Forest Service **Pacific Southwest Region** **Regional Office, R5**
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File Code: 1900 **Date:** May 8, 2015
Route To:

Subject: Emergency Situation Determination (ESD) Request Package for Pacific Southwest Region
To: Chief

Included with this letter are five Emergency Situation Determination (ESD) requests from the Pacific Southwest Region. Each request is related to one or more of the many fires experienced across the Region in 2014. Due to the number of emergency situations and the regional nature of the emergency triggering events, we have reviewed and assessed these requests at a regional level with the assistance of the Washington Office Ecosystem Management Coordination staffs.

In 2014, the Pacific Southwest Region experienced 1,460 fires on Forest Service managed land. These fires impacted 399,713 acres of our national forests. Substantial impacts to human safety, recreation, wildlife habitat, watersheds, and general forest health were felt across our region. Many acres were left in a deforested condition. In response to these impacts, we received a great deal of interest from the public, within the agency at the national level, and Congress, asking how we could work to restore these acres. Quick action is needed to address safety concerns, protect forest resources, and to avoid a loss of commodity value that would jeopardize the agency's ability to accomplish project objectives related to resource protection and restoration.

We have already requested alternative arrangements from the Council on Environmental Quality (CEQ) for adjustments to the Environmental Impact Statement (EIS) timelines for two projects preparing EIS documents (King Fire Restoration on the Eldorado NF and Westside Fire Recovery on the Klamath NF). Consistent with these alternative arrangement requests, extensive public engagement plans have been implemented to ensure opportunities for public input and for the Forest Service to address stakeholder concerns.

With this letter, we are requesting Emergency Situation Determinations (ESDs) from the Chief of the Forest Service, pursuant to 36 CFR 218.21, for the two projects listed above and three additional projects (Bald Fire Salvage and Restoration and Eiler Fire Salvage and Restoration on the Lassen NF and French Fire Recovery and Restoration on the Sierra NF). These five projects are responding to some of the more substantial fires in our region. The individual fires reflected in these requests are:

- Happy Camp Complex (Klamath NF) – 114,800 acres burned on Forest Service land
- King Fire (Eldorado NF) – 63,414 acres burned on Forest Service land
- Whites Fire of July Complex (Klamath NF) – 32,875 acres burned on Forest Service land
- Bald Fire (Lassen NF) – 31,324 acres burned on Forest Service land
- Eiler Fire (Lassen NF) – 14,926 acres burned on Forest Service land
- Beaver Fire (Klamath NF) – 14,589 acres burned on Forest Service land

- French Fire (Sierra NF) – 13,832 acres burned on Forest Service land

While the project areas that would be covered by these emergency processes only cover a portion of the acres affected by the fires experienced in the Pacific Southwest Region in 2014, the acres selected were carefully chosen based on an effort to reduce threats to human safety, wildlife, watersheds, soils, and to promote restoration and reforestation. The projects treat areas that are frequently used for recreation, by agency employees conducting administrative duties, or that are critical to fuels management objectives. While it is critical that the agency restore national forest land and mitigate harmful impacts as much as possible, it is also important that these decisions not unduly impact the remaining resources. We have attempted to strike that balance in the development of these projects.

We recognize the importance of the public involvement process for these projects and are aware that these expedited emergency processes impact the structure of that process. Recognizing that impact, we have made efforts to find ways to involve the public throughout the planning process and to ensure that public concerns are heard, considered, and that the responsible official is factoring that input into the final decision. Increased opportunity for public involvement has been a particularly important part of the two EIS projects, King and Westside, as we balance the need to move quickly with the importance of engaging and responding to the public.

If emergency determinations are not granted and implementation is delayed, the Federal government will experience a loss of commodity value that will jeopardize the agency's ability to accomplish project objectives related to resource protection and restoration. Each of these projects has its own justification for the need to act quickly; however, viewed cumulatively across the Region, the potential impacts of not acting quickly are even greater and add up to what would be a substantially negative impact on restoration. As trees deteriorate, their potential to threaten human safety increases, threats to natural resources increase, and the economic incentives related to removing the trees decreases, making it harder for the Forest Service to achieve costly restoration objectives. Thus, the Federal government's ability to mitigate safety and resource risks and achieve restoration objectives is firmly linked with the loss of commodity value associated with rapidly deteriorating timber. Conversely, if these projects are able to be implemented quickly and efficiently, the benefits derived from these projects will help the Region return many of the values, benefits, and resources that these forests contributed before the fires occurred.

We appreciate your continued support. Please feel free to contact me at (707) 562-8724 or aaduggan@fs.fed.us if you need any additional information or have any questions regarding these projects or the associated ESD requests.

/S/ BARNIE GYANT for

RANDY MOORE
Regional Forester Pacific Southwest Region

Enclosures

cc: Randy Moore, Barnie Gyant, Alan Olson, Mary Beth Hennessy, Cynthia Schiffer, Arthur Duggan

U.S. Forest Service
National Forest System
Briefing Paper

Date: May 8, 2015

Topic: Region 5's Emergency Determination (ESD) Requests

Key Points:

- Region 5 is seeking ESDs on five fire-related recovery projects from the 2014 fire season. Two of the five projects are pursuing alternative arrangements with CEQ. The projects all involve hazard tree removal, timber salvage and some restoration projects. They are:
  - King Fire Restoration Project on the Eldorado NF (EIS, also seeking alternative arrangements)
  - Westside Fire Recovery Project on the Klamath NF (EIS, also seeking alternative arrangements)
  - French Fire Recovery and Restoration Project on the Sierra NF (EA)
  - Bald Fire Salvage and Restoration Project on the Lassen NF (EA)
  - Eiler Fire Salvage and Restoration Project on the Lassen NF (EA)

- Each project stands as an independent ESD request.

- If an ESD is granted, there would be no objection process for that project. Implementation (i.e. advertising of the salvage timber sale) could begin as soon as a decision is signed. The following table outlines likely decision dates with an ESD versus without an ESD.

Project Name	Decision date w/ESD	Decision date w/out ESD
King Fire Restoration	August 2, 2015	November 1, 2015
Westside Fire Recovery	June 19, 2015	September 17, 2015
French Fire Recovery and Restoration	June 15, 2015	September 14, 2015
Eiler Fire Salvage and Restoration	June 10, 2015	September 8, 2015
Bald Fire Salvage and Restoration	June 18, 2015	September 16, 2015

- Thus, an ESD allow salvage harvest operations to begin early enough in 2015 so most of the safety hazards would be cut down and volume could be salvaged during the 2015 season. There are a few areas where hazard trees will be cut and left but they are the exception.

- Without an ESD, the 90 day objection period could push the salvage harvest operations start date back until late in 2015 or into 2016, especially for the King Fire projects.

- This delay results in continued presence of hazards throughout the summer of 2015 and in an estimate loss of commodity value available for restoration work and increases the potential of a no-bid salvage timber sale.

- This anticipated reduced value means fewer dollars would be available for the reforestation and other restoration work. If the salvage sales do not sell, there would be no funds generated and the removal of dead trees along roads, trails, and railways would not occur as quickly or as cost-effectively, or perhaps not at all. This would result in at least short-term administrative closures of impacted roads and a continued presence of these hazards.

- Representatives from the timber industry have expressed interest in all of these projects and have indicated that the timeline is a consideration for their 2015 work planning.

- Because there is no objection process, it is imperative that the local unit fully engages the public during project planning, making extra efforts when public interest warrants. Each ESD request includes a section on public involvement as part of their background information paper.

Recommendation: Approve all five ESDs based on the need for accelerated implementation of the salvage sales to relieve the safety hazards posed by roadside hazards of standing dead and dying trees and to capture the commodity value in the salvage sales sufficient that the sales will sell and will provide funds for reforestation, and potentially for other restoration work.

Contact: Leanne Marten - Director, Ecosystem Management Coordination

Note: Project details attached below

- The proposed actions includes:

Fire Name, acres (ac) and basic info. These two are EISs, CEQ Alternative Arrangements requested	Miles of Hazard Tree Removal (and Acres)	Timber Salvage	Reforestation	Fuels Treatment	Other Projects or Notes
King Fire 97,700 ac of which 63,000 ac are National Forest System (NFS) lands Contained October 10, 2014	260 miles along roads, also hazard trees along private residences, other structures, cultural resource sites	10,512 ac	11,561 ac	5,665 ac* Of which 2,824 mechanical 2,841 pburn	Increase ground cover on 778 ac A wide variety of fire effects and forest resilience research
Westside Fire 183,127 ac of which 162,264 are NFS lands A compilation of: Beaver Fire 32,411 ac of which 14,589 are NFS lands Contained August 30, 2014 Happy Camp Complex 116,948 ac of which 114,800 are NFS Contained October 23, 2014 Whites Fire 33,768 ac of which 32,875 ac are NFS lands Contained September 25, 2014	650 miles Includes Maintenance Level (ML) 1 Roads Used by Forest Service employees and contractors, and walk-in access for the public. Maintenance of ML1 roads includes hydrologic stabilization.	6,800 ac	18,800 ac	22,900* • Areas within 1/4 mile of private property structures in burned areas or within areas that underwent fire suppression-related activity (e.g. contingency firelines that the fire never reached), • Areas within 500 feet of infrastructure (e.g. utility lines, communication sites campgrounds, lookouts, bridges); and • Areas within 250 feet on either side of roads and ridgelines that have historically been used successfully for fire suppression purposes These criteria will be applied only in WUI areas determined to be feasible for treatment in terms of slope, accessibility, existing fuels conditions, and logical holding features (roads, streams, ridges).	

