



File Code: 1570

Date: October 25, 2012

Irene Jerome
AFRC Representative, Eastern Oregon/SW Idaho
American Forest Resource Council
408 SE Hillcrest Road
John Day, OR 97845

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Dear Ms. Jerome:

This constitutes my decision, pursuant to 36 CFR 215.18(b)(1), on your appeal (#12-06-14-0002-215) of Pomeroy Ranger District, Umatilla National Forest District Ranger Monte Fujishin's Record of Decision (ROD) for the South George Vegetation Management Project Final Environmental Impact Statement (FEIS).

Background

On July 17, 2012, Monte Fujishin, District Ranger for the Umatilla National Forest signed a record of decision (ROD) for the South George Vegetation Management Project FEIS. His decision to implement Alternative B, as modified includes:

- 2,900 acres of fuels treatment including pile burning and prescribed burning;
- 3,000 acres of prescribed landscape fire;
- 1,150 acres of non-commercial thinning and ladder fuel removal;
- Using helicopter, skyline, and ground based logging systems, implement 3,020 acres of improvement cutting (variable thinning); 80 acres of low thinning; 550 acres of seed tree regeneration harvest; and 250 acres of clearcut harvest with reserve trees;
- Road maintenance on 46.5 miles of ML 2 and ML 3 road;
- Use of 32.5 miles of ML 1 road;
- 3 miles of temporary road construction.

Modifications to the decision include:

- Implementation of helicopter logging in units #1 (approximately 100 acres) and #10 (approximately 158 acres) will be based on economic feasibility at the time of operation. If not economically feasible stand characteristics may still be manipulated by other methods such as manual thinning and burning. This strategy will only be implemented in the remaining stand structure can be properly protected to maintain other resource values. This also will result in less temporary road construction (approx. 0.64 miles).
- Decommissioning of approximately 31 miles of system roads.
- Any unauthorized non-system roads or trails located in harvest units will have entry areas made impassible after harvest activities.



- Hogback Road (FR 4302) will have the existing seasonal closure extended annually from September 15 to November 30th and will change from an operational maintenance level 3 to operational maintenance level 2.

Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of the appeals. The record indicates that informal resolution was not reached with American Forest Resource Council, Boise Cascade or The Lands Council/Blue Mountain Biodiversity Project/Hells Canyon Preservation Council. Informal resolution was reached with the State of Washington, Department of Fish and Wildlife.

My review of this appeal has been conducted in accordance with 36 CFR 215.18, *Formal review and disposition procedures*. I have reviewed the appeal record, including the recommendations of the Appeal Reviewing Officer. A copy of his recommendation is enclosed. The Appeal Reviewing Officer focused his review on the appeal record and the issues that were raised in all of the appeals.

Appeal Decision

After a detailed review of the record and the Appeal Reviewing Officer's recommendation, I affirm the Responsible Official's decision with instructions for the South George Vegetation Management Project and deny your requested relief. I instruct the District Ranger to complete an errata sheet that corrects minor errors that have been found since the ROD was signed and posting this errata sheet to the Forest's public website as well as provide it to appellants. This decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

A copy of this letter will be posted on the national appeals web page at <http://www.fs.fed.us/appeals>.

Sincerely,

/s/ John Laurence
JOHN LAURENCE
Acting Forest Supervisor



United States
Department of
Agriculture

Forest
Service

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File Code: 1570

Date: October 25, 2012

Route To:

Subject: Appeal Recommendation, South George Vegetation Management Project

To: John Laurence, Acting Forest Supervisor, Umatilla National Forest

Background

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Four appeals (#12-06-14-0001-215, #12-06-14-0002-215, #12-06-14-0003-215 and #12-06-14-0004-215) were filed by Steve Pozzanghera (State of Washington: Department of Fish and Wildlife), Tom Partin (American Forest Resource Council - AFRC), Lindsay Warness (Boise Cascade) respectively and one combined appeal (#0004) was filed jointly by The Lands Council



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(Jeff Juel), Blue Mountain Biodiversity Project (Karen Coulter), and Hells Canyon Preservation Council (David Mildrexler).

AFRC requested that an additional 6,000 acres be added to the planning area and requests that "providing sawlogs and wood fiber products for utilization by regional and local industry be made a key issue.

Boise Cascade requested that the Forest Service implement the project while supplementing the ROD with additional volume and that the Forest conduct more widespread and intensive fuel reduction and provide a restoration buffer to protect the private landowners near and within the project area.

The coalition of conservation groups requested that the ROD be withdrawn or remanded and that a supplemental EIS be prepared to address issues presented by them, and that the project be revised to ensure consistency with the NEPA, ESA, NFMA, APA, and all applicable regulations.

Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of the appeals. The appeal filed by Steve Pozzanghera for the State of Washington was subsequently withdrawn after informal disposition and will not be addressed further. The record indicates that informal resolution was not reached with American Forest Resource Council, Boise Cascade or The Lands Council/Blue Mountain Biodiversity Project/Hells Canyon Preservation Council.

Review and Findings

My review was conducted in accordance with 36 CFR 215.19 to ensure that the analysis and decision are in compliance with applicable laws, regulations, policies, and orders. The appeal record, including the appellant's issues, has been thoroughly reviewed. Having reviewed the FEIS, ROD, and the project record as required by 36 CFR 215.19(b), I conclude the following:

1. The decision clearly describes the actions to be taken in sufficient detail that the reader can easily understand what will occur as a result of the decision.
2. The selected alternative as modified will accomplish the purpose and need established. The purpose and need stated in the FEIS reflects consistency with direction to implement the Umatilla National Forest Land and Resource Management Plan.
3. The decision is consistent with policy, direction, and supporting evidence. The record contains documentation regarding resource conditions and the Responsible Official's decision document is based on the record and reflects a reasonable conclusion.
4. The record reflects that the Responsible Official provided adequate opportunity for public participation during the analysis and decision making process. The Responsible Official's efforts allowed interested publics the opportunity to comment and be involved in the proposal. The decision was modified based on comments received on the draft EIS.

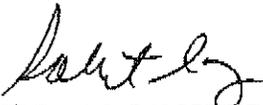
After considering the claims made by the appellants and reviewing the record, I found that the Responsible Official conducted a proper and public NEPA process that resulted in a decision that

is consistent with the Umatilla National Forest LRMP. I found no violations of law, regulations, or Forest Service policy.

Recommendation

After reviewing the appeal record, I recommend affirming the decision, with the instruction of completing an errata sheet that corrects minor errors that have been found since the ROD was signed and posting this errata sheet to the Forest's public website as well as provide it to appellants. Overall, I believe that the project documentation adequately supports the Forest Supervisor's decision with regards to all appeal points raised by the appellant.

Enclosed with this memo are my responses to each appeal issue.



ROBERT F. SANCHEZ
District Ranger

cc: Debble Anderson, Lillian M Compo

**South George Vegetation and Fuels Management Project
Final Environmental Impact Statement (FEIS)
Umatilla National Forest
Appeal Statements and Responses**

Appellant	Appeal Number
American Forest Resources Council (AFRC)	12-06-14-002-215
Boise Cascade (BC)	12-06-14-003-215
The Lands Council, Hells Canyon Preservation Council and (TLC) Blue Mountains Biodiversity Project/League of Wilderness Defenders	12-06-14-004-215

Impacts to Uninventoried Roadless Areas/Potential Wilderness Areas

Appellant Statement #1: Appellant states that the Forest has inadequately analyzed the impacts to both listed species and regionally sensitive species from development in unroaded areas of the South George Project. TLC at 5. Appellant states that these areas function as integrated roadless core habitat or connectivity corridors for many species and the FEIS never evaluated these areas as such. TLC at 6, 14 and 15. Appellant questions the FEISs assertion that logging and road building in roadless areas is needed to maintain wildlife habitat. TLC at 25.

Response: I find that the Responsible Official considered the analysis in the FEIS which analyzed the impacts to threatened, endangered, proposed and sensitive species when making his decision.

The Code of Federal Regulations (CFR) at 36 CFR 220.4(c) requires the Responsible Official to complete the environmental review before making a decision on the proposal, consider the environmental documents, public and agency comments, and agency responses to those comments; include environmental documents, comments, and responses in the administrative record, consider the alternatives analyzed in environmental documents before rendering a decision on a proposal, and make a decision within the range of alternatives analyzed in the environmental documents.

The Forest Service considered all lands in the project area and followed established procedures for inventory of Potential Wilderness Areas (PWA). These procedures are found in Forest Service Handbook (FSH) 1909.12, Chapter 70, Section 71. There were no PWAs identified within the South George project planning area using the PWA inventory process, as none of the polygons were over 5,000 acres in size. ROD at 14, FEIS at 182. During the PWA inventory process, isolated polygons of undeveloped lands were identified and based on with established criteria. Forest Service Handbook 1909.12. These polygons did not meet inventory criteria as potential wilderness areas and are not inventoried roadless areas or designated wilderness areas. There are no Forest Plan standards or guidelines for other undeveloped areas. In fact, the Forest Plan allocates the other undeveloped areas identified during the PWA process to management areas C1, C3, C3A, C4, and C5, most of which allow for timber harvest. FEIS at 3-183 and 3-184. Of the forested acres in the planning area, 91% (14,060 acres) are included in management areas where forestland is suitable for timber production. FEIS at 3-46.

Effects of the project on wildlife were analyzed in the FEIS at 3-97 to 3-142. The Forest Service considered also connectivity between old forest stands. Connectivity among old forest stands is expected to increase by 640 acres when the project is fully implemented. FEIS 3-100. Furthermore, areas with unique ecological values within the project planning area are currently maintained for those values with Forest Plan standards and guidelines for management areas such as C1 – Old Growth, C3 – Big Game Winter Range, and C3A – Sensitive Big Game Winter Range. FEIS at 1-5 to 1-7; 3-184.

Appellant Statement #2: Appellant states that key assumptions in the potential wilderness area (PWA) methodology are biased against roadless extent because the methodology “diminishes the true ecological value of these roadless lands” because the Forest breaks the areas into pieces thus underestimating the true roadless extent of an area; rules out 300 feet on either side of roads regardless of on the ground data and then evaluating the roadless lands as separate units; and excludes any area that experienced any harvest, which appellants state can recover from past thinning, and violates Congress’ request to abandon the ‘purity doctrine’. Appellant states that this methodology wasn’t “intended for evaluating the ecological value of roadless lands including uninventoried roadless areas.” As such, appellant states that 12,815 acres were excluded from the analysis and that overall, the analysis is arbitrary and capricious. TLC at 6, 17-27.

Response: I find that the Responsible Official evaluated potential wilderness areas within the South George project planning area and that his decision was not arbitrary and capricious because his decision was in accordance with law (Wilderness Act 1964 section 2(c)), regulation (36 CFR 219.7) and policy (FSH 1909.12 Chapter 70).

The Forest Service Handbook at 1909.12 Chapter 70 contains specific instructions for identifying and evaluating potential wilderness areas. Areas qualify for placement on the potential wilderness area inventory if they are 1) 5,000 acres or more; 2) contain less than 5,000 acres but either (a) can be preserved due to physical terrain and natural conditions, (b) are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness System, (c) areas are contiguous to existing wilderness areas, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size; 3) Areas do not contain forest roads (36 CFR 212.1) or other permanently authorized roads, except as permitted in areas east of the 100th meridian (FSH 1909.12 sec 71.12). The Umatilla National Forest completed an exhaustive inventory of potential wilderness areas using the above criteria and determined that there were no areas that met the criteria for PWAs. ROD at 15, FEIS at 3-181. These criteria for analyzing all undeveloped areas are documented in Appendix H. This appendix outlines the methodology and assumptions that the Forest used in their inventory and as such, is not arbitrary.

As explained in the FEIS Appendix H, roads and past harvest units were excluded in accordance with the information found in the FSH 1909.12, at 71.1(3); potential wilderness areas do not contain forest roads therefore all acres that were occupied by forest roads were removed from the inventory as shown in Map H-3 and Map H-4. The FSH 1909.12 at 71.1(9) states that acres with evidence of past logging and roads will be removed from the inventory; this was done by the Forest and is displayed in Map H-4. The FSH 1909.12, at 71 directs the agency to locate potential wilderness area boundaries at semi-permanent, human-made features to facilitate easy on-the-ground identification of a boundary. The FEIS Appendix H at Map H-4 displays how the Forest located boundaries of undeveloped areas.

Thus, Appendix H documents that these areas were excluded from the inventory. Further, the Appendix states that “[w]e recognize stumps are not present along every mile of forest road; for example roads adjacent to a meadow, talus, or a lake. The judgment we applied in setting a PWA boundary balanced inventory criteria regarding excluding past harvest and facilitating easy on-the-ground identification.” Appendix H goes on to state that “[b]ased on local knowledge, and professional judgment regarding the evidence of recognizable stumps, skid trails, etc. which occur to varying degrees adjacent to forest roads (as described above) and to facilitate easy on-the-ground identification of a uniform, measurable boundary along a semi-permanent, human-made feature; the boundary was set as 300 feet each side of the forest road. FEIS Appendix H at H-3 and H-4.

The Forest also addressed a similar comment from appellants on the DEIS. There, the Forest stated that they followed agency direction in applying inventory criteria to potential wilderness areas and other undeveloped lands. FEIS Appendix K at K-47 through K-52, and K-61 to K-62. I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following fourteen appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant asserts that the Forest arbitrarily excluded lands that were previously thinned because they may have recovered. Since appellant asserts these previously harvested areas can recover, nothing would then prevent the acres that are being proposed for thinning from recovering in time, which would then allow those acres to be considered undeveloped in the future, when stumps or other signs of timber harvest are no longer evident. Regardless, the FEIS fully documents and quantifies the impacts to areas that the Forest considers as undeveloped lands. Of the 8,785 acres of undeveloped lands, the selected alternative would harvest timber on about 1,405 acres, conduct associated activities on 225 acres, and conduct landscape prescribed fire would occur on 1,805 acres. FEIS at 3-185. This results in an 8% change in the status of undeveloped lands in the planning area. FEIS at 3-187.

Appellant Statement #3: Appellant further contends that the Forest has not ground-truthed their GIS analysis to determine where errors exist in the data (and has likely erroneously ruled out grasslands), which adds to the uncertainty of the analysis and exclusion of areas that should be considered as PWAs. TLC at 20, 21, 22, 23, and 24.

Response: I find that the Responsible Official complied with law, regulation, and policy in conducting the Potential Wilderness Area inventory.

The Forest Service is required to identify potential wilderness areas relying on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. FHS 1909.12 Chapter 71. Examples of situations where professional judgment was applied included (but was not limited to) placement of PWA boundaries along permanent natural (ridges, streams, topographic features) or semi-permanent human-made features (past harvest units, roads, etc.) in order to facilitate easy on the ground identification; whether to proceed through an isthmus (or pinch point) created between two roads or two harvest areas or place a PWA boundary across the isthmus; whether to locate a PWA boundary around a peninsula or place the boundary through the peninsula. The Forest evaluated 9,185 acres after removing 6,890 acres where past harvest had occurred and 4,925 acres associated with 300 feet on either side of roads, consistent with the past decisions and Travel and Access Management plans. Although not required by FSH 1909.12 Chapter 70, field site visits were conducted to verify past timber harvest areas. FEIS Appendix H at H-3.

Appellant Statement #4: Appellant states that the South Fork Asotin Creek Roadless Area was erroneously excluded from Potential Wilderness Area status because the Forest used biased GIS approaches to reduce the total roadless extent, used “highly questionable subjective professional judgment to conclude that wildlife habitat will suffer without mechanical treatment” and erroneously stated that wildfire and/or prescribed burning cannot maintain good wildlife habitat. TLC at 19-27.

Response: I find that the Responsible Official adhered to agency policy by inventorying and evaluating Potential Wilderness Areas.

The Forest Service is required to identify potential wilderness areas relying on local knowledge and judgment regarding unique, site-specific conditions of each area being considered for placement on the inventory of potential wilderness. FHS 1909.12,71.

The Forest used GIS, local knowledge and judgment and field visits to evaluate the project area for Potential Wilderness Areas. Each area inventoried was mapped (FEIS Appendix H) and evaluated based on criteria laid out in FSH 1909.12 Chapter 71. An outcome of the PWA inventory process was the identification of isolated areas of other undeveloped lands (FEIS Appendix H Map H-5, Table H-1B and Table H-1C) which shows consideration of the four largest polygons in the project area. These polygons did not meet inventory criteria as potential wilderness areas and they are not inventoried roadless areas or designated wilderness areas. The Forest took a hard look at these areas and determined that they do not meet the criteria for potential wilderness areas. FSH 1909.12,71.1.

It is unclear where in the FEIS appellant is stating that the Forest concludes that “wildlife habitat will suffer without mechanical treatment. The FEIS does document that the project “result in improved wildlife habitat for some species and a reduction in wildlife habitat for other species.” FEIS at 3-98. There is a section in Appendix H that documents that the majority of Polygon 1 (the largest undeveloped polygon) is designated as C4 and C3A, which are to be managed for habitat effectiveness for big game and other wildlife. Appendix H states that prescribed fire alone without management of vegetation would not maintain or enhance big game habitat and that options for future management would be limited with an eventual long term negative impact on wildlife habitat if these areas were included as potential wilderness. FEIS Appendix H at H-8 and H-9. This conclusion is based on the desired condition of these land allocations, which state that the areas will have a mosaic of plant communities, including a mosaic of even and uneven aged stands to create forage for big game in management area C4, which the majority of the planning area acres are located in (15,200 acres of the 21,000 acre planning area). FEIS at 1-6, 1-7; 2-33. A prescribed fire only alternative was analyzed, but eliminated from detailed study because of existing high fuel loadings and risk of fire escape. FEIS at 2-33.

I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following twelve appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant Statement #5: Appellant states that the Forest used questionable professional judgment to conclude that the threat of ATVs from private lands indicates that the area cannot be managed as a PWA. TLC at 19, 26 and 27.

Response: I find that the Responsible Official made an informed decision based, in part, on an understanding of activities on adjacent private lands. The Responsible Official’s decision is consistent with FSH 1909.12 Chapter 71 because it considers the effect of private land activities on the potential wilderness area.

FSH 1909.12,72.1 directs the Forest Service to evaluate and consider the capability of the potential wilderness which is defined as “the degree to which that area contains the basic characteristics that make it suitable for wilderness recommendation without regard to its availability for or need as wilderness. The Forest Service is required to evaluate the area for principle wilderness characteristics established by The Wilderness Act (1964). “Natural” refers to an area’s ecological systems that are substantially free from the effects of modern civilization and generally appear to have been affected

primarily by forces of nature. The largest polygon of “other undeveloped land” identified in the FEIS at Appendix H-10 did not meet the criteria as a PWA. ROD at 14, FEIS at 3-183 and Appendix H-10.

The Forest took assessed these undeveloped land parcels and analyzed the potential effects of the project on “intrinsic social and ecological values” of these areas. The Forest determined that project activities would not further impair these values. With regards to the largest polygon (polygon 1), the Forest does disclose that the adjacent private lands are being subdivided into small, 5 acres plots and developed. The Forest goes on to state that past history and ongoing experience has shown that ATV use from private landowners does occasionally cross onto National Forest System lands and that it is not possible to monitor these areas at all times. The context for this discussion is related to the inventory criteria of “[a]reas contain less than 5,000 acres but, can be preserved due to physical terrain and natural conditions.” FEIS Appendix H at H-8 and H-9. The Forest did not state that the threat of ATVs from private lands was the only reason that polygon 1 was not considered as PWA. As documented in Appendix H, there are other reasons, including the size of the polygon (it does not contain more than 5,000 acres – criteria 1), it is not a self-contained ecosystem (criteria 2b) and it is not contiguous with wilderness or other Administratively withdrawn lands (criteria 3). FEIS Appendix H at H-8 through H-10. For all of these reasons that Polygon 1 was not considered as a PWA.

Appellant Statement #6: Appellant states that the Forest failed to develop an alternative that “works with the extensive and critically important roadless values present” in accordance with the best available science. TLC at 7, 11 and 28. Further, appellants state that the Forest was “quick” to rule out the potential of prescribed fire or a combination of pre-commercial thinning and prescribed fire to manage the South Fork Asotin Creek Roadless Area and should have considered this further as it is responsive to science-based, long-term ecological restoration approaches that maintain roadless and potential wilderness values. TLC at 29 and 30.

Response: I find that the Responsible Official developed a reasonable range of alternatives that are responsive to the purpose and need for the project and considered the analyses and best available science used in the development of the FEIS when rendering his decision.

The phrase “range of alternatives” refers to the alternatives discussed in environmental documents. It includes all reasonable alternatives, which must be rigorously explored and objectively evaluated as well as those other alternatives which are eliminated from detailed study with a brief discussion of the reasons why they were eliminated. 40 CFR 1502.14.

The South George project interdisciplinary team developed 3 action alternatives and a no action alternative based on comments received during scoping, Forest Plan goals, standards and guidelines and that were also responsive to the purpose and need statement in the FEIS. The Responsible Official considered additional alternatives including a prescribed burning only alternative but found that this would not provide the greatest restoration value. Prescribed burning alone would not meet the purpose and need due to high existing fuel loading conditions and risk of potential escape. With large landscape areas covered with high risk vegetation, the potential for escape or resource damaging landscape fire would be high. Furthermore, this alternative would not meet the purpose and need of decreasing the probability of uncharacteristic high intensity wildfires by reducing fuel loads to levels expected under natural fire disturbance regimes. FEIS at 2-33.

