

FY99 Replacement Volume Timber Sale Appendix M

**FISCAL YEAR 1999 REPLACEMENT VOLUME TIMBER SALE
ENVIRONMENTAL ASSESSMENT
APPENDIX M**

**ANALYSIS OF 30 DAY COMMENT PERIOD RESPONSES
(August 18 To September 17, 1999)
March 6, 2000**

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Range of Alternatives

Comment #1: “The EA does not present a reasonable range of action alternatives. The Proposed Action and Alternative #1 are exactly the same. Both propose the same amount of logging on the same acreage using the same logging systems and cutting methods with the same amount of temporary road construction. EA at 19. The environmental consequences of both action alternatives are exactly the same. EA at 10. In reality, there is no alternative to the Proposed Action other than the no-action alternative. This is not a reasonable range.”

“Alternatives to the Proposed Action exist that were not considered in detail by the Forest Service. ...the Forest Service is obligated to develop and describe reasonable alternatives that minimize the environmental consequences of a proposed action.” (Klamath Siskiyou Wildlands Center (KSWC), Headwaters, Siskiyou Regional Education Project¹)

Response #1: As stated in Section 1.3 of the Replacement Volume Timber Sale Environmental Assessment, “The purpose of the timber sale is to provide alternative timber volume for the Father Oak timber sale on the Siskiyou National Forest. This is pursuant to Section 2001(k)(3) of the Rescission Act (Public Law 104-19) and the September 17, 1996 Settlement Agreement in Northwest Forest Resource Council v. Glickman and Babbitt. Under the act and the agreement, such alternative timber must be “an

¹ Comments provided by the Klamath Siskiyou Wildlands Center (KSWC) were provided on behalf of KSWC, Headwaters, and the Siskiyou Regional Education Project.

equal volume of timber, of like kind and value, which shall be subject to the terms of the original contract” (or as otherwise acceptable to the purchaser). Designation of alternative timber must be done in consultation and agreement with the purchaser.”

Section 1.2, Brief Decision History, provides a discussion for the elimination of 13 units from the Proposed Action. It states “In the ensuing time period since the Proposed Action was initially released for scoping in June 1997, 13 of the 17 units were determined to no longer meet the Project’s Purpose and Need as defined under Section 2001(k)(3) of the Rescission Act. As a result, these 13 units are no longer under consideration in this analysis.”

Section 2.1.1 of the Environmental Assessment continues this discussion stating, “The Proposed Action as initially released for scoping in June 1997 included 17 proposed harvest units. As stated, this allowed the Purchaser some flexibility in selecting units that would meet the "like kind and value" requirement. The dropping of these 13 units developed an alternative mix where the Proposed Action is now identical to Alternative #1. In other words, Alternative #1 under the FY 99 Replacement Volume Timber Sale analysis the same as the Proposed Action (refer to Section 1.2).”

Comment #2: “I have reviewed the Project document, and feel that Alternative #1, the Preferred Alternative, is best for the community and the environment.” (Forest Wilson)

Response #2: Alternative #1, the Preferred Alternative was designed to meet the Purpose and Need of the Replacement Volume Timber Sale.

Comment #3: “A more in-depth look at alternatives must be completed for this EA. The EA includes only one alternative besides the no action alternative. Even though this is a replacement volume sale, there should be more alternatives to the type of harvesting that occurs. In order to provide “like kind and value” there are varieties of options that should have been addressed. Regenerative harvesting does not have to be conducted. Thinning was not even an option. There were no alternatives that also included restoration. Alternatives that considered closing of roads and proposed no new “temporary” road building should have also been considered. There was not enough consideration or thorough study into the various options that could have been created for this project area. An EIS should be done to include an evaluation of other alternatives.” (ONRC)

Response #3: Alternatives were developed to meet a specific Purpose and Need (EA, Section 1.3). This is discussed in Response #1. This Purpose and Need was further clarified through litigation and the September 17, 1996 Settlement Agreement in Northwest Forest Resource Council v. Glickman and Babbitt.

Section 2.1.3 of the Environmental Assessment discusses Alternatives Considered but Not Fully Developed.

An environmental impact statement (EIS) is required under the National Environmental Policy Act (NEPA) if an action proposed might cause significant effects on the human environment which have not already been analyzed in the Siskiyou National Forest Land and Resource Management Plan, as amended by the Northwest Forest Plan. As stated the Replacement Volume Timber Sale Decision Notice and Finding of No Significant Impact, no extraordinary circumstances exist that might cause the chosen alternative to have significant environmental effects to the human environment. Therefore, in accordance with NEPA, the preparation of an EIS is not warranted.

Comment #4: “The EA states, “Based on the acceptance of the purchaser to the four proposed harvest units expanding unit boundaries and still meeting the Rescissions [sic] Act requirement of alternative timber of like kind and value by treating more acres with intermediate silvicultural prescriptions is not possible.” EA at 6-7. This is the crux of the problem: the government's settlement agreement with the plaintiffs in Northwest Forest Resources Council v. Glickman and Babbitt obliged the FS to plan replacement sales in consultation with the purchasers. The tentative agreement between the Siskiyou National Forest and Scott Timber Company regarding replacement of the Father Oak timber sale specifies that four units on the Galice Ranger District will be clearcut. That tentative agreement triggered the NEPA process for this timber sale. See November 4, 1996 Memorandum from Regional Forester Robert Williams to Forest Supervisors regarding NEPA process for alternative volume timber sales.”

“Only action alternatives which fulfill the tentative agreement between the FS and Scott Timber are considered in any detail in the Replacement Volume EA. Therefore, the NEPA process has been prejudiced by a back-room deal between the government and a timber company, depriving the public of an opportunity to compare potential environmental consequences of a range of action alternatives.” (KSWC)

Response #4: Klamath Siskiyou Wildlands Center’s comment stands on its own merit. The purpose of the Replacement Volume Timber Sale Environmental Assessment is to analyze the environmental impacts of alternative ways of meeting the Purpose and Need. It is not to analyze legal merits of the Northwest Forest Resources Council v. Glickman and Babbitt settlement agreement.

Silvicultural Methods (Clearcutting)

Comment #5: “Finally, the EA claims, “Expanding unit boundaries is not possible due to the adjacency of past harvest treatments and roads.” EA at 7. While it is true that all of the proposed cutting units are fragments of old-growth forest surrounded by clearcuts, this is the poorest reason of all for not considering alternative cutting methods. The FS could have found other places to cut in addition to the four proposed units elsewhere in the Briggs Creek watershed. Likewise, more units from the Waters Down or Bar None timber sales could have been carried over into Replacement Volume. There is no good reason why thinning cannot be implemented instead of clearcutting.” (KSWC)

Response #5: Refer to Response #1 for a discussion on the range of alternatives. The action alternatives meet the intent of Public Law 104-19 and the subsequent September 17, 1996 settlement agreement.