* Fuel treatments are a combination of biomass removal, mastication, felling and lopping, machine piling and burning, or broadcast burning.

Fire Name and acres (ac) and basic info These 3 are EAs	Miles of Hazard Tree Removal (and Acres)	Timber Salvage	Reforestation	Fuels Treatment	Other Projects or Notes
French Fire 13,835 ac, of which 13, 832 ac are National Forest System (NFS) lands Contained August 8, 2014 Treatment footprint = 5,969 ac Natural recovery = 7,863 ac	62 miles along roads Also hazard trees in Fish Creek and Rock Creek Campgrounds (2,353 ac)	3,371 ac 1st entry = 1,984 ac 2nd entry = 910 ac Plantations = 477 ac	3,000 ac	511 ac , of which 208 ac are not coincident with salvage areas *221 ac in DFPZ (96 ac not coincident)* *290 ac electric distribution line (112 ac not coincident)*	32 ac of noxious weed treatment Note: some of the fuels treatment and seedling release work includes use of Glyphosate
Eiler Fire 33,162 ac, of which 14,926 ac are NFS Contained October 3, 2014	32 miles ML2+ roads 2 miles of trails (1,174 ac)	3,048 ac	5,645 ac	4,480 ac*	No other projects Notes: Trees will be felled and left along trails in Thousand Lakes Wilderness and along 33N06Y where this road is in an IRA. Fuels treatment includes 211 acres in Baker cypress
Bald Fire 39,832 ac, of which 31,324 ac are NFS Contained September 15, 2014 Treatment footprint = 14, 363 ac Natural recovery = 16,951 ac	131 mile ML2+ roads 10 miles railway (4,815 ac)	3,632 ac	12,200 ac	5,499 ac*	None

* Fuel treatments are a combination of biomass removal, mastication, felling and lopping, machine piling and burning, or broadcast burning.

Forest Service

Klamath National Forest
Supervisor's Office

1711 S. Main Street
Yreka, CA 96097-9518
530-842-6131
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File Code: 2430; 1570 **Date:** May 6, 2015
Route To:

Subject: Transmittal of Westside Fire Recovery Emergency Situation Determination Request
To: Regional Forester

As a result of the 2014 fire season, the Klamath National Forest in northern California is confronting substantial safety hazards for the public and Forest workers and landscape-level changes to forested habitat. Severe drought and extremely dry fuel conditions made this fire season one of the worst in the history of the Klamath. Over 210,000 acres of public and private lands burned during the 2014 fire season on the Klamath. A subset (183,000 acres of Federal lands) of the total burned area includes the Beaver, Happy Camp Complex, and Whites fires (cumulatively addressed by the "Westside Fire Recovery Project"), and has been identified as requiring critical treatments to address post-fire conditions.

The Klamath National Forest is requesting an Emergency Situation Determination (ESD), pursuant to 36 CFR 218.21.

The purpose and need of the project includes the following:

- There is a need for worker and public safety and access.
- There is a need for safe conditions for fire suppression for firefighters and community protection.
- There is a need for an economically viable project that meets the project's restoration objectives, while also benefiting our local communities. (The Forest Service needs to obtain the maximum commodity value from burned timber by offering a sale while the wood is still marketable. Maximizing the commodity value of the timber provides the agency a means for meeting project needs, such as implementation of restoration.)
- There is a need for restored and fire-resilient forested ecosystems

In order to accomplish these objectives, the Klamath National Forest proposes:

- 650 miles of roadside hazard treatments (removal of dead and dying trees) along Forest system roads, State Highways, and County roadways;
- 6,800 acres of salvage harvest of dead and dying trees to reduce future fire risk and severity and to provide for public and forest worker safety;
- 22,900 acres of hazardous fuels treatments (including strategic fuel breaks and within ¼ mile of private property structures and other infrastructure); and
- 18,800 acres of reforestation (site preparation, planting, and release) to accelerate the restoration of forest habitat.

The Forest is preparing an Environmental Impact Statement (EIS) to analyze and disclose the effects of proposed treatments included in the Westside Fire Recovery Project. An EIS is required due to the scope of the proposed treatments and the potential for significant impacts, especially to the federally listed Northern Spotted Owl and its critical habitat. The Notice of Intent to prepare an EIS for the Westside Fire Recovery Project was published in the Federal Register on October 15, 2014; scoping also began on this date. The Forest released a draft EIS for public comment on March 14, 2015. A decision is anticipated in late June 2015.

The Forest anticipates recovery of as much as160 million board feet of merchantable timber from the harvest of dead and dying trees in salvage units and roadside hazard treatment areas. This level of harvest would generate as much as $4 million dollars in receipts. With an ESD, the Forest would be able to accomplish a majority of the contracted work in 2015, including:

- The removal of hazard trees from around local communities, key infrastructure, and 650 miles of roads, improving safety conditions and infrastructure protection, while providing fire managers improved options for effectively managing future wildfires.
- Salvage harvest in order to promote ecosystem sustainability by reducing large-log fuel loads and increasing the likelihood and speed by which burned forested areas are reforested by opening areas up for safe planting.
- Provide for decreased risk of habitat loss and watershed damage from future fires.
- Site preparation work necessary to safely and sustainably re-establish forest conditions.

The fire-affected timber is currently marketable, and prospective purchasers have expressed interest in proposed salvage and roadside hazard removal projects. Immediate implementation is necessary due to the implications of further delay on human health and safety, natural resource protection, and loss of commodity value which would jeopardize the Forest's ability to accomplish critical restoration objectives. An ESD allowing for immediate post-decision implementation would enable the agency to take action before substantial timber deterioration takes place, putting us in a better position to remove roadside hazards, restore the burned area and reduce the risk of no-bid timber sales.

Without an ESD, timber sale and roadside hazard tree removal contracts would not be awarded until September 2015, potentially delaying much of project implementation until late spring in 2016. If this situation played out and operations were delayed until 2016, there would be a substantial loss of commodity value in the fire-killed trees. This delay would substantially reduce the commercial viability of the Westside Fire Recovery Project and increase the likelihood of timber salvage and roadside hazard contract offerings where no bids are received. Service contracts using limited appropriated funds would be required to implement a greatly reduced project. Project restoration objectives would not be met.

The enclosed Relevant Information package provides specific details regarding this ESD request.

Thank you in advance for your time and consideration of this ESD request. Staff questions concerning this request may be directed to me or to Klamath National Forest Environmental Coordinator Wendy Coats at 530-351-2175.

/s/ Patricia A. Grantham

PATRICIA GRANTHAM
Forest Supervisor

Enclosure

cc: MaryBeth Hennessy, Arthur A Duggan, Laura Hierholzer

Relevant Background Information for the Westside Fire Recovery Project Emergency Situation Determination Request

Klamath National Forest

May 2015

Figure 1. Overview of a portion of the Happy Camp Complex. Photo taken September 27, 2014.

Introduction

Under 36 CFR 218.21(d), a proposed action is not subject to the pre-decisional objection process if the Chief or Associate Chief of the Forest Service determines that an emergency situation exists with respect to all or part of the proposed action or activity. 36 CFR 218.21(b) defines an emergency situation as "a situation on National Forest System (NFS) lands for which immediate implementation of a decision is necessary to achieve one or more of the following: relief from hazards threatening human health and safety; mitigation of threats to natural resources on NFS 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." This document provides supporting information for the Klamath National Forest's request for an Emergency Situation Determination for the Westside Fire Recovery Project.

This document describes:

A. The 2014 Fire Season and its impacts on natural resources;
B. Management actions that have been taken and those that are being proposed to respond to the effects of the 2014 Fire Season;
C. Public involvement in project planning efforts;
D. Rationale for requesting an emergency situation determination for proposed actions under the provisions of 36 CFR 218.21; and
E. How project implementation would proceed if an emergency situation determination was not granted.

A. Emergency Triggering Event and Resources Affected

Geographic Area Affected

On the west side of the Klamath National Forest, the terrain is extremely rugged, varying from approximately 1000 feet to over 8000 feet in elevation with hillslopes commonly steeper than 65%. The Klamath Mountains are also characterized by rich ecological gradients, and high vegetation, wildlife, and fish diversity, with numerous species present, including the federal Endangered Species Act (ESA)-listed northern spotted owl and Coho salmon and the federal ESA candidate Pacific fisher. Annual precipitation on the Klamath ranges from approximately 10 inches in eastern valleys to over 70 inches in the highest western elevations. The climate of the area is characterized by dry summer and fall months followed by significant winter precipitation. Morphology and function of the steep stream channels is controlled by large floods and associated landslides and debris flows.