The FEIS clearly describes the methodology used to assess current conditions of fuel loadings for the 21,000 acre project area. Field reconnaissance, GIS, historical vegetation mapping, Umatilla National Forest Integrated Forest Resource Management System (INFORMS) vegetation database and fire and

fuels modeling software (FVS-FFE, Behave) were all utilized to determine the condition of the area. FEIS at 3-76. Currently, 87% of the project area is in Condition Class 2 and 12% is in Condition Class 3, while 64% of the project area is at risk of high severity crown fire which is outside the historic fire regime. High fuel loading, ladder fuels, insect and disease all contribute to these conditions. Analyses in the fuels report established that prescribed fire alone would not be sufficient to reduce the potential for stand replacing fire within the project area. The results of the three action alternatives plus the no action alternatives are clearly displayed in the FEIS. FEIS Table 3.51 at 3-88.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. Under this direction, the Forest Service is required to document how the best available science was considered in the planning process within the context of the issues being considered. The Responsible Official followed agency direction in applying and considering the best available science. The FEIS identified methods used and references relied on. FEIS 3-75 to 3-93. A thorough review of the current literature related to fuels management and fire regimes was completed for this project. FEIS Appendix L at L-35 to L-37.

Appellant Statement #7: Appellant states that although “uninventoried roadless areas are included among the project units, the FEIS fails to correctly disclose their ecological site-specific conditions, and fails to adequately address the proposed project’s logging, roading, mechanized thinning, and other management action impacts upon these areas. The FEIS provides no specific analysis on the impacts of the proposed action on uninventoried roadless areas and simply defers analysis of these areas to the analysis of previously managed lands.” TLC at 8, 15, 17 and 35.

Response: I find that the Responsible Official thoroughly considered the impacts of the project on uninventoried roadless areas because the ROD and FEIS disclose the methods used to inventory and evaluate potential wilderness areas, potential impacts to these areas and further identified other undeveloped lands and analyzed the potential impacts to these areas.

The Forest Service is required to analyze direct, indirect, and cumulative effects for each project proposed. FSH 1909.12(20)(7). The Forest conducted a thorough analysis of effects in Chapter 3 of the FEIS, including analysis of soils, wildlife, hydrology, aquatic environment and undeveloped lands. FEIS at 3-3 through 3-191.

The Forest Service Handbook 1909.12 Chapter 70 provides detailed instructions for inventory and evaluation of potential wilderness areas. There were no PWAs identified within South George project planning area using the PWA inventory process. ROD at 14. An outcome of the PWA inventory process was the identification of isolated polygons of other undeveloped lands. FEIS Appendix H, Map H-5, Table H-1B. The ROD at 14 and the FEIS discloses that these polygons do not meet inventory criteria and are not inventoried roadless or designated wilderness areas. FEIS Appendix H. The FEIS and ROD disclosed that no special or unique values were associated with these areas and all actions implemented on these acres are consistent with Forest Plan Standards and Guidelines and management area allocations. ROD at 14, FEIS at 3-184 to 3-187. The environmental effects analyses for other undeveloped lands from implementation of the project are consistent with law, regulation, and Forest Plan management area standards and guidelines. NEPA 1969, FSH 1909.12 Chapters 20 and 70, and Umatilla Forest Plan at 4-47 to 4-195.

The Forest determined that other lands with no thinning or mechanized activity (8,785 acres) will retain their intrinsic physical, biological, and social values as described in the affected environment. These areas will remain free of developments such as forest roads or timber harvest stumps. Although assessed, these areas did not meet the PWA criteria (FSH 1909.12 Chapter 71).

In addition, the FEIS disclosed findings of consistency for all other resources in Chapter 3. Soils at 3-14; Hydrology at 3-32; Threatened, Endangered, Sensitive (TES) and Management Indicator (MIS) Aquatic Species at 3-46; Vegetation at 3-70; Fuels at 3-92 to 93; Air Quality at 3-97; Wildlife Species and Habitat at 3-110, 114, 117, 119, 121, 127 and 141; Invasive Plant Species (Noxious Weeds) at 3-148; Threatened, Endangered, and Sensitive Plants at 3-155; Recreation at 3-159; Visual Resource (Scenery) at 3-170; Economic Analysis at 3-175; Inventoried Roadless Areas (IRAs), Potential Wilderness Areas (PWAs) and Other Undeveloped Lands at 3-189.

The Forest also responded to a similar statement in their response to comments. There, the Forest notes that they considered the effects to all areas, including other undeveloped lands. FEIS Appendix K at K-43 and K-44. In addition, approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following nine appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant Statement #8: Appellant states that the FEIS fails to analyze the significant impacts to wilderness quality lands. TLC at 9. Appellant states that the project would degrade and may irreparably harm roadless areas, including the South Fork Asotin Creek Roadless Area. Appellant states that the Forest used the PWA analysis as an “excuse to not evaluate” the wilderness characteristics in uninventoried roadless areas. TLC at 9.

Response: I find that the Responsible Official evaluated potential wilderness areas within the South George project planning area and that his decision was not arbitrary and capricious because he was in accordance with law (Wilderness Act 1964 section 2(c)), regulation (36 CFR 219.7) and policy (FSH 1909.12 Chapter 70).

The Forest Service is required to analyze direct, indirect, and cumulative effects for each project proposed. 40 CFR 1502.16; 40 CFR 1508.7; FSH 1909.12(20)(7).

See also response to Appellant Statement #2 and #7. I note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Specifically, see FEIS Appendix K at K-46 to K-47 regarding the topic of ‘wilderness quality lands.’ In addition to this citation, approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following eight appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant Statement #9: Appellant states that for a project that “aims to restore historical conditions for species composition, the Agency fails to recognize the irony of pushing other rare aspects of landscapes, such as roadless lands and previously unlogged lands, further away from historical levels” and that the FEIS fails to address the underrepresentation of these landscapes across the Forest. TLC at 9, 15 and 25.

Response: I find that the Forest Service conducted a thorough analysis of Inventoried Roadless Areas (IRAs), Potential Wilderness Areas (PWAs) and other undeveloped areas.

The Forest Service is required to briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action. 40 CFR 1502.13. As described in the FEIS, the primary purposes of the project are to 1) move forest structure, species composition and stand density toward the historical range of variability; 2) manage forest stands in Condition Classes 2

and 3 to begin to restore vegetation characteristics and fire return intervals characteristic of historic fire regimes; 3) provide sawlogs and wood fiber for utilization by regional and local economies; 4) continue to provide and manage, over time, for wildlife habitat and its components. FEIS at 1-5. The alternatives developed and analyzed are responsive to the purpose and need for the project.

The regulation at 40 CFR 1502.16 directs the agency to disclose the direct and indirect effects of the proposed action and any alternatives. The Forest Service conducted and disclosed a thorough analysis of the effects of the South George Project on IRAs, PWAs, and other undeveloped lands and concluded that no IRAs or PWAs would be affected. FEIS at 3-186 to 187. In addition, the Forest responded to a similar comment on the DEIS. In the response to comments, the Forest notes that approximately 67% of the Pomeroy Ranger District is comprised of undeveloped lands, including Wilderness (48% of the District) and IRA (19% of the District). FEIS Appendix K at K-58 and K-59. Thus, since the majority of the District has not been actively managed, I concur with the Forest that these landscapes are not 'underrepresented' on the landscape.

Appellant Statement #10: Appellant states that the Forest "failed to adequately disclose the environmental impacts of logging in uninventoried roadless areas, some of which may qualify as Potential Wilderness Areas" and that the FEIS fails to address the wilderness characteristics that would be impacted by management activities in the units close to a popular campground and trails. TLC at 11, 14, 15 and 17. Appellant specifically states that the PWA analysis is "entirely non-substantive" and that the FEIS failed to "objectively disclose the critically important role that unroaded areas provide" and failed to "identify any special or unique features associated with over 42% of the project area lands that are roadless." TLC at 13. Appellant states that these omissions render the analysis arbitrary and capricious, and that the analysis "flies in the face of logic, runs counter to the peer-reviewed science, and raises questions regarding the scientific integrity of the analysis." TLC at 13, 18, 35 and 36.

Response: I find that the Responsible Official thoroughly considered the impacts of the project on "un-inventoried" roadless areas because the ROD and FEIS disclose the methods used to inventory and evaluate potential wilderness areas, potential impacts to these areas and further identified other undeveloped lands and analyzed the potential impacts to these areas.

The Forest Service is required to analyze direct, indirect, and cumulative effects for each project proposed. 40 CFR 1502.16; 40 CFR 1508.7; FSH 1909.12(20)(7). Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning.

The Forest responded to a similar comment from appellant. The response to comments states that the Forest documented each step of the inventory process and used professional judgment and local knowledge regarding unique, site specific conditions of the areas that were inventoried. FEIS Appendix K at K-49, K-50 and K-51. In addition, approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following six appeal statements. FEIS Appendix K at K-41 through K-67.

See also response to Appellant Statement #2, #7 and #8 above.

Appellant Statement #11: Appellant states that the analysis fails "to address or disclose the cumulative impacts that would result from management actions not only in unroaded areas but adjacent forest stands, including the diminishment of the extent of currently undisturbed habitat in the project area." TLC at 14 and 15.

Response: I find that the Responsible Official adequately considered cumulative effects of the project on other undeveloped lands because the FEIS discloses cumulative effects for each resource.

The regulation at 40 CFR 1508.7 requires the agency to consider and disclose cumulative effects. The Forest established the temporal and spatial extent for the cumulative effects analysis in the FEIS at 3-1 and followed the guidance in the Council on Environmental Quality's (CEQ) letter dated June 24, 2005. Using this guidance the Forest considered various projects within and adjacent to the South George Vegetation and Fuels Management project planning area. Past projects were listed including number of acres treated and what type of treatments were applied, planting, non-commercial thinning, invasive plant treatments, wildfires, grazing, and road management activities. FEIS at 3-3. A comprehensive list of on-going projects and reasonably foreseeable future projects was also catalogued in the FEIS. FEIS at 3-3 to 4. Cumulative effects for each resource are detailed in the FEIS and were considered to be short-term and minimal in nature. FEIS – Soils at 3-13 to 3-14; Hydrology at 3-26 to 3-28; Threatened, Endangered, Sensitive (TES) and Management Indicator (MIS) Aquatic Species at 3-37, 3-39, 3-40, 3-42, 3-44; Vegetation at 3-62; Fuels 3-90; Air Quality 3-97; Wildlife Species and Habitat 3-103, 3-109 to 3-110, 3-113, 3-116 to 3-117, 3-119, 3-127, 3-129, 3-134, 3-136, 3-140; Invasive Plant Species at 3-148; Threatened, Endangered and Sensitive Plants at 3-150; Range at 3-154 to 3-155; Recreation 3-159; Visual Resource (Scenery) at 3-168 to 3-170; Economic Analysis 3-175; Inventoried Roadless Areas (IRAs), Potential Wilderness Areas (PWAs) and Other Undeveloped Lands at 3-187 and 3-188.

Appellant Statement #12: Appellant states that the FEIS never considers the unique soil conditions, hydrology, aquatic environment, or wildlife of these other undeveloped lands, thus failing to take a “hard-look” analysis required by NEPA for these areas. TLC at 16.

Response: I find that the Responsible Official considered soil conditions, hydrology, aquatic environment, and wildlife in the other undeveloped lands in making his decision.

See also response to Appellant Statement #7. I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Specifically, see response to comments where the Forest states that they did consider and inventory soils in the proposed project area, considered the hydrological conditions of all areas, including undeveloped lands, proposed for harvest and considered impacts to wildlife, which were documented for the Responsible Official to consider prior to making his decision. FEIS Appendix K at K-56 and K-57. In addition, approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following four appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant Statement #13: Appellant contends that portions of the South Fork Asotin Creek Roadless Area, which is an uninventoried roadless area, are also Potential Wilderness Areas. TLC at 17.

Response: I find that the Responsible Official conducted a thorough assessment of Potential Wilderness Areas as required by FSH 1909.12, 70.

Forest Service Handbook 1909.12 Chapter 70 provides detailed instructions for inventory and evaluation of potential wilderness areas. There were no PWAs identified within South George project planning area using the PWA inventory process. ROD at 14; FEIS Appendix H. An outcome of the PWA inventory process was the identification of isolated polygons of other undeveloped lands. FEIS Appendix H, Map H-5, Table H-1B. The ROD at 14 and FEIS discloses that these polygons do not meet inventory criteria and are not inventoried roadless or designated wilderness areas. The FEIS and ROD disclosed that no special or unique values were associated with these areas and all actions implemented on these acres are

consistent with Forest Plan Standards and Guidelines and management area allocations. ROD at 14, FEIS at 3-184 to 187. The environmental effects analyses for other undeveloped lands from implementation of the project are consistent with law, regulation, and Forest Plan management area standards and guidelines. NEPA 1969, FSH 1909.12 Chapters 20 and 70, and Forest Plan 4-47 to 4-195. The Forest also responded to a similar comment in the DEIS and stated that the Forest did take a hard look at this area. FEIS Appendix K at K-47 and K-48.

See also responses to Appellant Statement #2, #3, and #4. I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following three appeal statements. FEIS Appendix K at K-41 through K-67.

Appellant Statement #14: Appellant states that the analysis is arbitrary and capricious because the Forest failed to identify that logging in uninventoried roadless areas is an irreversible and irretrievable commitment of resources. TLC at 17 and 18.

Response: I find that the Responsible Official evaluated potential wilderness areas within the South George project planning area and that his decision was not arbitrary and capricious because he was in accordance with law (Wilderness Act 1964 section 2(c)), regulation (36 CFR 219.7) and policy (FSH 1909.12 Chapter 70).

Forest Service Handbook 1909.12 Chapter 70 contains specific instructions for identifying and evaluating potential wilderness areas. Areas qualify for placement on the potential wilderness area inventory if they are 1) 5,000 acres or more; 2) contain less than 5,000 acres but either (a) can be preserved due to physical terrain and natural conditions, (b) are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness System, (c) areas are contiguous to existing wilderness areas, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size; 3) Areas do not contain forest roads (36 CFR 212.1) or other permanently authorized roads, except as permitted in areas east of the 100th meridian (FSH 1909.12 sec 71.12). The Umatilla National Forest completed an exhaustive inventory of potential wilderness areas using the above criteria and determined that there were no areas that met the criteria for PWAs. ROD at 15; FEIS at 3-181; FEIS Appendix H.

There were no PWAs identified within South George project planning area using the PWA inventory process. ROD at 14. An outcome of the PWA inventory process was the identification of isolated polygons of other undeveloped lands. FEIS Appendix H, Map H-5, Table H-1B. The ROD at 14 and FEIS discloses that these polygons do not meet inventory criteria and are not inventoried roadless or designated wilderness areas. The FEIS and ROD disclosed that no special or unique values were associated with these areas and all actions implemented on these acres are consistent with Forest Plan Standards and Guidelines and management area allocations. ROD at 14, FEIS at 3-184 to 187. The environmental effects analyses for other undeveloped lands from implementation of the project are consistent with law, regulation, and Forest Plan management area standards and guidelines. NEPA 1969, FSH 1909.12 Chapters 20 and 70, and Forest Plan 4-47 to 4-195.

In their appeal at 20, appellants state that “[t]he PWA approach systematically rules out any areas containing evidence of past harvest despite the well-known verified fact that the impacts from historical logging can recover quickly and not be visible to the casual observer.” Given this statement by appellant, proposed harvest activities in PWAs would not be considered “irreversible or irretrievable” if the areas can recover as appellant states these areas can in their appeal.

I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following two appeal statements. FEIS Appendix K at K-41 through K-67. Specifically, see also FEIS Appendix K at K-41 through K-42, K-45 through K-46, K-59 to K-60, and K-62 to K-63 where the Forest responded to a similar comment on the DEIS.

Appellant Statement #15: Appellant disagrees with the EISs assertion that the South Fork Asotin Creek Roadless Area does not provide solitude and the feeling of remoteness. TLC at 25 and 26.

Response: I find that the Responsible Official reviewed the analyses contained in the FEIS, considered the alternatives, and assessed the potential impacts on other undeveloped lands in the project area.

The Forest Service Handbook 1909.12 Chapter 70 contains specific instructions for identifying and evaluating potential wilderness areas. Areas qualify for placement on the potential wilderness area inventory if they are 1) 5,000 acres or more; 2) contain less than 5,000 acres but either (a) can be preserved due to physical terrain and natural conditions, (b) are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness System, (c) areas are contiguous to existing wilderness areas, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size; 3) Areas do not contain forest roads (36 CFR 212.1) or other permanently authorized roads, except as permitted in areas east of the 100th meridian (FSH 1909.12 sec 71.12). The Umatilla National Forest completed an exhaustive inventory of potential wilderness areas using the above criteria and determined that there were no areas that met the criteria for PWAs. ROD at 15; FEIS at 3-181; FEIS Appendix H.

There were no PWAs identified within South George project planning area using the PWA inventory process. ROD at 14. An outcome of the PWA inventory process was the identification of isolated polygons of other undeveloped lands. FEIS Appendix H, Map H-5, Table H-1B. The ROD at 14 and FEIS discloses that these polygons do not meet inventory criteria and are not inventoried roadless or designated wilderness areas. The FEIS and ROD disclosed that the four largest polygons identified as other undeveloped areas do not provide for solitude and the feeling of remoteness because they are not big enough, their shapes are not conducive to these values, and nearby nonconforming sights and sounds of roads and timber harvest can be heard and seen from within the areas. FEIS at 3-184. The environmental effects analyses for other undeveloped lands from implementation of the project are consistent with law, regulation, and Forest Plan management area standards and guidelines. NEPA of 1969; FSH 1909.12 Chapters 20 and 70; and Forest Plan 4-47 to 4-195.

I also note that the Forest responded to numerous comments from appellant on the issue of uninventoried roadless areas. Approximately 26 pages in Appendix K contain comments that the Forest addressed regarding this issue, many of which are similar to this and the following appeal statement. FEIS Appendix K at K-41 through K-67. Specifically, see also FEIS Appendix K at K-51 to K-52 and K-57 to K-58, where the Forest responded to a similar comment on the DEIS.

Appellant Statement #16: Appellant states that the best available science does not support commercial logging in previously unlogged forests and that the Forest failed to identify the best available science that supports their plans for logging these old forests. TLC at 47, 48, 52, 59, and 60. Appellant states that the agency lacks monitoring information in previously converted areas that they have logged in the past. TLC at 52, 59 and 60.

Response: I find that the Responsible Official identified and used the best available science in making his decision on the South George project.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. Under this policy, the Forest Service is required to document how the best available science was considered in the planning process within the context of the issues being considered. The Responsible Official followed agency direction in applying and considering the best available science. The project silviculturist conducted an exhaustive review of the current scientific literature and applied this in his analysis of project effects. South George Project Record, Pomeroy Ranger District, Review of Best Available Scientific Literature for Forest Vegetation Management.

The FEIS discloses that only improvement cutting will occur in existing old-forest stands and that post-treatment the structural stage will still be old forest. FEIS at 3-59. During the scoping and comment period comments were received that expressed concern over timber harvest in old stands. Timber harvest in old-forest stands will not change their status and will provide for regeneration and resilience to insects, disease, and wildfire. ROD at 9; FEIS at 3-59, and 3-87 to 3-89.

Fuel Reduction in Moist Forests/Best Available Science

Appellant Statement #17: Appellant states that the FEIS and ROD failed to incorporate the best available science by fire ecologists and other scientists with regards to fuels reduction in moist forests. TLC at 27-37. Specifically, appellant states that the science indicates that the mixed or variable severity fire regimes that constitutes the majority of the moist forests have not been altered by fire suppression; scientific data contradicts the assumptions that prior to fire suppression, wildland fire in eastern Oregon's forests burned only at low severity and that high severity fire is uncharacteristic or unnatural; fuels treatments in moist forest types like those in the project area can increase the risk of fire; and the project area contains rare previously unlogged and old growth forests that provide for many values including carbon sequestration, wildlife habitat and connectivity, and watershed and recreational values. TLC at 28-37.

Response: I find that the Responsible Official based his decision on best available science, considered responsible opposing views, and scientific uncertainty and risk (ROD at 5 and 21, FEIS at K-112-113, L-1). In addition, I find the fire regime condition class (FRCC) analysis in the fuels section (FEIS at 3-75 to 3-92) and the historic range of variability (HRV) analysis provided in the vegetation section (FEIS at 3-46 to 3-71) of the FEIS were correctly performed.

The Forest Service is required to analyze direct, indirect, and cumulative effects for each project proposed. 40 CFR 1502.16; 40 CFR 1508.7. Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning.