Section 2.3, Alternative Formation Process, of the Replacement Volume Timber Sale Environmental Assessment (EA) describes the broad goals to guide the interdisciplinary process, and mitigation measures common to all action alternatives. In addition to the mitigation measures outlined in Section 2.3.1 of the EA, Section 3.0, Environmental Consequences, states that the EA is based on the alternatives’ compliance with Federal laws, National Policies, and Regional standards and guidelines. This includes the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl, and compliance with the Siskiyou National Forest Land and Resource Management Plan. This compliance ensures that significant negative impacts to the human environment will not occur.

The afore mentioned planning documents do not eliminate the use of regeneration harvests on Federal lands. In addition, the environmental analysis presented in Section 3.0 of the EA, which is based on the mitigation measures detailed in Section 2.3.1 of the EA, did not conclude that there will be any significant negative impact to the resources.

Comment #6: “I am pleased that lands harvested will be reforested by a regeneration method. I am also pleased that the proposed action will make available to the wood products industry 1,100 MBF, providing much-needed economic support to the local communities.” (Forest Wilson)

Response #6: An economic analysis was conducted for the Replacement Volume Timber Sale. The analysis showed that there would be positive net benefits with all action alternatives. Refer to Section 3.2 and Appendix I on the Environmental Assessment for detailed discussions of the economic return for the timber sale. Socio and Economic Effects and Values are discussed in Section 3.4 of the Environmental Assessment.

Environmental Analysis (NEPA)

Comment #7: “Harvesting timber from mature forest stands will cause significant environmental impacts that must be analyzed in an EIS.” (ONRC)

Response #7: An environmental impact statement (EIS) is required under the National Environmental Policy Act (NEPA) if an action proposed might cause significant effects on the human environment which have not already been analyzed in the Siskiyou National Forest Land and Resource Management Plan, as amended by the Northwest Forest Plan. As stated the Replacement Volume Timber Sale Decision Notice and Finding of No Significant Impact, no extraordinary circumstances exist that might cause the chosen alternative to have significant environmental effects to the human environment. Therefore, in accordance with NEPA, the preparation of an EIS is not warranted.

Comment #8: “EAs must present some discussion of the affected environment to provide readers with a comparison of the actual differences between the environmental consequences of the action alternatives and the no-action alternative. The purpose of an EA is to determine whether or not an Environmental Impact Statement (EIS) is necessary, so logically, the requirements are the same for both.” (KSWC)

Response #8: The Replacement Volume Timber Sale Environmental Assessment incorporates the Upper Rogue Above Galice, National Watershed #26 Watershed Analysis, and the Briggs Creek Watershed Analysis. Both of these watershed analyses provide complete discussions of existing conditions in the watersheds and subwatersheds.

Existing stand and watershed level conditions are detailed in numerous appendices of the Environmental Assessment. They include, but are not limited to Appendix B, Silvicultural Prescriptions, Appendix C, Fuels Assessment, Appendix F, Hydrologic Cumulative Effects Analysis, Appendix G, Transportation Report, Appendix H, Botanical Biological Evaluation, and Appendix J, Visual Resource Report. The Fish and Wildlife Biological Evaluation, Appendix D, includes a checklist for documenting environmental baseline and effects relative to fisheries risk.

Comment #9: “Disclose the efficacy of proposed mitigation measures and "best management practices" under site-specific conditions to support a Finding of No Significant Impact (FONSI). Analyze empirical successes and failures of selected mitigations under similar site conditions using readily accessible monitoring data. This is especially important with respect to containing Port Orford Cedar root disease, given the high risk of new spread. Appendix L does not accomplish this.” (KSWC)

Response #9: The discussion of the efficacy of Best Management Practices (BMPs), along with other mitigation measures, is monitored at the Forest level, not the project specific level. As part of the Siskiyou

National Forest's annual monitoring program The 1998 Monitoring Report includes discussion of these and other monitoring points. In addition, the February 1999 report titled "1998 Monitoring of Siskiyou NF Timber Sale Implementation" as an intensive review monitoring report which detailed how well the Siskiyou National Forest was achieving the goals of the Northwest Forest Plan, including standards and guidelines. The Siskiyou National Forest has also undertaken an intensive study of the storm damage that occurred on the Forest from the storms of November and December of 1996. The objective of the assessment is to determine the effectiveness of management measures during a major storm and evaluate successful measures and those needing improvement.

Comment #10: "Disclose a project-specific monitoring plan." (KSWC)

Response #10: Monitoring would occur in all stages of project implementation as directed in Chapter V and Appendix D of the Siskiyou Forest Plan. At the project level, monitoring involves implementation and effectiveness monitoring. As examples on the Replacement Volume Timber Sale, monitoring would be used to check that effects of implementation are as predicted and ensure standards and guidelines are met. District-wide monitoring would occur annually to identify and develop treatments to reduce the spread of noxious weed populations. Monitoring activities are also discussed in, but not limited to, Appendix B, Vegetation Management Plan.

Like Kind And Value

Comment #11: "Because this sale will be used as replacement volume means that the Forest Service should prepare a detailed accounting of the "like kind and value" comparison between the cancelled Father Oak timber sale and this replacement sale. This account needs to include vegetation comparisons, looking at the size and age of the stands. The replacement volume sale contains many old-growth and mature trees that will be regeneration harvested. There must be in-depth conversation in the EA about the difference between this old-growth stand and the Father Oak project area stand." (ONRC)

Response #11: The "like kind and value" stipulation is a matter of Section 2001(K)(3) of the Rescission Act (Public Law 104-19) and the September 17, 1996 Settlement Agreement in Northwest Forest Resource Council v. Glickman and Babbitt. It is not the purpose of the Replacement Volume Timber Sale Environmental Assessment to review "like kind and value" between Father Oak and the proposed harvest units. The Replacement Volume Timber Sale Environmental Assessment purpose is to (1) select the Proposed Action or an alternative; (2) determine whether the selected alternative will have significant effects or not, and whether or not to prepare an environmental impact statement; (3) determine whether the selected alternative is consistent with the Forest Plan as amended by the Record of Decision on Management for Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl (EA, Section 1.5).

Comment #12: "The EA does not analyze the "kind and value" of the timber being offered from the Galice Ranger District compared to the timber purchased under the Father Oak contract. This is a glaring oversight, given that the purpose and need for action is to provide timber that is of "like kind and value" to the cancelled sale. The public has a right to verify that the accounting system used to calculate values are accurate." (KSWC)

Response #12: Refer to Response #11 above. The purpose of the Replacement Volume Timber Sale is not to compare the timber purchased under the Father Oak contract versus the Replacement Volume Timber Sale.

