Decision Notice and Finding of No Significant Impact for the Pioneer Gulch Project

USDA Forest Service
Middle Fork Ranger District
Willamette National Forest
Lane and Douglas Counties, Oregon

Introduction

The purpose of this project is to improve growth and vigor of timber stands and promote forest health in the Upper Middle Fork watershed; restore and improve aquatic condition and processes; improve big game forage habitat in summer range, mitigate potential for future uncharacteristic wildfires to spread from the Diamond Peak Wilderness (DPW), Inventoried Roadless Areas (IRA), and the Oregon Cascades Recreation Area (OCRA); maintain a safe and environmentally sound road network; and provide a sustainable supply of wood products. This action responds to the goals and objectives outlined in the Willamette Land and Resource Management Plan (LRMP, or Forest Plan) as amended by the Northwest Forest Plan, the Upper Middle Fork Willamette River Watershed Analysis (UMFWRWA) and Updates, and the Upper Middle Fork Willamette Watershed Action Plan (UMFWWAP) and helps move the project area towards desired conditions described in those documents. This action is needed for the following reasons.

A) Second-growth plantations are overstocked

There are about 940 acres of 40 to 60 year old second growth stands in the project area that would benefit from density reduction. These stands are overstocked, even-aged, uniform, single-story managed plantations. The stocking levels and structure of these stands are beginning to exhibit symptoms of suppressed growth and reduction of crown ratios that could hinder stand growth and health. Understory vegetation density and species composition have been reduced. Crown ratios of conifer trees have become small to the extent that some trees may be at risk of windfall or snow breakage, and the overall stand structure is not as diverse as natural young stands of similar age.

B) Restore and improve aquatic condition and processes

Approximately 30 percent of the acreage in plantations within the project area is within Riparian Reserves. The UMFWRWA has identified the need for silvicultural treatments in these areas to accelerate the development of mature and old growth, or late successional forest characteristics (USDA Forest Service, 1996, pp. 108-109). Desired conditions for late-successional forests include the development of large trees, multi-storied canopies, horizontal patchiness, and species diversification. Treatments in the Riparian Reserves are further guided by objectives established in the Aquatic Conservation Strategy (ACS) of the Northwest Forest Plan. The existing condition of these stands is a result of previous intensive timber management regimes. The stocking levels and structure of these stands could substantially delay the development of late-successional forest characteristics. Treatments could ensure the health and vigor of these stands, diversify the stand structure, and accelerate their development of late-successional forest characteristics.

C) Big game forage levels are falling below LRMP Standards and Guidelines

There is a need to improve and increase the amount of big game foraging habitat in summer range (FW-147-151, Forest Plan p. IV-69). The UMFWRWA projected forage levels in these Big Game Emphasis Areas (BGEAs) to fall below standard and guideline levels in the next decade. There is an opportunity to improve big game habitat effectiveness in this planning area by coordinating forage improvement projects with the commercial thinning, road closures, and sale area improvement projects in young plantations. Many of the project design elements and associated mitigating treatments such as fuel reduction treatments can be integrated to contribute secondary benefits such as improving forage quality.

D) A fuel break would improve options for future fire management in the Wilderness

An assessment of fire condition classes in the stands adjacent to Diamond Peak Wilderness within the project area has determined that many of the forest stands are in Conditions Class 2. Condition Class 2 indicates that stands have missed one or more fire intervals within the natural fire regime. A wildfire event in the Wilderness may escalate into a larger fire that becomes difficult to control if forest stand conditions adjacent to wilderness landscapes are left untreated in Condition Class 2. The Pioneer Gulch project provides an opportunity to address the problem by proposing treatments along the boundary of the Diamond Peak Wilderness (DPW), Inventoried Roadless Areas (IRA) and Oregon Cascade Recreation Area (OCRA). Portions of FS Roads 2160, 2160-406, and 2149 lie along the boundaries of the DPW, IRA and OCRA. These roads provide access and a potential fire line between the wilderness and non-wilderness areas. There is also an opportunity to enhance their effectiveness as a fire line by treating the forest stands adjacent to the road making it into wider fuel break.

E) Roads need to be maintained at safe and environmentally appropriate levels

There is a need to reduce the open road density in the planning area. The current road system was built to access timber and other forest resources in the 1960's – 1980's. Timber sale revenues paid for the majority of past construction and road maintenance. However, timber harvest has declined over the last two decades. Road maintenance operating budgets have also been reduced, limiting the ability to maintain such an extensive road system. Roads are no longer annually inspected for maintenance requirements. Some of the roads in the project area have already or will be closed with previous NEPA decisions. Some of the roads have already grown in and are inaccessible to vehicular traffic. Additional roads may need to be removed from the system, others closed and stored until future access is needed, and many roads managed at the lowest possible maintenance level. Closure of roads would also reduce disturbance to big game. The closure of roads would also provide the opportunity to store and rehabilitate roads and related aging infrastructure (such as culverts at the end of their design life) to a watershed-safe condition.

F) Provide a sustainable supply of timber products

The Willamette Forest Plan as amended by the Northwest Forest Plan provides the direction to manage timber resources. The majority of this planning area is designated as Management Areas 11a, 11c, 11d (Scenic) and 14a (General Forest) in the Forest Plan and as Matrix in the Northwest Forest Plan. The goals of these management allocations are to produce a sustainable yield of timber based on the growth potential of the land that is compatible with multiple use objectives and meets the environmental requirements of soil, water, air, and wildlife habitat quality. Most of the scheduled timber harvest that contributes to probable sale quantity (PSQ) is conducted on suitable forest lands in Matrix. Pioneer Gulch planning area could potentially contribute about 12.7 million board feet (MMBF) to the Forest harvest goals in the next 2-5 years.

Decision and Reasons for the Decision

Based upon my review of both alternatives, I have decided to implement Alternative B, the Proposed Action, with the exception of certain units (and their associated temporary spur roads) that will need to be re-consulted on due to recent new designation of northern spotted owl Critical Habitat in the Final Rule Regarding northern spotted owl Revised Critical Habitat, published on December 4, 2012. The units being dropped from this Decision are 2803 (72 acres), 2888 (40 acres), and a portion of unit 2923a (12 acres). See Figure 2. A separate Decision Notice will be issued for these units after consultation is re-initiated with the U.S. Fish and Wildlife Service and completed. In addition, no gaps will be created in units 2803 and 2888. In the portion of unit 2923a that is now within critical habitat as mapped in the new rule, gaps will be one acre or less.

Alternative B, as originally proposed in the EA, provides for about 940 acres of variable density commercial thinning in young, managed plantations, and yields about 12.7 million board feet (MMBF) of timber using ground-based and skyline yarding systems. This Decision Notice covers about 816 acres of variable density commercial thinning for about 11.6 MMBF, due to dropping units mentioned above.

Variable density thinning includes gaps of one to three acres on 15% of the harvest stands and skips in about 35% of the original acreage in the harvest stands. Thinning will occur within riparian reserves but outside of no-cut buffers. Slash from harvest operations will be reduced by yarding logs with tops attached, grapple piling, and/or prescribed underburning. A mechanized harvester will be allowed on slopes up to 30%. The one and two acre gaps will not be replanted to allow big game forage to persist longer. The three acre gaps will be planted with a mixture of conifers and hardwood shrub species. Four previously regeneration-harvested units will be treated to enhance wildlife forage on 164 acres. Treatments will include hand-felling or mastication of conifers in strips on 25% of the acreage in these units. A fuelbreak of about 133 acres will be created along the west side of FS Road 2160 by reducing hazardous fuels that are 10 inches diameter and less, within 200 feet of the road in the understory of mature stands and by precommercially thinning young plantations within 100 feet of the road. This fuelbreak will increase our future options for fire management if a wildfire spreads out of the DPW, IRAs, and OCRA.

Road maintenance and reconstruction (including culvert replacements to facilitate timber hauling) will occur on about 55 miles of roads needed for timber hauling. Road closures with hydrological stabilization treatments are proposed on about 18.42 miles of existing system roads. Of the 18.42 miles, about 4.56 miles are currently closed, and will be re-opened for timber hauling. After hauling is complete they would be closed and stored. These road closures were recommended in the UMFWRWA, the 2003 District Supplemental Roads Analysis, and the UMFWWAP. The system roads proposed for closure will be stored for future use. To facilitate yarding and log haul, about 4.12 miles of spur roads will be constructed on routes previously used for temporary roads and 2.16 miles of spur roads will be constructed in new locations. All temporary roads will be decommissioned after purchaser use is completed. The timber sales resulting from Pioneer Gulch Alternative B will replace two failing 48-inch culverts at one crossing on Estep Creek located on FS Road 21 at milepost 14.5. The project will also replace culverts at twelve other stream crossings (nine perennial streams and three intermittent streams) and 98 ditch relief culverts. All of the culverts to be replaced are deteriorating and need to be replaced to facilitate timber haul. The replaced culverts will also provide for safe long-term-term use by the public.

The environmental assessment analyzed a single action alternative and a no action alternative, in accordance with 36 CFR 220.7(b)(2)(i).

When compared to the No Action alternative this alternative will best meet the purpose and need by moving densely stocked second growth plantations to a healthier, long-term trajectory; restore and improve aquatic conditions by thinning within riparian reserves; create improved forage conditions for big game and other wildlife; create a fuelbreak that will improve options for managing wildfires if they spread out of the DPW, IRAs, and the OCRA; reduce the amount of open roads in the planning area to a safer and more environmentally and economically sustainable level by closing and storing roads, and provide a sustainable supply of timber products and the jobs that will be supported by that timber harvest level.

The selected alternative does not prevent attainment of the Aquatic Conservation Strategy objectives (as outlined in the 2004 Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests within the Range of the Northern Spotted Owl – Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy) in the long-term within the Fifth-field Upper Middle Fork of the Willamette River watershed (EA Appendix C). By implementing associated mitigating measures, design criteria, Best Management Practices, and compliance with Forest Plan Standards and Guidelines, the proposal will insure protection of water quality and beneficial uses (EA pages 31-41).

I find this proposal will maintain the viability of the Management Indicator Species (MIS) identified by the Forest Plan FEIS (page III-69) which occur within the project area, at the project area and the Forest Level. The Fisheries Report and the Wildlife Report contained in the Analysis File for this project both contain discussions of MIS, this project's effects upon them, and viability determinations, as does the EA (in summary) on pp. 38, 46, 87-88, 91-92, 99, 101-114,120-131, and 223. All these species are widespread within the project area and across the Forest, with the exception of spring Chinook salmon, which are found only in certain stream reaches where they have been placed through ODFW transplanting efforts. The proposed actions will have either no or negligible effects to the habitats of these species. The effects that occur (for example, to northern spotted owl dispersal habitat or cavity excavator habitat from thinning) will be short-term and provide for long-term habitat improvements. The project area represents less than one percent of the Willamette National Forest, so its effects on MIS viability at the Forest level are negligible to nonexistent.