The appellants contend "[t]he ROD adopted no changes to substantively respond to the leading relevant science on fuels reduction in moist forests, protection of old growth, management of Roadless areas including URAs and other undeveloped lands, etc. Therefore the integrity of the forests within the project area is significantly threatened by the erroneous and scientifically flawed South George Decision." (TLC at 27). The four points brought up from the paper that was submitted by appellants was reviewed and its relevance to the proposed project was discussed and documented in the FEIS Appendix K at K-78 to K-80.

The Forest Service does not contend that the sole reason for fire regime deviations in the moist forests is due to fire suppression, but is result of several factors including past harvesting practices and fire suppression (ROD at

4, FEIS at 3-81 to 3-82), and that fire exclusion and fire suppression have also indirectly contributed to advancing secondary succession and altering the expected size and frequency of the establishment of early seral species. FEIS at 3-81.

The Forest Service does not state that, “prior to fire suppression, wildland fire in eastern Oregon’s forests burned only at low-severity and that high-severity fire is “uncharacteristic” or unnatural” as cited by appellant in their appeal at 28, but in fact classifies the affected area into four different severity classes associated with six different fire regimes. FEIS at 3-78. These severity classes are considered natural for the affected area (FEIS at 3-76) and the historic range of variability of the vegetation groups associated with these fire regimes are identified and analyzed in the silviculture report and the National Forest Management Act (NFMA) analysis of the existing vegetation and historic vegetation. FEIS Appendix J at J-1 to J-24; South George Project Record, Pomeroy Ranger District, Silviculture Report.

The effects of timber harvesting on the fire regimes and fire regime condition classes are discussed at FEIS at 3-82 and in response to a similar comment to the DEIS. FEIS Appendix K at K-73 to K-74. Overall, the Forest conducted a thorough analysis of effects in Chapter 3 (FEIS at 3-3 to 3-191) including analysis of carbon sequestration (silviculture report), wildlife habitat and connectivity, and watershed and recreational values.

Appellant Statement #18: Appellant contends that the Forest’s claim that vegetation management activities included in the proposed action will effectively emulate disturbances processes affecting both dry and moist forests is unfounded and that there isn’t scientific consensus on the need to treat moist mixed conifer forests for fuels reduction. TLC at 32.

Response: I find that the Responsible Official considered the information regarding treatment in moist forests prior to making his decision and that the direct, indirect, and cumulative effects of the project were disclosed.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning.

The assumptions, analysis, and disclosed expected effects related to the proposed vegetation treatments are a realistic projection based on the science summarized by the silviculturist. The project silviculturist conducted an exhaustive review of the current scientific literature and applied this in his analysis of project effects. South George Project Record, Pomeroy Ranger District, Review of Best Available Scientific Literature for Forest Vegetation Management. In addition, the silviculturist reviewed and included “Active Management of Moist Forests in the Blue Mountains: Silvicultural Considerations, White Paper F14-SOWP-Silv-07, 275 p., April 2012” in his review. FEIS Appendix K at K-39. Further elaboration on the need to treat moist forests is found in the Forest’s response to comments, FEIS Appendix K at K-68 and K-70 to K-74.

Specifically, the Forest stated that “[t]he scientific rationale for proposing vegetation management treatments for the moist UF PVG is to “move forest structure, species composition, and stand density toward their historical ranges of variability (HRV)” (DEIS, Chapter 1, page 1-4). Since disturbance processes are influenced by the biophysical environments in which they operate, it is expected that wildfire, insects, and diseases will function with a characteristic frequency, intensity, severity, return interval, and spatial distribution when species composition, forest structure, and stand density occur within their ranges of variation (Egan and Howell 2001, Holling and Meffe 1996, Kaufmann et al. 1994). This means that when pine and larch are outside their range of variation, as evaluated by PVG, then

treatments designed to move them toward HRV would be expected to produce a corresponding change in the behavior of disturbance processes utilizing these types for one or more components of their “habitat.”” Thus, the expected changes to the vegetation composition and structure are based in sound science and can be considered a reasonable approximation of effects that would result from wildland fire.

Appellant Statement #19: Appellant states that the Forest’s response to the Cobbler II letter is incorrect because the agency stated that there are no fire regime IV areas in the planning area (which the agency states are within HRV), but the FEIS shows that 9% of the planning area is in Fire Regime IV. Thus, the Forest has admitted it should not be treating these areas because they do not experience stand replacement fire and are within HRV (historic range of variability), which means that the proposed treatments have not been justified. TLC at 33-35.

Response: I find that the Responsible Official considered all the information and analysis presented in the FEIS and South George Project area in making his decision. I further find that the FEIS displays the correct information regarding fire regime condition classes. The issue regarding the Forest’s response to comments in the FEIS Appendix K at K-79 was brought up by appellant during their informal disposition meeting. As documented in an email to appellant on October 5th, 2012, the statement regarding the lack of fire regime IV lands in the response to comments appears to have been an error.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects. With the error in the response to comments noted above, the FEIS does disclose the correct Fire Regime Condition Classes (FRCC) within the planning area and this information is used to analyze the effects of the alternatives, including no action and is foundational to the decision. FEIS at 3-77; Table 3-44 at FEIS 3-78. The decision presented in the ROD was based on the information and analysis of the FEIS which included those lands that fell within the Fire Regime IV-C (FEIS at 3-75 to 3-93).

I recommend that the Forest prepare an errata sheet for this FEIS and include this and any other errors that have been found since the ROD was signed and post it to their website for public and internal use.

Appellant Statement #20: Appellant states that the purpose and need is not based on the best available science and is scientifically inconsistent because it does not restrict fuel treatments to those areas outside their historical pre-fire suppression conditions. TLC at 37-44 and 99. Appellant specifically notes that the moist mixed conifer forests are not outside of their historical condition, thus, the project fails to “couple treatment units” with areas outside of HRV and as such, applies fuels reduction to “inappropriate plant association groups” and potentially increases the risk of fire. TLC at 38, 39, 42, 43, and 44. Appellant notes that the FEIS shows that these areas cannot be outside of HRV because the fire return intervals in moist forests are between 100-200 years, which is longer than the period of effective fire suppression. TLC at 39 and 99.

Response: I find that the Responsible Official based his decision on best available science, considered responsible opposing views, and scientific uncertainty and risk. ROD at 5 and 21; FEIS Appendix K at K-112 to K-113, FEIS at L-1. In addition, I find the FRCC analysis in the fuels section (FEIS at 3-75 to 3-92) and the HRV analysis provided in the vegetation section (FEIS at 3-46 to 3-71) were correctly performed.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency

considers cumulative effects. The fuels treatments included in the South George ROD supports the purpose and need (ROD at 5) and treatments fall within areas identified as fire regime condition class 2 or 3 (deviations from expected normal). FEIS at 3-88. The projected results of such treatments move the treated lands to a fire regime condition class within historic ranges of variability (FEIS 3-88).

Fire return intervals are based on the average number of years between all fires that occur within the landscape over a specific timeline for a specified fire regime and intensities. FEIS at 3-78. In their response to comments, the Forest addressed this assertion and states that “[w]e disagree with your characterization of the mixed-severity fire regime, particularly the statement “high severity fire is characteristic in this forest type.” As its name implies, the mixed-severity fire regime features a mix of fire severities, ranging from low severity (underburns) to patches of replacement severity (crown fire in some circumstances), all occurring as an intricate mosaic within a single fire perimeter. “A single fire may create patches of several types, consuming some stands in intense crown fires, burning others with cooler surface fires, and leaving unburned islands within burned areas” (White et al. 1999).” FEIS Appendix K at K-70.

The response continues by stating that “[f]ive coarse-scale fire regimes have been defined for the United States by using two factors: fire frequency and fire severity (Barrett et al. 2010). Moist upland forests have a mixed-severity fire regime (Fire Regime III). At the broad scale of the United States, fire regime III includes a wide fire frequency range of 35 to 200 years (Barrett et al. 2010). At the finer scale of the Blue Mountains, fire regime III is believed to have three variants or sub-regimes: IIIa (fire frequency of 50 years or less), IIIb (fire frequency of 51 to 100 years), and IIIc (fire frequency of greater than 100 years). Historically, low-to-moderate severity fires were an important component of the mixed-severity regime (Agee 1993, Brown and Smith 2000) – these are the FR IIIa and IIIb sites. Research in the Blue Mountains portion of the interior Pacific Northwest has often shown that mixed-severity regimes have more variability in fire frequency and severity than previously thought.” FEIS Appendix K at K-71.

Additional information from Heyerdahl, who studied fire regimes for four sites oriented on a broad, north-south transect traversing the entire Blue Mountains, and found that at the “southern sites, most of the fire return intervals were less than 25 years, whereas only half of the intervals were less than 25 years for the northern sites. The maximum interval decreased from north to south: the Tucannon site (northernmost area) had the largest range of fire interval and the Dugout site (southernmost area) the smallest (Heyerdahl 1997). Fifteen Blue Mountain sites were sampled to survey fire frequency in stands ranging from Douglas-fir to dry grand fir associations (Maruoka 1994). Current stand structure at 80% of the sites had an overstory dominated by ponderosa pine, with Douglas-fir and grand fir as understory dominants. Pulses of Douglas-fir and grand fir establishment occurred after the last recorded fire at 53% of the sites, while establishment pulses occurred between years of recorded fires at 47% of the sites. Fire scar analyses revealed high variability in fire return intervals. Mean fire intervals at each site ranged from 9.9 years to 49 years. Individual fire return intervals ranged from 2 to 119 years, but may have been influenced by sampling limitations.” FEIS Appendix K at K-71.

Thus, based on the above information, I find that the Forest did apply fuel treatments to areas that are outside of their HRV.

Appellant Statement #21: Appellant states that the best available science shows little evidence for the existence of “open, park-like conditions” in moist upland forests and the project will result in conditions that never existed. TLC at 42 and 43.

Response: I find that the Responsible Official's decision is based on the purpose and need for the project, and considered all direct, indirect, and cumulative effects of the proposed action and alternatives to the proposed action.

The FEIS describes treatments for various forest types including moist upland forests. It further displays the effects of treatments on the structure of these forest types. Creating open, park like stands is not the objective in the moist upland forests and is not expected to be the outcome of the project. FEIS at 3-60; South George Project Record, Pomeroy Ranger District, Silviculture Report at 70; FEIS Appendix C at C-7. The section of the FEIS cited by appellant is in the visual quality section and appears to be intended to apply to treatments in dry old forest single story (OFSS) areas, in particular, where ponderosa pine and Douglas-fir dominates and as such, would appear more open after thinning. FEIS at 3-187; FEIS at 3-50. In the appendices, the Forest documents that this type of condition does not apply to moist forests. In the section on consistency with the Eastside Screens it states that "an open, park-like structure was common for the Dry Upland Forest biophysical group but not for the Moist Upland Forest environment..." FEIS Appendix C at C-7.

Appellant Statement #22: Appellant states that the FEIS fails to analyze the "true impacts" of repeat entry to moist forest types and states that the effectiveness of treatments is approximately 15 years. TLC at 44.

Response: I find that the Forest sufficiently analyzed the direct, indirect and cumulative effects of the proposed action sufficiently.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. By definition, cumulative effects are those impacts "on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 CFR 1508.7. Further, the Forest Service defines "reasonably foreseeable" as "[t]hose Federal or non-Federal activities not yet undertaken, for which there are existing decisions, funding, or identified proposals." 36 CFR 220.3.

The future temporal context of the vegetation analysis for cumulative effects was limited to proposed treatments that may be proposed in the next five years and are based on actions listed in the Forest's Schedule of Proposed Actions (SOPA), as those meet the definition of reasonably foreseeable. FEIS at 3-53. To include an action that may or may not occur in 15 years, as suggested by appellant, would be speculative. Thus, the decision presented in the ROD was based on the information and analysis of the FEIS which included relevant past, current, and reasonably foreseeable activities.

Appellant Statement #23: Appellant states that the FEIS reports inconsistent HRV information calling into question the accuracy and basis for the decision. TLC at 48. Appellant specifically states that the current percentage of moist upland forest potential vegetation group was not consistently reported. TLC at 48 and 49.

Response: I find that the Responsible Official considered all information in the FEIS and made a reasoned and informed decision based on that information.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. Under this direction, the Forest Service is required to document how the best available science was considered in the planning process within the context of the issues being considered. The Responsible Official followed agency direction in applying and considering the best available science.

The percentage of moist upland forest potential vegetation group was calculated in two different ways and reported in two different tables. The numbers displayed in Table C-1 in Appendix C at C-4 is based on the entire analysis acreage (20,640 acres) and Table 3-20 in the FEIS is based on 14,060 acres of forested vegetation analyzed as the affected environment. FEIS at 3-46, 3-47, and 3-50. Thus, I find that the information in the FEIS was correct and consistently reported.

Appellant Statement #24: Appellant states that there is no scientific or ecological justification for logging moist OFSS forests in order to reduce tree density sufficient to promote establishment of an understory tree component because shade tolerant trees can regenerate under the existing tree canopy, as they have for “millennia”. TLC at 50 and 52. Appellant believes that the ROD violates NFMA, NEPA and lacks scientific integrity in not adopting an approach that protects moist old forests. TLC at 51 and 52.

Response: I find that the Responsible Official based his decision on best available science, considered responsible opposing views, and scientific uncertainty and risk (ROD at 5, 6 to 7, and 21, FEIS at K-112-113, L-1). In addition, I find the HRV analysis provided in the silviculturist report and the vegetation section (FEIS at 3-46 to 3-71) of the FEIS were correctly performed.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects. Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning.

The decision presented in the ROD was based on the information and analysis of the FEIS. A similar comment to the DEIS was discussed in Appendix K of the FEIS at K-99 to K-100. There, the Forest explains that “[a]s described in Chapters 1 and 3 of the DEIS, the Forest Service’s focus is to “move forest structure, species composition, and stand density toward their historical ranges of variability” (DEIS, Chapter 1, p. 1-4). Therefore, any proposal to move OFMS to OFSS, or vice versa, is based solely on the HRV results, and our desire to respond to structural stages that are either over-represented or under-represented in the planning area.” In addition, the Forest did consider Alternative D, which defers thinning in moist OFSS stands, which responds to appellant’s concern over consideration of an alternative that “protects” moist forests. FEIS Appendix K at K-19.

Range of Alternatives

Appellant Statement #25: Appellant states that the FEIS did not analyze “a single alternative that protected roadless areas, moist forest habitat and associated species (such as Marten; see MIS Wildlife Issues), and old-growth trees. NEPA requires that at least one alternative be based on the leading, verified, well-know, peer-reviewed science (Major Issue #4).” TLC at 28.

Response: I find the Responsible Official considered a range of alternatives that was adequate to respond to the purpose and need and incorporated best available science.

Pursuant to 40 CFR 1502.14 the Forest Service must rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss

the reasons for their having been eliminated. Each alternative should meet the purpose and need and address one or more significant issues related to the proposed action. No specific number of alternatives is required or prescribed. 36 CFR 220.5(e). An EIS must also: consider the selected alternatives in detail so their merits can be compared to the proposed action, include reasonable alternatives not within the jurisdiction of the lead agency, include the alternative of no action, identify the agency's preferred alternative or alternatives, and include appropriate mitigation measures not already included in the proposed action or alternatives. 40 CFR 1502.14. To insure professional and scientific integrity of the analysis, agencies must identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement as per 40 CFR 1502.24.

The Responsible Official proposed a vegetation and fuels management project to improve forest health, vigor, and resilience to fire, insects, and disease in upland forests that are outside of their historical pre-fire suppression conditions for specific composition, structural diversity, stocking densities, and fuel loadings. FEIS at 1-4. The agency prepared an EIS to document effects of the project on the human environment and to explore alternatives to the proposed action.

Four alternatives were considered in detail including three action alternatives that met the vegetation, fuels, timber production, and wildlife habitat objectives of the project. FEIS 2-6. Three alternatives, derived from issues brought up in scoping, were eliminated from a detailed analysis as they did not meet the elements outlined in the purpose and need for the project. FEIS 2-33. All action alternatives were designed to protect roadless areas, moist forest habitat and associated species, and old-growth trees.

The EIS analysis outlines how alternatives A through D will protect inventoried roadless areas, moist forest habitat and associated species, and old growth trees. FEIS at 2-6 through 2-33. Chapter three in the EIS details the environmental consequences related to each evaluated alternative with referenced field information and scientific research and literature cited. FEIS at 3-8 through 3-191; FEIS Literature Cited 1-43. Relevant effects sections include: Inventoried Roadless Areas (IRAs), Potential Wilderness Areas (PWAs) and other Undeveloped Lands (FEIS at 3-176), Vegetation (FEIS at 3-46), and Wildlife Species and Habitat including Management Indicator Species and other Threatened, Endangered and Sensitive Species (FEIS at 3-98). Thus, I find that the appellant's statement regarding the degree to which the alternatives protect areas is their opinion of the alternative and the analysis that was presented in the FEIS.

Appellant Statement #26: Appellant states that the Forest failed to develop an adequate range of scientifically-sound alternatives. TLC at 44. Specifically, appellant states that the Forest failed to fully develop: an alternative that protects uninventoried roadless areas (specifically the South Fork Asotin Roadless Area which appellants contend is a PWA); an alternative that limits fuels reduction to the appropriate plant association groups; an alternative that protects old-growth forests. TLC at 44-46 and 50.

Response: I find the Responsible Official considered a range of alternatives that was adequate to respond to the purpose and need and meet the objectives of the Umatilla Forest Plan as well as law, regulation, and policy.

The ID team developed in detail three action alternatives based on the purpose and need and key issues raised in scoping, as well as one no action alternative. FEIS at 2-6. Three additional alternatives were considered but eliminated from detailed study as they did not meet the project's purpose and need. FEIS at 2-33.

Pursuant to 40 CFR 1502.14 the Forest Service must rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. Each alternative should meet the purpose and need and address one or more significant issues related to the proposed action. No specific number of alternatives is required or prescribed. 36 CFR 220.5(e). To insure professional and scientific integrity of the analysis, agencies must identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement as per 40 CFR 1502.24.

The South George FEIS considered seven alternatives with correlated environmental consequences findings. Chapter two in the FEIS details the issues identified during project planning and scoping and the rationale for the range of alternatives. FEIS at 2-2 through 2-6. Methodologies and scientific references for the effects to each resource were disclosed in the FEIS (FEIS at Chapter 3 and South George Project Record, Pomeroy Ranger District, specialist reports). Uninventoried roadless areas as stated by appellant (the Forest Service refers to them as 'Undeveloped Land') have no forest-wide or management area standards specific to them in the Umatilla Forest Plan. FEIS at 3-176 to 3-182. All lands are managed consistent with forest-wide standards and guidelines and by designated Forest Plan management area allocations. Umatilla Forest Plan at 4-94 to 4-195. Action alternatives B through D apply fuel reduction treatments to appropriate plant association groups (FEIS at 3-75 to 3-92) and protect old-growth forests (FEIS at 3-46 to 3-75), as no harvest would occur in management area C1 (dedicated old growth) stands. FEIS at 3-100.

Furthermore, the no action alternative means that no immediate additional management activities would occur within the project area related to this project; other ongoing actions would continue to occur. FEIS at 2-7. This alternative was analyzed in detail to highlight the predicted future conditions if no actions were taken. If the appellant considers "protects uninventoried roadless areas" to mean no additional management in these areas, then I find that the no action alternative, as described in the FEIS at 3-185 suits their criteria and was analyzed in detail.

Recreation

Appellant Statement #27: Appellant states that the DEIS did not acknowledge the effects on recreation from logging in old-growth forests. TLC at 47.

Response: I find that the FEIS documented potential effects to recreation and that the Responsible Official considered these effects prior to making his decision.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects.

Potential project effects to recreation opportunities and recreationists were fully considered in the FEIS. The existing condition of planning area facilities, travel and access routes, recreation opportunity spectrum (ROS) and sense of place were all described in both the FEIS and recreation report. FEIS at 3-155 to 3-157; South George Project Record, Pomeroy Ranger District, Recreation Report at 1-10. Potential impacts to these recreational resources are fully described. FEIS at 3-157 to 3-159; South George Project Record, Pomeroy Ranger District, Recreation Report at 11-15.

As noted in the Forest's response to comments, old-growth was not specifically addressed in the recreation section because "none of the action alternatives proposed to reduce the old growth structural stage in the project area. The treatments proposed within old growth would help maintain the health and vitality of the larger tree, thus improving the recreational experience within old growth areas." FEIS Appendix K at K-98. Potential impacts to late and old forest structure are documented in the FEIS at 3-98 to 3-103.

Forest Plan Amendments

Appellant Statement #28: Appellant states that the two forest plan amendments required for the project would continue to incrementally degrade the regions remaining old growth. TLC at 51 and 52.

Response: I find that the Responsible Official did not identify a need to amend the Forest Plan to meet project objectives. The South George Vegetation and Fuels Management Project FEIS does not propose any Forest Plan amendments in any of the action alternatives. Because no amendments are proposed, it cannot "continue to incrementally degrade the regions remaining old growth" as asserted by appellant.