Riparian Reserves

Comment #13: “The EA and Cumulative Effects Report both assert that "full" Riparian Reserve buffers will eliminate any potential adverse impacts to aquatic habitats. EA at 16-18; EA Appendix F at 5, 7. The EA does not present any site-specific analysis indicating the probable effectiveness of the buffers; there is only an assertion that the buffers will be effective.” (KSWC)

Response #13: The effectiveness of the Riparian Reserve land allocation is not part of a project specific analysis. Their effectiveness has been detailed in the analysis documents that led to the development of the Northwest Forest Plan. The purpose of the Replacement Volume Timber Sale Environmental Assessment is not to evaluate the effectiveness of the Northwest Forest Plan’s land allocations and standards and guidelines.

Comment #14: “The EA does not analyze individual or cumulative effects of Replacement Volume on riparian-dependent species composition and viability. See Aquatic Conservation Strategy objective #8; ROD at B-11.” (KSWC)

Response #14: The Environmental Assessment states “The implementation of full riparian reserve buffers and BMPs would maintain the existing species composition and maintain overall structural diversity of the plant communities within the untreated riparian reserve areas.” As stated above, the effectiveness of the riparian reserve system is not the subject of this environmental analysis. Its effectiveness has been documented in the analysis leading to the development of the Northwest Forest Plan. The Northwest Forest Plan states “Riparian reserves are used to maintain and restore riparian structures and function of intermittent streams, confer benefits to riparian-dependent and associated species other than fish, enhance habitat conservation for organisms that are dependent on the transition zone between slope and riparian areas, improve travel and dispersal corridors for many terrestrial animals and plants, and provide for greater connectivity of the watershed. (B-13)” [Emphasis Added]

Comment #15: “Assertions in the EA that implementation of the Proposed Action or Alternative #1 would "maintain" riparian and aquatic habitat features are without merit absent a detailed description of current conditions in the affected environment and site-specific ranges of natural variability. EA at 16-18. What is being "maintained"? How is "maintaining" present conditions consistent with the restoration objectives of the Aquatic Conservation Strategy? What are the conditions to which riparian-dependent species within and downstream of the project area are uniquely adapted? These questions are unanswered by the EA and the reader is not adequately informed.” (KSWC)

Response #15: It is incorrect to state that a detailed description of current conditions in the affected environment and site-specific ranges of natural variability is absent in the Environmental Assessment and its associated analysis. First, the Replacement Volume Timber Sale Environmental Assessment incorporates the Upper Rogue Above Galice, National Watershed #26 Watershed Analysis, and the Briggs Creek Watershed Analysis. Both of these watershed analyses provide complete discussions of existing conditions and the ranges of natural variability in the watersheds and subwatersheds.

Secondly, existing stand and watershed level conditions are detailed in numerous appendices of the Environmental Assessment. They include, but are not limited to Appendix B, Silvicultural Prescriptions, Appendix C, Fuels Assessment, Appendix F, Hydrologic Cumulative Effects Analysis, Appendix G, Transportation Report, Appendix H, Botanical Biological Evaluation, and Appendix J, Visual Resource

Report. The Fish and Wildlife Biological Evaluation, Appendix D, includes a checklist for documenting environmental baseline and effects relative to fisheries risk.

Roading Impacts

Comment #16: “The EA does not account for potential impacts of new temporary road construction on riparian habitats. Decommissioning new temporary roads after use initially increases erosion, and the new roads will continue to erode at levels significantly elevated above natural levels for more than six years after obliteration (Potyondy, et al. 1993). Potential impacts of wet weather hauling on riparian habitats also were not considered.” (KSWC)

Response #16: All of the units are located by and will use existing ridge top roads. The 0.2 of a mile of proposed construction is minimal ridge top road for needed landings. The Siskiyou Forest Wide Flood Assessment following the large storms of 1996 and 1997, found no failures delivering sediment to streams from roads located on ridge tops.

All units are located along existing roads. The proposed temporary construction is landing construction within the existing road prism. No new road construction is proposed under any alternative. The Fish and Wildlife Biological Evaluation, Appendix D, includes a checklist for documenting environmental baseline and effects relative to fisheries risk. This checklist includes road densities and locations. Also, the Hydrology Cumulative Effects Analysis, Appendix F, provides a discussion of the effects.

Comment #17: “No new roads. The Forest Service has discussed the need to create and maintain fewer roads, yet this project proposes new “temporary” roads to be built. Even if the new roads are temporary, they have the ability to damage the ecosystem. Roads have the potential to disrupt the subsurface water flow and negatively impact the hydrology and soils of this site. The only way to prevent damage from road building is to never build the road and subject the forest floor to excessive compaction and disturbance.” (ONRC)

Response #17: Refer to Response #16 above.

Hydrologic Cumulative Effects

Comment #18: “The EA predicts that implementation of the Proposed Action or Alternative #1 will not result in significant impacts to riparian habitats because Replacement Volume would remove approximately 1% of the existing forest canopy from the Briggs Creek watershed. EA at 17. There are problems with this outlook. The EA considers a broad 5th-field watershed scale, and not at smaller sub-watershed scales. Confining analysis of effects to the 5th-field scale effectively masks habitat degradation and arbitrarily prevents important environmental information from being fully considered. The proportion of forest canopy that would be removed from the Onion, Horse, and Secret Creek drainages, respectively, is greater, although the exact proportion is not disclosed in the EA. Additionally, the estimate of 1% canopy removal does not account for cumulative watershed effects over time (see section 3 below). Replacement Volume is not proposed in a vacuum, as FS planners know. Statements that Replacement Volume will not result in significant impacts because 1% of the existing canopy in Briggs Creek would be removed are misleading because this analysis does not permit attention to the site-specific effects of clearcutting.” (KSWC)

Response #18: No riparian habitat will be entered for timber harvest. There are no streams located in the units. Two units have streams below them. At a minimum, full Northwest Forest Plan no cut buffers will be established. In some areas the buffer distance exceeds what is specified in the Northwest Forest Plan.

Comment #19: “According to the National Marine Fisheries Service, Replacement Volume is "likely to adversely affect" listed Coho salmon and steelhead trout. EA Appendix D at 2. The findings of NMFS do not support an extrapolation onto Replacement Volume of findings from Keppeler and Ziemer (1990), Wright et al. (1990), and Ziemer (1981), all of which considered streamflow responses to logging and road construction in northwestern California. The studies cited in Appendix F of the EA are not site-specific, nor has the Forest Service offered any analysis demonstrating that the findings of those studies are applicable to the Briggs Creek watershed. The only similarity between the studies and Briggs Creek is that the size of the drainages and the percentage of the total land area affected by timber management are similar. There is no allowance in the Forest Service's analysis for natural variability between watersheds on opposite sides of the Siskiyou Crest.” (KSWC)

Response #19: Cumulative effects analysis is a blend between using the most accepted scientific thinking and site-specific observations of Forest Service resource specialists most familiar with the stream conditions and how they respond to management activity. The effect of logging on streamflow peaks in the sited studies is consistent with the results from studies conducted over the past several decades throughout the Pacific Northwest.