The areas to be treated have been surveyed for all species requiring surveys which are likely to occur in these types of habitat. Those species were addressed in the Wildlife, Fisheries, and Botany Reports, and Biological Evaluations and Assessments in the Analysis File. The results of the surveys and effects to these species are summarized in the EA on pp. 57, 59, 60-61, 88, 100, 101-103, 133-136, 222, 224-226.

I have determined that the portions of the selected alternative covered by this decision are consistent with the Willamette National Forest Land and Resource Plan, as amended by the Northwest Forest Plan. This finding is based on the content of the environmental assessment, in accordance with Forest Plan Management Area and Forest-Wide Standards and Guidelines, which are cited throughout the EA and associated documents. This EA provides a description and rationale of how this proposal responds to the direction contained in the Forest Plan (EA Appendix F on pp. 223-224).

I have considered all the effects contained in the EA and summarized in this Decision Notice. Some of these effects are positive while other are negative, though none are significantly so. I have made this decision with realization of the tradeoffs between desirable general biodiversity effects and small negative effects to specific resources. I recognize that we cannot provide all things on all acres. This project appears to be the best way to provide for maintaining or improving forest health, vigor, and growth, though in the process snag recruitment will be reduced over the next several decades. The project will, however, provide for larger tree sizes in the future, which will eventually produce larger

snags that provide superior and longer lasting habitat than would be generated within these stands without thinning under the No Action Alternative.

Other Alternatives Considered

Only one action alternative, the Proposed Action, was given detailed analysis. Forest Service Handbook 1909.15, section 41.22 allows one action to be analyzed without consideration of additional alternatives if there are no unresolved conflicts concerning alternative uses of available resources (36 CFR 220.7 (b)(2)).

Alternative A - No Action

In addition to the Proposed Action (Alternative B), I considered a No Action alternative (Alternative A). A comparison of Alternatives A and B can be found in the EA on pages 19-43, with a comparison summary table on pages 41-43. Under the No Action alternative, current management plans would continue to guide management of the project area.

Tribal and Public Involvement and Scoping

The need for this action arose in 2008, and is described above. The Pioneer Gulch Project proposal was first listed in the Willamette National Forest's Schedule of Proposed Actions (SOPA) on July 1, 2008. The SOPA is mailed out to a Forest mailing list of people interested in the management activities of the Forest. The SOPA provides one of the means of keeping the public, government agencies, and tribes informed of the progress of individual projects. The SOPA is also made available to the general public on the Willamette Forest internet website.

The proposal was provided to the four tribes that have relations with the Willamette National Forest (Confederated Tribes of Warm Springs Reservation of Oregon, Confederated Tribes of Siletz Indians of Oregon, Confederated Tribes of Grand Ronde Community of Oregon, and the Klamath Tribe) on August 21, 2008. An update letter was mailed to these four tribes on October 18, 2011, describing changes to the proposed action. The Pioneer Gulch Project has been included in the Annual Program of Work Review with the Grand Ronde, Siletz, and Warm Springs tribes since 2008. No comments from any tribes have been received specific to the Pioneer Gulch Project.

Public scoping began with the mailing of the scoping record with the description of the proposed action and additional project area information on August 21, 2008 to the project's mailing list of 44 individuals, interest groups and organizations, elected officials, and other federal and state agencies.

Five written comment letters were received as a result of these notifications. Copies of the letters can be found in the Public Involvement section of the Analysis File. Letters were received from Rocky Mountain Elk Foundation (RMEF), American Forest Resource Council (AFRC), Oregon Wild (OW), Oregon Department of Fish and Wildlife (ODFW), and Cascadia Wildlands (CW). RMEF comments centered on providing forage for big game. AFRC comment topics included timber sale economic viability, seasonal restrictions for timber sales, fuel treatment objectives, and size of riparian buffers. OW comment topics included logging in natural mature stands, removal of shelterwood overstory, variable density thinning, construction of temporary roads, road closures, fuel reduction treatments in the proposed fuel break, roadless and Wilderness areas, impacts to old-growth related species, survey of special status species, water quality, Aquatic Conservation Strategy objectives, and the range of alternatives. ODFW comment topics included treatments in specific special habitat areas, size of gaps in second growth thinning, shelterwood overstory removal, and road closures/maintenance. CWP comment topics included logging in mature forest, compliance with Survey and Manage requirements,

big game forage habitat, and road closures. See Appendix G of the EA for a detailed record of scoping comments and responses to those comments.

Comments from the first scoping effort were incorporated into the project design. A scoping update letter (mentioned in the tribal section above) was mailed out to 52 individuals and organizations on October 18, 2011.

Six written comment letters were received as a result of the scoping update. Copies of the letters can be found in the Public Involvement section of the Analysis File. Letters were received from OW, RMEF, AFRC, CW, and two from Dick Artley. OW comment topics included relative need for a fuelbreak, number of trees to be retained in gaps, unroaded areas, support of road closures, dead wood and snags, thinning in Riparian Reserves, support of big game forage enhancement, and recommendations for thinning young managed stands. RMEF comments included support for thinning to less than 40% crown closure, support for two to three acre gaps, location of gaps, support for planting of gaps with native shrubs, seeding of disturbed areas, and meadow/opening enhancement. AFRC comments included economic viability, road decommissioning, winter logging/hauling, mitigation measures, and thinning in Riparian Reserves. CW comments included need for a fuelbreak and wildfire use plan, actual treatment acres in the wildlife forage enhancement units, variable density thinning and gap size, temporary roads, and effects of Hills Creek dam. Dick Artley's comments include timber harvest effects on wildlife, effects of road construction, and economic benefits of recreation.

Using the comments from the public, other agencies, and tribes, (EA pages 14-16), the interdisciplinary team identified several non-key issues regarding the effects of the proposed action. There were no key issues identified. The non-key issues were: big game habitat management; road management; economic benefit and efficiencies; water quality, listed fish, and their habitat; threatened, endangered, sensitive, and Survey and Manage species, soil productivity; invasive weeds; and fuels treatments. To address these concerns, the Forest Service created the Proposed Action described above.

A public notice was published in the Eugene Register-Guard newspaper requesting comments on the proposed actions and EA on September 27, 2012. The comment period was 30 days. A letter was also sent to the individuals and organizations who previously submitted scoping comments to notify them that the EA was available for review with a 30-day comment period. A summary of the comments received and my responses to them can be found in Appendix A of this Decision Notice. The full content of the comments can be found in the Pioneer Gulch Analysis File.

I reviewed all the comments along with their supporting reasons before making the final decision. The final decision on the selected alternative, along with the rationale for that decision, are documented in Appendix A of this Decision Notice. A notice of the decision will be published in the Register-Guard newspaper of Eugene, Oregon and sent out to members of the community who have submitted comments on the EA.

Finding of No Significant Impact

From my review of the results of the environmental assessment, I have determined that implementation of Alternative B developed for the Pioneer Gulch Project Environmental Assessment is not a major federal action that will significantly affect the human environment. An environmental impact statement is not needed, and will not be prepared.

The following is a summary of the project analysis to determine significance, as defined by Forest Service Handbook 1909.15_05. “Significant” as used in NEPA requires consideration of both context and intensity of the expected project effects.

Context

Context means that the significance of an action must be analyzed in several contexts (i.e. local regional, worldwide), and over short and long time frames. For site-specific actions significance usually depends upon the effects in the local rather than in the world as a whole.

This project is limited in scope and duration. The Willamette National Forest is one of nineteen National Forests in the Pacific Northwest Region. The selected alternative of the Pioneer Gulch Project will affect less than 0.001 % (1,237 out of 1,700,000 acres) of the Willamette National Forest. This decision also occurs in a social context. From a social perspective, forest health, vigor, and growth are important public values and the public desires that the commercial thinning, forage, fuelbreak, and road treatments be accomplished. This action, though small in the context of the entire Upper Middle Fork Willamette watershed, responds to those values. Timber harvest has been occurring in the Upper Middle Fork Willamette watershed for about the past 60 years. Over that period of time an average of over 800 acres of regeneration harvest has occurred per decade.

In the context of past management actions, the amount and degree of tree removal that will occur with the implementation of Alternative B is not a significant amount and will have a negligible effect upon the watershed's functions and values, the Forest's timber inventories, and the county’s economy. It will also have negligible effects upon regional threatened species populations (see the discussion below on threatened and endangered species under Intensity factor #9). Therefore, the effects of the selected alternative on the resources and species within the project area or at scales larger than the project area are not significant as disclosed in Chapter 3 of the EA.

Intensity

Intensity refers to the severity of the expected project impacts. The following 10 factors were considered to evaluate intensity.

1) Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.

The effects of the proposed actions will be both beneficial and adverse, as documented in Chapter 3 of the EA (pp. 44-175), but not significantly so. The actions have beneficial effects in that they will maintain or improve health, vigor, and growth and improve the diversity of species, putting them on a healthier long-term trajectory. In doing so, Alternative B best achieves the purpose and need for action. These are locally important beneficial effects that do not appreciably affect the larger landscape. Beneficial impacts in addition to overall special habitat restoration are the reduction in road density, and maintenance of the road system to assure it will not become a future source of sedimentation. The analysis shows there will be some socio-economic benefit from the revenues produced from the sale of timber to the local communities, and the proposal provides the opportunity to fund other resource restoration activities (EA pages 158 and 159).

On the other hand, there will be some detrimental effects. The actions may have some limited, short-term adverse impacts to water quality and fish habitat from sedimentation as a result of the road maintenance, road closure, and timber hauling operations (EA pages 79-82, 90-91). The thinning will reduce, over the short-term, recruitment of small diameter snags (EA, 93-99 and in EA Appendix E, pp. 212-221). The proposed road maintenance could increase (though by a small amount) the short-

term likelihood of sediment entry into the stream channel system while minimizing the potential for future road related sediment production from erosion of improperly maintained surfaces and structures.

I find that neither the beneficial nor detrimental effects documented in the EA will significantly affect the quality of the human environment. The context of the negative effects to listed species (generated by potential short-term increases in turbidity in the Middle Fork of the Willamette River (EA p. 91) , and the removal of about 117 acres of spotted owl dispersal habitat due to due to gap creation (of which 83 acres is within 1.2 miles of a core area and 16 acres is within 0.5 miles of a core area) is negligible in the context of the entire watershed and the effects of past actions (EA pp. 99-112). Since the importance of diversification of uniform second-growth stands (EA pp. 3 and 46-56) is contextually greater than the small, potential effects upon listed species, I find that the locally important beneficial effects of this action are greater than the comparatively insignificant adverse effects that will occur.