Emergency Triggering Event

Severe drought and exceptionally dry fuel conditions made the 2014 fire season one of the most impacting in the history of the Klamath National Forest. The following is an outline of some of the difficult conditions that characterized the season:

- Three consecutive years of drought resulted in record low snowpack, rainfall, and stream flows.
- Live and dead fuel moistures were at record historic lows, with numerous days setting new records for severe wildfire burning conditions.
- Over the course of the summer, five separate waves of lightning storms affected the Forest, setting a total of 126 wildfires (an additional 17 wildfires were human-caused).
- Twenty severe fire weather warnings ("Red Flag Warnings") were issued by the National Weather Service between July 29 and August 18, 2014, due to lightning and abundant dry fuels, strong winds, and low relative humidity.

- A total of 14 Mandatory Evacuations and 15 Evacuation Advisories were ordered by the Siskiyou County Sheriff's Department as a result of threatening wildfire activity. These evacuations affected an estimated 800 residents and almost 1,000 private property structures. Extensive Forest road and area closures were also in affect for most of the fire season.
- Simultaneous wildfires burning in Oregon, Washington and other parts of California resulted in limited resources (firefighting crews and aircraft) being readily available to the Forest during initial suppression efforts.
- Rugged mountainous topography, heavy fuel loadings (jackstraw fallen snags and trees), and limited access made fire suppression efforts extremely challenging.

Klamath-wide, about 210,000 acres burned during the 2014 fire season. The Westside Fire Recovery Project addresses a majority of these acres and is composed of the Beaver Fire, the Happy Camp Complex, and the Whites Fire of the July Complex, as described in table 1 below.

Table 1 – General information for fire areas included in the Westside Fire Recovery Project.

Fire	Start Date	Containment Date	Acres Burned
Beaver Fire	July 30, 2014	August 30, 2014	32,411 total 14,589 NFS 17,822 private
Happy Camp Complex Fire[1]	August 12, 2014	October 23, 2014	116,948 total 114,800 NFS 2,148 private
Whites Fire	July 31, 2014	September 25, 2014	33,768 total 32,875 NFS 893 private
Total			**183,127 total** **162,264 NFS** **20,863 private**

Fires within the Happy Camp Complex were ignited by lightning near the town of Happy Camp, which is located on the middle portion of the Klamath River. Seventeen fires were ignited in mid-August storms and comprised the complex. Due to hot, dry and windy conditions, three of the original 17 fires could not be readily contained, eventually grew together and spread east to the Scott River and south into the Marble Mountain Wilderness over the course of several weeks. This fire burned approximately 133,000 acres. The Beaver Fire occurred on the north side of the Klamath River about 30 miles east of Happy Camp, and eventually consumed approximately 32,000 acres. The July Complex was comprised of the Log and Whites Fires, which burned approximately 37,000 acres southeast of Fort Jones. The July Complex burned both private and National Forest land, ultimately spreading into the Marble Mountain Wilderness and into the North Fork drainage of the Salmon River.

[1] Total final size of the Happy Camp Complex is 132,899 acres. Portions of the fire perimeter within Wilderness have been excluded from this project.

The Forest reviewed the needs of the 210,000 fire-affected acres. Some fires, or portions of fires or complexes, burned within Wilderness areas, where natural processes drive restoration. Notably, since the Log Fire of the July Complex was largely in Wilderness or on private land, it was not included in this project. Other areas on the Forest have been covered under separate NEPA analysis. For example, restoration needs related to the 5,500-acre Little Deer fire, which is disconnected from this project and located on eastern-most district of the Forest, were identified and analyzed through a separate environmental assessment.

Resources Affected

The Happy Camp Complex, Beaver and Whites fire areas burned extensive portions of the Klamath River, Scott River and Salmon River watersheds on the western half of the Klamath National Forest. Dozens of tributary drainages in these watersheds were affected. Large portions of late successional reserves and habitat burned with high severity fire. 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 37,000 acres of Pacific fisher (a candidate for listing under ESA) habitat.[2]

All the large fires of the 2014 season burned with mixed severity, meaning there was a mosaic of light, moderate, and severely burned forests within each fire area (see Table 2). Of the approximately 183,000 acres that burned within the Westside Fire Recovery Project area, approximately 27% exhibit high vegetation burn severity (75-100% vegetative canopy killed) effects. 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 mixed conifer stands, species composition varies in combinations of Douglas-fir, ponderosa pine, sugar pine, and incense cedar. Approximately 6% of the fire areas burned with moderate severity (50-75% vegetative canopy killed), and a substantial portion of those trees have been killed by fire, and surviving trees 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. These continuing relatively dry conditions will further decrease the survivability of fire damaged trees, even in areas that burned in lower severity. See the attached maps for the Rapid Assessment of Vegetation Condition, created by the Remote Sensing Applications Center.

Table 2 – Percentage of vegetative canopy killed (basal area) by fire area and entire project area.

	Percentage (%) vegetative canopy killed (basal area)	Beaver %	Happy Camp %	Whites %	Total %
Very Low	0-25	43	62	63	**59**
Low	25-50	10	8	6	**8**
Moderate	50-75	7	6	5	**6**
High	75-100	40	23	26	**27**
	Total Percentage	100	100	100	100

[2] These numbers are based upon habitat acres lost within the proposed Westside Fire Recovery project; it is likely that additional habitat was lost outside this project's boundary.

B. Management Actions

Burned Area Emergency Response

Burned Area Emergency Response (BAER) actions completed or currently underway aim to identify and manage imminent, unacceptable threats to human life, safety, property, and critical natural and cultural resources on National Forest lands. BAER actions include repairing road drainages (grading, culvert cleaning, installation of rolling drainage dips, etc.), felling only imminent hazard trees along roads, and posting closure or danger signs along roads and trails. Hazard trees felled during fire suppression and BAER activities were very limited in scope and consisted of only older dead, decomposed and structurally unsound trees along only the most frequented of roadways. Due to the objectives of BAER activities and the scale of the fire impacted area, the majority of recently fire-killed trees (snags) were considered to be structurally sound at the time of BAER and were left standing. As snags along the roadways in burned areas are exposed to winter rains, snow, and winds and subsequently deteriorate and decay, threats to human health and safety substantially increase. While BAER activities mitigate many of the immediate hazards, additional emergency actions are needed to address the remaining safety concerns and to move the affected areas towards recovery.

Post-fire Restoration and Recovery

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. Forest Service resource specialists began evaluating conditions in the project area immediately following the fires. The Burned Area Emergency Response (BAER) analyses provided resource assessments on the fires' effects on soils, watersheds, vegetation, and wildlife. Post-fire inventories of the transportation system were conducted to obtain condition status. Field crews conducted surveys on forested stands to collect data on stand mortality and timber salvage viability. Soil burn severities and vegetation burn severities were mapped to determine the changed post-fire conditions. The initial post-fire assessments were completed by the fall of 2014. Resource specialists used this information to make recommendations to the responsible official, Forest Supervisor Patricia Grantham, for developing the proposed action.

The Forest is preparing an Environmental Impact Statement (EIS) to analyze and disclose the effects of proposed treatments included in the Westside Fire Recovery Project. An EIS is required due to the scope of the proposed treatments and the potential for significant impacts, especially to the ESA-listed Northern Spotted Owl and its critical habitat. The Notice of Intent to prepare an EIS for the Westside Fire Recovery Project was published in the Federal Register on October 15, 2014; scoping also began on this date. The Forest released a draft EIS for public comment on March 14, 2015. A decision on the Project is anticipated in late June, 2015.[3]