Appellant Statement #29: Appellant states that the Forest must assess the cumulative impacts of amending the Eastside Screens at the project scale, on a Forest-level basis. TLC at 62 and 91. Specifically, appellant states that the Forest "needs to consider the South George proposal in the cumulative effects of multiple past decisions, when combined with present and reasonably foreseeable future decisions to amend the Umatilla LRMP (Forest Plan) by removing the Eastside Screens' old-growth protections" and the impacts of those amendments on MIS and their habitat. TLC at 62 and 91.

Response: I find that the Responsible Official did not identify a need to amend the Forest Plan to meet project objectives. The South George Vegetation and Fuels Management Project FEIS does not contain any proposed forest plan amendments in any of the action alternatives; therefore, the Eastside Screens will not be amended with this project. With no proposed amendments, it is not possible for this project to contribute to cumulative effects of such amendments.

Appellant Statement #30: Appellant states that the geographic scope (South George planning area) of the Forest Service's cumulative impacts analysis for the old-growth resource is inadequate because the Eastside Screens is a regional management strategy that sets forth Forest-wide standards. TLC at 63. Appellant further states that this analysis scale is inadequate for measuring the cumulative impacts because of past and future projects that amend the Eastside Screens; the amendments affect the distribution of old-growth habitat that is available for dependent wildlife that move beyond the immediate project areas; repeated waivers to the Eastside Screens' old-growth protections should be considered at a scale similar to the area covered by the rule itself; and the Forest has not previously considered the cumulative impacts of these "repeated, piecemeal amendments" from projects that include Wildcat, Mirage, Tollgate WUI, and Cobbler II. TLC at 63, 64, and 65. Appellant cites CEQs guidance on how the Forest should have specifically analyzed cumulative effects, including analysis of time crowding, fragmentation, compounding effects, and triggers and thresholds. TLC at 67-70.

Response: I find that the Responsible Official selected the appropriate geographic scope in regards to old growth forest effects and old growth related species effects. I also find that the Responsible Official did not identify a need to amend the Forest Plan to meet project objectives. The South George Vegetation and Fuels Management Project FEIS does not contain any proposed forest plan amendments in any of the action alternatives; therefore, cumulative impacts of repeated amendments are not

relevant to the project. With no proposed amendments, it is not possible for this project to contribute to cumulative effects of such amendments.

Cumulative impacts or effects are defined by 40 CFR 1508.7 to be the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The analysis of cumulative effects begins with consideration of the direct and indirect effects on the environment that are expected or likely to result from the alternative proposals for agency action. 40 CFR 1508.7. Again, because no amendment is proposed, no cumulative effects are possible.

Regarding the scope of the geographic analysis for old growth, Chapter three of the FEIS discusses past, present, and reasonably foreseeable actions. FEIS at 3-1. The analysis summarizes past actions that occurred in the project planning area in relation to timber harvests, planting, non-commercial thinning, invasive plant treatments, wildfire, grazing, and road management. FEIS at 3-2. In accordance with the 2005 Council on Environmental Quality (CEQ) guidance, past actions are incorporated in the existing conditions in the project planning area; this would include the results of amendments to the Eastside Screens on the Forest. The analysis utilizes a database developed in 2009 with field validation in 2009 and 2010 to characterize existing vegetation conditions. FEIS at 3-52. Field reviews found that existing conditions in the planning area appropriately reflect past changes resulting from silvicultural activities, historical influence of wildfire, insect and disease activity, fire exclusion, ungulate herbivore, and other non-silviculture changes. FEIS at 3-52. The FEIS also addresses present ongoing actions that are still having an effect on the project planning area. FEIS 3-3.

The geographical context for estimating cumulative effects on the vegetation is the entire South George project planning area. There was no need to extend the cumulative effects analysis area beyond the project planning area boundary because no amendment is proposed, the forest vegetation conditions affected by the proposed action are common and widely distributed throughout the planning area, in the Pomeroy Ranger District in which it occurs, and in the Blue Mountains ecoregion containing the Umatilla National Forest. FEIS 3-52.

Appellant Statement #31: Appellant states that the Forest has never assessed what all past, present, and reasonably foreseeable Eastside Screen amendments mean in terms of forest-wide viability for old-growth dependent species including pileated woodpeckers, American marten, and northern goshawks. As such, the Forest cannot be certain that NFMA's substantive mandate to ensure species diversity and viability is being met. TLC at 65, 66 and 67.

Response: I find that the Responsible Official presented a complete cumulative effect's analysis that addressed past, present, and reasonably foreseeable actions relative to the proposed actions in the analysis. The South George Vegetation and Fuels Management Project contains no proposed forest plan amendments related to Eastside Screens or any aspect of the Umatilla LRMP. With no proposed amendments, it is not possible for this project to contribute to cumulative effects of such amendments.

Cumulative impacts or effects are defined by 40 CFR 1508.7 to be the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The analysis of cumulative effects begins with consideration of the direct and indirect effects on the environment that are expected or likely to result from the alternative proposals for agency action. 40 CFR 1508.7.

Chapter three of the FEIS discusses past, present, and reasonably foreseeable actions. FEIS at 3-1. The analysis summarizes past actions that occurred in the project planning area in relation to timber harvests, past amendments, planting, non-commercial thinning, invasive plant treatments, wildfire, grazing, and road management. FEIS at 3-2. Past actions are incorporated in the existing conditions in the project planning area, including the effects of past amendments. The FEIS also addresses present ongoing actions that are still having an effect on the project planning area. FEIS 3-3.

The wildlife resource section directly addresses the old forest element of the affected environment and analyses all direct, indirect, and cumulative effects that the proposed actions would have. FEIS 3-100. Potential effects related to pileated woodpeckers, American marten, and northern goshawks are found in the wildlife section of environmental consequences in the FEIS at 3-110 to 3-130.

Impacts to Late and Old Forests

Appellant Statement #32: Appellant states that the FEIS failed to thoroughly discuss the scientific uncertainties associated with logging in Late and old structure (LOS) stands to convert multi-storied old growth forest to single storied old growth forests, particularly when coupled with the uncertainties associated with climate change. TLC at 52, 53, 61 and 62.

Response: I find that the FEIS did discuss any potential uncertainties related to thinning in LOS stands and that the FEIS does discuss climate change.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects.

The analysis of climate change is found in the FEIS at 3-71 to 3-75. Specifically, the FEIS discusses climate change adaptation strategies that are related to forest vegetation and how the South George project addresses these strategies. The forest vegetation section fully addresses all science related to management of late and old forests, which are described in terms of old forest single story (OFSS) and old forest multistory (OFMS) stands. FEIS at 3-55 to 3-62; South George Project Record, Pomeroy Ranger District, Silviculture Report and Summary of Best Available Science.

The Forest's response to comments also addressed this concern. The Forest responded to appellant's comment by stating that "[w]e agree that HRV, as an analytical technique for evaluating whether existing forest vegetation components (composition, structure, density) have departed from their historical ranges and, if so, by how much, could be problematic as climate change unfolds in the future. This concern has been discussed in much recent scientific literature, as exemplified by this quote: "Climate change suggests that planning must not depend on expectations that the past will provide a template for the future. But if not the past, then what? For the present, no one seems to know. Like the often-quoted investment advice, it now seems that past performance is no guarantee of future results" (deBuys 2008). We agree with deBuys (2008) that at the present time, no one has come up with a viable alternative for HRV when considering climate change." FEIS Appendix K at K-106.

The response to comments continues by stating "Other research perspectives continue to recognize the value of considering reference conditions, even in the context of a rapidly changing climate. "Historical reference conditions remain useful to guide management because forests were historically resilient to drought, insects, pathogens, and severe wildfire. Adaptation of reference information to future climates is logical: historical characteristics from lower, southerly, and drier sites may be increasingly relevant to

higher, northerly, and currently wetter sites” (Fulé 2008). “The study of past forest change provides a necessary historical context for evaluating the outcome of human-induced climate change and biological invasions. Retrospective analyses based on fossil and genetic data greatly advance our understanding of tree colonization, adaptation, and extinction in response to past climatic change” (Petit et al. 2008).” FEIS Appendix K at K-107 and K-108.

The response to comments concludes by stating “[n]ote that the Forest Vegetation analysis in Chapter 3 of the DEIS provides a climate change analysis (pages 3-71 to 3-75), along with Appendix D of the Silviculture Specialist Report (pages 111-130) providing a climate change and carbon accounting analysis, and both analyses describe the expected compatibility of proposed vegetation management activities with predictions of future climate change for the project area.” FEIS Appendix K at K-108. Thus, based on the information found in the FEIS, appendices, and project record, I find that the Forest did address scientific uncertainty and climate change.

Appellant Statement #33: Appellant states that converting multi-storied old forests to single storied old forests and logging in moist single storied old forests would artificially impose a low severity regime on a mixed severity regime and is not scientifically supported. TLC at 54 and 55. In addition, appellant states that there is little scientific support that shows that the stands’ fire regimes have been “significantly altered.” TLC at 55 and 56.

Response: I find that the Forest documented the rationale behind moving OFMS to OFSS based on the need to move forest structure, species composition and stand density toward their HRV and the need to manage forest stands in condition classes 2 and 3 to begin to restore vegetation characteristics and fire return intervals characteristic of historical fire regimes. FEIS at 1-5.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. With regards to forest structure, the FEIS documents that “the SI, SECC, UR, and YFMS structural stages are outside of their historical ranges for the dry upland forest PVG, and that every structural stage except SI and SECC is outside of its historical range for the moist upland forest PVG.” FEIS at 3-50. With regards to species composition, the FEIS documents that the “dry forestland currently supports too much of the grand fir and Douglas-fir forest cover types, and too little of the ponderosa pine forest cover type. Moist forestland supports too much of the grand fir and spruce-fir forest cover types, and too little of the Douglas-fir, western larch, broadleaved trees, and lodgepole pine forest cover types.” FEIS at 3-49. As for tree density, the FEIS documents that “the dry upland forest PVG portion of the forest vegetation affected environment has too little of the low density class and too much of the high density condition. For the moist upland forest portion of the affected environment, all three density classes are within their historical ranges of variability.” FEIS at 3-51. This analysis is further supported by the information found in the silviculture specialist report (South George Project Record, Pomeroy Ranger District) and the analysis documented in Appendix J (NFMA analysis) and Appendix C (consistency with Eastside Screens and NFMA) of the FEIS.

The fuels section of the FEIS documents that 87% of the planning area is in condition class 2, while 12% is in condition class 1. FEIS at 3-76. This supports the forest’s determination that the condition class within the planning area has either been moderately or substantially altered. In addition, table 3-51 clearly displays existing and predicted fire regimes and shows that after implementation of the project, the mixed severity regimes remain across the planning area, but move closer to condition class 1, which means that the mixed severity regime would be within the range of HRV after treatment. FEIS at 3-78, 3-79, and 3-88.

The Forest also responded to a comment similar in nature to this appeal point. The Forest documents that “[w]e do however use much of Heyerdahl research in our analysis because much of it is specific to the Blue Mountains. This article surmises that changes as a result of fire exclusion, the associated change in fire frequency has affected forest composition and structure in the Blue Mountains (Heyerdahl et al 2001). This change has shifted the fire regime from frequent, low severity fires to infrequent, high severity fires that kill large areas, especially in dry forests (Heyerdahl et al 2001). This has resulted in the US Forest Service to institute a nationwide policy of ecosystem management (Everett et al 1994, Heyerdahl 2001). (See DEIS, Literature Cited, page L-20).” FEIS Appendix K at K-146 and K-147.

Appellant Statement #34: Appellant states that the project would remove mature trees that are currently showing old growth characteristics and that these trees will become snags in an area that is already deficit in snags. TLC at 57, 58 and 102.

Response: I find that the Responsible Official considered the potential effect of removing mature trees that may become snags.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects.

The FEIS documents that trees greater than 21 inches in diameter would be removed on a maximum of 620 acres of dry forest under the action alternatives. No trees in moist old forests would be removed except for danger trees. FEIS at 3-101. This limits the impact to potential large future snags in context and intensity to about 4% of the forested vegetation where timber harvest may occur (FEIS at 3-46 and 3-101) and less than 3% of the entire South George Planning Area. FEIS at 3-47 and 3-101.

Further potential impacts to snags are described in the wildlife section of the FEIS. Here, the Forest documents that the existing snag density currently meets or exceeds Forest Plan standards with regards to snags per acres. FEIS at 3-122. With respect to reference conditions, some size classes of snags are currently underrepresented while others are overrepresented compared to what occurred historically. FEIS at 3-122 to 3-125. A project design feature that requires dead wood habitat maintenance and green tree replacement further ensures that Forest Plan and species habitat requirements will be met. FEIS at 2-24; 3-126 and 3-127.

The Forest also responded to a comment regarding snags. The Forest states that “the average snag density in the Asotin watershed is 1.1 per acre in dry and 3 per acre in moist forest (DEIS Chapter 3, Table 3-69). Project activities would retain 3 large snags per acre where they exist. All dry forest units would retain a fully stocked stand, which should provide adequate future snags. Structural habitat for cavity excavating birds would be reduced at the stand scale, but watershed averages would remain relatively constant or become more in line with historical distributions (DEIS, Chapter 3, page 3-127). This project will maintain dead wood habitat and green replacement trees at or beyond levels identified in the DEIS, Chapter 2, Table 2-5, page 2-24. Also see Table 2-13, page 2-43 - Snags within harvest units would be retained above the minimum levels required in the Forest Plan. The number of acres with 2-4 snags per acre would increase and be more in line with reference conditions.” The FEIS goes on to state that “[t]his project has no specific objective to reduce snag numbers (including for fuels), although secondary reductions could be associated with timber harvest (danger trees, operational removals for landings, skyline corridors, etc.). Although snags would potentially decrease in harvest units (depending

on existing levels in each stand), large diameter snags would be retained above minimum levels identified in the Forest Plan. FEIS Appendix K at K-236.

Appellant Statement #35: Appellant states that canopy removal “threatens a long-term continued drying of the forest as repeated entries continue to remove larger trees to make up for the expense of the project” and cites numerous studies as references to their assertion. TLC at 57 and 58.

Response: I find that the Forest considered the reference submitted by appellant and documented the potential effects of project activities on large trees.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects.

During the comment period, appellant submitted a similar comment and cited numerous studies to support their assertion. The Forest considered each and every reference submitted by appellant, as documented in the FEIS Appendix K at K-156, K-157, K-168 through K-171, K-175 through K-177, K-185, K-198 and K-199, and K-201. These references were submitted with no assertion of violation of law, regulation, or policy; these references are repeated in the appeal. Thus, I find that the Forest adequately addressed relevant science.

In addition, the Forest addressed the potential for temperature changes to affect forest vegetation. The silviculture report details how temperatures, should they continue to warm, might affect vegetation throughout the planning area. South George Project Record, Pomeroy Ranger District, Silviculture Report at 23, 24, 60, 63, 111, 112, 113, 114, 116, 117, and 120. Removal of large trees (over 21 inches diameter at breast height) was disclosed in the FEIS at 3-101 and 3-102.

As for appellant’s assertion of repeated entries, I reviewed the reasonably foreseeable future actions identified by the Forest and find that no projects are proposed that would remove commercial-sized trees and as such, there are no repeated entries planned. FEIS at 3-4.

Appellant Statement #36: Appellant states that the “planned logging actions within the old-growth stands of the South George Project fail to comport with: the complex actual conditions of the forest area itself, credible ecological science recommendations, the nation’s federal environmental policy laws, and the imperative need to protect imperiled species habitat. The actions also fail to protectively retain critically important carbon sequestration capabilities and functioning of our forest ecosystems.” TLC at 58, 61, and 62.

Response: I find that the Forest adequately addressed the existing condition, best available science, and protected listed species. I also find that the decision is in compliance with environmental policy laws. Finally, I find that the forest addressed carbon sequestration in forest ecosystems.

The existing condition of the forest environment is fully described in the FEIS at 3-46 to 3-51. The Forest addressed the best available science throughout the FEIS, as evidenced and thoroughly documented in the silviculturist’s citation of best available science. South George Project Record, Pomeroy Ranger District, Silviculture Best Available Science Citations. Listed species, particularly with regards to the Canada lynx, are addressed in the FEIS at 3-135 through 3-137. Carbon sequestration is documented in

Appendix D of the silviculture report. South George Project Record, Pomeroy Ranger District, Silviculture Report.

Appellant is not specific as to which environmental laws the project does not comport with. I find that the project was properly prepared under the NEPA and that the ROD documents compliance with other relevant federal laws. ROD at 19 and 21.

Appellant Statement #37: Appellant states that the “FEIS fails to adequately and objectively “disclose the extent to which the impact of the proposed action is scientifically controversial,” regarding the Forest Services’ approach to achieve HRV objectives and reduce fire risk by commercially thinning intact, mature stands of mixed-conifer forest.” TLC at 58 and 59.

Response: I find that the FEIS fully documented the science that was used to determine the treatments and that the Forest also documented consideration of the best available science, including science submitted by appellant.

Forest Service guidance (June 20, 2007) regarding the use of best available science was followed during project planning. The Forest addressed the best available science throughout the FEIS, as evidenced and thoroughly documented in the silviculturist’s citation of best available science. South George Project Record, Pomeroy Ranger District, Silviculture Best Available Science Citations. The Forest also addressed all of the science submitted by appellant in the response to comments on the DEIS. The FEIS Appendix K notes each publication submitted and provides a response. FEIS Appendix K at K-123 through K-207 and K-246 through K-258.

Wildlife Species

Appellant Statement #38: Appellant states that “the EIS fails to demonstrate consistency with all the forest plan wildlife habitat standards and guidelines relevant to old growth, MIS species, dead and down tree habitat, nongame wildlife habitat, riparian areas, big game, and big game winter range.” TLC at 59.

Response: I find that the FEIS demonstrates consistency with standards and guidelines within the Umatilla National Forest Land and Resource Management Plan.

Under the National Forest Management Act (NFMA), a project that is planned that implements a LRMP must comply with that LRMP or must propose an amendment in order to proceed. NFMA Section 6(i). For the South George project, no amendments were proposed; as such, all standards and guidelines must be met.

Goals and objectives for land allocations are described FEIS 1-5 through 1-7. The FEIS reiterated those goals as well as Forest Plan standards and guidelines throughout the document, with analysis supporting the conclusion which leads to findings of consistency as follows: Old growth standards are documented in the FEIS at 3-98 through 3-99 with consistency embedded within the analysis in the FEIS at 3-100 through 3-103.

Management Indicator Species (MIS) are discussed in the FEIS, including Rocky Mountain elk which includes big game habitat and big game winter range (FEIS at 3-105, Table 3-65; FEIS at 3-106, Table 3-67; and FEIS at 3-109, Table 3-68). The analysis in the FEIS at 3-106 to 3-110 supports the conclusion and findings of consistency for elk. FEIS at 3-110. American marten are described, starting with their role as a management indicator species (FEIS at 3-110) and the analysis 3-111 to 3-113 supports

conclusion and findings of consistency for marten. FEIS at 3-113. The pileated woodpecker is documented starting in the FEIS at 3-313, and the analysis in the FEIS at 3-115 through 3-117 supports the conclusion and findings of consistency for pileated woodpeckers. FEIS at 3-117. American three-toed woodpeckers are documented starting in the FEIS at 3-117, with the analysis in the FEIS at 3-118 through 3-119 supporting the findings of consistency for Alternatives B and C (FEIS at 3-119) and Alternative D (FEIS at 3-121) for American three-toed woodpeckers. Finally, for primary cavity excavators and snag habitat, the analysis begins in the FEIS at 3-121. Table 3-69 in the FEIS at 3-122 further displays standards and guidelines with the analysis found in the FEIS at 3-122 through 3-125. The analysis in the FEIS at 3-125 through 3-127 supports the findings of consistency for cavity nesting species. FEIS at 3-127. Down wood requirements are met by retaining a minimum of 3-6 down logs per acres in dry plant association groups and 15-20 logs per acres in moist plant associations to meet Forest Plan Standards and guidelines. FEIS at 2-24 and 3-126.

Although appellant isn't specific as to which non-game habitat standards and guidelines are not being met, Northern goshawk design features in Table 2-5 of the FEIS at 2-24 provides for protection of goshawk and as such, meets Eastside Screen requirements. These requirements are based on existing and/or historical nest locations. Regional Forester's Eastside Forest Plan Amendment 2 Revised Interim Direction Appendix B at 12, incorporated by reference in the FEIS at 1-11 and 3-127. The FEIS disclosed there were no nests in the project area. FEIS at 3-128. Thus, the project is consistent because there are no nests upon which to delineate nest stands and post fledgling areas. Analysis was completed on potential goshawk habitat. FEIS at 3-128 through 3-130.

Landbirds, which also include nongame habitat, riparian and aspen habitats, are described in the affected environment section of the FEIS and utilize Bird Conservation Plans (Altman 2000) to meet the requirements of Executive Order 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds. FEIS at 3-130. Consistency is demonstrated through the description of habitats (FEIS at 3-131 through 3-132) and analysis (FEIS at 3-133 through 3-134), which supports the overall findings of consistency under the Migratory Bird Treaty Act. FEIS at 3-141.

The FEIS also directly responded to this issue in response to comments, FEIS Appendix K at K-113 to K-114, and K-235 to K-237.