Comment #20: “Jones and Grant (1996) found that clearcutting and road construction within the transient snow zone quantifiably and sometimes significantly affect water yield in small drainage basins, such as third- and fourth-order streams. This research is more recent than that used by the Forest Service. The Replacement Volume planning area is located entirely within the transient snow zone. EA Appendix F at 1.” (KSWC)

Response #20: The 1996 Jones and Grant study was not sited because of the controversy in the Pacific Northwest scientific community over the statistical analysis used. It also is not consistent with the decades of studies on peak flow response to clear-cutting. Independent analysis of the same data set used by Jones and Grant indicated that the same relationship could not be found. (Beschta et al. 1997, Megahan et al. 1998).

Comment #21: “In order to qualify as "temporary," new roads must be constructed and decommissioned in the same season. NMFS Biological Opinion on the Siskiyou National Forest LRMP (3/18/97) requires, "Temporary roads shall be installed and decommissioned during the same dry season of the same year (usually May 15 to October 15)." The EA fails to specify a time table for road construction and decommissioning.” (KSWC)

Response #21: The March 18, 1997 NMFS Biological Opinion was for the Siskiyou Forest Plan and was not project specific. NMFS defined “Reasonable and Prudent Measures” as a means to minimize take of listed fish species. NMFS definitions of “semi-permanent” and “temporary” roads are used by NMFS for their analysis. NMFS definitions are not consistent with the long-standing definition used by the Forest Service.

The Forest Service definition of a “temporary road”, as detailed in the Siskiyou Forest Plan (IV-57) states that temporary roads should be obliterated as part of the project work, generally at the end of the contract. The Forest Service definition of “temporary road” is roughly synonymous with the NMFS definition of “semi-permanent” road.

Regardless of differences in definitions used by the two agencies, the environmental impacts of road construction and reconstruction have been detailed in the Replacement Volume Timber Sale and its Appendices. All units are located along existing roads. The proposed temporary construction is landing construction within the existing road prism. No new road construction is proposed under any alternative.

Comment #22: “The Northwest Forest Plan's Aquatic Conservation Strategy intends to maintain and restore riparian and aquatic habitats, so in that context, the mandate is to consider: 1) how all things together affect population viability of riparian-dependent species; 2) how all things together affect limiting factors of aquatic habitat productivity such as large pool formation and maintenance, clean gravel interstices, or over-wintering habitat; 3) how all things together affect water quality including temperature, sedimentation, turbidity, nutrients, and pH; 4) how all things together affect peak flows, percent of cobble imbeddedness, large woody debris recruitment, and large pool habitat; and so on. The analysis of environmental consequences in the Replacement Volume EA is too narrow and limiting in terms of natural processes. Some of the factors noted above are considered, while others, such as riparian species viability, large pool formation and maintenance, pH, nutrient cycling, and percent embeddedness, are not.” (KSWC)

Response #22: The Aquatic Conservation Strategy’s description in the Northwest Forest Plan is the best representation of its contents and objectives. Species viability is considered on a broad landscape scale, beyond the project level scale that the Replacement Volume Timber Sale analysis considers. This is in keeping with the National Forest Management Act definition of providing species viability. Issues such as species viability are also addresses through consultation with regulatory agencies. The Replacement Volume Timber Sale is consistent with the Biological Opinions rendered. This BO considered the impacts to habitats and species viability. The Biological Opinions found that no species were involved in jeopardy or take.

Comment #23: “The EA makes general observations about past activities that have occurred in the Briggs Creek watershed. Human activities such as mining, road construction, logging and other development "have changed stream channel form and function," and caused "increased sediment delivery and a decreased large wood supply." EA at 21. The EA and its appendices lack information about how all things together (including the proposed action) affect critical elements of riparian habitats, such as those described above. Past timber harvest in the affected subwatersheds, for example, is expressed as a percentage of the total land base, without any qualitative description of site-specific impacts to water yield, water quality, or channel morphology. That is inadequate. Broad [s]tatements about historically "increased sediment delivery" to streams are meaningless without qualitative assessments of actual site-specific impacts and comparisons to the natural range of variability for streams that may be affected by the Replacement Volume timber sale. See ROD at B-10.” (KSWC)

Response #23: The potential effect to water quality (temperature and turbidity), water quantity, riparian reserves slope stability, sediment delivery and channel morphology are addressed in the Hydrology Analysis, Direct, Indirect, and Cumulative Effects section. Those findings are based on accepted scientific studies and site-specific conditions.

Comment #24: “The EA does not present information about past human activities or their impacts to the Onion, Horse, or Secret Creek drainages, specifically. All discussion of the environmental consequences of past activities are vague and apply to the Briggs Creek watershed generally. Just as there is no discussion of current conditions or natural ranges of variability within the affected subwatersheds, the EA also lacks perspective on the actual impacts of past management on riparian ecosystems, to which the Replac[e]ment Volume timber sale will contribute cumulative effects.” (KSWC)

Response #24: The information presented is specific to the streams in the project area and includes stream condition and channel measurements from recent stream surveys. This information came from the Briggs Creek Watershed Analysis. More information for Onion and Secret Creek can be found in that document.

Comment #25: “The EA may not defer analysis of the affected subdrainages to the Briggs Creek Watershed Analysis. EA at 21. Findings of watershed analysis should be incorporated and summarized in NEPA documents. ROD at B-10.” (KSWC)

Response #25: Refer to Appendix F for the watershed analysis.

Comment #26: “The EA asserts that effects on water yield in Briggs Creek following logging of 67% of the entire watershed have been "slight," so new effects on peak or low flows during rainfall events are "unlikely" if the Proposed Action or Alternative #1 are implemented. EA at 21. The problem is that without site-specific evaluations of past impacts to particular components of riparian habitat, such as those discussed above, the assessment of "slight" effects on peak and low flows is not very meaningful. Beschta et al. (1995) identified problems with cumulative effects assessment methodologies that emphasize peak flows as the driving force behind downstream channel changes. Other factors include soil displacement and sedimentation, large woody debris recruitment, and other factors. Stream channels in all of the affected subwatersheds (Horse, Onion, Secret) are deficient in large woody debris. EA Appendix F at 3. The lack of in-stream structure makes stream channels vulnerable to adverse changes induced by effects of upslope timber management. This factor was not considered by the Replacement Volume EA.” (KSWC)

Response #26: There is an error in the EA (page 21). The previous harvest per cent in Briggs Creek should have read approximately 16% and not 67%. Refer to Appendix F for cumulative effects discussion and site-specific evaluation.