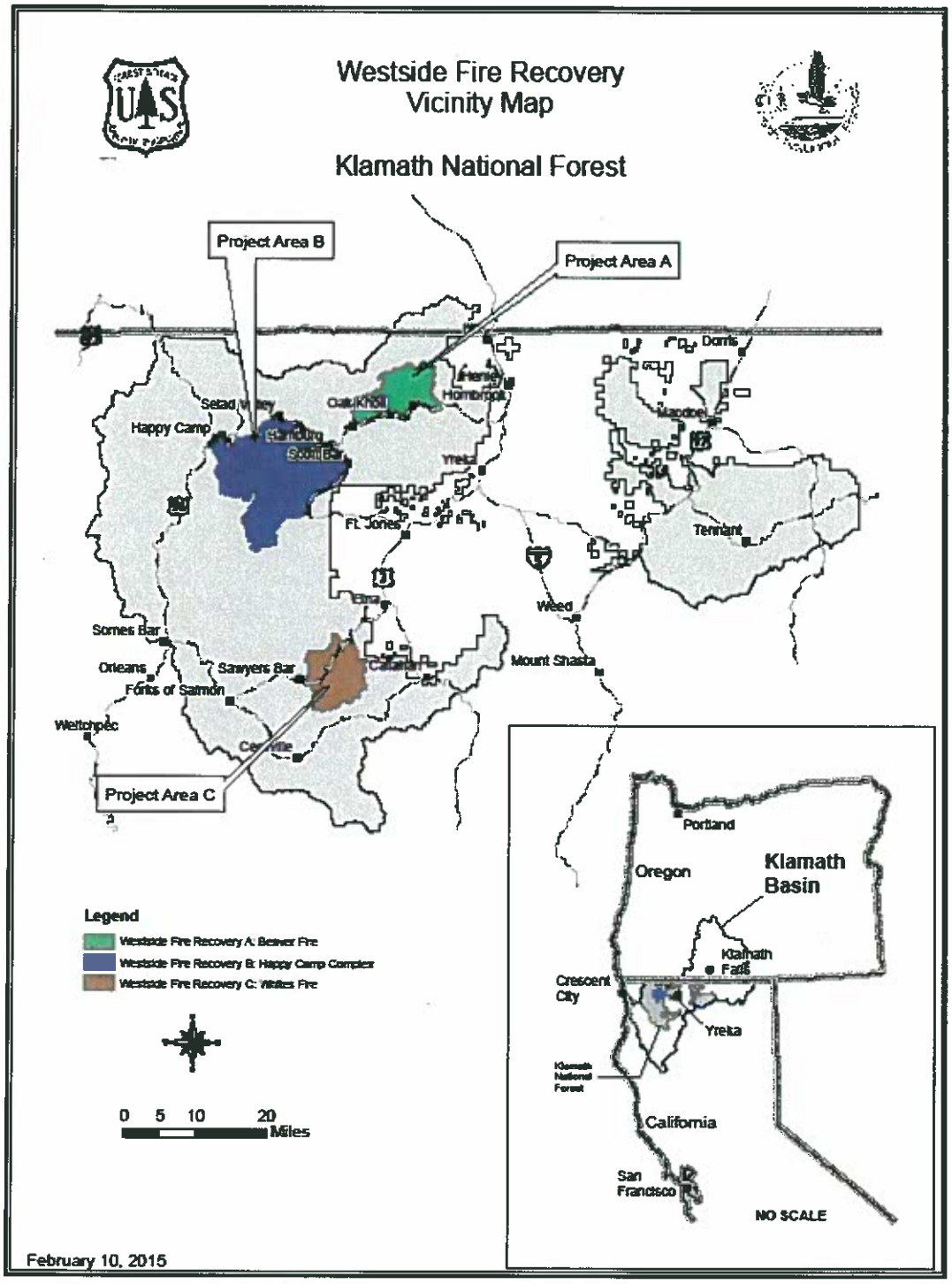
[3] A June decision date is dependent upon approval of requests for both alternative arrangements with CEQ and an Emergency Situation Determination (ESD) with the Chief of the Forest Service. All comparative estimations in this document, including scenarios without an ESD, assume alternative arrangements have been granted. However, an ESD would help support the implementation timeline even if alternative arrangements are not granted by CEQ. With an ESD, a decision could still be signed and implemented with some time left in the 2015 operating season.

The purpose and need of the project includes the following:

- There is a need for worker and public safety and access.
- There is a need for safe conditions for fire suppression for firefighters and community protection.
- There is a need for an economically viable project[4] that meets the project's restoration objectives, while also benefiting our local communities.
- There is a need for restored and fire-resilient forested ecosystems

The project area is comprised of 218,600 total acres, including 187,100 acres of National Forest land and 31,500 acres of private land. The total project area is divided into three subparts: project area A (Beaver Fire), project area B (Happy Camp Complex), and project area C (Whites Fire of the July Complex). For improved community protection, the boundary was expanded one-quarter mile beyond the fire perimeters in order to incorporate hazardous fuel reduction treatments and fire breaks. See the vicinity map below

[4] The Forest Service needs to obtain the maximum commodity value from burned timber by offering a sale while the wood is still marketable. Maximizing the commodity value of the timber provides the agency a means for meeting project needs, such as implementation of restoration.


Westside Fire Recovery
Vicinity Map
Klamath National Forest
Project Area B
Project Area A
Project Area C
Happy Camp
Hamburg
Seiad Valley
Yreka
Fort Jones
Etna
Weed
Mount Shasta
Dorris
Macdoel
Tennant
Somes Bar
Orleans
Forks of Salmon
Sawyers Bar
Weitchpec
Legend
Westside Fire Recovery A: Beaver Fire
Westside Fire Recovery B: Happy Camp Complex
Westside Fire Recovery C: Wildes Fire
0 5 10 20
Miles
Portland
Oregon
Klamath Basin
Klamath Falls
Crescent City
Yreka
Klamath National Forest
California
San Francisco
NO SCALE
February 10, 2015

The proposed action was designed to meet the purpose and need for action. The proposed action will treat a total of about 63,500 acres (or 51,800 total disturbance foot-print) within the project boundary.[5] This project includes the following four overlapping treatment types: (1) Roadside Hazard Treatments; (2) Timber Salvage; (3) Hazardous Fuel Treatments; and (4) Site Preparation, Planting, and Release, as described below.

1. **Roadside Hazard Treatments (650 miles)**

The Forest Service will identify and remove hazard trees along about 650 miles of National Forest Transportation System roads, County Roads, and State Highways. To provide for both public and Forest worker safety and future fire suppression efforts, roads classified in all maintenance levels will be considered for roadside hazard treatments. This includes maintenance level 1 roads used by Forest Service employees and contractors for administrative purposes. The maintenance of level 1 Forest roads is important for safety reasons, as these roads can also still be used by hikers and hunters and are critical for future fire suppression efforts. Additionally, maintenance of level 1 roads would include hydrologic stabilization practices that address existing erosion and sedimentation issues and prevent erosion and sedimentation issues in the future, improving overall, long-term watershed conditions.

Current hazard trees will be identified using the *Regional Hazard Tree Guidelines for Forest Service Facilities and Roads in the Pacific Southwest Region* (Angwin et al. 2012). In addition, in order to efficiently capture future hazard trees using this project, all trees burned in the 2014 fire season along roads within the project area will be considered for removal if they have a 60 percent or greater chance of dying as defined by Report #RO-11-01 *Marking Guidelines for Fire-Injured Trees in California* (Smith & Cluck, 2011). All merchantable trees will be removed when consistent with project design features. Non-merchantable trees will be cut, piled and burned where the treatment is along a strategic road for hazardous fuels treatments.

2. **Salvage Harvest (6,800 acres within about 11,700 acres)**

Salvage harvest treatment is limited to areas of moderate and high vegetation burn severity (i.e. greater than 50 percent of trees fire-killed on a unit level, based on Rapid Assessment of Vegetation Condition after Wildfire (RAVG) and field verification). In determining what individual trees will be harvested, standing dead trees 14 inches in diameter or greater at breast height will be considered for salvage using the guidelines to identify trees for removal as outlined in Report #RO-11-01 *Marking Guidelines for Fire-Injured Trees in California* (Smith & Cluck, 2011). It is anticipated a majority of trees within salvage units will be harvested, as most burned with high severity and have a high probability of mortality. Salvage logging treatments will be accomplished by a combination of ground-based, skyline, and helicopter logging systems. Incorporated into the proposed action are project design features with the intent of protecting and promoting late successional habitat, consistent with the Forest Plan.

3. **Hazardous Fuel Treatments (22,900 acres)**

In addition to the hazardous fuels reduction accomplished through salvage harvest and roadside hazard treatments, additional hazardous fuel treatments are proposed to reduce the dangers associated with heavy fuel loading, especially within the Wildland Urban Interface. Fuels treatments were developed using the criteria listed below and include: lop and scattering, chipping, broadcast burning, jackpot burning, piling and pile burning.

[5] Treatment acres and miles are based upon the proposed action. Acres and miles of treatment in the decision may vary, depending on the alternative selected.

The following criteria were used to identify and evaluate areas for hazardous fuels treatments:

- Areas within 1/4 mile of private property structures in burned areas or within areas that underwent fire suppression-related activity (e.g. contingency firelines that the fire never reached);
- Areas within 500 feet of infrastructure (e.g. utility lines, communication sites, campgrounds, lookouts, bridges); and
- Areas within 250 feet on either side of roads and ridgelines that have historically been used successfully for fire suppression purposes;

These criteria will be applied only in areas determined to be feasible for treatment in terms of slope, accessibility, existing fuels conditions, and logical holding features (roads, streams, ridges).

4. **Site Preparation, Planting, and Release (18,800 acres)** Site-preparation, planting, and release treatments are designed to increase the likelihood and speed by which burned forested areas are reforested following fires. More successful and sustainable reforestation is accomplished by reducing fuel loading and creating openings for safe and effective planting. Careful evaluations were made to prioritize treatment units likely to support successful reforestation.

C. Public Involvement

Early Public Involvement and Consultation Efforts

The Forest is using news releases and social media to keep interested publics informed. The Forest has created a project website to post project information, as well as the standard legal notices and public notifications that meet the requirements of the National Environmental Policy Act (NEPA). Numerous public meetings have been held in the local communities of Yreka, Fort Jones, Scott Bar, Sawyers Bar, Happy Camp, Klamath River, and Seiad Valley. Field trips have been conducted for groups that have requested them. All of these efforts will continue to be used to inform, consult, and involve interested parties in an interactive manner. These efforts will also help gauge public understanding and perception of the project.