Appellant Statement #39: Appellant states that the Forest has failed to monitor populations of old-growth associated wildlife, and that there is insufficient data to show that the Forest has completed or is committed to completing the monitoring that would insure old-growth/mature forest wildlife MIS viability. TLC at 59, 60, and 70. Appellant further states that the FEIS "fails to describe the quantity and quality of habitat necessary to sustain the viability of the species in question and it does not explain its methodology for measuring this habitat. The FEIS fails to demonstrate sensitive and management indicator wildlife species reasonably expected to be found in the project area are a part of viable populations." TLC at 60.

Response: I find that the FEIS did describe the habitat needed to sustain viability by incorporating by reference Wales et al (2011), which provides the basis for habitat quality and quantity based on the best available information that the Forest has as part of Forest Plan revision. Part 1 of this citation describes the process and modeling that was used to determine habitat for the Forest. Based on this information, the project wildlife biologist documented the project level impacts that may occur to MIS.

Viability is typically determined at the Forest level not at a project level. Regional advice regarding MIS, "Management Indicator Species Project Level NEPA Analysis February 2011" stated, "[w]here population

monitoring data are not available, due to lack of funding or feasibility of monitoring populations, the amount and quality of habitat can be used as a proxy for determining viability effects of projects on MIS (Lands Council v. McNair 2010). For project level planning and environmental analysis, the use of habitat abundance and quality and the distribution of habitat have been used to estimate project effects on MIS. In order to use habitat as a proxy, the analysis includes at a minimum: 1) a clear relationship between the species and its habitat based on habitat relationship models that utilize the best available science; 2) the amount of habitat available at the Forest scale; 3) species presence in the project area; 4) the amount of habitat being impacted at the project level in terms of quality and quantity; and 5) a determination of the project impact on viability at the Forest scale.”

For each species, habitat is described with references to the best available science in the affected environment section; the amount of habitat is also given in this section as well as the amount of habitat available at the forest level. This section also discusses the relative abundance of the species and if it is known to occur in the project area. The amount of habitat being impacted is included within the environmental consequences section, with the determination of the project impact on viability discussed within the findings of consistency section. FEIS at 3-103 to 3-127.

The FEIS states that “[t]he quality and quantity of wildlife habitat was primarily assessed using a Geographic Information system, district records and field reviews.” FEIS at 3-98. References are included in the description of habitat. The literature cited for wildlife is found FEIS at Literature Cited L - 38 through L-41. A more complete reference section is within the wildlife report starting at 49.

The scale of the analysis is based on varied scale which the appellant acknowledged. Appellant did not say what species the scale was inappropriate for. The wildlife biologist completing the analysis used professional judgment to determine spatial and temporal scales. FEIS at 3-98.

For sensitive species the “Affected Environment” section, FEIS at 3-137 through 3-138, describes habitat and probability of occurrence. A review of GIS and NRIS data shows that none of the sensitive species has been found in the project area in recent years. South George Project Record, Pomeroy Ranger District, GIS and NRIS data. This information, in combination with the environmental consequences section starting on FEIS 3-138 and the summary of effects in Table 3-71 (FEIS at 3-140 and 3-141) provides occurrence and effects determinations of the project to viability of sensitive species. As documented in the FEIS, “NI” (No Impact to Region 6 sensitive species, individuals, populations or their habitat) was the determination for all sensitive species, except for great gray owl and peregrine falcon, which received a determination of “MI” (may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species) based on the minor potential for trees that may serve as roost trees to be cut and for disturbance to transient individuals, should they pass through the planning area for great gray owls and for the potential for disturbance from burning for peregrine falcon as they pass through the area. FEIS at 4-139 to 3-141. For additional information on MIS, see response to Appellant Statement #40.

Appellant Statement #40: Appellant states that the FEIS “does not identify the amount and quality of habitat necessary to maintain viable populations of the affected MIS on the Umatilla NF and how much of the requisite quality of habitat will remain post-South George project implementation.” TLC at 70 and 71. Appellant further indicates that the scale of the analysis (planning area) was inappropriate because these species have large home ranges. TLC at 71.

Response: I find that the FEIS did identify habitat needed to support viable populations of affected MIS species and that the scale of the analysis was appropriately defined.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency considers cumulative effects. Quality and quantity of wildlife habitat as well as relative abundance is described for each MIS in the affected environment section, as well as what is provided at the forest level and what is treated by alternative. The MIS for the Umatilla National Forest are identified in the FEIS at 3-103. Each species, along with the habitat types they represent, are listed.

Specifically, the elk habitat discussion includes all components of habitat including forest cover (FEIS at 3-104), forage (FEIS at 3-105), roads (FEIS at 3-105), habitat effectiveness index (HEI) and indication of habitat quality (FEIS at 3-106), and the effects analysis starting in the FEIS at 3-107, which states the amount of habitat treated, resulting cover and final HEI.

The American marten habitat description begins on page 3-110 of the FEIS, with the discussion of acres treated by alternative and map of habitats and treatments found in the FEIS at 3-112.

The pileated woodpecker habitat description begins on page 3-113 of the FEIS and includes snag density, discussion of acres treated by alternative and a map of habitat and treatment units. FEIS at 3-115.

The American three-toed woodpecker habitat description begins page 3-117 of the FEIS, while the discussion including acres treated by alternative and a map of habitat and treatment units is found in the FEIS at 3-118.

Finally, primary cavity excavator habitat description including snag density by forest type begins on page 3-121 of the FEIS, while the discussion including acres treated by alternative begins on page 3-125 of the FEIS.

Wales et. al. (2011) is referenced throughout the MIS section and provides the basis for habitat quality and quantity. Part 1 of this reference describes the process and modeling used for MIS. Current Vegetation Survey (CVS) plot data by Mason and Countryman (2010) was used for the snag and down wood analysis. The FEIS tiers to the Umatilla National Forest Plan which is a forest wide analysis upon which standards are based to maintain viable populations. FEIS at 1-10; Forest Plan at 4-25 through 4-31 and 4-56 through 4-58.

In addition to the information found in the FEIS, the Forest also addressed this issue within the response to comments. The FEIS Appendix K at K-91 to K-92 describes the continued viability of black-backed woodpeckers, which are part of the primary cavity excavators, a group that is considered as MIS on the Forest. The FEIS Appendix K at K-113 to K-114 describes the contribution the project area makes to species viability. Finally, the FEIS Appendix K at K-237 notes the viability of all bird species and documents that replacement burns are not deficit in this area (with regards to providing habitat for cavity nesting species).

Appellant Statement #41: Appellant states that the “FEIS has failed to disclose scientific research and other documents (“best science”) that the UNF used to support its habitat management strategies for old growth and mature forest wildlife, including the standards, guidelines, and the MA C1 and MA C2 amounts and distribution.” TLC at 60.

Response: I find that the Responsible Official used the best science to consider the effects of the South George project and made an informed decision based on the analysis in the FEIS.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed. Appendix L at L-1 identifies consideration of best science.

The FEIS states that the “..best available science (Literature Cited) was used to determine effects to wildlife species in a manner appropriate for the circumstances.” Literature is cited throughout the analysis. The “Literature Cited” section for wildlife is found FEIS at Literature Cited L -38 through L-41. A more complete reference section is found within the wildlife report starting at page 49. South George Project Record, Pomeroy Ranger District, Wildlife Report at 49.

Specific scientific research and other documents that went into management strategies for the Umatilla National Forest are located within the Umatilla National Forest Land and Resource Management Plan and EI, which was tiered to in the FEIS at 1-10; as such, the foundation and assumptions that went into that plan do not need to be revisited at the project level; this includes development of standards and guidelines, as well as management area.

With regards to impacts to late and old forests, the FEIS at 3-98 to 3-103 fully documents the potential impact of the project on mature trees. The FEIS clearly states that there are about 900 acres of management area C1 in the project planning area and that no activities are proposed within management area C1. FEIS at 1-6; FEIS at 3-99 and 3-100. It does not appear as though any management area C2 lands are found in the planning area and as such, they were not addressed. FEIS at 1-6.

Appellant did not specifically indicate which standards and guidelines they take issue with. As such, they will not be discussed further.

Appellant Statement #42: Appellant states that the Forest’s conclusion of no effect to lynx is “suspect” and that the Forest offers no justification for their conclusion other than citing a 6 year old report. TLC at 72. Appellant states that the FEIS should have adequately addressed how further fragmentation would affect lynx. TLC at 72. Appellant asserts that intensive management of lynx habitat that would “squeeze” lynx out of their range runs “afoul” to NFMAs requirement that the agency maintain viable populations of wildlife and that the Forest is obliged to accurately assess the impacts of its actions on lynx, as well as promote recovery to viable population levels within the species historic range. TLC At 72 and 73.

RESPONSE: I find that the Responsible Official adequately considered the potential for the project to impact lynx prior to making his decision.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. The NFMA requirement is to provide for a diversity of species and does not speak to recovery of a species to its historic range. Species recovery falls under the jurisdiction of the regulatory agencies and in the case of Canada lynx, the US Fish and Wildlife Service (USFWS) is responsible for species recovery. The Forest Service Manual (FSM) requirement, as cited below, is for

maintaining existing populations of species throughout their current range. The Umatilla National Forest, including the Pomeroy Ranger District does not have a current population of lynx.

“Management of habitat provides for the maintenance of viable populations of existing native and desired non-native wildlife, fish, and plant species, generally well-distributed throughout their current geographic range” (FSM 2622.01(2)).

“Maintain viable populations of all native and desired non-native wildlife, fish and plant species in habitats distributed throughout their geographic range on National Forest System lands.” (FSM 2670.22(2)).

The FEIS at 3-135 documented the status of Canada lynx on the forest and within the project areas. The Umatilla National Forest was determined to have unoccupied habitat for Canada lynx by a joint analysis with USFWS. A letter from the USFWS dated May 2006 included the Occupied Mapped Lynx Habitat Amendment to the Canada Lynx Conservation Agreement. Within this amendment, the Umatilla National Forest is listed as having “no occupied lynx habitat” based on the National Lynx Survey (Table 1). Under this agreement the Lynx Conservation Assessment and Strategy (LCAS) only applies to occupied habitat. Until the Umatilla meets the criteria for occupied habitat, the LCAS does not apply, and compliance with Section 7(a)(2) of the Endangered Species Act is not required.

The recovery outline (USFWS 2000) states that “[i]n “peripheral areas” the majority of historical lynx records is sporadic and generally corresponds to periods following cyclic lynx population highs in Canada. There is no evidence of long-term presence or reproduction that might indicate colonization or sustained use of these areas by lynx. However, some of these peripheral areas may provide habitat enabling the successful dispersal of lynx between populations or subpopulations. At this time, we simply do not have enough information to clearly define the relative importance of secondary or peripheral areas to the persistence of lynx in the contiguous United States.”

The effects analysis in the FEIS discloses the effects to lynx habitat as a reduction of suitable habitat that ranges from 625 acres (Alternative D) to 900 acres (Alternatives B and C) within this peripheral area as a short term impact. FEIS at 3-136. Cumulatively, approximately 1,200 acres would be altered over the next 10 years. The determination of “no effect” to the Canada lynx population was made, primarily because the Blue Mountains are considered unoccupied.

Appellant Statement #43: Appellant states that the FEIS did not sufficiently disclose or objectively address the importance that the prey species of lynx have on the recovery of fragmented forest habitat. TLC at 73.

Response: I find that the FEIS adequately disclosed information regarding Canada lynx.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The importance of prey species of lynx is documented in the LCAS. As stated in response to Appellant Statement #42, the LCAS does not apply to the Umatilla National Forest. The FEIS at 3-135 documented the status of Canada lynx on the forest and within the project area. The Umatilla National Forest was determined to have unoccupied habitat for Canada lynx by a joint analysis with USFWS. A letter from the USFWS dated May 2006 included the Occupied Mapped Lynx Habitat Amendment to the Canada

Lynx Conservation Agreement. Within this amendment the Umatilla National Forest is listed as having no occupied lynx habitat based on the National Lynx Survey (Table 1). Under this agreement the LCAS only applies to occupied habitat. Until the Umatilla meets the criteria for occupied habitat, the LCAS does not apply and compliance with Section 7(a)(2) of the Endangered Species Act is not required. See also response to Appellant Statement #42.

Appellant Statement #44: Appellant states that all of the “action alternatives would log connective mature and old forest habitat, and degrade uninventoried roadless areas and other undeveloped areas resulting in significantly further reducing needed cover for wildlife, jeopardizing both lynx and their prey species viability across the area—in violation of the NEPA, NFMA, and the ESA.” TLC at 73.

Response: I find that the FEIS fully addressed the Canada lynx.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

See the response to Appellant Statement #42 and #43 for more details on Canada lynx. The FEIS at 3-99 describes old forest connectivity as not needing to meet the same description of old forest, but meeting the intent of connectivity for providing free movement between old forest stand for the species associated with the old forest stands. The connective habitat is described (FEIS at 3-9) as consisting of young forest multi strata, stem exclusion open and closed canopy, and understory re-initiation structural stages, not mature and old forest habitat. Mature and old forest habitat proposed for harvest treatments would remain mature and old forest habitat following treatment. FEIS 3-102. The project is also consistent with the Regional Forester’s Forest Plan Amendment #2 direction (Eastside Screens). FEIS Appendix C-5 through C-9.

Appellant Statement #45: Appellant states that “it is clear that the Forest Service has not completed NEPA required accurate analysis and therefore is in violation of the LCAS, as well as the ESA and NFMA. The EIS makes insufficient mention as to any site-specific to protocol recent surveys supporting the agency’s determinations, fails to adequately disclose surveys or survey protocol, methodology, areas or frequency. As such, the EIS planned logging actions, and inference of non-significance is arbitrary and capricious and therefore illegal.” TLC at 73.

Response: I find that the LCAS does not apply to the Umatilla National Forest. For details, see responses to Appellant Statement #42 and #43.

Appellant Statement #46: Appellant states that the “EIS fails to adequately analyze how wolverine will be affected by the planned project” in violation of both NEPA and NFMA. TLC at 74. Appellant states that the project would contribute incrementally to pushing wolverine populations towards listing and as such, is inconsistent with the Forest Plan as amended and NFMA. TLC at 74.

Response: I find that the FEIS analyzed potential impacts to wolverine.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS discloses that a majority of project area is foraging habitat; there is no denning habitat within the project area; and that wolverines have not been documented in the project area and occurrence in the project area would be rare. FEIS at 3-137. The FEIS also discloses that in the short term activities could disturb wolverine if present at the time of the activity. Overall, the project would not alter prey availability or use of the area by wolverine. FEIS at 139. A review of GIS and NRIS data shows that no wolverines have been detected in the project area in recent years; the nearest unconfirmed sighting is about 6 miles to the west of the project area. South George Project Record, Pomeroy Ranger District, GIS and NRIS data. Based on the GIS data, NRIS data, field surveys, and professional judgment of the project biologist, the determination of no impact was made for the wolverine for all alternatives. FEIS at 3-140.

Appellant Statement #47: Appellant states that the FEIS proposes “harmful logging with no ecological purpose within Marten habitat.” TLC at 74.

Response: I find that the FEIS fully analyzes the effects to marten and their habitat; the statement that this project is harmful with no ecological purpose is the appellant’s opinion and a value statement.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The purpose for the project is clearly stated in the FEIS at 1-4, which is to improve forest health, vigor and resilience to fire, insects and disease in upland forests that are outside their historical pre-fire suppression conditions. On the Umatilla National Forest, suitable environments for marten have changed little from historical to current conditions (FEIS at 3-111) with approximately 100,000 acres of source habitat found on the Forest, while the project area contains about 2,800 of those acres. The FEIS at 3-112 discloses the effects of Alternative A (No Action), which retains all habitat in the short term and increases habitat in the long term. Alternative B and C reduce habitat by 735 acres including impacting one large block of habitat in the Hogback region, while Alternative D does not treat any marten habitat. FEIS at 3-112. The FEIS also states that over 2,000 acres of marten habitat would be unaffected by the project and that the impacts total less than 1 percent of marten habitat on the Forest. FEIS at 3-113. The FEIS finds the project consistent with the Forest Plan, with no changes to the population or viability of marten on the Umatilla National Forest expected to occur. FEIS at 3-113.

Appellant Statement #48: Appellant asserts that the FEISs analysis of gray wolf is inadequate because the FEIS does not explain why the species was not found in the project area. In addition, appellant states that the FEIS fails to address the cumulative impacts of fire and fire management of this and other species whose biology includes adaptation to fire-sustained ecosystems. TLC at 76.

Response: I find that the FEIS considered effects to the gray wolf.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS does not say the gray wolf is not found in the project area. The FEIS at 3-137 states there are no known key areas such as denning or rendezvous sites and expects dispersing wolves to continue to disperse into the area. The project would not impact the gray wolf because it does not affect key wolf

areas, nor does it change prey availability. FEIS at 3-139. While there is a suspected pack in southeast Washington, there are no known denning or rendezvous sites.

The project also proposes to conduct landscape burns on about 3,000 acres, which will help meet the purpose and need of reintroducing landscape prescribed fire into the ecosystem. FEIS at 1-5; FEIS at 2-18. The FEIS does address the potential for the project to affect wildfires. In the response to comments, the Forest states that “[w]hile the risk of high severity in the South George project area would be reduced, wildfire risks are not reduced throughout Umatilla National Forest. Untreated areas, patches within units, and unmanaged areas (including inventoried roadless areas and wilderness) still remain susceptible to high severity fire. These areas account for a large portion of the land area of Umatilla National Forest, leaving ample land scattered across the forest, the area on which viable populations are measures, as potential habitat for black-backed woodpecker. As mentioned in response to comment TLC-15 - Over 75,000 acres of the district burned in wildfires in 2005 and 2006, e.g. School and Columbia Complex, (DEIS, Chapter 3, page 3-118). Stand replacement burns are currently not at a deficit in this area.” FEIS at K-91 to K-92.

Appellant Statement #49: Appellant states that the FEIS fails to address viability of the great gray owl. TLC at 76 and 77.

Response: I find that the FEIS addressed the potential for the project to affect the viability of the great gray owl.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

No great gray owls have been documented in the project area. FEIS at 3-138. The FEIS at 3-139 discloses that the project would reduce the suitability of some habitat for great gray owls. A review of GIS data from the district GIS files indicates there are approximately 4,800 acres of great gray owl habitat. South George Project Record, Pomeroy Ranger District, GIS and NRIS data. With implementation of Alternatives B and C, about 1,000 acres would be affected by treatments. Treated areas would remain old growth and habitat for great gray owls, however in the short term suitability would be reduced because of the potential removal of trees and snags used for nesting and roosting. FEIS at 3-139. This potential impact results in a determination of may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. FEIS at 3-139 and FEIS at 3-140.

Appellant Statement #50: Appellant states that the FEIS violates NEPA because it lacks a meaningful and accurate analysis, as well as meaningful scientific disclosure and conclusions regarding bald eagles. TLC at 77.

Response: I find that the FEIS discloses the potential for impacts to occur to bald eagles and that the FEIS documents compliance with the Bald and Golden Eagle Protection Act.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS at 3-137 states nesting bald eagles are uncommon in Washington. They are most likely to winter in the reservoirs and major tributaries of the Columbia River. There are no known nests or roost sites in the project area. Waterways are too small to provide foraging habitat. Bald eagle use of the project area is considered incidental, at best. FEIS at 3-139. A review of GIS data from the district GIS files indicates reported observations of bald eagle have occurred within 1-3 miles of the planning area, which substantiates the FEISs disclosure that use of the project area is incidental and transitory. South George Project Record, Pomeroy Ranger District, GIS and NRIS data. With no impact to nesting or foraging and only incidental use of the project area, the only effects would be disturbance if a transient eagle were to be present at the time an activity would take place. FEIS 3-139.

Appellant Statement #51: Appellant states that the project would negatively impact 1,700 acres of goshawk habitat and that the “FEIS must better provide for goshawk viability and recovery across the affected forest landscape, upholding NFMA’s requirement to maintain viable populations of these and many other forest canopy dependent species, 36 C.F.R. § 219.19.” TLC at 77-81.

Response: I find that the Responsible Official’s decision provides for goshawk viability and that the decision does not lead to a downward trend in viability for the species.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The northern goshawk is not a management indicator species, nor is it listed as Threatened, Endangered, or Sensitive. The Eastside Screens, which amended the Forest Plan 1995, provides for specific protections for goshawk nesting territory; as such, it was analyzed in this FEIS. Goshawk surveys were conducted in potential nesting habitat; no goshawk nest trees have been found in the project area. If any active nests are found, they would be protected as specified in the project design criteria. FEIS at 2-24. The Eastside Screens do not require specific habitat protections unless a nest site is documented.

The FEIS discloses that the project would affect 1,700 acres of goshawk habitat in the planning area, as stated by appellants. An approximate 3,000 acres of habitat would remain unaffected. FEIS at 3-129. Because no nest sites or post-fledging areas would be affected, the viability of the species would not be affected.

Appellant Statement #52: Appellant states that the FEIS “fails to accurately, objectively and adequately disclose the current population status and trends of native forest dependent Neotropical migrant and native avian species within the analysis area and adjacent forest.” TLC at 81 and 82. Appellant asserts that the action alternatives would degrade habitat, imperil avian species populations, and result in individual mortality and irreparable habitat harm, in violation of the Migratory Bird Treaty Act (MBTA). TLC at 81 and 82.

