roads to discourage public exposure to hazards, and signage to remind people of hazards. Generally the public is cognizant and tolerant of such hazards when out in nature. Large snags are the least likely to fall within 5 years and should not be considered imminent hazards. Small trees near high use areas should be the priority for hazard tree felling. Hazard trees should be felled but not removed from reserve land allocations.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. See Chapter 2 of the EIS for a full description of what is being proposed in terms of roadside hazard treatment. The 250-foot buffer is simply where fire-damaged trees will be evaluated to determine whether or not they are hazards according to the criteria in Chapter 2 of the EIS--not all will be removed. The removal of hazard trees has been developed within the standards of the Northwest Forest Plan, and the Project activities have been developed to protect the health and safety of the public and forest workers, as outlined in the purpose and need statement of the Project. Changes to the Forest transportation system are outside the scope of the project. Recreation and Scenery-6 project design feature in Chapter 2 of the EIS addressed signing needs for safety related to operations.
282.03 - Cultural, Hist., Anthro. Resources	#18878-18	DEIS: The following modifications or clarifications were made following scoping: Release includes manually removing all vegetation within a minimum of a fivefoot radius from a planted or naturally regenerated conifer seedling. (Pg. 17) Comment: The manual removal of hardwoods should be prohibited as these are a critical component of the landscape, increase fire resiliency in the landscape, and removal of such species is contrary to discussions during government-to-government consultation.	As described in Chapter 2 of the EIS "Growth of existing hardwoods will be encouraged; hardwoods will be included in the target stocking for units in areas where they exist. "Vegetation removed through release generally consists of forbs, grasses, and shrubs. Because planting prescriptions specify that conifers will be planted away from hardwoods, it is unlikely the hardwoods would exist within the grubbing radius of the planted conifer seedling.
282.03 - Cultural, Hist., Anthro. Resources	#18878-5	After numerous communications and based upon our review of the DEIS we feel it necessary to reaffirm the United States Forest Service as a federal governmental entity that has the legal and moral obligation to protect tribal trust resources and culturally significant resources which are defined in our Draft Karuk Tribe Department of Natural Resources Eco-Cultural Resources Management Plan (06-05-10) (ECRMP): "Culturally significant resources are not simply artifacts and anthropological histories. They encompass a wide range of physical, social and spiritual characteristics. The physical resources include, but are not limited to food resources such as deer, elk, salmon, lamprey eels, acorns, berries, and mushrooms. The spiritual characteristics of these culturally significant resources incorporate the need for the human influence in management for the perpetuation of cultural resources, practices and 1of22 knowledge base necessary to maintain Karuk Culture. The spiritual nature behind cultural resources not only validates the cultural principle that humans are the stewards of natural processes, but shows that everything in nature is at some level a significant cultural resource (Holmlund 2006)."	We agree that culturally significant resources are more than simply artifacts and anthropological histories. Any identified culturally significant resources will be protected from project activities using project design features and/or Standard Resource Protection Measures. The Forest Service is actively consulting with the Karuk Tribe; see Chapter 1 of the EIS.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#18878-58	DEIS: Karuk people were engaged in a seasonal subsistence rounds. The people would foray out from permanent village sites throughout the year as resources became available for harvesting and processing. When resources had been procured, individuals and families would return to the village sites and store the supplies for future use. The project area has numerous culturally significant plant stands (e.g. tanoaks, bear grass, hazel, huckleberry) within and adjacent to natural openings, plantations and meadow areas. Important species were often managed and enhanced by tribes through the use of fire. (Pg. 246) Comment: There are two major points which need to be addressed regarding this statement in particular and for this whole section in general; 1) The use of the past tense is an affront and demonstrates a fatal lack of understanding of the Karuk People. The impression either intentionally or not gives the non-Indian reviewer an impression that we are no longer around and do not currently practice subsistence gathering, and use fire to manage "culturally significant plant stands". While it maybe said these practices have over time been declared illegal and a concentrated effort has been made by the Forest Service to curtail such activities, it has been demonstrated with the other National Forest which resides within our Aboriginal Territory an active acknowledgement of our cultural practices in a contemporary setting. Our cultural practices are not a quaint aspect of the past, but a living breathing aspect of the world today. 2) Some of our "culturally significant plant stands" have been named, yet none of these or other cultural resources were analyzed. How does the Forest Service meet the trust obligation in regards to our resources when they fail to perform any analysis beyond "physical artifacts". It is very clear to us absolutely none of our Scoping Comments, let alone the decades of actively engaging and educating the Forest Service were considered when drafting this DEIS. Once again Forest Service actions speak louder than words. At this time, the Karuk THPO cannot recommend Karuk participation in the Westside Fire Recovery Programmatic Agreement. The purpose of a Programmatic Agreement, as stated in the Region 5 PA, is to modify the Section 106 process, and the THPO is not yet satisfied that section 106 concerns have been properly addressed. Based on a comparative analysis of the WFR PA and the Stanislaus PA for the 2013 Rim Fire, we question whether the Stanislaus PA is an appropriate model for the WFR Project, as the extent of the salvage operations proposed in the WFR is much larger and the consultation period is much shorter. It is also important to note that in recent years the Karuk Tribe has recommended decertification of the 16 of22	Any identified culturally significant resources will be protected from project activities through project design features and/or Standard Resource Protection Measures. Identified resources were analyzed by specialists (see Chapter 3 of the final EIS). Comments regarding the WFR Programmatic Agreement are being addressed directly with the Karuk through consultation.