Beyond the Forest's typical means of outreach, the Westside Fire Recovery Project has also inspired the creation of two local collaborative groups:

- On January 6, 2015, the Siskiyou County Board of Supervisors unanimously approved the formation of a Citizens' Advisory Committee, charged to develop consensus recommendations for the Board to consider in responding to federal and state agencies on a variety of topics, including the Westside Fire Recovery Project. An objective of the Board is to have the Committee represent a broad spectrum of interests within Siskiyou County.
- The locally-based National Institute for the Elimination of Catastrophic Wildfire formed a diverse citizens' collaborative group to address the Westside Fire Recovery Project. The group ("The Westside Klamath Steering Committee") will be comprised of Siskiyou County residents representing a wide range of interests that reflect the social and economic diversity within the affected area. The purpose of the group is to generate, through a collaborative process, recommendations to the Forest Service, Siskiyou County Board of Supervisors, the California State Legislature, the Governor's Office, and the California Congressional Delegation regarding treatments for the Westside Fire Recovery Project.

The two groups are not expected to compete with one another, but, rather, complement each other in representing the views of Siskiyou County residents. It is anticipated that both collaborative groups will:

- 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
- 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.

The Forest has been actively consulting with regulatory agencies as well as local and national elected officials. The Forest has also initiated government to government consultation with local tribes. The Karuk Tribe has raised concerns regarding the project; the Forest has increased its engagement with the Karuk to address these concerns. The Forest has developed a project-specific programmatic agreement with the State Historic Preservation Office for compliance with the National Historic Preservation Act. Regarding the Endangered Species Act, the Forest is consulting and conferencing with the U.S. Fish and Wildlife Department about the effects of the project on the ESA-listed Northern Spotted Owl and ESA listing candidate Pacific fisher, respectively. The Forest is also consulting with National Oceanic and Atmospheric Administration Fisheries about the effects of the project on the ESA-listed Coho salmon. The Forest is also working with the North Coast Regional Water Quality Control Board regarding a waiver application in compliance with the Clean Water Act. The Forest will continue consultation efforts with all parties to ensure there is a full understanding of the project and that the concerns of these groups are recognized and addressed.

The Forest Service has also met with local timber industry representatives regarding this project in order to gauge industry interest and capacity for the project. Local timber industry capacity is not an issue for this project.

Results from Public Scoping

In response to scoping, the Forest Service received 749 unique scoping comments by means of 98 unique letters, and 1,556 form letters. Scoping comments included two form letters. One form letter was organized by a local environmental group, Klamath-Siskiyou Wildlands Center, and submitted to the Chief of the Forest Service, opposing approval of an Emergency Situation Determination (ESD). The second form letter was organized by the local Mid-Klamath Watershed Council, suggesting project design to minimize impacts to streams and watersheds (many of these suggestions were incorporated into the proposed action or alternatives).

To date, public opinion on the project is mixed. As evidenced by our scoping period comments and public open houses, the majority of local citizens, local fire safe councils, County-elected government, and timber industry groups are supportive of the project, supporting any means by which timelines can be shortened to meet the project's purpose and need. The overwhelming concern raised by the public during open houses was the need for the Forest Service to act quickly and effectively to address fuels concerns in order to reduce the risk and impacts of future fires on the local communities. The timber industry is most concerned with effective roadside hazard and salvage harvest treatments being completed while dead trees are still marketable. Completing these treatments will also allow for effective reforestation efforts.

In addition to the local environmental groups who regularly comment on Klamath projects (Klamath-Siskiyou Wildlands Center, Environmental Protection Information Center), the Forest also received scoping comments from the John Muir Project, the Center for Biological Diversity, and the American Bird Conservancy. Some local groups whose members represent a variety of interests also commented on the project, including the Mid-Klamath Watershed Council and the Fire Learning Network. Environmental groups have been largely unsupportive of the project in the early planning stages; however, the Forest has refined the proposed action and developed alternatives in response to concerns raised during scoping. The Forest will continue robust engagement and outreach efforts, and anticipates consulting further with local Tribes, working with the emerging collaborative groups, and engaging County government and all other interested groups, individuals and organizations as much as possible to ensure information is exchanged and concerns and ideas regarding this project are identified, considered and incorporated as much as possible.

In October 2014, Forest Supervisor Patricia Grantham shared her intent to request an Emergency Situation Determination (ESD) as part of the Notice of Intent for the project published in the Federal Register and in the scoping letters sent to interested and affective parties. The Karuk Tribe has voiced concerns about project timelines. As mentioned earlier, the Chief of the Forest Service also received a form letter, requesting that he deny the request for an ESD. Since then, Forest Supervisor Patricia Grantham and other line officers have discussed at public meetings, field trips and in presentations the need for an ESD in order to meet project objectives. Many interested parties, including local and national elected officials, local residents, County and state government representative, community fire protection groups, and timber industry groups are asking for an expedited process to speed up the recovery and restoration of the areas affected by the 2014 wildfire season.

Forest NEPA Progress

Following the 30-day public scoping period, the Westside Fire Recovery Project interdisciplinary team worked on scoping comment disposition, issue analysis, and alternative development. Interdisciplinary team members developed resource reports, including analysis of the affected environment and environmental consequences of the no action, the proposed action and the three other action alternatives.[6]

Four issues were determined to be relevant to alternative development:

1. There is a disagreement about effects of salvage logging on wildlife habitat (e.g. Northern Spotted Owl, Pacific fisher, and snag associated species) and general wildlife habitat fragmentation and connectivity. (Alternative 3 responds to this issue.)
2. There is a disagreement about the effects of salvage logging and required infrastructure on watershed health (e.g. beneficial uses of water, Coho salmon habitat, and soil productivity). (Alternative 4 responds to this issue.)
3. There is a disagreement about the effects of salvage logging and site preparation on late successional reserves (LSRs) and riparian reserves. (Alternatives 3, 4, and 5 respond to this issue.)
4. There is a disagreement about whether or not the proposed action sufficiently reduces fuels adjacent to private timber lands in the Beaver Fire area. (Alternative 5 responds to this issue.)

On March 14, 2015, the Forest published a notice of availability in the Federal Register, notifying the public of the 30-day comment period on the draft EIS.[7] Midway through the 30-day period, the Forest Supervisor decided to extend the comment period by 15 days in order to ensure all interests were provided sufficient time to participate in this large project. Notice of the extension was published in the Federal Register and interested parties were notified through emails and letters. The draft EIS, maps and information about how to make an official public comment are available on the Klamath National Forest website under the Westside Fire Recovery Project Page at: http://www.fs.usda.gov/main/klamath/home. The comment deadline was April 27, 2015. Comment analysis is now on-going. Over 13,000 comments were received. The majority of those comments were website-generated form letters. About 250 of those comments were unique letters. Comments on the draft EIS will be considered in the development of the final EIS and in preparation for a June 2015 decision.

[6] In addition to the alternatives being studied in detail, the Forest also developed 10 other alternatives that have been eliminated from detailed study.

[7] Klamath Forest Supervisor Patricia Grantham has sought alternative arrangements with the Council on Environmental Quality. Arrangements were granted that allowed the Forest to reduce the comment period from 45 days to 30 days. Forest Supervisor Grantham has also sought alternative arrangements to eliminate the 30-day wait period requirement between the final EIS and record of decision. A decision from Council on Environmental Quality related to this request is pending.

Continued Public Involvement and Consultation Efforts

The Klamath National Forest is continuing to host open house meetings to discuss and solicit comments on the draft EIS. The Forest has hosted a total of 10 open houses. Seven were in the local communities of Fort Jones, Scott Bar, Happy Camp, Klamath River, Seiad Valley, Sawyers Bar, and Yreka, CA. The Forest also hosted public open houses in Eureka and Redding, CA and Medford, OR. DVD copies and hard copies of the draft EIS were shared with members of the public who requested them.

A total of 165 people have attended these open houses. At the open houses, the public provided valuable input and observations about the project to the Forest Service.

The majority of local residents of Siskiyou County who have participated in the public involvement efforts support the proposed action (Alternative 2) set forth in the draft EIS. Notably, 21 people, (about 1/3 of the local population) attended the open house in Scott Bar, CA, most in support of alternative 2.

On April 7, 2015, at the request of the Environmental Protection Information Center (EPIC) the Forest Service also traveled to Eureka, CA for an open house. Eureka is about a five hour drive from the Forest headquarters in Yreka, CA. A total of 56 people attended this open house. Although this was a publicly advertised meeting the attendance was overwhelmingly represented by members of EPIC or those who responded to EPIC's alert concerning the meeting. Forest Service Westside Fire Recovery Team members answered questions and explained information presented in draft EIS in an open house forum, followed by a Q&A session with the audience. Many of the comments expressed a generic opposition to post-fire salvage and other recovery actions. There was also strong opposition expressed concerning the use of the ESD. Several commenters also expressed a belief that trees would retain value beyond two years or more, obviating the need for the ESD. Fourteen individual written comments were received at the open house.

The open house in Medford, OR attracted 30 people interested in commenting on the project. Valuable input in the form of over 12,000 comments was also provided.

The Forest Supervisor and key members of the project team have met with each of the collaborative groups. Those groups have submitted comments for consideration.

The Forest is continuing government to government consultation with the local American Indian tribes, including the Karuk Tribe. In addition to scheduled meetings and field trips, the Forest has been meeting by conference phone with the Karuk Tribe every Monday. A day prior to the publication of the draft EIS, the Karuk submitted an alternative for consideration. The Forest Service included this alternative as an appendix to the draft EIS. The alternative is being considered in the NEPA process and it is a topic of consultation discussions.