Response: I find that the FEIS documented potential effects to migratory birds.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

Landbirds are described in the affected environment section of the FEIS and utilize Bird Conservation Plans (Altman 2000) to meet the requirements of Executive Order 13186 - Responsibilities of Federal

Agencies to Protect Migratory Birds. FEIS at 3-130. Consistency is demonstrated through the description of habitats (FEIS at 3-131 through 3-132) and analysis of potential effects (FEIS at 3-133 through 3-134), which supports the overall findings of consistency under the Migratory Bird Treaty Act. FEIS at 3-141.

Specifically, the FEIS notes the habitat type and features found in the project area and makes note of the focal species for each habitat type. FEIS at 3-131. As described in the FEIS, several habitats occupied by migratory birds, primarily in riparian areas and unique habitats, would remain largely unaffected by the project. FEIS at 3-134. Dry forest habitats would have activity on about 565 acres (out of an existing 1,700 acres of this habitat type), while mesic mixed forests would have about 980 acres of treatment (out of 1,300 acres). The effect of the proposed activities varies by species. For some species, allowing a denser shrub understory to develop would be beneficial for the hermit thrush. In the short term, cover would be reduced for some species, but the risk of uncharacteristic wildfire that may eliminate forest habitat would be reduced. FEIS at 3-123. Design features such as snag and down log retention, live tree retention, and avoidance of riparian areas would minimize the risk of affecting migratory birds. As such, this project meets the intent of the Migratory Bird Treaty Act and Executive Order 13186. FEIS at 3-141.

Appellant Statement #53: Appellant further states that the FEIS failed to comply with the legal and scientific obligations under the MBTA and Executive Order 13186. TLC at 82 and 83.

Response: I find that the FEIS documented potential effects to migratory birds.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

Landbirds are described in the affected environment section of the FEIS and utilize Bird Conservation Plans (Altman 2000) to meet the requirements of Executive Order 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds. FEIS at 3-130. Consistency is demonstrated through the description of habitats (FEIS at 3-131 through 3-132) and analysis of potential effects (FEIS at 3-133 through 3-134), which supports the overall findings of consistency under the Migratory Bird Treaty Act. FEIS at 3-141.

Specifically, the FEIS notes the habitat type and features found in the project area and makes note of the focal species for each habitat type. FEIS at 3-131. As described in the FEIS, several habitats occupied by migratory birds, primarily in riparian areas and unique habitats, would remain largely unaffected by the project. FEIS at 3-134. Dry forest habitats would have activity on about 565 acres (out of an existing 1,700 acres of this habitat type), while mesic mixed forests would have about 980 acres of treatment (out of 1,300 acres). The effect of the proposed activities varies by species. For some species, allowing a denser shrub understory to develop would be beneficial for the hermit thrush. In the short term, cover would be reduced for some species, but the risk of uncharacteristic wildfire that may eliminate forest habitat would be reduced. FEIS at 3-123. Design features such as snag and down log retention, live tree retention, and avoidance of riparian areas would minimize the risk of affecting migratory birds. As such, this project meets the intent of the Migratory Bird Treaty Act and Executive Order 13186. FEIS at 3-141.

Appellant Statement #54: Appellant states that the FEIS fails to base its effects analysis claims on “substantive protocol surveys and fails to address relevant comprehensive scientific research” on the pileated woodpecker, three-toed woodpecker, white-headed woodpecker, black-backed woodpecker, Pygmy nuthatch, Lewis’ woodpecker, Williamson’s sapsucker, and other cavity excavators, their habitat, and forest ecological functioning. Appellant states that the FEIS fails to meet NEPA’s “harder look”

analysis requirements and more effective level of compliance with NFMA's population monitoring protocol for these MIS focal species and regional species of concern. TLC at 83-91.

Response: I find the FEIS used the best available science and that the Responsible Official's decision was in accordance with the NFMA.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed.

The FEIS at 3-98 states "The best available science (Literature Cited) was used to determine effects to wildlife species in a manner appropriate for the circumstances. Vegetation information used in habitat evaluation was obtained from the project Silviculturist or from GIS databases." References pertaining to the science used in the wildlife analysis are documented throughout the FEIS and in the references section of the document, Literature Cited at 38. These references include Bull, E.L. 1987. *Ecology of the pileated woodpecker in northeastern Oregon*. Journal of Wildlife Management 51(2):472-481, as discussed by the appellant.

The regulation 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation 40 CFR 1508.7 describes how the agency will consider cumulative effects. In addition, FSM 2621.3 guides the agency in analyzing proposed actions, and instructs the agency to conduct habitat analyses to determine the cumulative effect of each alternative on management indicators selected in the plan or project area.

The NFMA does not discuss, state, or list any wildlife population monitoring protocols. NFMA requires the agency to provide for wildlife species diversity and viability of native species. The FEIS discusses the direct, indirect, and cumulative effects associated with each alternative for Forest MIS (FEIS at 3-123 through 3-128) and regional species of concern (FEIS at 3-128 through 3-142). Pileated woodpeckers are specifically discussed in the FEIS at 3-113 through 3-117, while cavity nesting species are specifically addressed in the FEIS at 3-121 through 3-127.

Appellant Statement #55: Appellant states that the project violates NFMA by degrading primary cavity excavator habitat, which will result in a continued decline of the species. TLC at 88.

Response: I find the Responsible Official's decision did not violate the NFMA or result in species decline.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

See response to Appellant Statement #39 and #40 regarding viability requirements, which is to provide for a diversity of species and does not speak to declining habitat of a species.

The Forest scale analysis that was conducted was found not to change cavity excavator populations. The FEIS at 127, under cumulative effects states that "[s]tructural habitat for cavity excavating birds would be reduced at the stand scale, but watershed averages would remain relatively constant or become

more in line with historical distributions.” The FEIS at 127, under “Findings of Consistency” states that “[t]he project would affect less than 1 percent (.006) of the forested land on the Umatilla National Forest. The overall direct, indirect, and cumulative effects would result in a small negative habitat trend for primary cavity excavators. The amount of effect from this project is too small to cause changes to cavity excavator populations. Therefore the project is consistent with the Forest Plan and continued viability of primary cavity excavators is expected on Umatilla National Forest.”

Appellant Statement #56: Appellant states that the project does not use the best available science when evaluating big game habitat. AFRC at 5; BC at 1 and 2. Appellant states that the area is above forest plan standards for satisfactory cover and will remain that way post project. Appellant states that thermal cover and HEI are no longer valid concepts and that forage is the limiting factor. AFRC at 5; BC at 1 and 2.

Response: I find the Responsible Official did consider the best available science when analyzing the impacts to big game and that the FEIS analyzes foraging through Forest Plan standards and HEI modeling.

The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed.

The FEIS at 3-98 states that “[t]he best available science (Literature Cited) was used to determine effects to wildlife species in a manner appropriate for the circumstances. Vegetation information used in habitat evaluation was obtained from the project Silviculturist or from GIS databases.” References pertaining to the science used in the wildlife analysis are documented throughout the FEIS and in the references section of the document, Literature Cited at 38.

Foraging is a factor in the Forest Plan standards for elk habitat and in the HEI model analysis. The FEIS at 104 states that “Forest Plan standards are designed to evaluate effects of management actions on elk habitat, which includes percent tree cover, open road density, and elk habitat effectiveness. The elk habitat effectiveness index (HEI) is a model that assesses the ratio and configuration of elk cover and forage areas, and incorporates open road density to provide an ‘effectiveness rating’ from 0 to 1.” An analysis of cover, HEI, and forage by alternative is discussed in the FEIS starting at 3-107.

With regards to appellant’s assertion that HEI is no longer a valid concept, the analysis for HEI is required by the Forest Plan and as such, was fully documented in the FEIS. Appellant also states that forage is the limiting factor. Both landscape burning (FEIS at 3-107) and regeneration harvest would help provide forage for big game across the planning area. Additional landscape burning in the watershed would cumulatively benefit forage for big game. FEIS at 3-109 and 3-110.

INFISH/PACFISH/Aquatics/Water Quality

Appellant Statement #57: Appellant states that logging will remove large wood that would eventually contribute to complex stream habitat and upland slope stability, thus retarding attainment of riparian management objectives (RMOs), in violation of PACFISH and INFISH. TLC at 92. Appellant further states that the project, as planned, is inconsistent with the biological opinion foundations of PACFISH. TLC at 92.

Response: I find that the decision does not violate PACFISH and would not retard attainment of RMOs, particularly given the limited extent of mechanical treatment (25 acres) that is proposed.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The RMOs for water temperature associated with removing large wood through thinning are described in the FEIS at 3-22. The water temperature analysis at FEIS 3-21 to 3-22 states that “this fuels treatment would not be expected to prevent attainment or retard recovery of the water temperature RMO.” Bank stability and sediment are also addressed. The FEIS states that “Special design features for tree removal in about 25 acres of RHCA are listed in Chapter 2, Table 2-5. Hand felling, full suspension tree removal systems with no yarding related soil disturbance in the RHCA, overall limit of 10 percent soil disturbance within RHCAs, and protection of bank and channel stabilizing trees would protect ground cover and prevent detectable erosion and sedimentation due to implementation of this project. No measurable effect to water quality would be expected.” FEIS at 3-23.

Current large woody debris was identified for George Creek in Table 3-14 of the FEIS at 3-35. Field observations gathered by the Pomeroy Ranger District in RHCA units 1 and 2 illustrate that instream large woody debris densities likely exceed PACFISH Large Woody Debris Riparian Management Objectives. South George Project Record, Pomeroy Ranger District, Fisheries File. The FEIS at F-7 states that there would be no harvest activities in RHCA that would affect LWD. The FEIS at 2-19 states “full suspension yarding, bank and channel stabilizing trees located on the inner gorge and the valley/channel bottom will remain uncut.” Implementing these design criteria would assure that PACFISH bank stability RMO would be met. Finally, the fuels specialist report for treatment within RHCAs states that “an improvement cut is proposed to reduce stand density from 190 basal area to approximately 150 basal area.” Thus, by retaining 150 square feet of basal area, an adequate supply of standing trees remain that will be able to contribute to future down wood. South George Project Area, Pomeroy Ranger District, fuels RHCA report at 3.

The FEIS also documents that the limited entry into the RHCA would have no measurable effect on fisheries. The FEIS states that “[t]he proposed fuels treatment on approximately 25 acres in the RHCA is not on a fish bearing stream and has benching occurring between the project and downstream designated critical habitat about one-half mile away.” FEIS at 3-41. Thus, the possibility for movement of materials downstream is negligible.

Lastly, the FEIS documents that this limited entry into RHCAs was designed to comply with PACFISH. The FEIS states that “[t]he proposed 25 acres of RHCA treatments (RHCA units 1 and 2) have been designed to fall within the intent and project design criteria of Category 13, Riparian Vegetation Treatment (controlled burning) in ARBO (see Appendix F). These are specific and separate criteria from the BMP’s for the rest of the project area.” FEIS at 3-39. Further, the FEIS states that “Implementation of any alternative would be consistent with Umatilla Forest Plan, as amended (PACFISH), and Endangered Species Act (ESA).” FEIS at 3-46. The FEIS goes on to state that “[t]his project is consistent with ESA listed fish recovery plans. Actions proposed for riparian vegetation restoration project (about 25 acres – RHCA units 1 and 2) are consistent with habitat actions identified in the draft Snake River Salmon Recovery Plan for SE Washington (Snake River Salmon Recovery Board 2006) (referred to as the LSR Recovery Plan). Habitat actions are grouped and define the approach to be taken to implement restoration or protection strategies. Upper George Creek is identified as a major spawning aggregation (MSA) in the lower reaches (LSR Recovery Plan Summary p. 51). The LSR Recovery Plan identifies large

woody debris goals for the Upper George Creek MSA of one piece per channel width. To improve large woody debris requires improving channel and floodplains, improving riparian areas and improving instream habitat (LSR Recovery Plan Summary p. 48). Implementation of actions in units (about 25 acres) in the RHCAs should result in long-term restoration and improvement of riparian function.” FEIS at 3-46.

Given the limited extent of mechanical treatments within RHCAs and the disclosure found in the FEIS, appendices, and specialist reports, I find that PACFISH standards and RMOs would be met.

Appellant Statement #58: Appellant states that the FEIS aquatic cumulative impacts analysis “fails to disclose the total cumulative effects of past management activities, including recent and past fires, past postfire salvage logging, burning and other fuels reduction actions, timber sales, previously clear cut areas that are young planted stands, the reopening of closed roads, road maintenance, landings, pile burning, biomass removal, log hauling, livestock grazing, OHV use and growing impacts – including areas within the project that evidence resource degradation, etc.” TLC at 92 and 102.

Response: I find that the cumulative effects of past management activities were adequately addressed in the FEIS.

The regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. The FEIS at 3-1 through 3-4 identifies past, present, and reasonably foreseeable actions that may contribute to cumulative effects. CEQ guidance was followed by considering past actions in the context of the existing condition.

The FEIS at 3-20 identifies the spatial and temporal scales for the hydrologic indicators, water quality and water yield. The FEIS at 3-20 also discusses how the Equivalent Treatment Acre (ETA) model was set up to account for past timber activities that effect hydrological indicators. Appendix F at F-7, F-8 and F-9 also discusses the potential for water yield cumulative effects to occur. The FEIS at 3-26 through 3-30 and the FEIS at 3-37 through 3-44 discuss the potential for cumulative effects to occur to fisheries. Each of these sections documents whether or not other activities, including past, present and future grazing, timber harvest, and burning could potentially contribute to cumulative effects. Finally, the ROD at 10, 11 and 13 addresses aquatic effects and documents how the project complies with PACFISH, ESA and the Magnuson-Stevens Fishery Conservation and Management Act.

Appellant Statement #59: Appellant states that the FEISs analysis of sediment delivery, water quality, and future large wood input “failed to adequately consider and disclose steepness of slope issues, which has a direct bearing on the inevitable movement of soil and wood toward streams.” TLC at 92 and 93. Appellant further states that because so many units are adjacent to streams, some with steep slopes, that the Forest Service erred in concluding that the project “is not likely to adversely affect” threatened, endangered, and sensitive (TES) fish species downstream of the project area. TLC at 93.

Response: I find that the FEISs analysis of sediment delivery, water quality and future large wood input was adequate. Furthermore, I find that the conclusions documented in the biological evaluation for Endangered, Threatened, and Sensitive Aquatic Species and Macro-Invertebrates that TES fish will not be adversely affected are appropriate, because of implementing design features and Best Management Practices (BMPs) as detailed in the FEIS at 2-19 (Table 2-5) and in Appendix D.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The ROD at 10 and 11 identifies that soil erosion will be minimized through design features and site-specific BMPs and demonstrates that past BMPs have been effective. The FEIS at 2-19 through 2-22 identifies buffer widths for various riparian habitat conservation area categories and states that no ground-based equipment will operate on sustained slopes greater than 35% in order to reduce the potential for soil movement. In addition, past monitoring specific to the Umatilla National Forest shows that the Forest has a very high rate of compliance with BMPs. FEIS at 3-31. Based on RHCA buffers, the FEIS states that no cases of erosion or sedimentation were observed post-harvest in RHCAs. FEIS at 3-31. The FEIS states that “[w]ith the exception of the 25 acres of RHCA fuels treatment (RHCA units 1 and 2) design features (Chapter 2, Table 2-5) for these actions would include no harvest in RHCAs using PACFISH interim widths, and slope gradients that would not exceed 35 percent on ground based harvest units. These design features would prevent damage that could contribute to erosion and sedimentation into channels and streams (Belt et al. 1992).” FEIS at 3-25. Thus, I find that FEIS at 3-25 adequately documents the effects of RHCA widths.

With regards to steep slopes, in the FEIS Appendix F at F-6, F-9 and F-10, under sediment habitat parameters, it identifies that “[b]ased on slope distance the potential for sediment to reach channels is very low, near zero.” Finally, the FEIS Appendix D at D-1 through D-5 identifies the Best Management Practices (BMPs) that “would be implemented in any action alternative” and will minimize accelerated erosion to surface waters. In addition, the Forest responded to a similar comment regarding steep slopes and notes that “[d]espite the steep terrain in the steep sideslope areas, the rock type is quite stable with relatively little mass movement activity- events generally are limited to shallow debris slides from buildup of rock fragments. There are no mapped areas of land slump (deep-seated soil and rock movement) indicated in the Umatilla Soil Resource Inventory nor any indicated from the LTA layer.” FEIS Appendix K at K-115; South George Project Record, Pomeroy Ranger District, Soils Report at 6. Thus, I conclude that the FEIS did consider slope steepness and that the effects determinations were not in error.

Appellant Statement #60: Appellant states that the Forest’s conclusions related to water quality do not consider the best available science regarding stream temperature increases from logging in upslope locations. TLC at 93.

Response: I find that the Forest’s conclusion regarding water quality does consider the best available science.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed. Appendix L at L-1 identifies consideration of best science.

The FEIS at 3-23 identifies science from FEMAT 1993 which states that “shade is controlled by about 1 tree height.” The next sentence further states that “[t]here would be no effect to water temperature from these treatments.” FEIS at 3-23. In their comments, the US Environmental Protection Agency (EPA) states that they have found that impacts to shade and stream temperature occur when timber harvest occurs within 100 feet of a stream. FEIS Appendix K at K-36. Thus, with the exception of the 25 acres of fuels treatment in Units 1 and 2, all streams have no-cut buffers which will fully protect effective shade zones.

Appellant Statement #61: Appellant states that the FEIS “failed to consider the fact the RHCA buffers may be compromised by fires, ORV use, livestock grazing, and future projects, or disclose and address areas where there are existent cumulative impacts within these buffers.” TLC at 93. Appellant further states that the FEIS “failed to consider the fact that the removal of trees and future downed logs from upslope areas will reduce the landscape capacity for sediment storage. Standing trees and medium to large logs on the forest floor act as sediment traps, but if they are removed that function is eliminated.” TLC at 93.

Response: I find that the FEIS fully considered the potential for cumulative effects to occur.

The regulation at 40 CFR 1508.7 defines how the agency will consider cumulative effects. The FEIS at 3-26 through 3-28 documents the ongoing and future foreseeable projects that will be considered in the cumulative effects analysis. The cumulative effects analysis fully describes the potential for impacts to occur from ongoing grazing activities on the Asotin C&H allotment (FEIS at 3-27); see the response to Appellant Statement #68 for more details on how grazing was considered.

With regards to the overall cumulative effects analysis for Alternative B (the other alternatives are also analyzed separately), the FEIS fully documents that the Eastside landscape project proposes burning over 4,500 acres and that project design criteria include stopping ignition within 600 feet of streams and that backing fire into RHCAs is unlikely to occur. FEIS at 3-27. The FEIS also documents that unauthorized ATV use would also continue to contribute to localized sedimentation on some roads, including Forest Road 4300-130. FEIS at 3-23 and 3-27. The FEIS also notes that there are restoration efforts that would improve area springs. FEIS at 3-27.

With regards to trapping sediment, the FEIS at 3-25 states that project design features would prevent damage that would contribute to erosion and sedimentation in to channels and streams. The hydrologist concluded that the combination of limited drainage area and erosion control would reduce and generally prevent surface erosion. FEIS at 3-25.

See also responses to Appellant Statement #57, #59, and #60 for more details.

Appellant Statement #62: Appellant states that the “FEIS analysis of large wood and sediment failed to consider the impacts of removing hundreds of hazard trees from miles of haul roads.” Appellant further states that by allowing the hazard trees to be removed outside of RHCA boundaries, fallers will be motivated to fall hazard trees away from RHCAs where they can be removed instead of left to serve as large wood and that the FEIS did not address this “incentive to log RHCAs,” thus underestimating project impacts to RMOs. TLC at 94.

Response: I find that the FEIS fully documented the potential for danger tree falling and removal.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS at 1-9 identifies danger tree removal and states that “[d]anger trees within Riparian Habitat Conservation Areas (RHCAs) would not be removed; they would be cut and left to provide potential additional coarse woody debris.” The above statement is also declared at FEIS at 2-16 through 2-17. The FEIS at 3-23 states that “[d]anger trees would be felled along all haul routes used for the

proposed timber sales. They would be left on the ground inside RHCAs and commercially removed elsewhere.” Furthermore in FEIS at 3-23 it states that “[d]anger trees felled on haul routes within RHCAs of perennial streams would have a negligible effect on shade density for affected streams.” This repeated disclosure of the fate of danger trees within RHCAs fully documents consideration of danger tree removal. The Forest also responded to a comment regarding this issue and reiterates that danger trees will not be removed from RHCAs. FEIS Appendix K at K-210 and K-211.

With regards to appellant’s assertion that there would be incentive to log RHCAs, I find this statement to have no basis in fact and as such is the opinion of the appellant.

Appellant Statement #63: Appellant states that “road reopening, maintenance, and log hauling will also unavoidably retard attainment of RMOs in violation of PACFISH/INFISH. BMPs are inadequate and do not assure that impacts will be avoided.” TLC at 94.