Furthermore, in order to be consistent with northern spotted owl recovery objectives for dispersal habitat and critical habitat, a separate Decision Notice will be issued for three commercial thinning units. In addition, the gap prescription will be modified in these three units. No gaps will be created in units 2803, 2888 which are within both critical habitat (as defined by the Final Rule regarding northern spotted owl Revised Critical Habitat, published December 4, 2012 in the Federal Register) and the 0.5 mile core habitat area. A portion of Unit 2923a is within critical habitat and on the edge of a 0.5 mile core habitat area, so it will only have gaps one acre and less in size within the critical habitat portion of the unit.

2) The degree to which the proposed action affects public health or safety.

The project designs and mitigations will result in no adverse public health or safety effects. Public safety will be improved as a result of closing and storing roads.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are a number of historic and cultural resources in the project area in the form of historic and pre-historic archaeological sites. There are no park lands or prime farmlands, within, adjacent to, or affected by the project. Some of the proposed thinning (about 25 percent) is within the Middle Fork Willamette River Eligible Wild and Scenic River corridor. This thinning complies with recommendations made by the Upper Middle Fork Watershed Analysis.

A cultural resource survey has been completed that encompasses all areas that could be disturbed by the proposed activities. The survey was conducted according to an inventory plan approved by the Oregon State Historic Preservation Office (SHPO). This inventory is consistent with an agreement between the USDA Forest Service R6/PNW, Oregon SHPO, and the advisory council on historic preservation. Some areas containing these resources have been identified within the project area. The actions avoid disturbance of, or exclude these areas from, any management activities and/or mitigate the effects by protecting the sites through minimization of disturbance by yarding method and log suspension requirements. The proposal will have no adverse effects to cultural resources (EA p. 169 and EA Appendix F p.222). A provision will be included in the implementing contracts to provide for protection of this resource in the event that new material is discovered during ground disturbing activities.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The Pioneer Gulch Project analysis is based upon the best available scientific information, site-specific data, and professional judgment. Models and methods used to estimate the effects presented in Chapter 3 of the EA are widely used in similar analyses and have been reviewed by the research and academic communities. I am not aware of any credible, peer reviewed scientific questioning of the methods used in this analysis, nor of its results.

No comments have been received during the scoping and analysis of this project, nor during the 30-day public review period for the EA, that have identified any elements of controversy regarding the results of the analysis or the methods, techniques, or rationales used.

I find that there is no known controversy surrounding the scientific basis for the estimation of effects of the proposed thinning, forage enhancements, fuelbreak creation, fuels treatment, road maintenance, temporary road constriction, road closure, presented in the Pioneer Gulch Project EA.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The general effects of second-growth thinning and road maintenance are not uncertain, nor do they involve any unique or unknown risks. This lack of uncertainty is due in most part to the long history of management in this area which allows us to predict with reasonable certainty, based upon the results of the last 50 years of forest management, the impacts of the proposed actions. There are examples of similar past management activities within and adjacent to the project area that serve as examples of the result of the types of activities I am authorizing with this decision.

There are always some inherent uncertainty and limits to the predictability of ecosystem functions and response to disturbances. To the extent that we do not know what may happen in this area during a 250 year return interval flood, a landscape scale wildfire, or a subduction earthquake, the potential environmental effects are uncertain or unknown, but this type of uncertainty is not unique in the daily lives of humans, nor are these uncertain events part of the proposed actions. I do not consider any of the potential effects discussed above to be highly uncertain given our extensive experience in vegetation manipulation in these types of environments.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

If the results of these actions are seen by the public to be favorable in terms of thinning to enhance and maintain stand diversity, the project could very well result in similar proposals in the future. Whether those potential future actions would result in significant effects would be determined by the environmental analysis that would be conducted at the time they are proposed.

Given the long history of timber management in this general area and the current Forest Plan land allocations, the selected actions will not establish a precedent for future actions. Fifty-two percent of the project area is composed of Matrix lands as defined by the Northwest Forest Plan, those lands where timber harvest may take place.

The Forest Plan is the vehicle that makes decisions in principle about future considerations. Future projects to implement Forest Plan direction will be analyzed in separate NEPA planning processes. Decisions based upon the Pioneer Gulch Project analysis will not directly affect how such future decisions may be made.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The analyses presented in Chapter 3 of the EA include numerous evaluations of cumulative impacts covering a number of resources. These discussions include effects of past, present, future foreseeable actions in addition to those of the selected alternative, as follows: vegetation (EA pp. 55-56, 58-60, 63-64), soils (EA pp. 69, 74), hydrology (EA pp. 77, 79, 81-84), fisheries (EA pp.91-92), wildlife (EA pp. 93, 98-99, 111, 114-119, 122, 127, 129-133, 135-136), fire and fuels (EA pp. 145-146, 148), roads (EA p.150), economics (EA p. 153), recreation (EA pp. 155-159, 161, 164), potential wilderness areas and other undeveloped areas (EA pp. 165-166), heritage resources (EA p. 169). Past management actions which the above analyses have taken into account consist primarily of timber harvest and associated road construction which have occurred in this watershed over the last 60 years (see EA Appendix B).

All these effects are within the levels anticipated by the Willamette National Forest and the Northwest Forest Plans. The Upper Middle Fork Willamette watershed analysis is incorporated through numerous references throughout the EA. This WA presents a comprehensive analysis of the watershed processes and conditions that provides a contextual basis for the discussion of cumulative effects. No significant direct, indirect, or cumulative impacts to public safety, recreation, fuel loadings, fisheries, wildlife, water, soil, or other components of the human environment are anticipated. Specifically, in terms of water quality, the potential of the thinning and gap creation portions of the proposed actions to cause adverse effects to fish from transport of fine sediment to the Middle Fork of the Willamette River will be unnoticeable (EA, p. 91). However, due to potential for sedimentation from planned culvert replacement at Estep Creek (though of local, short-term extent), the potential effects to spring Chinook salmon resulted in an effect determination of Likely to Adversely Affect (LAA). The effect determination for bull trout was May Affect, Not Likely to Adversely Affect (NLAA). The effect determination for critical habitat for spring Chinook salmon habitat and bull trout was LAA (EA p. 91).

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

An appropriate review of this proposal has been conducted, and no significant property (s), which may be eligible for inclusion in the National Register Historic Places were found to be present in portions of the project area affected by proposed actions. This analysis meets the requirements of Section 106 and 110 of the National Historic Preservation Act. Cultural resources have been surveyed (as mentioned above under Item 3). The proposal will have no adverse effects to cultural resources (EA, pp. 169 and 222).

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

The Pioneer Gulch Project Biological Evaluations (BE) and Biological Assessments (BA) address the effects on sensitive, endangered and threatened species and their habitat. A summary of the effects to threatened northern spotted owls is found in the EA (pp. 101-112). The EA states that “there is no critical habitat for the threatened northern spotted owl; therefore there will be no effect to critical habitat”. However, under the Final Rule regarding northern spotted owl Revised Critical Habitat, published in the December 4, 2012 Federal Register, three of the units now are within newly designated spotted owl critical habitat (2803 - partially, 2888 - totally, and 2923a - partially). A separate Decision Notice will be issued for these three units and their prescriptions modified (as noted

above in Factor #1) to comply with the new rule and any terms and conditions directed in the new consultation.

The effects determination is a "May Affect but is Not Likely to Adversely Affect (NLAA)" for northern spotted owls for both habitat modification and disturbance (EA p. 112). Formal consultation with USF&WS as required by Section 7 of the Endangered Species Act was completed and a Biological Opinion for a finding of no jeopardy to the northern spotted owl is located in the Analysis File for this project (EA p. 112). Consultation will be re-initiated under the 2012 USFWS Final Critical Habitat Rule.

The project area contains one peregrine falcon nest site and likely has peregrine falcon foraging habitat. Adverse effects to peregrine falcons will be short-term with long-term habitat enhancement resulting from the thinning (EA p. 113-114).

The Middle Fork of the Willamette River contains and provides habitat for spring Chinook salmon and bull trout. Both fish species are Federally listed as threatened. Middle Fork Willamette River salmon are part of the Upper Willamette Spring Chinook Salmon Evolutionarily Significant Unit (ESU). Due to potential for sedimentation from planned culvert replacement at Estep Creek (though of local, short-term extent), the potential effects to spring Chinook salmon resulted in an effect determination of Likely to Adversely Affect (LAA). The effect determination for bull trout was May Affect, Not Likely to Adversely Affect (NLAA). The effect determination for critical habitat for spring Chinook salmon habitat and bull trout was LAA (EA p. 91).

Formal consultation has been completed with the National Oceanic and Atmospheric Administration (NOAA) - Fisheries Division and the US Fish and Wildlife Service. Biological Opinions from these agencies contain a finding of no jeopardy for Chinook salmon as a result of the proposed actions. The Biological Opinion findings are contained in the project's Analysis File.

I find, based upon the analysis presented in Chapter 3 of the EA, the various specialist reports, and Biological Evaluations and Assessments, that these effects are relatively small in the context of the landscapes that were analyzed and that the risk to populations and individuals is small. These effects do not constitute significant effects to the human environment based upon their context and magnitude.

There will be no measurable effects on stream shade or wood recruitment to streams (EA p.90). There will be localized, short-term inputs of sediment to the Middle Fork of the Willamette River due to the replacement of the culverts at Estep Creek. Given the context in which these effects are occurring, and the fact that various mitigations will be employed (such as retention of stream buffers , seasonal restrictions, and other Best Management Practices, I find these potential effects to be insignificant.

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This project is in compliance with all Federal and State laws and various recent Executive Orders relating to environmental protection. A summary of how this project and the design of alternatives comply with the federal and state laws and policies can be found in EA Appendix F. The proposed action meets State air and water quality standards and complies with all regulations in the National Historic Preservation Act, National Environmental Policy Act, Endangered Species Act, National Forest Management Act, Clean Air Act, and Clean Water Act. It will not disproportionately impact minorities and low income populations as defined in Executive Order #12898 (EA p. 227).

This finding is based upon the Pioneer Gulch Project environmental assessment being prepared in accordance to Forest Plan Forest-Wide and Management Area Standards and Guidelines; State air quality standards; water quality and beneficial uses; threatened, endangered, and sensitive species guidelines or consultation; and National Forest Management Act requirements for suitability for timber growth (see the Silvicultural Prescription contained in the project's Analysis File).