Consultation with regulatory agencies also continues and will continue through decision. James Munson from the Environmental Protection Agency conducted a site visit to the Supervisor's Office and project area March 31 through April 2. A site visit from CEQ is expected in late May 2015. The Forest has developed draft biological assessments in conjunction with NOAA Fisheries and the U.S. Fish and Wildlife Service for the federal ESA-listed Coho salmon and northern spotted owl, respectively, which have been made available on the project website for public information. The Forest continues to actively consult on ESA-

listed species and posted the submitted biological assessments on the project website in mid-April 2015 during the draft EIS comment period.[8]

D. Rationale for ESD Request

The Forest is requesting an Emergency Situation Determination (ESD) for the actions proposed in the Westside Fire Recovery Project. The minimum 90 days (three months) needed for the 36 CFR 218 objection process would greatly inhibit the Forest's ability to: (1) respond to hazards to human health and safety created by the 2014 wildfires, (2) address ongoing threats to natural resources resulting from the 2014 wildfires, and (3) accomplish the project's objectives for resource protection and restoration due to the loss in salvage tree commodity value.

1. Responsiveness to hazards to human health and safety created by the 2014 Wildfires

A component of the project's purpose and need is to provide for public and forest worker safety. Existing conditions include:

- Trees killed or severely burned by wildfire (i.e. snags) are often unstable and at risk for falling or snapping off, especially during winter snow, rain, and high wind events.
- Infrastructure, including utility lines, roadways, bridges, trailheads, campgrounds, and fire lookouts within the project area, are surrounded by fire-killed and damaged trees and preexisting danger trees that pose a hazard to the public and Forest workers. Notably, 650 miles of roadways are affected.
- Dead and dying trees within proposed salvage harvest areas present a safety hazard to firefighters when the area burns again or to others who may recreate or work in the areas.
- A high probability of future high-intensity wildfires due to heavy fuel loading from existing fire-killed trees threatens structures and will present a safety hazard to nearby residents and firefighters when the area burns again. Progressively increasing fuel loadings where potential flame lengths would exceed four feet), provides conditions in which fires are resistant to suppression tactics.

It is critical that safety needs and hazardous fuels conditions are addressed where they exist. This includes along roadways, near infrastructure, along strategic fuel breaks, and within the Wildland Urban Interface, especially within one-quarter mile of private property in burned areas or within areas that underwent fire suppression-related activity. Should the Forest be granted an ESD, this would allow timber sale contracts to be awarded in June 2015[9]. This would allow for several months of operations before winter weather closes access. Leveraging the timber sales would allow for the quick and efficient reduction of hazardous fuels and protection of infrastructure, which would in turn reduce the intensity of future fires and provide for the safety of the public and forest workers.

- A majority of hazards along 650 miles of roads and other infrastructure would be treated in 2015 prior to winter weather operational restrictions.
- Salvage logging would reduce safety hazards, promoting the successful protection of the public and forest workers.

[8] Note that a biological assessment is prepared to inform the ESA Section 7 consultation process and to support the Biological Opinion provided by the services; it is not subject to the notice and comment procedures of NEPA.

[9] The June implementation schedule referenced throughout this request assumes that alternative arrangements will be granted by CEQ. If alternative arrangements are not granted, an ESD would allow for implementation in July 2015, which would provide many of the same benefits discussed under the June schedule, just at a reduced scale, and with a higher potential that the proposed timber sales would not receive bids due the reduced timeframe for operations in the 2015 operating season.

- Snag removal from around local communities, key infrastructure, and roads would provide fire managers improved options for effectively managing potential future wildfires.
- Although fire plays an important role in the ecosystem, reducing these fuel loadings minimizes the intensity and severity of future fires; thereby, improving the likelihood of firefighting success.

2. Mitigation of threats to natural resources on National Forest System lands or adjacent lands from future fire intensity and severity

- Future fire intensity and severity threaten natural resources on NFS lands. Although wildfires have many benefits (e.g., snag and downed wood creation), 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. High severity fire inhibits stand regeneration, resulting in stand type changes to brush or other non-forested vegetation types and delaying these lands from reaching the desired conditions of the Forest Plan.
- Recent studies have shown that burned areas will regenerate naturally, but this regeneration will likely be highly variable and have a prolonged timeline (Shatford et al, 2007, Lentile et al 2005). The findings from this research are evidenced by the many older burns within the Klamath province and the mountains of the Salmon River drainages, which have remained brushfields for many decades after having been burned. Without some treatment of dead vegetation created by the 2014 fires, it is highly unlikely that the naturally regenerated trees would survive. Much of the project area would remain in a brush-dominated condition for decades, with the exception of those areas composed of re-sprouting hardwoods.
- A substantial amount of wildlife habitat has been lost as a result of the 2014 wildfires and other recent fires. If future fuels conditions are not addressed to minimize the intensity and severity of future fires, substantially more wildlife habitat loss is likely.
- Forested stream conditions provide for current and long-term habitat for the ESA-listed Coho salmon. Legacy sites (existing roads and mines) and recent large fire and flood events contribute to stream conditions. All streams within 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. The proposed action includes legacy site treatment and restoration treatments associated with reforestation that will improve long-term watershed conditions and stream health, and consequently, improve habitat conditions for the ESA-listed Coho salmon.

As mentioned earlier, Forest Supervisor Patricia Grantham is requesting an ESD, which would allow for timber sale contracts to be awarded in June 2015. This would allow for several months of operations before winter weather closes access, allowing the Forest to meet project objectives:

- Treatments proposed in the project are an important step towards reducing the heavy fuel loading from fallen snags, restoring intensely burned forested areas, and facilitating the speed and probability by which these areas recover to a forested condition. By reducing heavy fuel loading, the project area would be less susceptible to higher intensity and higher severity wildfires.
- Salvage logging would 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.
- Effective fuels treatments are an essential component of reforestation. Fuels treatments would break-up the continuity of fuels across a burned landscape, likely reducing the amount of time needed to restore the site to a sustainable coniferous forest. Research has shown that plantations

established in areas with high slash loadings burned severely, while those where residual slash has been adequately treated burned with much less intensity or not at all (Thompson 2007, Weatherspoon and Skinner 1995).

- Treatments to reduce fuel loadings would also provide for a decreased loss of important habitat and watershed damage from future fires. Site preparation work necessary to safely and sustainably re-establish forest conditions.

It is important to address the resource needs of forest recovery and fuels reduction while the Forest has the capability to implement these actions through selling dead and dying trees while they still have value, rather than having to pay contractors to cut/pile/remove valueless fire-killed trees.

3. Avoiding a loss of commodity value sufficient to jeopardize the agency's ability to accomplish project objectives directly related to resource protection or restoration

A component of the project's purpose and need is to obtain the maximum economic commodity value from burned timber by offering a sale while the wood is still marketable. Several factors influence the rate of deterioration of fire-killed trees: tree species, species characteristics (such as bark thickness or depth of sapwood), tree diameter, rate of growth, age, local site conditions, severity of the fire, and time of year the burn took place (Lowell et al, 1992). Bark provides a protective covering for the cambial layer in a tree. Trees with thinner bark are more susceptible to fire damage and tend to deteriorate more rapidly than those with thicker bark. Sapwood in all species is susceptible to decay. It is the first merchantable part of fire-killed or damaged trees to be degraded by insects, and stain and decay fungi. Large diameter trees generally decay slower than small diameter trees, and older trees generally decay slower than young trees. Less sapwood volume and decreased growth rates within the sapwood are partially the reason. When the effects of diameter and age are combined, a larger diameter tree will deteriorate more slowly than a smaller diameter tree if the difference is a result of age and not rate of growth. A faster rate of growth may offset this advantage of a large diameter tree (Lowell et al, 1992).

Insects (primarily beetles), stain and decay fungi, and weather all act as deterioration agents in fire-killed timber. Insect activity usually precedes fungal activity and provides a mechanism for introducing fungi that accelerate sapwood deterioration. Fungal decay, once introduced, will deteriorate the sapwood ahead of any insect damage. Decay causes reductions in strength properties of wood, rendering the wood useless from a structural standpoint, and thus decreasing useable log volume. In addition to the deterioration caused by stain, decay, and insects, weather checking also contributes to loss. Weather checking is cracks that form vertically in the wood as the dead tree dries out. With time, the cracks go deeper into the log, and the portion of the log that is checking is unusable for manufacturing boards.

Although we are not aware of any research data that is directly on point, based on experience, Forest specialists are concerned about the impact of the warmer winter temperatures following the 2014 fire season on wood deterioration. Forest Staff Officer Dan Blessing has had personal communications with several timber companies and foresters from local industry. From these sources, it appears that deterioration is dependent upon the size of the trees. Although the largest logs are not showing more deterioration, the smaller logs are showing deterioration about three months in advance of what is typically seen for burned timber. This means that wood conditions we are seeing in March are typical of what would be expected in June under standard conditions. Insect activity also appears to be in more advanced stages. Roughly one-quarter of the trees in the treatment areas have boring insect activity already. These factors contribute to an advanced rate of timber value loss, the extent of which is uncertain, when compared to more normal, colder conditions.