Comment #27: “The EA does not disclose that the Waters Down and Barr None timber sales are also planned for implementation in the Briggs Creek watershed in the next five years. No attention is given to the cumulative environmental consequences of these actions in tandem with Replacement Volume. Specific consequences of ongoing degradation of terrestrial and aquatic habitats on private lands in the Briggs Creek watershed also were not considered.” (KSWC)

Response #27: The cumulative effects analysis has been updated to include the effects of all sales in the foreseeable future, including the Waters Down and Barr None timber sales. See Appendix F. Known private land activities were incorporated into the cumulative effects analysis.

Comment #28: “Unit 2-10 poses a particularly high risk of adverse cumulative watershed effects due to its proximity to Onion Creek and the prevalence of past management throughout the surrounding landscape. Lands on all sides of this 24-acre forest fragment have been clearcut, and soils still have yet to reach full recovery in terms of stability. EA Appendix F at 5.” (KSWC)

Response #28: The Forest Geologist conducted a site visit to Unit 2-10. Unstable areas were evaluated during this site visit. The subsequent Replacement Volume Geology report (Appendix F, page 26) concluded that the cumulative watershed effects for sediment delivery are minimal.

Comment #29: “Two roads (not one as reported in the Cumulative Effects Report) flank unit 2-10, with the upslope road at the west edge of the unit demonstrating ample evidence of drainage diversion and sediment runoff. The 700 foot "buffer" between the valley bottom road and unit 2-10 is highly disturbed, having been burned and logged within the last 20-30 years. This "buffer" will not provide significant protection to Onion Creek in terms of drainage infiltration or sediment capture (if it will, the FS doesn't analyze how or why). The EA does not analyze impacts of current drainage diversion or sediment delivery from existing management effects (e.g., roads and clearcuts) in this small drainage basin, let alone the cumulative effects of the proposed action on a site-specific level. Since the EA also fails to analyze broader trends within this specific drainage of Onion Creek, including natural ranges of variability, no solid basis exists for an affirmative finding of no significant impact.” (KSWC)

Response #29: See response to Comment #28

Comment #30: “The Forest Service's rationale for dismissing cumulatively significant impacts to soil stability and/or sediment delivery to streams is entirely reliant on expert opinion in the absence of supporting objective data or repeatable scientific analysis. According to the Cumulative Effects Report, an FS soil scientist decided "after years of field observations" that compaction and surface erosion are not risk factors on the entire Siskiyou National Forest, and that there is no need for mitigation or further site-specific analysis. EA Appendix F at 5. In Idaho Sporting Congress, the Ninth Circuit Court rebuffed the FS for relying on expert opinion in the absence of supporting site-specific data.” (KSWC)

Response #30: The Siskiyou National Forest 1998 Timber Sale Implementation Monitoring, report that included several sales across the forest, did not find surface erosion problems on skyline skid roads. This is consistent with the findings of the long time Forest Soils Scientist mentioned in the analysis. IN addition, the Forest Geologist conducted a site visit to Unit 2-10. Unstable areas and potential detrimental soils impacts were evaluated during this site visit. The subsequent Replacement Volume Geology report (Appendix F, page 26) concluded that the cumulative watershed effects for sediment delivery are minimal.

Comment #31: “The Waters Thin project is not a reliable indicator of site-specific effects that will occur in the Replacement Volume cutting units. EA Appendix F at 5. Waters Thin had a far less intensive silvicultural prescription and was not sandwiched between two roads like unit 2-10.” (KSWC)

Response #31: The Siskiyou National Forest 1998 Timber Sale Implementation Monitoring, report that included several sales across the forest, did not find surface erosion problems on skyline skid roads. This is consistent with the findings of the long time Forest Soils Scientist mentioned in the analysis. The updated Hydrology Cumulative Effects Analysis (Appendix F) contains a site-specific effects discussion.

Comment #32: “The Cumulative Effects Report mistakenly claims that no new road construction is proposed for this project. EA Appendix F at 5. In reality, 0.2 miles of new temporary road construction is proposed under both action alternatives. EA at 19. The FS has not considered potential adverse cumulative watershed effects posed by proposed new road construction and subsequent obliteration.” (KSWC)

Response #32: Refer to Response #16.

Survey & Manage Requirements

Comment #33: “The Replacement Volume EA illegally defers surveys of 32 survey and manage "category 2" species for which surveys are required prior to ground disturbing activities. See ROD at C-5. The March 3, 1999 Decision Notice signed by the Regional Forester deferring surveys for one year violated NEPA and NFMA. Surveys that are feasible and for which protocols are developed must occur before logging activities are allowed to commence.” (KSWC)

Response #33: Surveys that are feasible were completed. Species that were included in the Regional Survey & Manage Environmental Assessment (32 species) that have habitat in the project area were surveyed for in accordance with current protocols, in FY 1999-2000. Updated surveys were also completed to incorporate the findings of the August 2, 1999 decision of Judge Dwyer in the ONRC Action v. USFS and BLM.

Comment #34: “The 32 survey and manage strategy two species subject of the Survey and Manage EA must be surveyed for before this project is implemented. There is no statement that says all the Survey and Manage species have been surveyed. The EA does state that mollusk surveys have been completed. Surveys are not yet complete for fungi and bryophytes. Failure to survey for these species is illegal according to the forest plan survey and manage strategy two. The Record of Decision was inappropriately amended in violation of NEPA and NFMA because they did not consider significant cumulative effects and failed to do an EIS. Judge Dwyer’s August 2, 1999 ruling in ONRC Action v. USFS confirms that the surveys must be done.” (ONRC)

Response #34: Refer to Response #33.

Comment #35: “Surveys for red tree voles were completed according to the EIS, but there is little discussion on how they were done. Before you “write off” any Red tree vole sites (because you think that are enough in the area) you must confirm that all the suspected nests are in fact Red tree vole nests. The EA does not say whether all required transects were conducted, whether resin ducts were found to confirm all nests, and/or whether any trees needed to be climbed to confirm Red tree voles. The Northwest Forest Plan survey and manage strategy two requires surveys for Red tree voles within the range and habitat of the species prior to all projects. (C-5 of the ROD) If the surveys are not completed, there is potential to destroy their habitat before coming to an understanding of their status in the project area. The November 4, 1996 memo is illegal and should not be followed.” (ONRC)

Response #35: A protocol survey was conducted (August 10-11, 1999) in all of the proposed units in the preferred alternative. This 100 percent survey (Large trees were inspected for nests and ground searched) resulted in no nest detections. For a description on how Red Tree Voles surveys are/were conducted, the reader is referenced to the Interagency Red Tree Vole Survey Protocol (November 4, 1996).

Comment #36: “Management recommendations for terrestrial mollusks were not finalized as of the date the EA was published. EA Appendix D at 4. The FS should wait to approve a decision on Replacement Volume until scientifically credible and peer reviewed management recommendations are finalized and fully disclosed as a mitigation measure in the Decision Notice. According to the Fish & Wildlife Report, "these pending new Management Recommendations [sic] may contain information that differs substantially from what is in Appendix J2," which forms the basis of the Forest Wildlife Biologist's unit-specific recommendations. Id. Therefore, the NEPA record is not complete on this issue.” (KSWC)

Response #36: Survey protocol exists for terrestrial mollusks. All proposed harvest units have been surveyed for terrestrial mollusks according to protocol. Management recommendations for terrestrial

mollusks, Version 2.0 (four Terrestrial mollusks), were issued on November 23, 1999. These recommendations have been incorporated in the final Wildlife report.