Conclusion

After considering the environmental effects described in the EA and specialist reports, I have determined that Alternative B will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

Findings Required by Other Laws and Regulations

This decision to thin second growth plantations; enhance wildlife forage; create a fuelbreak; replace culverts; and maintain, close, and store roads is consistent with the intent of the forest plan's long term goals and objectives. The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines to control stocking levels set forth in the Willamette National Forest Plan (MA-14a-13). It responds to the need to improve and increase the amount of big game forage in summer range (Forest Plan FW-147-151). The Pioneer Gulch Project responds to recommendations made in the Upper Middle Fork of the Willamette River Watershed Analysis (Recommendations section). The Pioneer Gulch Project implements direction set forth in the Willamette National Forest Plan as amended by the Northwest Forest Plan.

This decision to implement Alternative B is consistent with the intent of the forest plan's long term goals and objectives listed on pages IV-2 to IV-44. The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for Management Areas 11a, 11c, and 11d, where activities will occur implementing this decision (EA, p. 8) (Willamette National Forest Land and Resource Management Plan, pp. IV-201-202, IV-205-209).

This decision is consistent with all applicable Acts and Regulations such as the National Forest Management Act of 1976, National Environmental Policy Act of 1969, Endangered Species Act of 1973, Clean Water Act of 1972 and section 319 of the 1987 CWA, Civil Rights Act of 1964, Title VI and Environmental Justice Executive Orders 11988 and 11990, the Preservation of Antiquities Act of June 1906 and the National Historic Preservation Act of October 1966, Executive Order 12962 on Recreational Fishing, and Executive Order 13186 on Neotropical Migratory Birds (EA, Chapter 3).

Best Available Science

I am confident that the analysis of this project was conducted using the best available science. My conclusion is based on a review of the record that shows my staff conducted a thorough review of relevant scientific information, considered responsible opposing views, and acknowledged incomplete or unavailable information, scientific uncertainty, and risk. Please refer to the specialist reports in the project file for specific discussions of the science and methods used for analysis and for literature reviewed and referenced.

Administrative Review and Appeal Rights

This decision is subject to appeal pursuant to 36 CFR 215. Only individuals or organizations that submitted comments during the comment period may appeal. Notice of Appeal must meet the requirements of 36 CFR 215.14. Appeals can be submitted in several forms, but must be received by the Appeal Deciding Officer within 45 days from the date of publication of this notice in the Eugene Register Guard. Appeals may be:

1) Mailed to: Appeal Deciding Officer, Meg Mitchell, Forest Supervisor; ATTN: Appeals, 3106 Pierce Parkway, Suite D, Springfield, OR 97477;

2) E-mailed to: appeals-pacificnorthwest-willamette@fs.fed.us. Please put APPEAL and "**Pioneer Gulch Project"** in the subject line. Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to the email address above. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification;

3) Delivered to: Willamette National Forest, Supervisor's Office at 3106 Pierce Parkway, Suite D, Springfield, OR 97477, between the hours of 8:00 am and 4:30 pm, M-F.; or

4) Faxed to: Willamette National Forest, Supervisor's Office, ATTN: APPEALS at (541) 225-6222.

The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

Implementation

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Contact Person

For further information on this decision, contact Eric Ornberg, Lead Planner, at Middle Fork Ranger Station, 46375 Highway 58, Westfir, OR 97492. Phone: (541) 782-5217, eornberg@fs.fed.us.

The Environmental Assessment and this Decision Notice can be found on the Willamette National Forest Website at: www.fs.usda.gov/goto/willamette/projects-all.

Implementation Date

As per 36 CFR 215.9, if no appeal is received, implementation of this decision may occur on, but not before, the 5th business day following the close of the appeal filing period (215.15). When an appeal is filed, implementation may occur on, but not before the 15th business day following the date of appeal disposition (36 CFR 215.2).

Approved by:

/s/ Duane F. Bishop ***December 18, 2012***

DUANE F. BISHOP
District Ranger
Middle Fork Ranger District
Willamette National Forest

Date

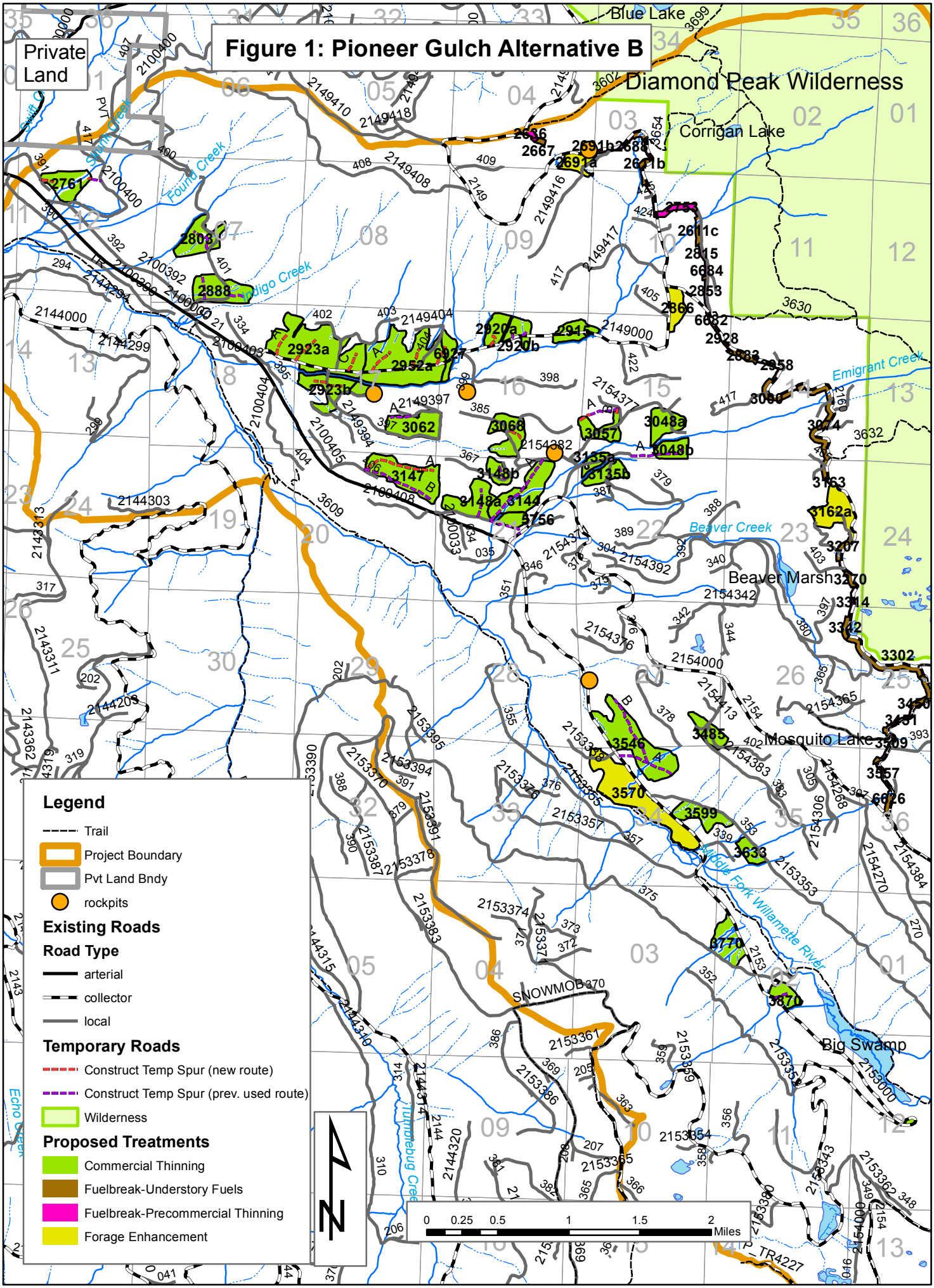


Figure 1: Pioneer Gulch Alternative B
Private Land
Blue Lake
Diamond Peak Wilderness
Corrigan Lake
Found Creek
Indigo Creek
Emigrant Creek
Beaver Creek
Beaver Marsh
Mosquito Lake
Middle Fork Willamette River
Big Swamp
SNOWMOB
Legend
Trail
Project Boundary
Pvt Land Bndy
rockpits
Existing Roads
Road Type
arterial
collector
local
Temporary Roads
Construct Temp Spur (new route)
Construct Temp Spur (prev. used route)
Wilderness
Proposed Treatments
Commercial Thinning
Fuelbreak-Understory Fuels
Fuelbreak-Precommercial Thinning
Forage Enhancement
0 0.25 0.5 1 1.5 2 Miles