Beyond the important safety concerns associated with fallen snags, deterioration of the fire-killed and damaged trees reduces the quality, the merchantable volume, and value of the lumber. The reduction in value impacts the revenue the federal government receives from stumpage and it also impacts the ability to cost effectively remove the dead trees. There are numerous examples of recent fires where the timber went

unsold and unharvested because delay caused deterioration, rendering the trees worthless in the marketplace. This ultimately left heavy fuel loads on the landscape without feasible treatment options.

An ESD would save over 90 days from the project timeline[10] and would provide for project implementation in June 2015. An ESD is necessary in order to ensure the Forest can capture the value and commodity benefit of the timber.

With an ESD, the Forest anticipates advertising timber sale contracts in June 2015, allowing a substantial amount of the logging operations to be conducted during the 2015 operating season.

In January, 2015, timber volume within the project area was estimated to be as much as 190 million board feet. By June, this amount will drop to approximately 160 million board feet due to timber deterioration. With an estimated purchase value of about $25 per thousand board feet, the project can be anticipated to generate as much as $4 million dollars in receipts.

With an ESD, the Forest would be able to accomplish a majority of the contracted work in 2015, including:

- The removal of hazard trees from around local communities, key infrastructure, and 650 miles of roads, improving safety conditions and infrastructure protection, while providing fire managers improved options for effectively managing future wildfires.
- Salvage harvest in order to 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.
- Provide for decreased risk of habitat loss and watershed damage from future fires.
- Site preparation work necessary to safely and sustainably re-establish forest conditions.

E. Implementation without an ESD

If an ESD is not granted and objections are filed:

- A decision would be delayed by at least 90 days.[11]
- The earliest a decision could be signed would be late-September 2015.
- Contracts would not be awarded until early-October 2015.
- Due to limiting operating periods[12], logging would not likely begin until May 2016 or September 2016, depending on the portion of the project area.

If an ESD is not granted, then the value of the timber would continue to be lost, which would inhibit the Forest Service's ability to attract viable bidders for this project. If project implementation is delayed until summer 2016, then the value of timber would deteriorate into its third year. This delay would result in the

[10] The 90 day timeline assumes that objections would be filed on the FEIS. Without objections, there would still be a 45 day delay in implementation due to the need to have an objection filing period.

[11] A minimum of 90 days is calculated by adding the 45 day filing period and the 45 day response period. Although unlikely, there is also a potential for the response period to be extended an additional 30 days for administrative review or resolution meetings. Typically, there is also additional time needed between the objection response period and a decision in order to make adjustments to the project record in response to reviewing officer instructions and to document the objection process into the decision document.

[12] Due to wet weather operation standards, the normal operating period for this area of the Klamath is between May 1 and October 15 of each year. These standards are designed to protect water quality and soil stability from erosive potential following treatment. Further, limited operating periods for the northern spotted owl would be in place between February 1 and July 9 (or September 15) of each year, restricting noise producing and habitat modifying activities in many treatment areas.

merchantable volume dropping by almost half to about 85 million board feet. The general reduction in value would render many parts of this project economically unviable.

Harvesting costs, in terms of total dollars, would also increase due to a slowdown in productivity as the integrity of the salvaged trees diminish. Harvesting costs are typically displayed in terms of dollars per net million board feet. Since the actual dollar cost of harvesting would increase and the net million board feet volume would decrease from 160 million board feet to 85 million board feet, the delay would result in harvesting costs more than doubling, exceeding the value of the timber. Given these factors, without an ESD, it is anticipated that implementation of the salvage harvest component of this project could only be accomplished with a service contract, costing the government an estimated $16 million to implement the same treatments.

If an ESD is not granted and a viable bidder is not found, then the Forest would need to use a service contract to remove roadside hazards. It is estimated that a service contract for the hazard tree removal alone would cost almost $3 million. Delaying or forgoing hazard tree removal would mean that the safety hazards currently threatening the recreating public and forest workers would not be abated in a timely manner.

Together, salvage harvest and roadside hazard treatments would cost up to $19 million dollars to implement through a service contract.

If these situations played out as expected and operations were delayed until 2016, there would be a loss of commodity value. This would increase the chance of receiving no bids on a timber sale, drastically inhibiting the Forest Service's ability to attract a viable bidder for this project and meet project restoration objectives.

Without an ESD, project treatments would likely be reduced as follows:

- The majority of roadside hazard treatments would be delayed until 2016.
- Salvage treatments would be substantially reduced and may not be accomplished at all.
- Fuels reduction work on National Forest System lands adjacent to private lands would not be accomplished or would be accomplished at a much reduced level. Fuels treatments would be dependent on appropriated funding, which would likely lead to only a fraction of the proposed treatments being accomplished. Hazardous fuels treatments would be limited to areas immediately adjacent to local communities. It is unlikely that strategic fuel breaks and the remainder of the fuels treatments would be accomplished.
- Reforestation of burned forested areas would not be accomplished, since planting crews cannot safely operate in areas of dead and decaying standing trees.

Loss of commodity value and subsequent changes to the project would impact project objectives with the following consequences:

- Snags would continue to decay, break, and fall, increasing surface fuel loading and the severity and intensity of future fires.
- Delayed hazard treatments along roadways and nearby infrastructure would increase safety risks to forest workers and the public. To mitigate safety risks to the public, Forest Orders may be needed temporarily to close road access to portions of the Forest.
- Increased fire intensities and the continued existence of dead and decaying standing trees would inhibit the effective control of future fires and/or put fire suppression crews at increased risk.
- The Forest Service would not collect as much as $4 million in receipts which could be used to perform restoration treatments. The failure to perform these restoration activities will in turn affect watershed conditions for fish habitat and substantially delay the creation of future wildlife habitat for the federally-listed northern spotted owl and other important wildlife species.
- Ecosystem sustainability and reforestation objectives would not be met.

F. Conclusion

The granting of an Emergency Situation Determination (ESD) would ensure the Forest's ability to expeditiously address safety concerns, reduce hazardous fuels, capture the commodity value of burned trees and use these funds to accomplish the restoration of forested conditions on a severely burned landscape.