282.03 - Cultural, Hist., Anthro. Resources	#18878-62	Under Alternative 1, Cumulative Effects, the Tribe strongly agrees with the statement that the No Action Alternative "will lead to the degradation of traditional-use areas and plants ... resulting in the loss of culturally important places, and the ability to sustain traditions and cultures." Moreover, the Tribe would encourage the Klamath National Forest to acknowledge elsewhere in the DEIS the implicit truth in this statement: that these are timehonored practices that have taken place for millennia. The landscape contained within the Project area is replete with cultural resources - watercourses, trees, occupation sites, gathering sites, major trade routes, access trails, ceremonial trails, cairns, altars, and much more - that demonstrate the antiquity and historicity of these practices.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#18878-67	According to the USDA Departmental Regulation 1350-002, Tribal consultation is the timely, meaningful, and substantive dialogue between USDA officials who have delegated authority to consult, and the official leadership of Federally recognized Indian Tribes, or their designated representative(s), pertaining to USDA policies that may have tribal implications. It is our view that KNF's consultation was neither timely, meaningful, or substantive. Despite our concerns with the consultation process, we still believe that there is time for KNF to address our concerns and to provide assurances that project implementation, including but not limited to contract management and post implementation monitoring, can be conducted in accordance to the agreed terms and conditions. Finally, the need to reintroduce more natural fire regimes to the landscape cannot be overstated. It is critical that we work together to make our forests more fire resilient in the face of a changing climate and the need to protect our local communities from the risks associated with catastrophic wildfire. Any project proposed which does not include 20 of22 this component is contrary to our past practices, present needs, and future vision for the Klamath Basin.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.
282.03 - Cultural, Hist., Anthro. Resources	#18878-86	We consistently maintain the believe and expectation there is time to address the concerns of the Karuk Tribe, and provide assurances that the project implementation including, but not limited to contract development, and post implementation monitoring is conducted in accordance to agreed terms and conditions. In addition to the above, the following general principles should be also incorporated into post-fire projects. Please note these are not in any particular order of importance; 1) Research component uniquely 6) Incorporation of Tribal tailored to the Mid-Klamath Environmental Knowledge in Region; project planning, implementation 2) Enhancement of hydrologic and effectiveness monitoring; function of the Forest 7) Prescribed Burn Plans for retransportation system through introduction of fire on the road maintenance and landscape utilizing existing improvement actions, such as control lines and features; culvert replacement, road surface 8) Effective long term legally replacement and road enforceable agreements and/or decommissioning; independent conflict resolution 3) Economic Value utilizing a truly mechanisms to ensure restoration local and Karuk Tribal actions agreed upon will be workforce; implemented; 4) Enhancement of Tribal 9) Set aside areas within large burns Trust/Culturally Significant that will remain unsalvaged; Resources; 10) In areas where burned habitat is 5) Improvement of Government to rare, do not conduct salvage Government Coordination and harvests; Cooperation with the Karuk 11) Leave sufficient course woody Tribe in conjunction with our debris, good-quality snags within Tribal Historic Preservation salvage areas based on biological Office; 8of11 needs of species associated with post fire conditions ; 12) Avoid riparian buffers to minimize impacts to watercourses and promote L WD recruitment; 13) Delay salvaging where possible so that the important immediate post-bum ecological values can persist; 14) Salvage area with 90%+ overstory mortality; 15) No post-fire salvage operations in areas where fires were ingnited form the bottom of the slope during suppression efforts; 16) In riparian reserves, fall trees as needed on contour to reduce erosion for high severity areas 17) Retain larger trees greater than 30 inches in diameter (living or dead) 18) Retain all green trees at time of harvest 19) Retain/plant fire/droughtresistant species suitable to future climate conditions (site specific) 20) No planting within low and moderate severity areas 21) No new roads, including temporary roads 22) Return fire as an ecological force in forested landscapes; and 23) Avoid salvaging areas of burned forests adjacent to unburned forests. Finally, it cannot be stressed enough it is critical we work together to return fire to it's rightful place on the landscape, and any project proposed which does not include this component is contrary to our past, present and future management vision and practice. Baker, M. A. 1981. The Ethnobotany of the Yurok, Tolowa, and Karok Indians of Northwest California. Master Thesis. Humboldt State University	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation. These comments are being addressed through on-going tribal consultation. Also see response to comment number 12364-1.