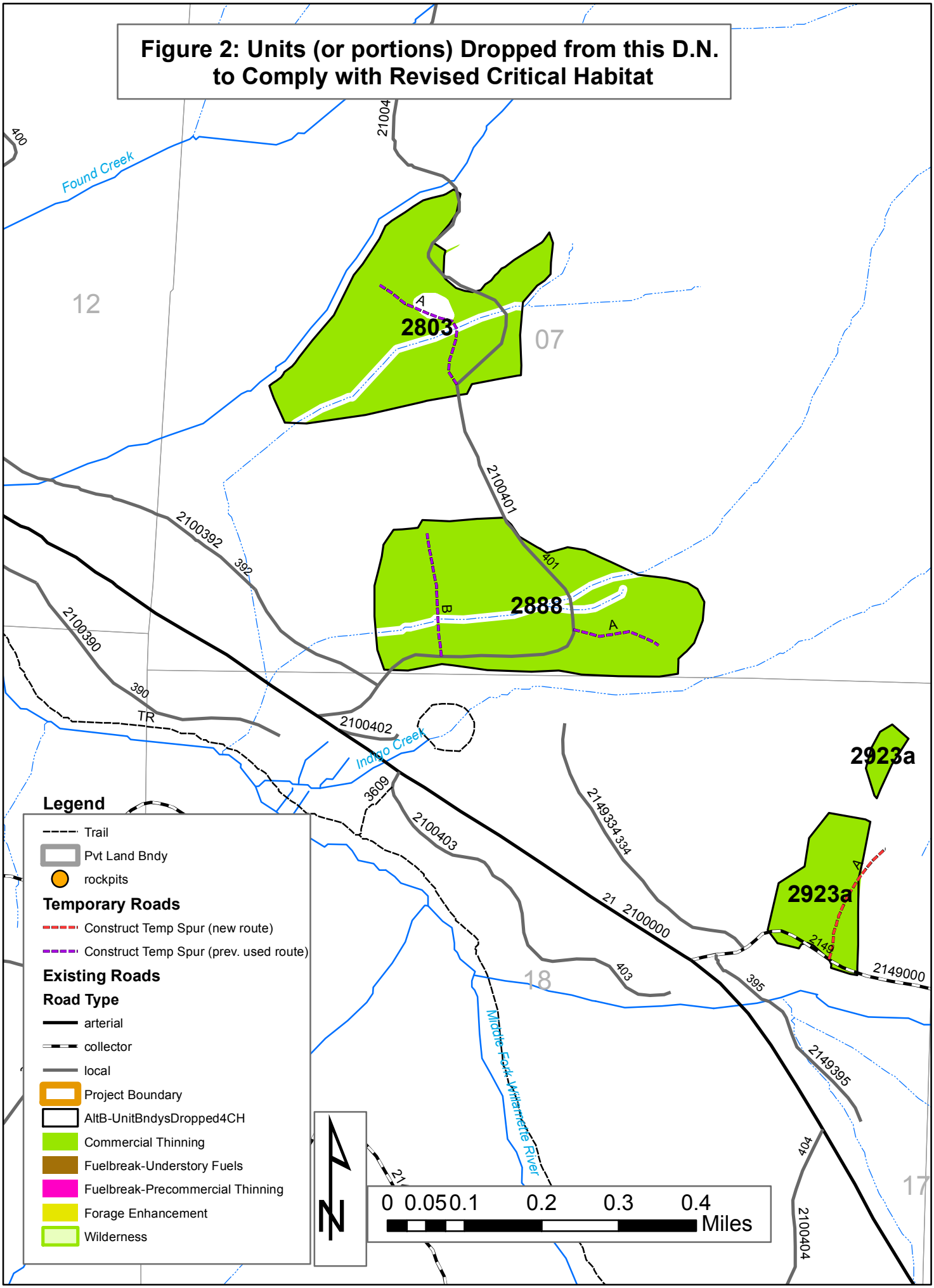


Figure 2: Units (or portions) Dropped from this D.N. to Comply with Revised Critical Habitat
Found Creek
Indigo Creek
Middle Fork Willamette River
2803
2888
2923a
2923a
A
B
12
07
18
17
400
21004
2100401
401
2100392
392
2100390
390
TR
2100402
3609
2100403
403
2149334
334
21
2100000
2149
2149000
395
2149395
404
2100404
Legend
Trail
Pvt Land Bndy
rockpits
Temporary Roads
Construct Temp Spur (new route)
Construct Temp Spur (prev. used route)
Existing Roads
Road Type
arterial
collector
local
Project Boundary
AltB-UnitBndysDropped4CH
Commercial Thinning
Fuelbreak-Understory Fuels
Fuelbreak-Precommercial Thinning
Forage Enhancement
Wilderness
N
0 0.05 0.1 0.2 0.3 0.4
Miles

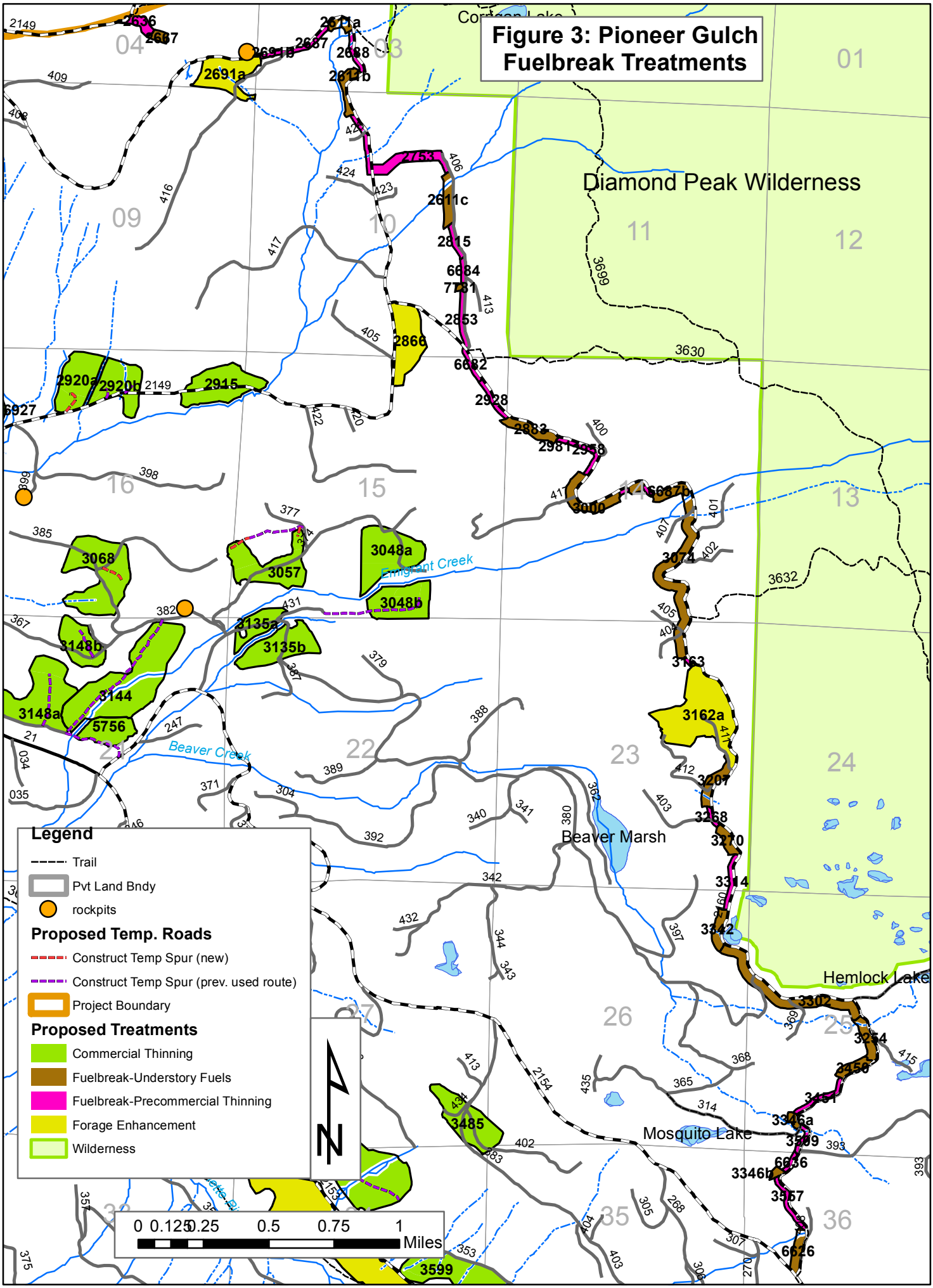
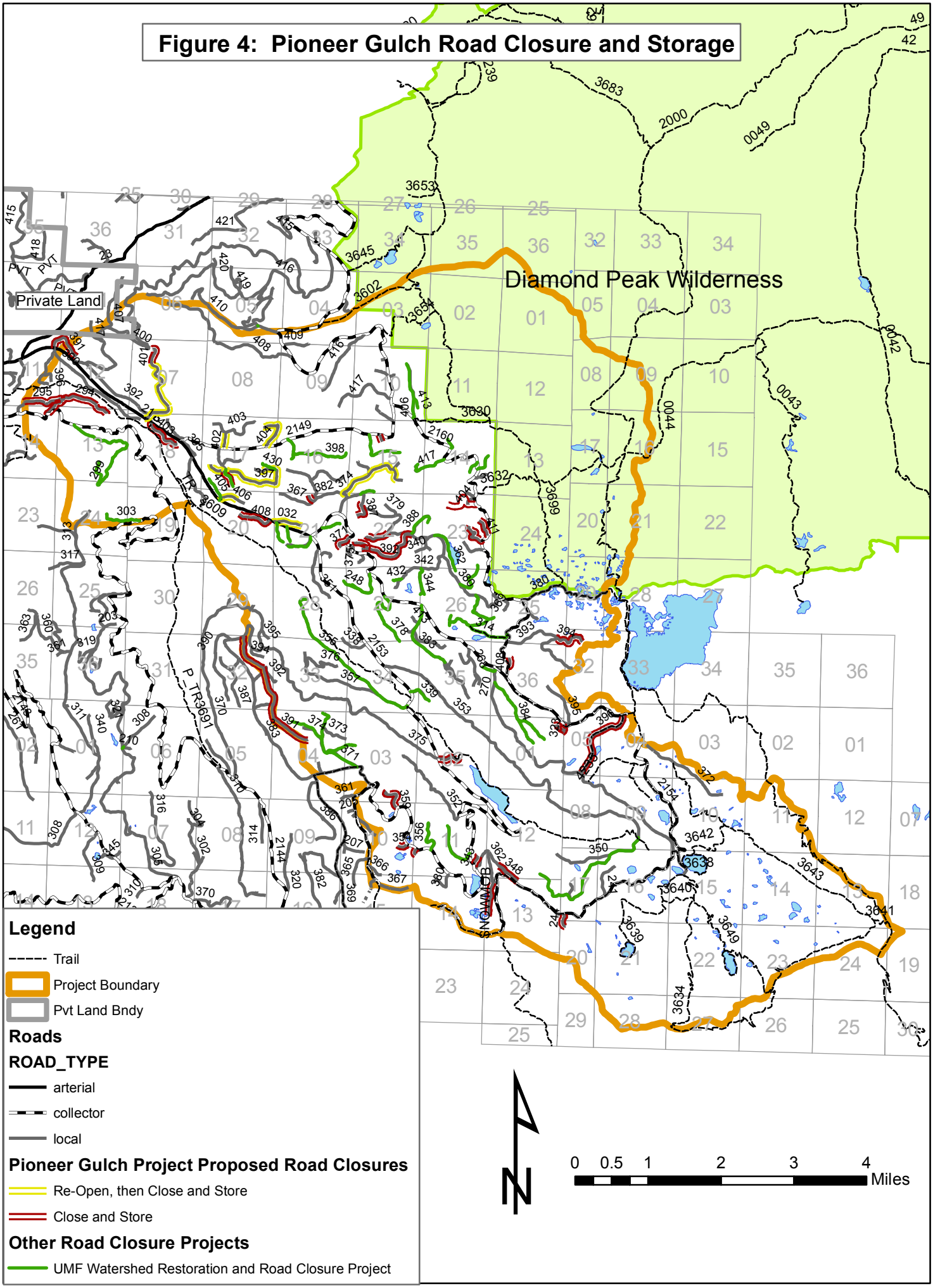


Figure 3: Pioneer Gulch Fuelbreak Treatments
Diamond Peak Wilderness
Beaver Marsh
Mosquito Lake
Hemlock Lake
Emigrant Creek
Beaver Creek
Legend
Trail
Pvt Land Bndy
rockpits
Proposed Temp. Roads
Construct Temp Spur (new)
Construct Temp Spur (prev. used route)
Project Boundary
Proposed Treatments
Commercial Thinning
Fuelbreak-Understory Fuels
Fuelbreak-Precommercial Thinning
Forage Enhancement
Wilderness
0 0.125 0.25 0.5 0.75 1
Miles

Figure 4: Pioneer Gulch Road Closure and Storage



Appendix A – Pioneer Gulch Project EA Response to Comments

The Environmental Assessment was available for public review and comment from August 27, 2012 to September 26, 2012. Five written comments were received during the comment period from the following groups/individuals: Dick Artley, American Forest Resource Council (AFRC), Rocky Mountain Elk Foundation (RMEF), Oregon Wild (OW), and Cascadia Wildlands (CW).