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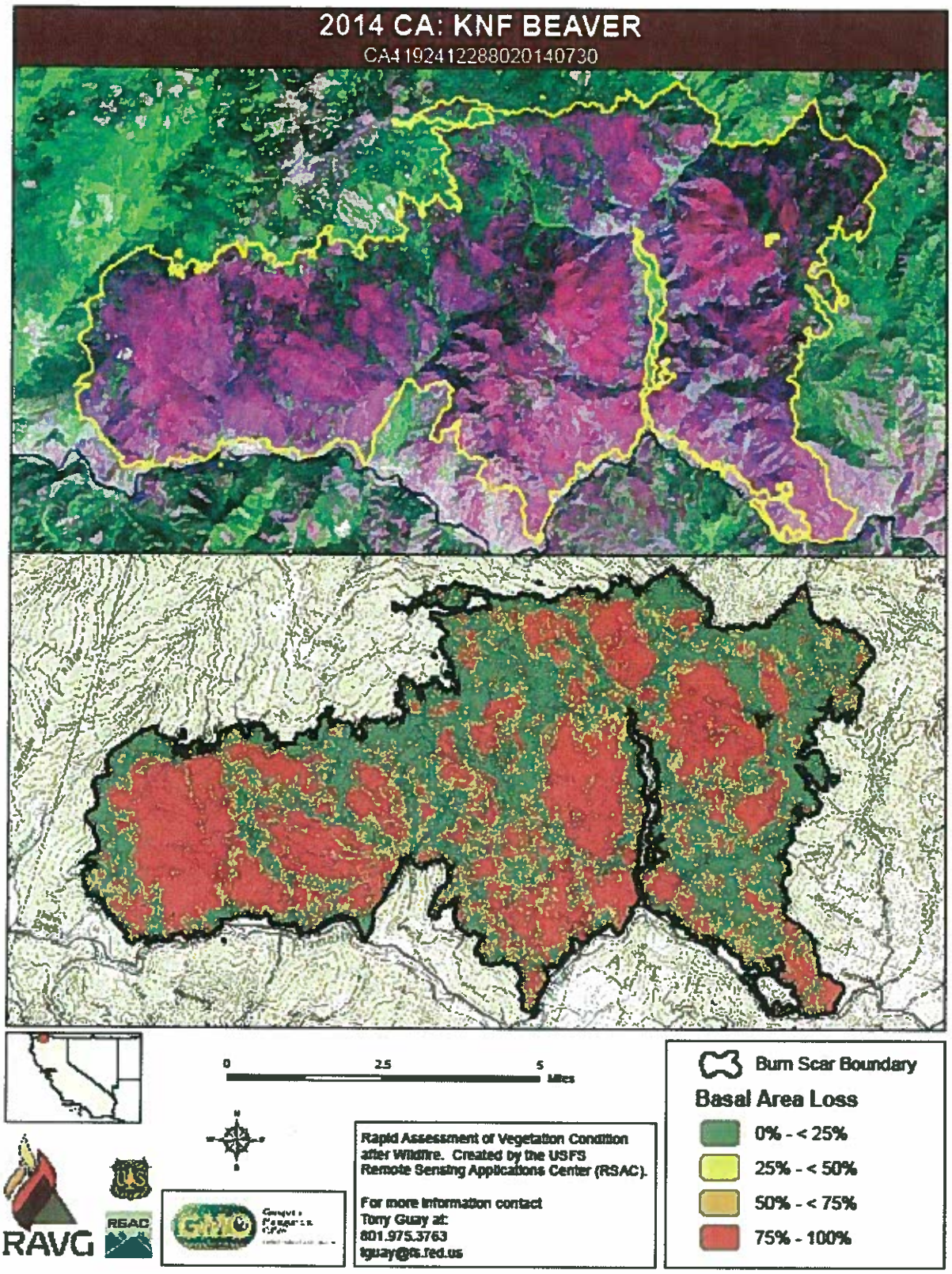
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25% - < 50%
50% - < 75%
75% - 100%
Rapid Assessment of Vegetation Condition after Wildfire. Created by the USFS Remote Sensing Applications Center (RSAC).
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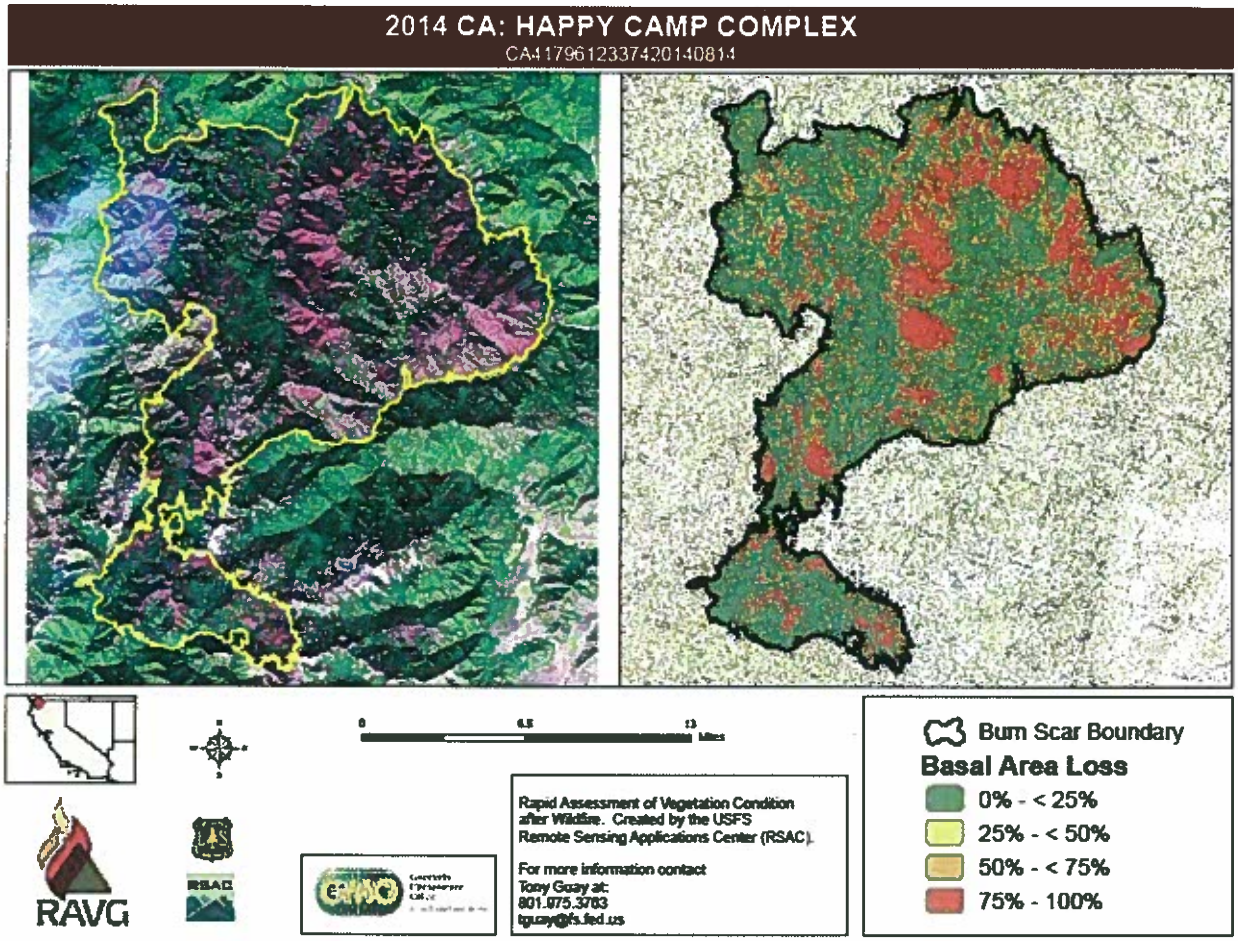
RAVG
RSAC


2014 CA: HAPPY CAMP COMPLEX
CA41796123374201408 14
Burn Scar Boundary
Basal Area Loss
0% - < 25%
25% - < 50%
50% - < 75%
75% - 100%
Rapid Assessment of Vegetation Condition after Wildfire. Created by the USFS Remote Sensing Applications Center (RSAC).
For more information contact
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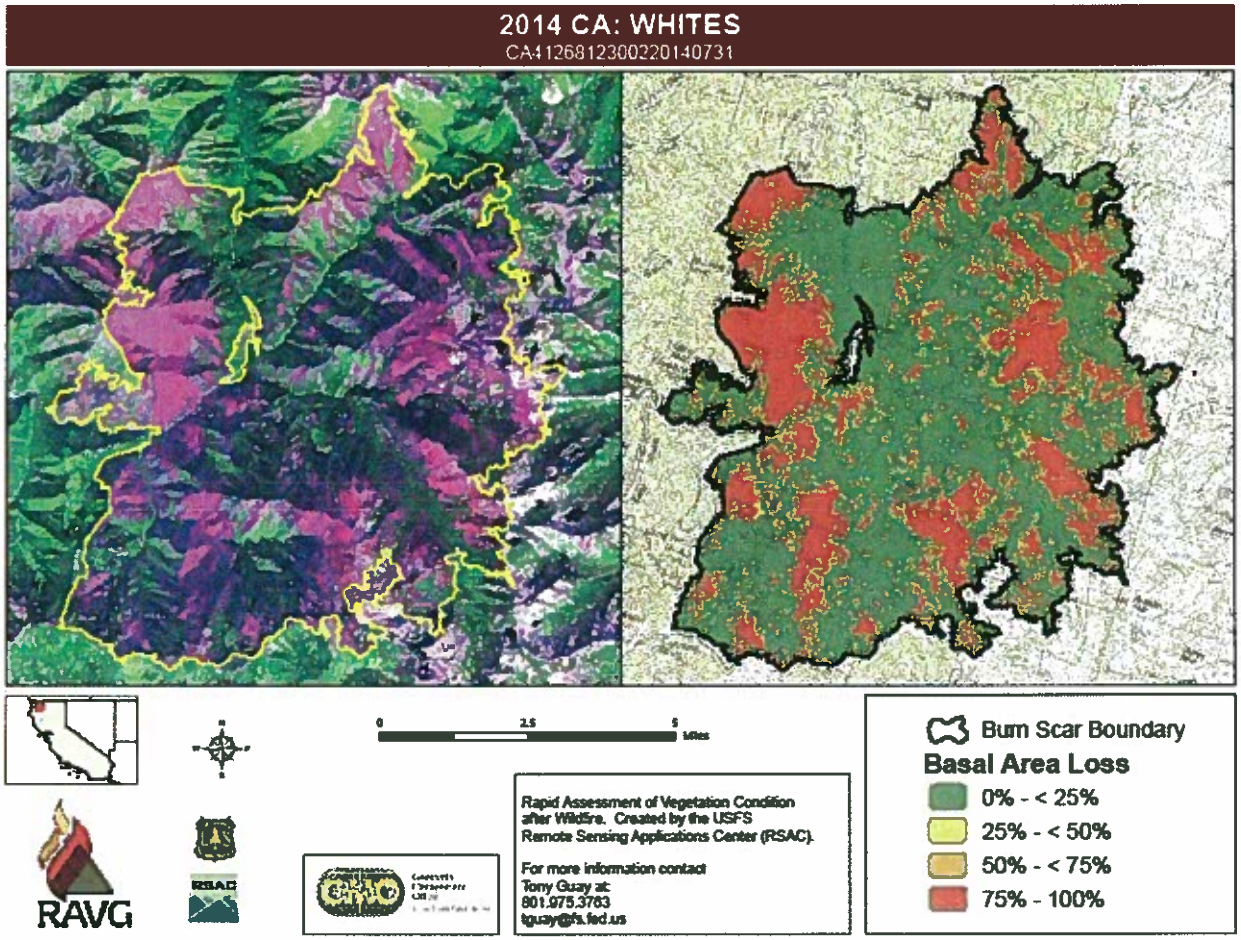
tguay@fs.fed.us
RAVG
RSAC


2014 CA: WHITES
CA4126812300220140731
0
2.5
5
Miles
Rapid Assessment of Vegetation Condition after Wildfire. Created by the USFS Remote Sensing Applications Center (RSAC).
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Burn Scar Boundary
Basal Area Loss
0% - < 25%
25% - < 50%
50% - < 75%
75% - 100%
RAVG
RSAC