Botanical Biological Evaluation

Comment #37: “The Sensitive Plants Biological Evaluation concedes that surveys for sensitive plants like *Cypripedium fasciculatum* did not cover all of the areas that will be impacted by Replacement Volume. EA Appendix H at 8. Statements that the proposed action “may impact” individuals or habitat for sensitive plants and attendant predictions regarding viability trends are baseless without documented surveys to account for the presence or absence of specimens.” (KSWC)

Response #37: All four units of the FY99 Replacement Volume Timber Sale Proposed Action and Alternative #1 have been surveyed during two separate field seasons for sensitive plant species. The Botanical Management Recommendations are mitigation measures to minimize impacts to sensitive plant species or their habitats that were not identified during field surveys.

Comment #38: “The Sensitive Plants Biological Evaluation makes “management recommendations” which, even if followed, will not protect sensitive species or ensure that species do not become threatened or endangered because of Forest Service actions. Recommendations against using sites with sensitive plants for piling logs or slash, depositing excess soil material or parking equipment are not effective if surveys have not been performed in all areas where sensitive plants may exist. EA Appendix H at 9.” (KSWC)

Response #38: Refer to Response #37. Surveys during two separate field seasons of all four units in the Proposed Action and Alternative #1 have been conducted.

Comment #39: “Cumulative effects on sensitive plant populations in the Briggs Creek watershed are unknown because no such data ever was collected by the Forest Service. According to the Sensitive Plants BE, “cumulative effects are an issue” with respect to plant viability, but the effects of Replacement Volume are uncertain. EA Appendix H at 8. Uncertainty requires full disclosure of a worst-case scenario in an EIS.” (KSWC)

Response #39: Disclosure that there is not a system in place to analyze past cumulative effects to sensitive plant populations does not, in itself, justify not issuing a finding of no significant impact. Significance is defined by context, intensity and duration of environmental impacts. Surveys have been conducted and mitigation measures have been implemented to eliminate or minimize adverse effects to sensitive plant populations. As described in Appendix H, the indirect effects of the actions may be positive and negative effects. In all cases the Botanical Biological Evaluation states that the Proposed Action will not likely result in a trend towards federal listing or cause loss of viability to these species.

Comment #40: “The Sensitive Plants BE also finds that even with “full” riparian buffers, “some impacts could occur [to riparian habitat] during project implementation.” EA Appendix H at 7. This finding contradicts those of the EA and the Cumulative Effects Report, and is more consistent with the findings of NMFS per formal Section 7 consultation. Some effects to riparian habitat are inevitable with this action, yet the FS is not disclosing what exactly they might be.” (KSWC)

Response #40: The statement in the Sensitive Plant BE is not incorrect, nor does it contradict that which is stated in the Hydrologic Cumulative Effects Analysis (Appendix F). These two analysis reports discuss the

impacts to differing resources. The comment above incorrectly inserted “to riparian habitat” not the sentence on page 6 of Appendix H. Therefore; the impacts of the actions on those resources have been determined, site-specifically to be different and are stated as such in the EA and its Appendices.

Fish and Wildlife Species

Comment #41: “The EA asserts, “The Proposed Action and Alternative #1 may effect [sic] but is not likely to adversely affect the Northern California/Southern Oregon coho salmon.” EA at 12. However, the Fish and Wildlife Biological Evaluation finds, “The Proposed Action may affect and is likely to adversely affect the Southern Oregon/Northern California Coho Salmon.” EA Appendix D at 2. No analysis in any NEPA document bridges this discrepancy. The EA contains inaccurate and misleading information regarding direct adverse impacts to a threatened species.” (KSWC)

Response #41: A complete analysis of the effects of alternatives on fish species is included in Appendix D, Fish and Wildlife Biological Evaluation, and is summarized in the Environmental Assessment, Section 3.3.4, Effects on Proposed, Endangered, Threatened, or Sensitive Fish Species. The May Affect and are Likely to Adversely Affect determination acknowledges that some effects to fish species will take place as a result of land management activities. Some take is expected and is acceptable under the Endangered Species Act, based on consultation with the National Marine Fisheries Service.

Klamath Mountain Province Steelhead Trout is discussed in Appendix D, Fish and Wildlife Biological Evaluation, and is summarized in the Environmental Assessment, Section 3.3.4, Effects on Proposed, Endangered, Threatened, or Sensitive Fish Species.

Comment #42: “The logging units are in suitable owl habitat. The EA is unclear on whether any units might contain owl activity centers that are currently inactive. The EA states that the proposed action may adversely affect the northern spotted owl (EA-12). There must be more discussion on the owl habitat in this area and the possible affects of logging in the EA. Owls do not nest every year and they sometimes rotate between a few different nest trees, so the fact that an activity center is not occupied this year does not mean it’s ok to log and destroy the nest area. Destroying owl activity centers, even though they may not be currently active, may constitute a “take” under the ESA. In this EA and other future EAs please disclose whether any unit contains any currently inactive owl activity centers.” (ONRC)

Response #42: There are no northern spotted owl activity centers in the proposed harvest units. The closest known (1990) activity center is more than one quarter mile from the closest harvest unit. This timber sale’s actions and its effects on the northern spotted owl and its habitat have undergone consultation with the Fish and Wildlife Service and are part of the existing FY97/98 Timber Sale Projects Biological Opinion. Refer to Appendix D, Fish and Wildlife Biological Evaluation.

Comment #43: “ONRC strongly urges the FS to look again at the great impacts to fish populations in this project area. Coho salmon, chinook salmon, cutthroat trout and steelhead trout all will be impacted by this logging project. Although full riparian buffers are proposed with this EA, that may only relieve some of the impacts that logging will have on the stream. Continuous erosion and disruption of subsurface water flows due to compaction will contribute the decline of water quality. These fish populations are endangered and sensitive species that must be adequately protected. Logging in these units will negatively impact these fish populations, therefore better mitigation alternatives must be provided.” (ONRC)

Response #43: The Biological Evaluation (Appendix D) and the EA have considered the effects on fish populations for each alternative. NMFS has been formally consulted on the listed species of fish for this project and have issued a Biological Opinion (BO). The terms and conditions recommended in the BO will be incorporated into the project design. Best Management Practices (Appendix L) will also be incorporated into the project and are designed to reduce erosion, sedimentation, and protect water quality.