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#18878-97	Klamath National Forest from the Region 5 Programmatic Agreement as a result of repeated abuses of the PA' s protocol. The THPO recognizes the benefit of a Programmatic Agreement to an agency, but believes that trust is an essential yet missing component of such an agreement. The THPO underscores the Cultural Resource Report statement that the disclosure of locations and character of historic or archaeological resources may open the resources to a risk of harm, theft, or destruction. The DEIS continues, "Therefore, discussion of the effects of this project is generalized to types of historic properties and cultural resources rather than individual properties or resources. Project design features are sufficient to protect the resources while not disclosing their locations. Management and/or SRPMs are prescribed at the individual property or resource level and are documented in the Archaeological Survey Report for this project (R2014-05-05-2188-0)." While the THPO agrees that this language is appropriate for an EIS, which is a public document, these statements do not apply to consultation and coordination with the Karuk Tribe, where the timely, specific, and full disclosure of site records, surveys and other related information is required to be shared. In the absence of such, the THPO is unable to concur with the finding that "project design features are sufficient to protect the resources." Accordingly, the THPO requests the site records and the Archaeological Survey Report (R2014-05-05-2188-0) referenced above. The THPO office has reviewed the Standard Protection Measures (SPM) specified in the Region 5 PA, which states that Indian Tribes shall be consulted regarding SPMs. The Karuk THPO would welcome such consultation regarding SPMs. While we are encouraged by the inclusion of additional SPMs in the WFR PA, they do not apply to "prehistoric "or more properly, "pre-contact" sites. SPMs form a central part of Section 106 clearance and should be used with discretion to safeguard historic properties rather than to justify a finding of No Adverse Effect. The Forest Service's ability to make an expedited ineligible determination under the WFR PA, as per the Region 5 PA stipulation 7.7(c), is subject to the consent of Indian Tribes. The Section 106 implementation guidelines, 36 CFR 800.4 (c)(2) state that "If an Indian Tribe ... that attaches religious and cultural significance to a property off tribal lands does not agree, it may ask the Council to request the agency official to obtain a determination of eligibility." While this provision is reassuring, it is entirely contingent on timely notification and full disclosure of relevant information to the Tribe.	Records for sites within Karuk territory have been provided; survey findings within Karuk territory will be shared at consultation meetings and the final report provided after surveys are completed. Project design features for protecting cultural resources were shared with the Karuk in January and input requested. Tribal consultation is on-going.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#18878-98	The THPO is likewise concerned that a lack of specificity concerning sites or properties may result in significant adverse effects to potentially eligible properties, especially without meaningful consultation or oversight. As stated under Analysis Indicators, at-risk properties are significant, retain integrity and have been identified as being susceptible to adverse effects by specific undertaking activities. While we agree that pre-contact sites may be in danger from such practices as the making of skid roads, landing areas, and heavy equipment staging, we also believe that many of these sites remain unidentified. The Cultural Resources Report reveals that there are 159 recorded sites within the Area of Potential Effect. However, there is no specification of the proportion of pre-contact and post-contact sites. The Draft EIS states that there are no designated TCPs or Sacred Sites located within the proposed project area. However, the implementation guidelines to section 106 (36 CFR 800) make clear that the requirement for historic properties applies to properties eligible for inclusion on the National Register of Historic Places. While there are a number of Karuk sacred sites or TCPs that have been listed or determined eligible for listing on the National 17 of 22 Register, it is important to understand that each of these nominations came about in response to a specific threat to the property. Therefore, having no listed properties within the APE should not be interpreted to mean that there are no significant properties present within the APE. In point of fact, the sheer size and scope of the WFR Project tends to reinforce our belief that the likelihood of eligible properties existing within the APE is actually quite high. Likewise, it is important to remember that in the case of Sacred Sites or TCPs the guidelines do not empower the agency to make eligibility determinations; these are judgments made only by the Tribe. The THPO is concerned by