Response: I find that the road related activities associated with this project will not retard attainment of RMOs and that the BMPs have been adequately defined.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

Past monitoring (FEIS at 3-31) demonstrates that Forest Service personnel have been successful in implementing best management practices, PACFISH standards, and skidding guidelines for disturbed soils. The FEIS at 3-16 through 3-18 identifies roads that are hydrologically connected and that present a potential risk to water quality. The FEIS at 3-23 and 3-24 identifies the action of road drainage on haul routes and documents how improvements associated with maintenance work that is common to all alternatives “would reduce this sedimentation and prevent or minimize additional sedimentation from timber haul.” The FEIS at 3-26 states that “design criteria include the halting of log haul when turbid water leaving roadways had a potential to enter surface waters” thus further minimizing the potential for impacts to occur. The FEIS at 3-26 also states that “road use restrictions and minimized ditch cleanout would reduce sediment production from road use to the extent possible.” The FEIS at 3-28 states that “[r]eductions in hydrologic connectivity would reduce risks associated with sedimentation and drainage network expansion.”

As for appellants contention that BMPs are inadequate, the FEIS at 3-31 states that “Umatilla National Forest has a high rate of compliance with BMPs” as documented by the fact that presale crews consistently apply buffers that are larger than prescribed, taking into account site-specific topography concerns during layout.

As far as compliance with PACFISH, C-10 under Roads Management (RF-2d) states that RMOs will be met by “minimizing sediment delivery to streams from the road surface.” PACFISH at C-10 and C-11 under Roads Management (RF-3 (c)) states that RMOs will be met by “closing and stabilizing, or obliterating and stabilizing roads not needed for future management activities”. The Forest complies with RF-2d by performing road maintenance prior to timber haul, and complies with RF-3(c) by incorporating 31 miles of road decommissioning (approximately 4.3 miles of seasonal open roads and 26.6 miles of closed roads as listed in the FEIS Appendix G, Table G-3) into the project. ROD at 2. Finally, the ROD at 10 states that temporary road construction and road use were issues raised during the public comment period and that “all action alternatives were developed with design features (FEIS, Chapter 2, Table 2-5) and site-specific BMPs (FEIS, Appendix D) to lessen impacts to water quality.”

Appellant Statement #64: Appellant states that the analysis failed to adequately disclose the full effects of logging and how it will degrade unroaded areas, mature and old forests, and aquatic systems. TLC at 94.

Response: I find that the analysis fully disclosed the effects of the project on undeveloped areas, mature and old forests, and aquatic systems. See response to Appellant Statement #1 through #16 for information on how the Forest considered impacts to other undeveloped areas (unroaded areas). See response to Appellant Statement #32 through #37 for information on how the Forest considered impacts to mature and old forests. See response to Appellant Statement #57 through #63 for information on how the Forest considered impacts to aquatic systems.

Appellant Statement #65: Appellant states that the Forest failed to demonstrate or provide rationale that shows that commercial logging in RHCAs is needed to meet RMOs. TLC at 94 and 95. Appellant states that the Forest must disclose which RMOs are not currently being met and how commercial logging in RHCAs is needed to meet those specific RMOs. TLC a 95.

Response: I find that the Forest is not proposing commercial harvest in RHCAs.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The ROD at 3 (Table 1) and the proposed action (FEIS at 1-9; FEIS at 2-17 and 2-18) states that RHCA mechanical fuels treatment is non-commercial. The ROD at 13 states that the proposed RHCA thinning will help determine effects of future fuel reduction opportunities in RHCA's that are in overstocked condition. The Fuels Specialist Report (RHCA treatment) at 1 states that "the purpose of this project is to reduce probability of crown fire initiation by treating ladder fuels and to reduce crown fire spread by using treatments to disrupt canopy continuity in dry forest RHCAs and utilizing prescribed fire to reduce existing and created ground material. To illustrate that the project assures RHCA RMO's are met, and why timber management in RHCAs is consistent with PACFISH policy." South George Project Record, Pomeroy Ranger District, Fuels Report on RHCAs. See also response to Appellant Statement #57.

Appellant Statement #66: Appellant states that the current best available science indicates that RHCA buffers are inadequate. TLC at 95. Appellant further states that the FEIS failed to document riparian areas that are within the project area and have not been buffered. TLC at 95.

Response: I find that the Forest provided adequate documentation regarding riparian buffer widths and that site specific monitoring has shown that these buffer widths are effective.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed.

The ROD at 5 states that "information in the project file shows a thorough review of relevant scientific information, a consideration of responsible opposing views, the acknowledgement of incomplete or unavailable information, scientific uncertainty and risk." Appendix L-1 states that "best available science for South George analysis was evaluated and incorporated in specialist reports and in the Literature

Citation section.” The ROD at 3 ensures that project-specific design features and management requirement in FEIS, as well as BMPs in Appendix D of FEIS will be implemented. The FEIS at 2-19 (Table 2-5) specifically describes RHCA buffers, which vary by stream class, while the FEIS at 2-20 states that the Forest will “implement and monitor BMPs and incorporate findings into project implementation.”

The Forest also documented monitoring that occurred in 2006 during implementation of the School Fire Salvage Project. Monitoring showed that average buffer widths on the ground exceeded prescribed buffer widths in all stream categories. FEIS at 3-31. Thus, it can be expected that compliance with buffer widths would occur in the future.

Additional direction to comply with buffer widths is found in Appendix D (BMPs) at D-1, which states “follow PACFISH standards and guidelines. Timber Management, Roads Management, and Fire/Fuels Management standards and guides apply to this project.” Further stated at D-1, is “ephemeral stream channels should have protections to minimize equipment disturbance of duff and soil, and should not be used as skid trails, landing sites, or as road locations,” and ephemeral draws not in RHCAs are to meet down wood requirements to reduce risk of scour channel initiation. Finally, the FEIS at 3-23 states that commercial timber harvest would not occur inside of interim PACFISH RHCAs.

Regarding appellant’s statement that there are riparian areas that have not been buffered, final sale layout may not yet have occurred. The inclusion of the project design feature for buffers in the FEIS at 2-19 ensures that during sale preparation, appropriate RHCA buffers will be applied to streams and riparian areas.

Reducing Wildfire

Appellant Statement #67: Appellant states that the FEIS failed to adequately analyze the adverse impacts of further reducing wildfire, especially high intensity fire, which some wildlife species depend on for habitat, in whole or in part. TLC at 95.

Response: I found the FEIS provides analysis of the impacts to wildlife species dependent in whole or part upon post-fire habitat.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS at 86 states that “[t]aking no action in the project planning area would result in FRCCs to continue to be outside their historical range of variability (HRV) and further deviation from HRV would occur across the landscape. In dry upland forests as defined in Hessburg et al. (2005), fire severity, intensity, frequency, and vegetative characteristics would continue to place ecosystem function at risk in the event of an uncharacteristic wildfire (FRCC Handbook). In the absence of treatment in South George project planning area, Fire Regimes I and III would continue to shift from frequent low/mixed severity fires to infrequent moderate/high severity fires characterized by increased fire return intervals and associated fire disturbance severities.”

The FEIS addresses possible improvement to habitat through wildfire in the direct and indirect effects of the Alternative A (No Action) species discussion for big game and states that “[g]rassland on ridges and open slopes need to burn occasionally to invigorate plant growth.” FEIS at 106. For cavity nesters, the FEIS states that “[t]here is an increased risk of wildfire that could reduce nesting habitat for some

species, but other woodpecker species would respond positively. The black backed woodpecker and Lewis' woodpecker would benefit in the short and mid-term, due to their preference for burned stands. Most other woodpeckers would respond to fire by shifting their use to adjacent unburned or lightly burned stands." FEIS at 125. For Canada lynx, the FEIS states that "[t]he potential for fires may increase, but generally fire creates better habitat for snowshoe hare, the primary prey of Canada lynx." FEIS at 135.

Additionally, fuels treatments, including landscape and unit burning, proposed in each action alternative is discussed as a tool to improve certain species' habitat, i.e. all woodpecker species, big game, northern goshawk, and lynx, and reduce risk of a stand replacing event. Fuels treatment results are discussed in the action alternative direct and indirect discussions in the old growth section (FEIS at 102-103), the MIS section (FEIS starting at 107-128), the northern goshawk section (FEIS at 128-130), and the landbird section (FEIS at 133-134). Beneficial snag creation through fire or fuels treatments is also discussed throughout the MIS section, the landbird section, and the TES section.

The Forest also responded to a similar comment on the DEIS. The response to comments fully documents how species such as the black-backed woodpecker, which is one of sixteen different species of birds that are included in the group labeled "primary cavity excavators" in Umatilla Forest Plan, are considered. FEIS Appendix K at K-91. The FEIS explicitly addresses the project's effects on primary cavity excavator habitat. FEIS at 3-121 through 3-127. The response to comments continues by stating that "[w]hile the risk of high severity in the South George project area would be reduced, wildfire risks are not reduced throughout Umatilla National Forest. Untreated areas, patches within units, and unmanaged areas (including inventoried roadless areas and wilderness) still remain susceptible to high severity fire. These areas account for a large portion of the land area of Umatilla National Forest, leaving ample land scattered across the forest, the area on which viable populations are measures, as potential habitat for black-backed woodpecker. As mentioned in response to Comment TLC-15 - Over 75,000 acres of the district burned in wildfires in 2005 and 2006, e.g. School and Columbia Complex, (DEIS, Chapter 3, page 3-118). Stand replacement burns are currently not at a deficit in this area." FEIS at K-91 to K-92.

Impacts from Grazing

Appellant Statement #68: Appellant states that the "FEIS failed to address cumulative impacts from livestock grazing or to disclose alternative provisions for the removal of livestock from logged and burned areas for a minimum of five or more years to allow the areas to recover post project." TLC at 93.

Response: I find that the FEIS addressed the potential for grazing to add to cumulative effects.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. Chapter 3 of the FEIS specifically lists the Asotin C&H Allotment and a past and ongoing.

In the effects analysis, the possibility for grazing to contribute to cumulative effects is disclosed, where relevant. Specifically, cumulative effects from grazing is addressed for: soils (FEIS at 3-6); water yield, sediment, and hydrology (FEIS at 3-18, 3-26, 3-27, and 3-29); fisheries (FEIS at 3-36, 3-37, 3-39, 3-40, 3-42, 3-44, 3-103); wildlife (FEIS at 3-109, 3-110, 3-119, 3-129, 30-130 and 3-140) and invasive species (FEIS at 3-148). Analyses of project activities on range and grazing are displayed in Chapter 3. FEIS at 3-

154. Lastly, resource protection measures were included to protect range fences during project implementation. FEIS at 2-23.

This project is not a post-fire project, so it is unclear how the appellant relates post fire recovery from grazing to this project.

Role of Fire

Appellant Statement #69: Appellant states that the FEIS arbitrarily treats high-intensity fire as if it is unnatural and also portrays the historical fire regime inaccurately. TLC at 96.

Response: I find that the Responsible Official used the best available science regarding fire regimes and fire history.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed.

The FEIS does not portray high intensity fire as “unnatural”. High severity fire regimes do occur within the planning area. FEIS at 3-78. The purpose of the project is to reduce the occurrence of uncharacteristic high severity fires, which are those fires that are in high fire regimes, but are also in condition class 2 or 3, which means the fire regimes on these acres have been altered and fire frequencies have departed from natural frequencies by one or more intervals or multiple intervals. FEIS at 3-79.

See also response to Appellant Statement #17 for more information regarding fire regimes.

Appellant Statement #70: Appellant states that scientific data contradicts the Forest’s assumptions that pre-fire suppression era wildfire in eastern Oregon’s forests burned only at low-intensity levels and patches of high-intensity fire are uncharacteristic or unnatural. TLC at 97.

Response: I find that the Responsible Official used the best available science regarding fire regimes and fire history.

See responses to Appellant Statement #17 and #69 for more information regarding high intensity fire and fire regimes.

Appellant Statement #71: Appellant states that the FEIS makes scientifically unsound and inaccurate assumptions that a loss of wildlife habitat and ecosystem value is caused by wildfire. TLC at 97.

Response: I find the Responsible Official’s decision did consider the best available science when analyzing the impacts to wildlife species.

The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed. The FEIS at 3-98 states, “The best available science (Literature Cited) was used to determine

effects to wildlife species in a manner appropriate for the circumstances. Vegetation information used in habitat evaluation was obtained from the project Silviculturist or from GIS databases.”

See response to Appellant Statement #69. As stated there, wildlife habitat and ecosystem values may be ‘lost’ if an uncharacteristic wildfire occurs, which means that the vegetation that support that particular species would be altered such that it would no longer be considered useable habitat. This project aims to reduce the occurrence of those uncharacteristic fires. As stated in the response to comments, stand replacement burns are not deficit in the area, given that over 75,000 acres of the Pomeroy Ranger District burned in 2005 and 2006. FEIS Appendix K at K-92. Wildfires, including high severity fires, would continue to occur naturally throughout the District in both untreated and unmanaged areas. FEIS Appendix K at K-91. References regarding the science used in the analysis are documented throughout the FEIS, including the vegetation and fuels sections, and in the references section of the document. FEIS Appendix L at L-14 to L-31 and L-35 to L-37.

Soils

Appellant Statement #72: Appellant states that the FEIS does not demonstrate how the cited soil assessment methodology results in reliable and accurate data predictions of detrimental soil conditions (DSC) as defined in the Forest Plan. TLC at 102.

Response: I find that the Responsible Official used the best available science and applied Forest Plan Standards and Guidelines and considered the soils analysis in the FEIS when making his decision to implement the South George Project.

The regulation at 40 CFR 1502.24 requires the agency to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. Forest Service guidance (June 20, 2007) regarding the use of best available science during project planning was followed. Under this policy, the Forest Service is required to document how the best available science was considered in the planning process within the context of the issues being considered. The Responsible Official followed agency direction in applying and considering the best available science. The FEIS identifies methods used and references relied on for describing the affected environment and environmental effects. FEIS at 3-4 to 3-14. Timber harvest units in the South George planning area were assessed for impacted soils using field observations, the soil inventory (SRI) with field verification, prior activity and knowledge of the sites from previous assessments. Forest and regional assessment protocols were followed. FEIS at 3-6.

The FEIS contains a thorough analysis and discussion of detrimental soil conditions related to project activities. Project design features intended to ameliorate impacts to soils will be fully implemented and were used in the assessment of detrimental soil conditions. ROD at 10; FEIS at 2-12 to 22. Forest Plan standards and guidelines were assessed against project activities and effects analysis and found to be consistent with the Forest Plan. FEIS at 3-14.

Appellant Statement #73: Appellant states that the FEIS does not explain how the Forest Plan’s assumptions that acceptable soil productivity potential are defined. TLC at 102 and 103. Appellant states that the Forest didn’t answer the question as to whether soil disturbance crosses the ‘detrimental’ threshold and doesn’t affect soil productivity. TLC at 103.

Response: I find that the appellant’s assertion that the Forest Plan’s assumptions that acceptable soil productivity potential are not defined is outside the scope of this decision; the FEIS tiered to the Forest

Plan and those assumptions and analyses will not be revisited. FEIS at 1-10. The Forest Plan standard of a minimum of 80 percent of an activity area is to be maintained in a condition of acceptable productivity potential is documented in the FEIS at 4-80. I further find that the Responsible Official had adequate information to make an informed decision relative to the detrimental thresholds for soil productivity.

Forest Plans are prepared in accordance with the Secretary of Agriculture regulations (36 CFR 220), the National Forest Management Act (1976) and in accordance with NEPA regulations (40 CFR 1500) for implementing the National Environmental Policy Act (1969). This Responsible Official's decision does not include any amendments to the Forest Plan nor does it revise the Umatilla National Forest Plan; as such, compliance with Forest Plan standards is required.

The South George Project record contains all the specialist reports including the soils report which is referenced in the FEIS. FEIS at 3-4. The Soils Report Appendix A lists all harvest and hand thinning units and the percent of detrimental soil conditions in each unit post project activities. South George Project Record, Pomeroy Ranger District, Soils Report Appendix A at 25-27. As displayed there, none of the harvest units would exceed 11% total DSC after project activities were implemented. In addition, existing areas of DSC would be reused and any new DSC would be mitigated by decompaction and seeding. FEIS at 3-14.

See also response to comments, FEIS Appendix K at K-115 to K-117.

Appellant Statement #74: Appellant states that the Forest fails to adequately cite monitoring to validate estimated methodologies that would demonstrate that DSC has been accurately measured. TLC at 103.

Response: I find that the Forest adequately cited methodologies that demonstrate how to measure DSC. The FEIS at 3-5 states that "guidance for methodology includes: Protocol for Assessment and Management of Soil Quality Conditions, Umatilla National Forest, 2002; and Guidelines for Sampling Some Physical Conditions of Surface Soils, Howes, Hazard, and Geist, US Forest Service Pacific Northwest Region, 1983". In addition, the FEIS states that "[i]t is common for operations on Umatilla National Forest using ground-based systems to impact less than 8 percent of an activity area. Skyline and helicopter systems have even lower results; typically less than 5 percent of an activity area is affected. Anticipated environmental effects are based on monitored results of previous timber harvest operations on Umatilla National Forest." FEIS at 3-9.

Appellant Statement #75: Appellant states that the FEIS does not validate that disturbed soils can be restored to the point where the site is no longer categorized as DSC. TLC at 103.

Response: I find that the FEIS does demonstrate how soils can be restored over time.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects.

The FEIS at 3-6 states "how long soils remain compacted (after soil disturbance) is determined by natural recovery rates or tillage operations or both." A project requirement is found in the FEIS in order to help mitigate effects to soils. The FEIS Appendix D at D-1 states "all temporary roads and landings shall be obliterated at the end of their intended use" while FEIS Appendix D at D-5 details what actions are to

occur to effectively obliterate temporary roads and landings. Project design features are prescribed to protect soils during burning and logging operations. FEIS at 2-21 and 2-22.

The FEIS provides further information that demonstrates that soils have the ability to recover. The FEIS states that “[r]esponse of soils and stands to earlier harvest activities with much greater disturbance levels than proposed in this project indicates that ecotypes (soils and vegetation) in the project planning area are resilient to disturbance. Tree growth and soil surface recovery is excellent in plantations in the area, providing indication of recovery of mycorrhizae populations. Positive repopulation in highly disturbed sites is observed in Harvey et al. 1997.” FEIS at 3-9 and 3-10.

Appellant Statement #76: Appellant states that the Forest “confuses the issues of soil disturbance and soil productivity” and does not fully recognize the internal controversy surrounding its own use of SQS standards for compliance with NFMA. TLC at 103 and 105.

Response: I find the Responsible Official’s decision was consistent with Forest Service soil standards.

The Region 6 supplement to Forest Service Manual 2500-98-1 directs that new activities must be designed to not exceed detrimental soil conditions on more than 20 percent of activity area and cumulative detrimental effects following implementation must not exceed 20 percent. Soil conditions exceeding these levels of acceptable productivity are considered to be in a detrimental soil condition (DSC). The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7.

Chapter three in the FEIS describes the direct, indirect, and cumulative effects to the detrimental soil condition incorporating the existing detrimental soil condition in the project area. FEIS at 3-13. The effects analysis is spatially bound by harvest unit boundaries, temporary access routes to those units, and the time it would take the soil to recover from impacts. FEIS at 3-13. The summary for cumulative detrimental soil condition by alternative in relationship to the existing condition is found in FEIS at 3-14. Soil productivity can be affected by an increase in bulk density, displacement, erosion or severe burns. FEIS Appendix K at K116 to K-117. Soil mycorrhizae populations can also be affected by harvest operations. FEIS at 3-9. Project design features are prescribed to protect soils during burning and logging operations, thus protecting the productivity of the soil. FEIS at 2-21 and 2-22. Thus, I find that soil productivity and soil disturbance were adequately defined and assessed.

Appellant Statement #77: Appellant states that the FEIS does not disclose the extent of compacted surfaces and fails to quantify detrimental soil conditions (DSC) unless they are within proposed treatment areas (units). TLC at 105. Appellant further asserts that the FEIS relies upon anecdotal evidence to state that DSC doesn’t matter and treats Forest Plan standards as meaningless, since consistency is not demonstrated with conformance to a quantitative standard. TLC at 107.

Response: I find that Forest Service Manual (FSM) direction (FSM 2550) was followed in determining the extent of detrimental soil conditions for use in the effects analysis of the FEIS. A forest-approved protocol was utilized to evaluate the extent of existing detrimental conditions caused by past activities in proposed treatment areas. South George Project Record, Pomeroy Ranger District, Soils Report at 12.

The regulation at 40 CFR 1502.16 requires the agency to disclose the direct and indirect effects of the proposed action and any alternatives, while the regulation at 40 CFR 1508.7 describes how the agency will consider cumulative effects. Manual direction (FSM 2550) directs the Forest to evaluate soil impacts

across the proposed activity area, including the associated permanent and temporary transportation systems. Treatment units were visited and evaluated using an established forest protocol and included the transportation system (FEIS Appendix E at E-7, South George Project Record, Pomeroy Ranger District, Soils Report at 13 and 24). The results of the evaluation are displayed by activity unit in Table E-6 (FEIS Appendix E at E-8 to E-10). Thus, site evaluations were not based on anecdotal evidence as alluded to by the appellants.