Comment #44: “The Fish and Wildlife Biological Evaluation contains a Checklist for Documenting Environmental Baseline and Effects of the Proposed Action [and] Alternative #1 on Relevant Indicators, which shows that both the Proposed Action and Alternative #1 will degrade sediment and human disturbance history indicators. The affected stream reach is "at-risk" for adverse sediment delivery now, and will be moved to a "not properly functioning" condition by Replacement Volume. EA Appendix D at 8. Moreover, the affected reach is "not properly functioning" now due to the magnitude of past human disturbances, and will be further degraded by this action. Id. This information is not consistent with a finding that the proposed action complies with the Aquatic Conservation Strategy.” (KSWC)

Response #44: Consistency with the ACS has been addressed in the BE (Appendix D), the Hydrologic Cumulative Effects Analysis (Appendix F), and the EA. The terminology and risk assessment in the Fishery BE (degrade means there is some increased risk of fine sediment reaching Briggs Creek) is not the same as the terminology used in the evaluating the ACS. The ACS objective of maintaining the sediment regime would be met. See Fish and Wildlife Addendum page 4.

Comment #45: “The Fish & Wildlife Report asserts that neither action alternative will negatively impact any known Management Indicator Species except for northern spotted owl. EA Appendix D at 2. However, the report does not analyze the existing snag habitat density within the affected subwatersheds, nor does it consider long-term consequences of snag habitat loss from units proposed for clearcutting. There is no objective data or analysis demonstrating that Forest Wide Standards and Guidelines 4-13a and 4-13b will be met. LRMP at IV-33 to IV-36. Other standards and guidelines meant to protect indicator species are also unanalyzed.” (KSWC)

Response #45: Snag analysis and related Large Woody Material evaluation can be found in Appendix B. The addendum to the Fish and Wildlife Report addresses the indicator species.

Snags and Coarse Woody Debris

Comment #46: “Snags provide important habitat for many forest species such as woodpeckers, bats, etc. The replacement volume EA does not indicate any sort of analysis or account in order to adhere to the snag requirements of the Northwest Forest Plan (page 3-23). There should also be an analysis of the loss of snags that must be cut for safety and operational reasons. How will forest plan snag requirements be met. Creating new snags that are “safe” while destroying existing snags that currently provide habitat is inappropriate and will cause a serious temporal gap in effective snag habitat. The EA fails to discuss this issue.” (ONRC)

Response #46: See response to #45

Comment #47: “Snags and coarse woody debris prescribed for retention following logging are too small to meet Northwest Forest Plan guidelines. EA Appendix B at 10, 14, 18.” (KSWC)

Response #47: See response to #45

Comment #48: “Many species that are of special concern will be affected by this sale. There must be more discussion of protection that they need in order to remain a viable population. Endangered species such as the peregrine falcon and sensitive species such as the marbled murrelet and northern spotted owl deserve special treatment. As their habitat is continuously taken by logging projects, adequate habitat must remain. This stand, consisting of intact old-growth, would be perfect habitat for displaced populations.” (ONRC)

Response #48: In accordance with the Endangered Species Act (ESA) the Replacement Volume Timber Sale’s harvest actions have undergone consultation with the U.S. Fish and Wildlife Service and are part of the FY97/98 Timber Sale Projects Biological Opinion. Through consultation it has been determined that the Proposed Action and Alternative #1 may affect and are likely to adversely affect the Northern Spotted Owl. The consultation process, nor its finding, regarding the Northern Spotted Owl violates the ESA. Other sensitive species associated with late successional forest have been evaluated in Appendix D.

Comment #49: “According to the Fish and Wildlife Biological Evaluation, Replacement Volume "will impact" Del Norte salamanders which are present in the proposed cutting units. EA Appendix D at 4. Yet the EA does not account for these impacts, nor are any habitat buffers analyzed for effectiveness at maintaining population viability on site-specific basis.” (KSWC)

Response #49: With regards to the Del Norte Salamander, it is correct that a determination has been made that the original Proposed Action developed in 1998 will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species. As a result, Alternative #1 was developed such that it has been determined to have no impact on the Del Norte Salamander. See Appendix D, Table on page 5.

Comment #50: “The EA states on page 12 that there it was determined there would be “no impact” to Del Norte salamanders, yet the Fish and Wildlife Final Evaluation (Appendix D) states that logging “will impact” this species. This large discrepancy must be addressed. This salamander is on the survey and manage listing and has Sensitive Species listing. The EA must sufficiently discuss address the affects to the salamander. The EA is inadequate.” (ONRC)

Response #50: With regards to the Del Norte Salamander, it is correct that a determination has been made that the original Proposed Action developed in 1998 will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species. As a result, Alternative #1 was developed such that it has been determined to have no impact on the Del Norte Salamander.

Comment #51: “Leave all talus intact regardless of whether or not it is occupied. The potential colonization of Del Norte salamanders into unoccupied habitat was not considered in the EA. The interagency protocol states "...the potential ecological value of contiguous but apparently unoccupied habitat should be considered, especially in regards to desired future conditions, population dynamics, and connectivity issues. Conservative measures are recommended when dealing with this type of rare endemic vertebrate species." (17) The EA does not disclose where nearby or potentially genetically connected Del Norte salamander sites are located.” (KSWC)

Response #51: The ROD for the Northwest Forest Plan contains management recommendations for Del Norte salamanders. These mitigations and recommendations will be incorporated into project design (EA page 9, Appendix D, Fish and Wildlife Report page 3).

Comment #52: “Impacts to great grey owl were not considered.” (KSWC)

Response #52: Surveys are completed for Great Grey Owls where habitat is found. The habitat characteristics for the Great Gray Owl are very specific and are limited to very few locations on the Siskiyou National Forest. There is no Great Grey Owl habitat within the Replacement Volume Timber Sale Planning Area. See Appendix D.

Comment #53: “Impacts to northern goshawk were not considered.” (KSWC)

Response #53: Surveys for northern goshawks are not required. This species is not a PETS species or survey or manage species.

Comment #54: “Impacts to neotropical migratory songbirds were not considered.” (KSWC)

Response #54: The issue of neotropical birds was not identified as an issue by either the public or the Agency. Neotropical birds are not listed as sensitive, proposed endangered or threatened species at this time. In addition, the Migratory Bird Treaty Act was intended to address the hunting and poaching of migratory birds, not habitat modification.

Comment #55: “Impacts to bats were not considered.” (KSWC)

Response #55: The wildlife report (Appendix D) has stated that there is no sensitive species (Pacific Western big eared bat) bat habitat associated with the harvest units. Bat habitat associated with large trees and snag habitat has been evaluated by the snag and down wood report in Appendix B and Appendix D.

Comment #56: “The EA states, “there is no existing bald eagle, northern spotted owl or marbled murrelet sightings or habitat in the project area.” EA at 12. However, Replacement Volume is “likely to adversely affect” northern spotted owls because it would remove suitable habitat in close proximity to a core nesting area. EA Appendix D at 2. What accounts for this apparent discrepancy?” (KSWC)

Response #56: Appendix D, Fish and Wildlife Biological Evaluation, has been corrected to clarify the sightings or habitat notation in Table 1 and 2. Habitat for northern spotted owls exists, but no sighting have occurred in the project area.