The comments received have been summarized and italicized below. The original comment letters can be found in the Project Analysis File. All comments were read and District Ranger Duane Bishop's responses follow each comment.

Comments from Dick Artley

Comment #1: Please include these opposing view source documents in the References Cited section of the final EA. When describing the environmental effects of the timber sale activities to the countless natural resources in the project area please cite the resource damage described in the source documents contained in the attachments.

Response #1: The List of Citations provided by the commenter has been reviewed and no opposing science has been found. The commenter cites some documents that are not peer-reviewed scientific studies but are opinion papers or web postings. Scientific papers provided are partially quoted and taken out of context of the study as a whole or misinterpreted. These documents provide no scientific evidence to inform the public further or for respective resource specialists to consider any new or opposing scientific views that would help them reanalyze the Alternatives' effects on resources. In the EA, the References Cited section lists the reference material used by resource specialists when preparing the EA. Because the documents referenced by the commenter were not used by the resource specialists, they cannot be included in the List of Citations in the EA.

Comment #2: It violates the law to give the public a skewed (one sided) description of the environmental effects of a proposed project as you have done in this preliminary EA. I suggest you become familiar with the meaning of "hard look." You should also read the Administrative Procedures Act.

Response #2: The effects of the No Action and the Proposed Action alternatives on resources are discussed within their respective sections of Chapter 3, and were considered in the decision making process. By analyzing these 3 alternatives, a broad study of potential environmental effects was considered.

Comment #3: The opposing views quoted in Attachment #1 were authored and/or signed by 237 different unbiased Ph.D. biological scientists with no connection to the USDA. Does it surprise you that about 77% of the source documents listed in the References section of this pre-decisional EA that drove the project are authored by USDA employees with financial incentives to portray logging as ecosystem-friendly? Intelligent Americans will immediately detect bias towards logging in the References.

Response #3: See response to Comment #1.

Comment #4: The opposing views quoted in Attachment #4 were authored and/or signed by 52 different unbiased Ph.D. biological scientists with no connection to the USDA. They indicate that road construction inflicts more resource damage than any logging-related activity.

Response #4: As stated in Chapter 1, Water Quality/Listed Fish Habitat was determined to be an issue (non-key) during public scoping, with evaluation criteria including miles of road work. Alternative B was developed in response to comments. No new system road construction is considered in Alternative B. In Alternative B temporary spur roads will be closed, decommissioned, and revegetated after use. The effects of temporary road construction are discussed throughout Chapter 3 on pages 62, 63, 66, 67, 70-74, 79, 149, 152, 153, 163, 166, 169, 170, 207, 226, 234, and 235. Also, about 18 miles of existing system roads are proposed for road storage. Of the 18.4 miles, about 13.8 miles are currently open and about 4.6 miles are currently closed but will be re-opened for timber haul.

Comment #5: None (emphasis added) of the documents listed in the References Cited section for this pre-decisional EA are specific to this project. This is a double standard intended to shut out public comment.

Response #5: See response to Comment # 1.

Comments from American Forest Resource Council (AFRC)

Comment #6: AFRC is concerned with the "wildlife forage enhancement units," particularly these treatments' potential affects to the future timber supply on USFS matrix lands. It seems as though this treatment is aiming to reduce the growing stock of future merchantable timber species in favor of forbs and brush species such as vine maple. Will the treatments described for the four forage enhancement units have adequate stocking to meet your responsibility to enable perpetual timber harvest at the long-term sustained yield capacity, or maintain appropriate tree species? In our opinion, these treatments will inhibit your ability to meet this responsibility.

Response #6: The Pioneer Gulch forage treatments are proposed in four units. One of the units has extremely low stocking and appears to be a failed regeneration clearcut. The other three are in previous shelterwood harvest units. Of the 164 acres in these units, only about 41 acres (25%) will be impacted by conifer whip-felling or mastication. At a landscape scale, the amount of acres with the potential to lose timber production is insignificant as a trade-off for some enhancement of big game/early-seral species habitat. Additionally, the actual area of ground where trees may be removed will occur in a mosaic/swath (8 ft. wide) pattern, not as a contiguous area, thus at a stand/unit level, there will not likely be a measurable reduction in stocking that exceeds the LRMP requirements. Willamette Forest Plan S&Gs support appropriate management options that favor biodiversity over commercial timber production (FW-201, FW-207). There will still be enough trees to meet NFMA and LRMP requirements of 125-150 trees per acre, averaged over the whole unit. Young trees in plantations may be getting in shorter supply, but so is good quality wildlife forage.

Comment #7: AFRC is happy that the Forest Service has recognized the new Westside Elk Habitat Model that has been adopted, and has incorporated it into their analysis. However, we would like you to look at ways to meet the needs of the elk population in big game emphasis areas through regeneration harvests that would generate revenue to pay for projects, rather than treatments that generate costs. Table 16 in the EA shows that 11% of the project area consists of stands in the stand initiation stage of seral development, while stands in the understory reinitiation and old growth stage comprise 70% of the project area. Wouldn't creating quality elk forage by regenerating stands in this 70% result in a more balanced seral stage composition? There is a need to meet the requirements of big game emphasis areas; however, are units in the stand initiation stage of development really the best area to do it?

Response #7: The opportunities for regeneration harvest in the understory reinitiation and old growth stages are very limited to none. As stated in the EA on p.17, a proposal for harvesting mature stands

(understory reinitiation phase) was dropped due to the recent Survey and Manage Settlement Agreement (2011) requiring surveys for red tree voles, the costs associated with red tree vole habitat retention, and the high probability of finding tree vole nests in these stands. The same applies to old growth stands.

Comment #8: AFRC reviewed the four forage enhancement units in the field and we're a bit confused on how these stands are aged in Table 13 of the EA. Three of these four units were treated with a shelterwood harvest, which is a kind of regeneration harvest. Yet the table in this EA is identifying the age of these stands based on the residual overstory trees left behind as part of the shelterwood. Since these stands were regenerated, wouldn't the age of the stand be that of the regeneration? Currently the Forest Service has these stands listed as 101, 101, and 150 years old. This may seem trivial, but in 25-30 years when these stands are ready to be commercially thinned, opponents of timber harvests will be clamoring that they are old growth based on their age.

Response #8: You are correct that the age of these stands should reflect the age of the regeneration rather than the age of the remaining shelterwood overstory trees. The approximate age for these three stands should have been displayed as 20 years.

Comment #9: AFRC would like to see all timber sales be economically viable. Appropriate harvesting systems should be used to achieve an economically viable sale and increase the revenues to the government. We encourage the Forest Service to conduct an economic analysis early in their planning process to explore the viability of each stand treatment. Allowing the use of processors and feller-bunchers throughout these units can greatly increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest.

Response #9: The Proposed Action alternative will have a positive economic benefit and will be economically viable (EA pp.151-154). Feller-bunchers will be allowed on slopes up to 30% (EA p.33).

Comment #10: Proper road design and layout will pose little to no negative impacts on water quality or slope stability and we are glad the Forest Service is proposing new roads where needed for proper management. We encourage the Forest Service to identify those units that will require future entries as candidates for permanent road construction in order to ensure economic feasibility of future sales, as well as to allow wet weather operations on current sales. It appears that this project is implementing (road closure) actions through road storage rather than road obliteration, and we encourage the Forest Service to continue with this approach.

Response #10: The roads being constructed for this project are all planned as temporary roads in order to minimize impacts to other resources such as wildlife and aquatic organisms (EA p. 24). Wet weather haul will be permitted but will be monitored by the Timber Sale Administrator, the District Roads Manager, Fishery Biologist, and/or Hydrologist and may be suspended when necessary during heavy rainfall (EA p.36). Yes, the road closures will be accomplished through road storage.

Comment #11: AFRC is glad to see that the Forest Service is being proactive in treating riparian reserves. We would like the Forest Service to continue to look for ways to treat more of the riparian reserves based on its' own local expert's opinions, and not to defer treatment due to outside agency biases and opinions.

Response #11: Riparian reserves in and adjacent to all the commercial thinning units will be thinned, leaving a no-cut buffer depending on stream class.

Comment #12: We would also like the Forest Service to consider including some of the following pieces of scientific research into their analysis. Much controversy surrounding any type of thinning in riparian reserves has surfaced, and we think the following information would be useful in justifying the kinds of beneficial treatments the Forest Service implements: Dolloff and Warren, 2003; Naiman et al., 2002; Keim et al., 2002; McEnroe, 2010; Minor, 1997, McDade et al., 1990; and Welty et al., 2002.

Response #12: We are aware of the many articles you cited and currently do take your suggestions and suggested scientific research articles on riparian thinning and management into consideration during our planning and implementation phases.

Comments from Rocky Mountain Elk Foundation (RMEF)

Comment #13: The Elk Foundation is particularly pleased to see two things appear in this EA:

- The clear indication USFS collaborated with the local wildlife biologist from Oregon Department of Fish and Wildlife in development of the EA.
- A thorough analysis of the current declining big game forage habitat conditions and favorable impacts of the proposed actions on big habitat and specifically the forage habitat improvement the project will provide.

Response #13: The application of Executive Order (EO) 13443 (Facilitation of Hunting Heritage and Wildlife Conservation) is intended to be at a much larger scale than the Pioneer Gulch Project alone. Nevertheless, this project has collaborated with agencies and organizations such as the Oregon Department of Fish and Wildlife and Rocky Mountain Elk Foundation (E.O. 13443 Sec. 2. (g)) while planning management that would improve habitat for wildlife game species (E.O. 13443 Sec. 2. (c)) at a very local scale. This EO is intended to be relevant at a National Forest and/or Regional Scale. The Forest Service provides extensive hunting opportunities via access to abundant public lands and also via management and conservation of wildlife.

Comments from Oregon Wild (OW)

Comment #13b: The specialists reports incorporated by reference on page 44 of the EA should be made available on the Pioneer Gulch project page of the Willamette National Forest website.

Response # 13b: The specialists reports are all available on request. We strive to meet Section 508, which requires that documents posted on the internet must be available to handicapped persons. We meet those requirements with our EAs and Decision Notices, but are not quite at that stage with our specialist reports so we do not post them on the internet.