the statement in the DEIS that: "Approximately 75% of the Area of Potential Effect has never been surveyed for historic properties, though about 80% of this area has slopes greater than 30 percent." Taken at face value, this would mean that 25% of the APE has been surveyed. This later number seems unbelievably high, and we would appreciate any additional information you can provide relative to the methods used to determine this number. Additionally, the reference to 80% of the area having slopes greater than 30% needs further elaboration i.e. what does this mean? We assume that this reference is related to survey protocols found in the Region 5 PA which allow the agency to forego surveys in areas with greater than 30% slope. If our assumption is correct, we must once again reiterate our long standing objection to the use of this survey protocol within Karuk territory. While one would clearly expect a much greater density or concentration of historic sites and properties in the immediate vicinity of permanent occupation sites located along river valleys and tributary streams, evidence of intensive Karuk use, past and present, is found across the landscape within the project area. The DEIS includes a somewhat brief outline of Tribal use of the landscape under Affected Environment. This brief treatment serves to perpetuate the long held myth of indigenous peoples as passive hunter gathers. Karuk people have actively managed a diversity of natural resources across the landscape for thousands of years. The widespread use of low intensity fire to promote and rejuvenate a wide variety of plant resources and facilitate the exploitation of various fish and wildlife resources is well established in our oral history. The development of complex and intricate ceremonial systems and ritual practices associated with important Karuk population centers such as Inaam, Katimiin, Tishaniik, Ameekyaaraam, and Vunxarak are widely known. Less known are the inextricable linkages that exist across the landscape connecting these population centers and specific high country areas. Karuk people traditionally made use of ridgelines for trails; meadows for harvesting plant and wildlife resources; slopes for gathering various nuts, berries, fungi, and other food and medicinal plant resources; watercourses of all sizes including high mountain springs and streams were utilized for harvesting and gathering various aquatic and terrestrial resources; established both permanent and seasonal occupation sites; conducted religious ceremonies, as well as personal quests for power and wisdom - often on slopes greater than 30%	The Klamath is complying with all cultural resource laws and tribal consultation is on-going. Efforts to identify historic properties and cultural resources will be completed prior to project implementation, and any identified historic properties/cultural resources will be protected by project design features and/or Standard Resource Protection Measures. Following tribal consultation, survey strategies for Karuk ancestral territory were expanded to include areas up to 45% when contiguous with areas up to 30%; the efficacy of this strategy will be checked periodically and adjusted accordingly. High probability land forms and random samples have always been included in the forest survey strategy.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#18894-2	The project area is culturally and spiritually important to Tribes and Tribal Consultation is an important component of the decision-making process associated with the project. We encourage the Forest Service to continue meaningful consultation throughout the NEPA process, with all potentially affected tribal governments. We recommend that the results of consultations with tribal governments and with the Tribal Historic Preservation Office/State Historic Preservation Office be inbluded in the FEIS. EPA has rated the DEIS and preferred alternative 2 as Lack of Objections-LO (see enclosed "Summary of Rating Definitions"). We support the best management practices and resource protection measures included in the project design. We recommend that the FEIS incorporate the additional measures and information specified above.	We agree that tribes and tribal consultation are an important part of the decision-making process. The Klamath National Forest is consulting and conferring with all tribes with ties to the project area and will continue to do so through project implementation. A summary of consultation will be provided in the final EIS. Tribal consultation is ongoing.
282.03 - Cultural, Hist., Anthro. Resources	#18909-104	The project has the potential to affect 159 previously recorded historic properties and an unknown number of unrecorded historic properties and cultural resources. The project area is within Karuk Ancestral Territory. The DEIS does not consider numerous culturally significant trees, plants or animals as required for cultural botanical resources nor does it consider or incorporate Traditional Ecological Knowledge.	Historic properties and any identified culturally significant resources will be protected from project activities through project design features and/or Standard Resource Protection Measures' see Chapter 2 of the EIS. Specialists did analyze for identified resources (see Chapter 3 of the final EIS).