The May Affect and are Likely to Adversely Affect determination for the Northern Spotted Owl acknowledges that some effect to the owl will take place as a result of land management activities. Some take of habitat is expected and is acceptable under the Endangered Species Act, based on consultation with the U.S. Fish and Wildlife Service. Late-successional habitat for species such as the Northern Spotted Owl is addressed in the Northwest Forest Plan in its management allocations and standards and guidelines.

Comment #57: “The Replacement Volume EA, the Siskiyou National Forest LRMP and its FEIS, the Northwest Forest Plan and its FSEIS, and the USFWS Biological Opinion covering this project fail to analyze the rate of LSOG habitat removal and degradation from lands eligible for timber production in the Rogue Basin, let alone across the range of the northern spotted owl. The NFP FSEIS assumed that new LSOG habitat would develop in LSRs fast enough to support a diminished but stable NSO meta-population as existing LSOG habitat in Matrix is destroyed. However, the success of this strategy is predicated on effective monitoring and careful attention to the rate of habitat removal and regeneration at the provincial, watershed, and site-specific level. According to Judge Dwyer, monitoring is the key to the strategy’s compliance with applicable laws. Replacement Volume will contribute to an ongoing trend of LSOG habitat destruction and is "likely to adversely affect" NSO. In the absence of monitoring data demonstrating that the present rate of harvest is compatible with the viability goals of the NFP, this presents a potentially "significant" impact that should be analyzed in a project-specific EIS.” (KSWC)

Response #57: Harvest levels on the Siskiyou National Forest , as predicted in the NFP, have not been achieved. Less acres of acres and change in LSOG habitat has occurred than the predicted PSQ. See Forest Plan Monitoring Reports FY 95- FY98. Also see Appendix D.

Old Growth, Fragmentation and Interior Habitat

Comment #58: “Virtually all the units have old-growth characteristics that make them inappropriate for harvest. There is very little discussion in the EA about the characteristics of this stand as an ecosystem. All that wood is necessary to support habitat for viable populations of native species and to provide a carbon sink that will not be replaced with the next generation of trees. Because there is little comparison between the two sales, it is difficult to assess the true losses of this forest in comparison to the losses that would have been accumulated from the logging of the Father Oak timber sale. The EA is incomplete in it’s assessment, and should provide further information about the old-growth harvest.” (ONRC)

Response #58: Refer to Response #22 for a discussion on species viability. . See Appendix D for discussion of interior habitat suitability.

Comment #59: “ONRC opposes the Replacement volume timber sale because it will continue the trend of increasing fragmentation, reducing interior forest habitat, and increasing forest edge. Creating “connectivity” by retaining riparian corridors is not a sufficient mitigation for logging. It is good that full riparian buffers will be retained, yet this is a small corridor – hardly big enough to support adequate protection for the streams – cannot provide sufficient habitat for countless forest species that will be disrupted.” (ONRC)

Response #59: The four timber sale units proposed for harvesting are small isolated stands. They do not currently function as interior habitat. Appendix D, using the analysis of within the watershed analysis, concludes that the action alternatives would have no impact on the existing habitat connectivity and the existing interior habitat within the watersheds. Northwest Forest Plan Standards and guidelines specify a network of late-successional reserves. Dispersal between those reserves is facilitated in part by the riparian reserves and the matrix standards and guidelines.

Wildlife connectivity and habitat fragmentation have been addressed through the design of the Northwest Forest Plan and its land management allocations and through implementation of Siskiyou Forest Plan standards and guidelines. The Northwest Forest Plan has establish a series of land management allocation, including late-successional reserves, riparian reserve, managed late-successional reserves, that together with

the land management allocations of the Siskiyou National Forest LRMP provide a network of connectivity and ultimately species viability. In addition to these land management allocations, specific standards and guidelines from the Siskiyou National Forest LRMP, as amended by the Northwest Forest Plan, have been implemented that provide for connectivity and reduction in fragmentation. These include standards and guidelines for green tree retention, retention of old growth fragments in watershed, snags and down woody material, and limitation on the size of openings.

Comment #60: “The EA fails to analyze cumulative effects of Replacement Volume on landscape-level late-successional forest habitat connectivity. Medford District BLM plans a large logging project on Buckhorn Mountain in the Taylor Creek and Pickett Creek watersheds which will remove large bits of late-successional habitat to the northeast of the Replacement Volume planning area. The FSEIS of the Northwest Forest Plan clearly anticipates that provisions will be made for connectivity and northern spotted owl dispersal in the Matrix between Late-Successional Reserves, yet the Replacement Volume EA does not consider this important issue.” (KSWC)

Response #60: Cumulative effects of the Replacement Volume Timber Sale have been analyzed and the results of this analysis are displayed in Section 3.2 and Appendix F of the Environmental Assessment. There is no Bureau of Land Management or private land holding in the watersheds being proposed for timber harvest.

Port-Orford-Cedar

Comment #61: “Populations of Port-Orford-cedar must be protected from *Phytophthora lateralis*. The only way to be completely sure that it does not become introduced into the planning area is to avoid entry. Even with all the strategic methods suggested, introduction is a very real possibility. This bacteria is extremely harmful and can cause great mortality to the entire population of Port-Orford-cedar in this watershed. Logging should not be conducted in this area because of the high chance of *Phytophthora lateralis* outbreak.” (ONRC)

Response #61: A complete inventory of all known Port-Orford-Cedar (POC) populations has been completed on the Galice Ranger District. As stated in Appendix K, Port-Orford-Cedar Root Rot Control Strategy, no *Phytophthora lateralis* infections are known to exist within the sale area or adjacent to the haul route. Timber haul and equipment movement would occur through uninfected areas that contain POC, as well as areas where POC is not known to occur. The Control Strategy continues to state that its mitigation measures do not guarantee control, but significantly reduce the risk of import of *Phytophthora lateralis*.

Soil Disturbance

Comment #62: “The EA does not contain sufficient discussion of soil disturbance. Although no tractor logging is proposed, there will be significant impacts to soil productivity. Removing tree boles, soil compaction and disturbance, and killing mycorrhizal fungi all have an adverse affect on soil productivity.” (ONRC)

Response #62: Siskiyou National Forest Land Management Plan developed standards and guidelines to minimize impacts to soil productivity. These mitigation measures have been used for this project. See EA page 15 and 16.

Comment #63: “The Silvicultural Prescription does not disclose what type of soils are located in unit 2-10. EA Appendix B at 8. 3.” (KSWC)

Response #63: See Appendix F, Hydrology Cumulative Effects Analysis, Geology report, Appendix A.