Comment #14: We support variable density thinning in dense young stands where it can be done carefully and without too many roads. Please apply variability at many scales both within and between stands. If these stands to be treated have distinguishable patches of legacy trees, please conduct red tree vole surveys. The EA says “Skips would include no-cut riparian buffers, areas where conifer tree density is low, and areas that are not feasible to log.” Please strive to find the optimal mix of treated and untreated areas instead of using the arbitrary limit of operational constraints to determine the proportion of skips.

We support gaps but 3 acres gaps with only 6 tpa is a bit large and a bit too structure deprived. Please try to mimic natural processes. Gaps are typically formed by disturbances that retain a lot more

structure than just 6 tpa. Gaps should be small - on the order of a few acres or less than an acre. Smaller gaps need less retained structure. Larger gaps need more retained structure. It is not always desirable to replant conifers in gaps, so that complex early seral conditions can be prolonged. Planting these openings with red alder would delay occupation by shade-tolerant conifers.

Response #14: Variable density thinning will be used in the commercial thinning units and temporary road construction will be kept to the minimum needed to economically thin these stands. Variability will occur both within and between stands. Within stands, there will be gaps, skips, and thinned areas (EA p. 19). Between stands, there will be different spacing density and some stands will not be thinned at all at this time. The mix of 15% in gaps, 35% in skips, and 50% thinned (on average per harvest unit) will benefit a variety of wildlife and aquatic species.

An alternative (suggested by Oregon Wild) that would leave four to six clumps of live trees per acre in each gap (in commercial thinning units) with three to five trees in each clump and patches of tall shrubs and /or small trees left within gaps was considered. The alternative was eliminated from detailed study because Alternative B, the Proposed Action, would leave about six dominant live trees per acre and small unmerchantable sized trees (less than 7" diameter) and shrubs in the gaps (EA p. 17-18). If four to six clumps of merchantable size trees per acre were to be left, then the purpose and need to enhance big game forage habitat in the project area would not be met (EA p. 18). Smaller gaps (less than an acre) fill in with conifers seedlings too quickly to serve as wildlife forage for very long. That is why we are creating up to three acre gaps, so they will remain in quality wildlife forage for longer. Not all gaps will be planted. We are only going to plant the three acre gaps. The three acre gaps will be planted with a mix of 50 conifers per acre and 25 hardwood shrubs per acre (EA p. 19).

Comment #15: Thinning in riparian reserves: Stream buffers as small as 30 feet will result in significant reduction in recruitment of functional wood. The EA did not adequately disclose this. Small streams have less power so small wood can be functional in small streams.

The EA says that logging in riparian reserves will accelerate development of late successional characteristics, but in fact it will advance some aspects (e.g., vegetation diversity) and retard some aspects (e.g., dead wood). The EA should disclose how logging effects (both beneficially and adversely) each of the major features of late successional habitat.

Growing large trees is not the same as recruiting abundant functional wood because there are trade-offs between the size of individual trees and the volume of wood in the stand, and between the goal of large trees and delayed recruitment of dead wood.

The EA says "Over the long-term trees treated within the Riparian Reserves would grow larger and would become more useful as functioning wood when they are recruited within perennial streams." This is only half true. It applies to the trees that are retained, but the trees that are exported from the site will never provide habitat for fish & wildlife.

The EA says "Residual trees in riparian areas … would create a more abundant supply of large woody debris (LWD) to improve future stream habitat diversity …" This is highly unlikely. Thinned stands almost always produce less volume than unthinned stands. See Heiken, D. 2010. Dead Wood Response to Thinning: Some Examples from Modeling Work.

The cumulative effect analysis should be in the EA, not an Appendix.

The EA discusses wood recruitment to streams but does not adequately address wood recruitment to the outer portion of the riparian reserve which should also have abundant dead wood to mitigate for the shortage of dead wood across the highly managed public/private forest landscape.

Response #15: Class IV and V streams (intermittent stream channels) will have 30 foot buffers, only have water during significant rain events, and are not habitat to fish or other water dependent aquatic species. This 30 foot buffer will allow recruitment of smaller pieces of wood creating and or enhancing aquatic habitat within these areas. However, the expected trajectory of the riparian stands we are working towards is an older stand that provides larger wood to the aquatic environment. Large wood persists in the environment longer, creates more in-stream and channel stability, and has more utility as aquatic structure if it is transported to larger fish bearing streams during heavy rains or debris torrents.

Furthermore, the rationale for riparian thinning is as follows: the primary concern is that, if riparian areas are not thinned, their ability to reach site potential tree height (180-200 feet) in the riparian areas will be reduced and the timeframe to reach that height will be at a minimum greatly extended. Many of the riparian stands are already in a state of diminished crown ratio percentage for the height and age of the trees due to overcrowding. This condition can lead to further loss of structural integrity of the trees as the low crown ratio does not provide enough photosynthetic area to allow the trees to put on girth/diameter that would otherwise strengthen the tree. Current growth is primarily vertical due to competition for sunlight and other important characteristics of growth are not being adequately provided. By applying most of the available energy to vertical growth the trees are not able to support heavy snow loads, which increases the probability of breaking or knocking the tree down.

The overall intent of thinning these stands is to open the entire canopy by removing some of the poorly developed existing trees, especially their crowns, to provide the remaining trees room to expand and increase photosynthetic area that will lead to the production of more energy the trees can invest in other types of growth other than vertical. Opening the over-story canopy and allowing sunlight to penetrate to the forest floor, under-story plants such as young trees of a diverse nature, shrubs and forbs will experience increased growth rates and assist in creating a multi-layered forest that previously existed.

Oregon Wild correctly states that Riparian Reserve thinning will capture mortality and result in a decrease of future coarse wood volume at the unit scale. Unfortunately, Oregon Wild has made the assumption that ACS objectives are analyzed and implemented at the unit scale. The Record of Decision, NWFP 1994 explicitly states that "*Watershed* analysis is one of the principal analyses that will be used in making decisions on implementation of the Aquatic Conservation Strategy." Effects analyses of the proposed action are based on an ecologically relevant scale, often the 6th field watershed, not the individual tree or treatment unit. The area being treated in the watershed is but a small fraction of that land-base and the watershed will continue to provide sources of course wood in abundances and sizes with no measurable decrease. As disclosed in the EA, thinning will accelerate development of late successional characteristics in the treatment areas, will provide variability in structure and diversity across the watershed, and will maintain course wood abundances across the watershed. In addition, the thinning from below prescription will result in cutting the smaller trees and leaving the larger trees.

Furthermore, Oregon Wild has made the incorrect assumption that any decrease in coarse wood levels from their current levels will constitute an ecological effect. Oregon Wild provides no scientific background for this assertion. The EA discloses that snag and downed wood abundances will be maintained above the Standards and Guidelines after thinning. Oregon Wild's position is that removing any trees will result in a detrimental ecological effect and therefore ACS objectives will not

be met. It is stated numerous times throughout the EA that the treatment stands are overstocked plantations that are in an un-natural condition. Decreasing potential volume from these levels does not constitute an ecological effect.

Oregon Wild states that the cumulative effects analysis should be in the EA not in the Appendix. Appendix B is merely a list of past, present, and future actions that were considered in the cumulative effects analysis. The cumulative effects analysis occurs throughout Chapter 3 in the EA.

Comment #16: We urge the FS to focus on a broader suite of early seral species instead of just big game. We support the integration of forage enhancement, road closures, weed control, etc. We support early seral (forage) enhancement in places that are already exhibiting those characteristics (e.g., old shelterwoods and failed plantations) because these efforts do not present significant trade-offs with the important goal of mature/old forest development. We support variable treatment of fuels. Treating fuels in a variety of ways can help enhance habitat diversity.

Response #16: Creating and improving early-seral habitat benefits more than just elk and deer. Its beneficial effect on upland game birds is addressed on pages 5 and 20 of the EA and page 16 of the wildlife specialist's report. Forage enhancement, road closures, and weed control are all part of the proposed action. Early seral enhancement is proposed in three existing shelterwoods and one existing clearcut. Variable fuel treatments will include yarding tops, grapple piling, prescribed burning, and pile burning.

Comment #17: We are skeptical about the need for fuel reduction in a location that is both remote and typified by relatively infrequent stand replacing fire. No one can predict where or when fire will occur, and while we wait, fuels will likely regrow to erase the benefits of fuel reduction. The marginal benefits of such fuel reduction probably do not outweigh the negative effects on mature forest habitat, afterall, fuel = habitat.

The EA is not exactly clear on what is being proposed as far as fuel reduction, e.g. "units would receive one or more of a variety of treatments including …" Are treatments limited to those listed? We hope that commercial removal of larger trees is not contemplated. If the fuel treatment is going to be done, we support the use of non-commercial methods and the limitation to fuels less than 10" dbh. This helps avoid incentives to remove larger trees with greater ecological value.

If the fuel break will be used primarily to control fire instead of to allow fire serve its natural role in the ecosystem, then the fuel break is part of a non-ecological approach to fire as a natural ecological process. It's part of the problem instead of part of the solution.

Response #17: A wildfire event in the Wilderness may escalate into a larger fire that becomes difficult to control, changing or adding to the severity of the fire, if forest stand conditions adjacent to wilderness landscapes are left untreated in Condition Class 2 (EA, p. 4). Treating the understory fuels would reduce fire behavior potential during wildfire events and restore fire to fire adapted landscapes as well as providing a safety anchor point that could be used for future fires in the wilderness (EA, p. 143).

Fuelbreak treatments are limited to those listed in the EA on pp. 5,6, and 21. Commercial removal of larger trees in the fuelbreak is not part of the proposed action. Only trees less than 10 inches dbh will be removed in the fuelbreak.

Allowing fires to burn in the wilderness is not within the scope of this project. That would be a separate proposal and would need to have a separate NEPA document. Creating a fuelbreak increases

our future options for fire management and suppression in those areas adjacent to Diamond Peak Wilderness (DWP), Inventoried Roadless Areas (IRA), and the Oregon Cascades Recreation Area (OCRA).

Comment #18: We support the maintenance of well-travelled roads. We support closure and storage or decommissioning of roads that are not needed or cannot be maintained.

Response #18: Closure and storage of roads is included in the proposed action.

Comment #19: More than 6 miles of new temporary roads it too much. The adverse effects of temporary roads is not really temporary. They are linear clearcuts that fragment the forest and cause significant soil damage that is not completely healed for a very long time.