282.03 - Cultural, Hist., Anthro. Resources	#18909-106	We are concerned that the Karuk Tribe was not mentioned in the social environment for consideration. Although this may be a formality, the cut and paste nature of the document seems to reflect the actions of KNF leadership. The American Indian population is a greater percentage of the population in Siskiyou County than in the State of California; therefore, potential impacts of management actions on the American Indian population will be disclosed. DEIS page 253. Looking at effects of the no action alternative the DEIS at page 253 states: "The lifestyles, values and beliefs of the people in Siskiyou County will not be changed and the wish that resources of the Forest be used to benefit local residents will not be fulfilled." Looking at direct social effects of Alternative 2 at page 257: "The lifestyles, values and beliefs of the people in Siskiyou County will include some fulfillment of the desire that resources of the Forest be used to benefit local residents. The concern regarding the fire-safe character of the communities will be addressed through fuels treatments on ridges and near communities." The DEIS does not take into consideration the lifestyles, values and beliefs of the native people. The document does not define 'resources'. It does not appear the cultural resources were considered. Further, as supported throughout these comments the project as proposed would threaten the fire-safe character of the communities. The DEIS states that the potential impacts to the American Indian population will be disclosed, however the only statement we found was "there will be no disproportionate effects on American Indians or the poor'. The KNF has a responsibility and an opportunity to work with the tribe in their ancestral territory.	The social environment is described in the categories used by the U.S. Census; therefore, the description is of American Indians and Alaska Natives as a whole. The social environment section has been expanded to reference other sections of this Chapter that disclose the effects of the project on tribal traditional use areas and cultural plant collecting areas. The Karuk and other tribes are included in the discussion of the affected environment for in the cultural resources section of Chapter 3 of the final EIS. Effects on identified culturally important resources have been analyzed as required under law and are reported on in that section of Chapter 3 of the final EIS. The Klamath National Forest is consulting and federally recognized tribes with ties to the project area and will continue to do so through project implementation as noted in Chapters 1 and 4 of the final EIS.

Code	Comment Number	Comment Text	Response
282.03 - Cultural, Hist., Anthro. Resources	#3678-26	Cultural Resources – No Action direct and indirect effects "There would be no direct effects to archaeological sites because no management actions would be implemented. However, there would also be no actions taken in the project area to reduce fuels or fire-weakened trees from within and around archaeological sites. Tree-mortality, such as that resulting from wildfires, puts historic properties and cultural resources at risk. When trees are left to fall naturally, these trees may damage or destroy site features or displace the same when uprooting (e.g. rock walls, house pits). The effects of tree fall are often compounded by erosion which can bury or displace cultural deposits, fuel loading if left on the ground (see below), and accelerated decay as previously unexposed surfaces become exposed. Lack of road roadside hazard treatments may also affect linear resources through erosion, and blowouts where culverts are plugged creating negative effects to morphological features. Therefore, a possible indirect adverse effect resulting from alternative 1 is the continued risk of damage to sites from wildfire, tree fall and erosion. At particular risk are large scale historic mining sites (tens to hundreds of acres) consisting primarily of earthen and rock features (e.g. hydraulic headwalls, ditches, raceways, waste-rock piles, processed sediment deposits, roads, etc.). The indirect, short-term effects to archeological resources would be negligible but indirect, long-term effects would be moderate to major."	This comment was written by the interdisciplinary team specialist for the project and quoted in the comment letter. No response required.
282.05 - Justice	#18872-13	The environmental lawsuits filed to stop safe forest and River practices are in violation of the Sovereignty of the Shasta Nation. As a Sovereign power existing before the Constitution of the United States with the power to form a Tribal Government and a Court of Law. Being Federally Recognized Corporation to receive federal funding is not a prerequisite	Issues of sovereignty, court proceedings and federal funding of tribes are outside the scope of this project's National Environmental Policy Act analysis. The Klamath National Forest is continuing to consult and confer with all tribes with ties to the project area and will continue to do so through project implementation.
282.05 - Justice	#18872-14	The environmental lawsuits filed to stop safe forest and River practices are in violation of the Sovereignty of the Shasta Nation. As a Sovereign power existing before the Constitution of the United States with the power to form a Tribal Government and a Court of Law. Being Federally Recognized Corporation to receive federal funding is not a prerequisite	See response to comment number 18872-13.
282.05 - Justice	#18872-16	The Shasta Nation has retained Unextinguished Indian land title to all of the Westside Fire Recovery Project area, on the Salmon, Klamath and Scott Rivers. Any Tribal logging or considerations thereof will be of or by the Shasta Nation. The Shasta Nation is A Sovereign entity, our Sovereignty is above that of a Corporation status, or sub corporations, Karuk Tribe of California Inc., Karuk Tribe Inc.Other Tribes may comment as a courtesy, but not as a lawful Sovereign entity.	Issues of tribal sovereignty are outside the scope of this project's National Environmental Policy Act analysis. The Klamath National Forest is continuing to consult and confer with all tribes with ties to the project area and will continue to do so through project implementation. Logging will be conducted through a bid system.
282.05 - Justice	#18870-3	I support the Karuk alternative.	Thank you for your comments on the Westside Fire Recovery Project. This comment reflects the opinion of the commenter. Comments that state a position for or against a specific action are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.