Forest Plan standards are described in the FEIS for soils. Detrimental soil conditions and effective ground cover standards are documented in the FEIS at 3-5. The standard of maintaining 80% of an activity area in acceptable productivity potential and maintaining effective ground cover based on erosion hazard class are clearly displayed. FEIS at 3-5 and 3-7. The Soils Report Appendix A lists all harvest and hand thinning units and the percent of detrimental soil conditions in each unit post project activities. South George Project Record, Pomeroy Ranger District, Soils Report Appendix A at 25-27. As displayed there, none of the harvest units would exceed 11% total DSC after project activities were implemented. Thus, all project activities would result in effects that are within thresholds and Forest Plan standards and guidelines would be met. FEIS at 3-13 and 3-14. In addition, the Forest responded to similar comments to the DEIS and documented their response in the FEIS Appendix K at K-115 and K-208 to K-209. Based on the information found in the FEIS and Appendices, I find that the decision presented in the ROD was based on the site-specific information and that Forest Plan standards will be met.

Appellant Statement #78: Appellant states that the forest failed to adequately address the spread of noxious weeds that further compromise soil productivity. TLC at 107.

Response: I find that the Responsible Official's decision addresses the threat of noxious weeds within the project area and that the selected alternative adequately manages for soil productivity.

The Pacific Northwest Region Final Environmental Impact Statement for the Invasive Plant Program and associated Record of Decision in 2005 amended the Umatilla National Forest Plan. FEIS at 3-142. As such, noxious weed sites will be treated consistent with the 2005 Region 6 Invasive Plant FEIS and the July 2010 Umatilla National Forest Invasive Plant Treatment Project FEIS and ROD. FEIS Appendix K at K-237. Prevention standards are incorporated in Chapter two (FEIS at 2-22) of the FEIS and are listed in detail in Appendix A of the Invasive Plant Specialist Report. FEIS at 3-142.

The decision includes specific project design measures intended to help prevent the spread of noxious weeds and promote native plant groups, including avoiding adding excessive detrimental soil effects by operational design and revegetating with native weed-free species (grasses and trees). FEIS at 2-22 to 2-23; South George Project Record, Pomeroy Ranger District, Soils Report at 19. The decision incorporates the design features and resource protection measures from the FEIS, and as such, adequately addresses the potential for further impacts to soil productivity. ROD at 3.

Appellant Statement #79: Appellant states that the FEIS doesn't disclose areas with landslide potential in the project area, as observed by appellants in their field visits. TLC at 108.

Response: I find the Responsible Official adequately analyzed effects to soil resources within the project analysis area. The project area was analyzed for potential landslide activity.

Interdisciplinary team members must identify the environmental issues related to the proposed action and when necessary conduct an effects analysis comparing effects of alternatives. FSH 1909.15. The

environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7.

The Forest addressed a similar comment from appellant. All proposed activity units were compared with known landslides. FEIS Appendix K at K-115. Soils analysis found that despite steep terrain in the steep side-slope areas, the rock type is quite stable with relatively little mass movement activity. Events generally are limited to shallow debris slides from buildup of rock fragments. There are no mapped areas of land slump indicated in the Umatilla Soil Resource Inventory nor are any indicated from the Land Type Associations layer within the project area. South George Project Record, Pomeroy Ranger District, Soils Report at 6.

Impacts of Illegal Logging

Appellant Statement #80: Appellant states that the FEIS does not address the illegal logging taking place within timber sale units (appellant notes 7 units), which further adds to soil compaction. TLC at 108. Appellant states that the skid trails caused by this “timber theft” have not been analyzed, in particular with regards to cumulative effects with cattle grazing, snag removal, etc. TLC at 108.

Response: I note that the field inventory sheets submitted by appellant are all dated in August of 2012. The record of decision was signed by the Forest Supervisor on July 17, 2012. As such, he had no opportunity to work with appellants to resolve their concerns regarding potential timber theft in these units prior to signing his decision. Scoping, which is a process that is used to identify significant environmental issues deserving of study, did not yield any unit specific concerns. 40 CFR 1501.7. In addition, appellant submitted comments during the 45-day comment period (40 CFR 1503.3) and did not include any unit specific concerns. Thus, I encourage appellant to work with the Forest in a timely manner and surface their unit specific concerns early in the process, such that the Forest has an opportunity to respond.

If timber theft is occurring, law enforcement would be called to investigate. Based on field data collected by law enforcement and by timber staff, the Responsible Official would determine if a ‘changed condition’ had occurred since he had signed his ROD. The Responsible Official would then follow the process outlined in FSH 1909.12, 18.1 to determine if any additional actions needed to be taken.

Comments

Appellant Statement #81: Appellant states that the FEIS did not seriously incorporate their comments. TLC at 108.

Response:

I find the Responsible Official adequately addressed and considered comments provided on the project. The project had an early and open scoping process and all comments received in the official comment period were reviewed and responded to. Multiple alternatives were developed in response to comments and feedback. The selected Alternative B also incorporated suggestions and comments received on the original proposed action.

Pursuant to 40 CFR 1503.1 the Forest Service is required to invite and request comments on the DEIS allowing for a minimum of a 45 days period. The agency must also review, analyze, evaluate, and

respond to substantive comments on the DEIS. 40 CFR 1503.4. The Responsible Official determines an appropriate summary that accurately reflects all substantive comments and at a minimum includes copies of all comments received on the draft from Federal, State, and local agencies and elected officials. FSH 1909.15, 24.1.1. The scoping process can also identify issues deserving of study and also deemphasize insignificant issues. 40 CFR 1500.4.

A summary of the scoping period, comment period, and issue identification can be found in Chapter two of the FEIS at 2.1 to 2.6. Comments on the DEIS with associated Forest Service responses can be found in their entirety in Appendix K. Specific to appellant, including co-signers of the appeal, FEIS Appendix K at K-41 to K-207 (166 pages) and FEIS Appendix K at K-208 to K-258 (50 pages) document comments received and provide a response, thus complying with the regulation at 40 CFR 1503.4. Thus, I find that the Responsible Official considered all comments and feedback, fully documented his response to comments (FEIS Appendix K) and summarized how Alternative B will address each issue. ROD at 8 to 10. Rationale for not selecting each alternative presented in the FEIS after analysis and feedback is found in the ROD at 17 to 18.

Appellant Statement #82: Appellant contends that “the Forest Service was arbitrary and capricious in the development of the preferred alternative by virtually ignoring input from forest industry regarding the economics of this project and failing to recognize the critical nature of retaining the current forest industry infrastructure. Further, the Forest Service is not treating enough acres in the planning area to meet the purpose and need of the South George Vegetation and Fuels Reduction Project.” AFRC at 5.

Response: I find the Responsible Official was not ‘arbitrary and capricious’ in developing or selecting the preferred alternative and adequately addressed economic impacts of the proposed actions. The Responsible Official selected the alternative that met the purpose and need of the project, and complies with Federal and local laws and regulations. Management treatments were selected to provide landscape level treatments while also providing for resource stewardship and protection.

The basic definition of arbitrary and capricious is absence of a rational connection between the facts found and the choice made. *Natural Resources Defense Council. v. U.S.*, 966 F.2d 1292, 97, (9th Cir. '92). Pursuant to 40 CFR 1503.1 the Forest Service is required to invite and request comments on the DEIS allowing for a minimum of a 45 days period. The agency must also review, analyze, evaluate, and respond to substantive comments on the DEIS. 40 CFR 1503.4. The Responsible Official must make a decision encompassed within the range of alternatives analyzed in the environmental documents. 36 CFR 220.4(c).

The Responsible Official reviewed relevant scientific information, considered responsible opposing views, acknowledged incomplete or unavailable information, reviewed scientific uncertainty and risk, reviewed the Forest Plan, applicable laws, regulations, and Forest Service Policies. ROD at 5. A comparative synopsis of each alternative exhibits how Alternative B meets each element of the purpose and need. FEIS at S-12 to 15. Overall, the agency articulated a rational connection between the factual findings it made and the decision it rendered.

A summary of the scoping period, comment period, and issue identification can be found in Chapter two of the FEIS at 2.1 to 2.6. Comments from industry representatives on the DEIS with associated Forest Service’s responses can be found in the FEIS Appendix K at K-28 to K-36. The Responsible Official considered all comments and feedback and summarized how Alternative B will address each issue. ROD at 8 to 10. Rationale for not selecting each alternative after analysis and feedback is found in the ROD at 17 to 18. An economic analysis was completed to address potential effects to local economies and to

address the purpose and need statement of providing sawlogs and wood fiber for utilization by local and regional economies. FEIS at 3-170.

Unit Specific Comments

Appellant Statement #83: Appellant states that the FEIS does not analyze the unique impacts to Unit 12, nor does it disclose that this unit contains a burned area that will be “salvage” logged. TLC at 100.

Response: I note that the field inventory sheets submitted by appellant are all dated in August of 2012. The record of decision was signed by the Forest Supervisor on July 17, 2012. As such, he had no opportunity to work with appellants to resolve their concerns regarding these units prior to signing his decision. Scoping, which is a process that is used to identify significant environmental issues deserving of study, did not yield any unit specific concerns. 40 CFR 1501.7. In addition, appellant submitted comments during the 45-day comment period (40 CFR 1503.3) and did not include any unit specific concerns. Thus, I encourage appellant to work with the Forest in a timely manner and surface their unit specific concerns early in the process, such that the Forest has an opportunity to respond.

If a fire had occurred since the time field data were collected, the Responsible Official would determine if a ‘changed condition’ had occurred since he had signed his ROD. The Responsible Official would then follow the process outlined in FSH 1909.12, 18.1 to determine if any additional actions needed to be taken.

Appellant Statement #84: Appellant submitted an attachment which they state documents numerous issues with the harvest units. TLC at Attachment 1.

Response: I note that the field inventory sheets submitted by appellant are all dated in August of 2012. The record of decision was signed by the Forest Supervisor on July 17, 2012. As such, he had no opportunity to work with appellants to resolve their concerns regarding these units prior to signing his decision. Scoping, which is a process that is used to identify significant environmental issues deserving of study, did not yield any unit specific concerns. 40 CFR 1501.7. In addition, appellant submitted comments during the 45-day comment period (40 CFR 1503.3) and did not include any unit specific concerns. Thus, I encourage appellant to work with the Forest in a timely manner and surface their unit specific concerns early in the process, such that the Forest has an opportunity to respond.

Purpose and Need/Proposed Action

Appellant Statement #85: Appellant states that the project does not adequately move forest structure, species composition, and stand density toward their historic range of variability. AFRC at 2; BC at 4.

Response: I find the Responsible Official selected the alternative which will meet the purpose and need to move forest structure, species composition, and stand density toward their historical ranges of variability.

The purpose and need for action discusses the relationship between the desired condition and the existing condition in order to justify the need for taking action. FSH 1909.15.41.21. The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7.

The proposed action is designed to address the project's purpose and need by improving forest health, vegetation vigor, and ecosystem resilience to fire, insects, and disease. Proposed silvicultural activities respond to the purpose and need by helping to move species composition, forest structure, and tree density back within their historical range of variability. FEIS at 3-62. The proposed action reduces tree density and surface fuel loadings, and increases representation of early-seral tree species. FEIS at 3-62. The Responsible Official reiterated that Alternative B-Modified will make significant progress in moving the project planning areas toward historical vegetative and fuel conditions. ROD at 6.

For more information on how implementation of the selected alternative B moves forest stands towards historic ranges in forest cover type, structure, and tree density, see response to Appellant Statement #86.

Appellant Statement #86: Appellant states that "it is unclear that stands are improved and moved toward HRV by leaving them in the SECC or the SEOC structural condition where, per O'Hara, competition remains limiting. Further, this strategy minimizes the fuel loads removed from overstocked stands and minimizes the amount of merchantable sawlog volume removed. Trees greater than 21 inches at dbh should be removed to help reduce competition in the residual stands and to provide suitable material for the forest infrastructure." AFRC at 3. Appellant concludes by stating that the "South George project does not treat enough acres to effectively move the planning area toward a "restored" or more resilient condition." AFRC at 3; BC at 3 and 4.

Response: I find that the Responsible Official selected the alternative which most effectively accomplishes the project's purpose and need. The FEIS and ROD explains that there are multiple components to moving vegetation into the historic range of variability including treatment effects differing between forest cover types, forest structure, and forest tree density. Furthermore, not all SECC or SEOC stands remain in the stand exclusion phase following treatment. Overall, the project area moves towards a more resilient landscape and towards historic ranges of variability.

The purpose and need for action discusses the relationship between the desired condition and the existing condition in order to justify the need for taking action. FSH 1909.15.41.21. The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7.

The vegetation direct and indirect effects section of the FEIS explains how Alternative B moves stands toward their historical ranges, to the extent practical. As documented in the FEIS, it isn't possible to move every stand into HRV because: (1) a relatively low proportion of area is being treated, which limits the opportunity to change under- or over-represented forest cover types, forest structural changes, and tree density classes. Alternatives B and C only affect 25 percent of the forested portion of the planning area and 28 percent of the forest vegetation affected environment (FEIS at Table 3-16); and, (2) proposed silvicultural activity units cannot generally address every issue simultaneously. Very few individual units address all three of the forest vegetation indicators concurrently, so certain activity units directed toward one indicator may have a neutral or negative effect on another indicator, depending on a unit's suitability for addressing indicators, and on a priority setting between units. FEIS at 3-62. As documented in his ROD, Alternative B makes "significant progress in moving the project planning area toward historical vegetative and fuel conditions." ROD at 6.

Not all the SECC and SEOC stands will remain in the stand exclusion phase following treatment; some stands may change from SECC to SEOC or to SI (stand initiation). South George Project Record, Pomeroy Ranger District, Silviculture Report at 105-109.

A Forest Plan Amendment would be needed to remove trees greater than 21 inches dbh in the moist forest type, and was not proposed for this project because implementing the preferred alternative would result in reasonable progress on species composition objectives. The cutting of larger diameter trees (>21 inch dbh) in the dry forest is proposed and allowed under the Eastside Screens guideline (FEIS at J-8 to J-9). Objectives of removing some trees greater than 21 inches dbh include increasing ponderosa pine and decreasing grand fir for the dry Umatilla biophysical environment. FEIS Appendix C at C-7; FEIS Appendix K at K-30.

Appellant Statement #87: Appellant states that the project does not adequately manage stands in fire conditions classes 2 and 3 to reduce fuel loads and transition those stands toward historic fire regimes. AFRC at 3 and 4; BC at 3 and 4.

Response: I find the Responsible Official selected the alternative which will meet the purpose and need by managing forest stands in Condition Classes 2 and 3 to begin to restore vegetation characteristics and fire return intervals characteristics of historic fire regimes.

The purpose and need for action discusses the relationship between the desired condition and the existing condition in order to justify the need for taking action. FSH 1909.15.41.21. The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7.

Overall with the proposed actions of alternative B, FRCC condition classes 2 and 3 are proposed to be treated and 45 percent of the upland forest would move towards a more resilient and historical representative condition. FEIS at 3-88. As documented in the FEIS, 87% of the planning area is in condition class 2, while 12% is in condition class 3. FEIS at 3-76. This project alone shifts stand composition that results in an increase in the resiliency of the landscape and helps reduce the severity of effects during wildfire events. FEIS 3-88.

Appellant Statement #88: Appellant states that the ROD does not meet the purpose and need to provide saw logs and wood fiber for utilization by regional and local economies. BC at 3. Appellant further states that the ROD does not specify how much volume will be removed or the ratio of saw logs to non-saw logs that would be harvested. BC at 3.

Response: I find the Responsible Official selected an alternative which meets the social economic secondary objective to provide sawlogs and wood fiber for utilization by local and regional economies. The FEIS does analyze for each developed alternative the proposed volume harvested, the value/CCF, and the total timber value at predicted high bid rate.

The purpose and need for action discusses the relationship between the desired condition and the existing condition in order to justify the need for taking action. FSH 1909.15.41, 21. The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7. The Umatilla Forest Land and Resource Management Plan includes an objective to provide for production of wood fiber consistent with various resource objectives, environmental constraints, and considering cost efficiency. Forest Plan at 4-67.

Alternative B-modified will meet the purpose and need of the project and will also accomplish Umatilla National Forest Plan objectives. The selected alternative has the least cost per acre of the three action

alternatives and has the highest predicted bid rate. FEIS at 3-174. Table 3-80 shows the economic comparison by Alternative including volume harvested, total timber value predicted at high bid rate, and cost per acre. FEIS at 3-174. The cumulative effects associated with this project may bring the local economy some increased relative stability during the life of the project. FEIS 3-175.

This analysis does not reference the ratio of saw logs to non-saw logs because this type of information is determined when the units are cruised, which is typically done after a decision is made. The purpose and need of the project does include the intent of the Regional Forester Kent Connaughton's letter of March 30, 2012 which expresses the need to provide for sawlogs and wood fiber. FEIS at K-36.

Industry/Infrastructure/Economics

Appellant Statement #89: Appellant states that retention of industry infrastructure is not identified as a key issue. AFRC at 4. Appellant states that the project only treats a small portion of the planning area which is not adequate in terms of wood products generated, especially when compared with the high costs of planning. AFRC at 4.

Response: I find the Responsible Official adequately addressed issues and key issues and justifies the amount of acres treated within this project.

Issues serve to highlight effects or unintended consequences that may occur from the proposed action and alternatives and are phrased as a cause-effect statement relating actions under consideration. FSH 1909.15. The Responsible Official approves the issues to be analyzed in depth by the ID team in the environmental analysis. FSM 1950.41.

The FEIS describes fifteen issues including one on economics evaluating sale viability and benefit to local and regional economy in each developed alternative. FEIS at 2-6. It was not selected as a 'key issues' because it was not deemed to be an unresolved conflict that needed the development of an additional alternative. FEIS at 2-2.

The analysis justifies the total treatment percentage because 61 percent of the Umatilla National Forest is unavailable for timber harvest, leaving only 39 percent of the land base that can generate timber sales and wood products. FEIS at K-34. In the South George project planning area, 6,940 acres of the 21,000 acres are either non-forest or unsuitable for timber production. Treatment on 36 percent of the affected environment is deemed to be a reasonable treatment percentage in regards to other wildlife habitat and water quality objectives. FEIS at K-34.

Appellant Statement #90: Appellant states that the economic analysis was inadequate, did not consider the entire area affected by the project, and did not analyze the cumulative effects of how the timber sale would affect governments, counties and infrastructure outside of Asotin and Garfield. BC at 2. Appellant further states that the agency didn't properly analyze how the project will affect the local community through the receipts between the Federal Government and the county. BC at 2.

Response: I find the Responsible Official did consider the appropriate affected area with regards to economic and social impacts.

The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR

1508.7. The Responsible Official has the designated authority to establish the scope of the environmental analysis, including the scope of the actions, alternatives, and effects. 40 CFR 1508.25.

The geographic scope of the economic analysis included Aston and Garfield Counties in Washington State. This was an appropriate scope of analysis because the project would occur entirely in Aston County and wood products would most likely be transported to and processed in Clarkston, Washington (Aston County). FEIS at 3-171. Details of the affected environment for economics, including community demographics and employment, can be found in Chapter three and within the economic and social specialist report. South George Project Record, Pomeroy Ranger District, Economic and Social Report.

Alternative B-Modified is not expected to have any additional cumulative effects on local economies; however, jobs and income associated with implementing that action may bring the local economy some increased relative stability during the life of the project. FEIS 3-175. Timber receipt distribution is a congressionally determined measure that is outside the decision maker's authority.

See response to Appellant Statement #89 for more information regarding economic effects of timber and wood product removal.

Impacts to Adjacent Lands

Appellant Statement #91: Appellant states that the ROD does not properly mitigate the potential spread of disease, insects and wildfire onto adjacent private land. BC at 3.

Response: I find the Responsible Official did consider the appropriate affected area in relation to economic and social impacts.

The environmental consequences portion of the analysis must include direct and indirect effects and their significance as well as cumulative effects considered with past actions. 40 CFR 1508.8 and 40 CFR 1508.7. The Responsible Official has the designated authority to establish the scope of the environmental analysis, including the scope of the actions, alternatives, and effects. 40 CFR 1508.25.

The FEIS does address how the project would help reduce the potential for fire to spread onto private land. One example is that the approximate 25 acres of RCHA treatment, which is designed to protect the stands from fire moving up the drainage from private lands. FEIS at 3-21. In addition, a review of the proposed landscape burns (3,000 acres) shows that large treatment areas are proposed adjacent to private lands in order to reduce fuels that may contribute to fire spread. FEIS Appendix A, Alternative B Fuels Map.

With regards to insect and disease spread, the project silviculturist documented that the action alternatives would move a "substantial portion of the treated acreage from a high or moderate susceptibility condition (the pre-treatment condition) to a moderate or low conditions (the post-treatment condition). FEIS at 3-70; FEIS Appendix A, Alternative B Map. These treatments, when combined with the fuels treatments, improve stand conditions that reduce the potential for insect and disease outbreaks on National Forest System lands spreading to private lands. FEIS at 3-70.