Response #19: Temporary roads help reduce the associated logging costs. The low per acre timber volume and long haul distances are both factors that decrease the economic viability of the commercial thinning in this project. A minimum amount of temporary roads was planned to facilitate yarding of the timber with ground-based and skyline logging systems. If temporary roads were not planned, a large part of the commercial thinning would have to be accomplished with helicopter yarding, which is much more expensive, and the timber sales would probably not sell. The environmental effects of temporary road construction are expected to be minor and short-term. About two-thirds of the temporary road construction (4.12 miles) will occur on previously used routes, so many of the effects already occurred in the past. The effects of temporary road construction is discussed throughout Chapter 3 on pages 62, 63, 66, 67, 70-74, 79, 149, 152, 153, 163, 166, 169, 170, 207, 226, 234, and 235.

Comment #20: Oregon Wild supports thinning of young planted stands if designed to accomplish restoration objectives and carefully implemented. One of the key considerations is to find the optimal mix of treated and untreated patches within and between stands. In order to achieve all the objectives for optimal late successional forest conditions, restoration projects must contain both thinned and unthinned patches. Finding the right mix should not be an accident based mostly on operational feasibility, but should be a conscious decision based on quantitative analysis showing how best to achieve optimal late successional conditions. Since thinning has a long-term negative effect on reducing recruitment of dead wood, it should be treated as a limiting factor and used to drive the search for an alternative with the most appropriate mix of treated and untreated stands.

Determining the appropriate scale of thinned and unthinned areas is a critical decision which requires clear objectives and quantitative analysis. One necessary component of such an analysis is to determine how many green trees are needed at what density in order to recruit sufficient snags over time (both short and long-term) to achieve 50-80% DecAID tolerance levels across the project area.

Response #20: See response to Comment #14. A thorough DecAID dead wood analysis was completed – see EA pp. 93-99 and Appendix E of the EA.

Comments from Cascadia Wildlands (CW)

Comment #21: We are not opposed to skips and small-gap thinning strategies to reintroduce diversity in managed plantations. However, three-acre gaps are too large, more like mini-clearcuts. While six live trees per acre will be left within the gaps, the Forest Service should also leave additional trees to provide future or created snags within the larger gaps.

The Northwest Forest Plan does not allow large gaps in the LSR for the purpose of elk forage production. If any of these gaps, intended to enhance forage for elk, is in the LSR, it must be eliminated.

The Northwest Forest Plan also does not allow gaps created for elk forage in riparian reserves. While the EA said gaps would be located 170 feet away from streams, it is not entirely clear if all gaps for forage would be outside of all riparian reserves. Page 84 of the EA indicated that gaps would be located "within the riparian reserves of class II streams."

The EA states "Gaps would be placed in root rot pockets when spacing allows" (pg. 19). This is unfortunate as root rot pockets are natures best way of introducing diversity in homogenous stands – far better than logging mini-clearcuts. Root rot pockets will produce areas of high-quality early-seral habitat, including abundant, wildlife-friendly snags. The root rot pockets will naturally reforest with rot-resistant species, enhancing diversity in tree spacing and species. While the EA states gaps would be artificially replanted with rust-resistant species, it is not clear if they are also rot-resistant species.

Response #21: For gap size discussion, see Response #14. There are no treatments, including thinning with gaps, forage, or fuels planned in LSR in this project. The Northwest Forest Plan contains no language specifying that gaps are not allowed within Riparian Reserves. About six acres of gaps will be placed within Riparian Reserve on Class II streams on Skunk, Pioneer, and Emigrant Creeks outside of 170 feet (EA, p. 77, 84; Fisheries BA, p. 10). Gaps within Riparian Reserves will not be place on slopes greater than 25% or areas with unstable soils with high erosion potential (EA, p.91; Fisheries BA, p. 16). Grapple piling, hand piling, and pile burning will not occur in gaps within Riparian Reserves (EA, p.89; Fisheries BA. P. 22).

The primary shade zone for all units is 60 feet and the secondary extends to 170 feet. Gaps will be outside the secondary shade zone of 170 feet. It is unlikely that gaps will result in an increase in stream temperature, due to the primary and secondary shade zones having no gaps placed in them (EA, p. 90; Fisheries BA, P. 41).

The creation of gaps in Riparian Reserves has the potential for an increased probability of slides or wasting events. However, there will be a maximum of six acres of gaps placed outside 170 feet on Class II streams. Gaps will be placed on stable slopes ranging from 5-25% gradient. All units have been surveyed for unstable soils and unstable slopes and neither condition were found in any of the units. Overland debris flows, slides, or mass wasting events in gaps is highly unlikely given the porous soil, hydraulic conductivity of forested soils, and characteristics of sub-surface flows and flow paths in the proposed action area. Given the stable slopes, low gradient, and soil characteristics, there is a discountable probability that debris flows ,slides, or mass wasting events will occur as a result of gap creation (EA, p. 91; Fisheries BA, p. 44).

A total of 6 acres of gaps will be created within the Riparian Reserves of Class II streams, outside the secondary shade zone of 170 feet from the stream. Gaps will be placed outside the wood recruitment zone for these streams. Based on studies by Johnston et al 2011, 90% of the 90th-percentile source distances were within 18 meters of the channel, indicating that a buffer width of 18 meters would maintain 90% of expected LWD inputs 90% of the time for streams. The 170 foot buffer distance for gaps is nearly three times this distance and is unlikely to result in any decrease in LWD recruitment. (Fisheries BA, p. 53). Effects to Riparian Reserves from thinning with gaps were thoroughly analyzed in the EA which includes consultation and concurrence from the U.S. Fish and Wildlife Service and NOAA.

The root rot pockets are infected with laminated root rot (Phellinus weirii). Root rot pockets in the commercial thinning units will most likely regenerate naturally with a mixture of Douglas-fir (highly susceptible to laminated root rot), grand fir (highly susceptible), western hemlock (intermediately susceptible), and bigleaf maple (immune). The species we are proposing to plant in the three acre gaps are western redcedar (resistant), western white pine (tolerant), and various hardwood shrubs (immune). Effects of thinning with gaps on snag recruitment is discussed in the EA on pp. 93-99 and in Appendix E of the EA.

Comment #22: The EA states that snags greater than 24" DBH could be felled for safety reasons. This should be changed so that no large snags need to be cut for safety reasons. Table 4 indicates that less than 60-90 trees per acre (TPA) will be retained. Clearly, this is too few trees to provide for the necessary wildlife snags in the future. Especially in riparian reserves and LSRs, the Forest Service must leave more trees for future snags. Even in the matrix, the Northwest Forest Plan provided interim standard and anticipated development of detailed standards for how dead wood would be managed.

Response #22: It is standard operating procedure for the Forest Service to make every effort to protect snags during operations. As listed in the Mitigation and Design Features section of the EA on p. 37, all existing legacy trees (generally large diameter mature or old growth trees that remained on site after the first harvest entry) are to be protected throughout project activities. Existing snags $\geq$ 10" dhb and down logs $\geq$ 20 inches diameter which may occur in or adjacent to treatment areas will be protected throughout proposed activities within safety tolerances (EA, p. 37). There may be an occasional snag $\geq$ 24 inches that needs to be felled for safety reasons, i.e. to meet OSHA requirements for the loggers' safety. Because human safety is of paramount importance, foregoing snag removal in certain situations is not an option. Retaining live trees around a snag does not necessarily make it safe to work around if it is leaning and/or has an advanced level of decay. Effects of the project on dead wood are thoroughly discussed in the EA on pp. 93-99 and in Appendix E of the EA.

Comment #23: This area is a high-use recreation area. To fully evaluate the impacts to the human environment, the most important recreation resources should have been included in the EA map, such as trails, trail heads, popular dispersed camps, scenic byways, and eligible Wild and Scenic Rivers. This would allow the public and decision makers to get a better idea of which units impact which recreation resource the greatest to determine if mitigations are necessary. For instance, Camp Marsh could be heavily impacted by being used as a log landing, yet the EA does not indicate which units include Camp Marsh. The map also fails to indicate where hiking trails traverse through logging units. The EA also failed to consider existing off-highway vehicle (OHV) use in the area. Many roads are being stored, not decommissioned. Stored roads have a greater potential of being damaged by OHV use.

Response #23: A recreation resources map showing trailheads, dispersed campsites, and recreation facilities was included in the Recreation Specialist Report, in the project Analysis File. The Recreation Specialist Report is available on request. Trails have been added to the Alternative B maps included with this Decision Notice.

Effects on trails and trailheads are discussed in the EA on pages 158-159. There are no trails through commercial thinning units. Bear Mountain Trail # 3602 traverses a fuelbreak understory treatment unit (unit 2636), and the Middle Fork National Recreation Trail #3609 traverses a forage treatment unit (unit 3570). Mitigation measures described on pp. 39 and 40 of the EA will protect the integrity of these trails.

Effects on dispersed recreation are discussed on pp. 157 and 158 of the EA. No impact is expected because most of the dispersed sites identified in the Existing Condition have not been used in years

(EA, p. 158). Camp Marsh is located at the junction of FS Road 21 and spur roads 405 and 406, about ¼ mile west of commercial thinning unit 3147 or any other unit. Camp Marsh will not be used as a landing for logs from unit 3147. The landings for unit 3147 will be located in the unit itself. Mitigations for dispersed recreation are described in the EA on p. 39.

Diamond Drive is discussed in the EA on p. 154 and is not a Scenic Byway. There are no Scenic Byways in the project area. The portion of Diamond Drive within the project area consists of FS Road 21 to the junction with FS Road 2154 and then following FS Road 2154 to the southern edge of the project area. There are no commercial thinning units immediately adjacent to Diamond Drive. Scenic resources are discussed in the EA on pp. 163-164.

The eligible Wild and Scenic River (Middle Fork Willamette River) is discussed in the EA on pp. 160-161. Stored roads will be closed to all motor vehicle traffic. It was determined that these roads will be needed for future timber harvest entries. If these roads were decommissioned, they would not be available for timber hauling in the future, and the expense of timber harvest in the next entry would increase substantially.

Comment #24: The EA failed to consider an alternative that reduced miles of new road construction. The EA should have disclosed the number of acres each new road segment would access. For instance, unit 3147 has two new roads. Could only a few acres have been eliminated to reduce new construction on one of the roads? Unit 2923b has a new road that appears to be only for logging in riparian reserves. Perhaps the riparian reserve could have been better protected by eliminating the road.

Response #24: The Interdisciplinary Team planned the least amount of temporary road construction possible that would still facilitate economical logging and yarding. Table 4 of the EA displays the miles of temporary road needed to access the acres included in each unit. The roads in units 3147 and 2923b are all needed, for both skyline and ground-based logging. The need for thinning within Riparian Reserves is discussed in the EA on pp. 3 and 82-83. The need for temporary roads to reduce logging costs is discussed in Responses # 14 and 19, above.

Comment #25: The EA claims (pg. 84) treatment is riparian reserves is necessary to promote the development of future large wood. However, the National Marine Fisheries Service found that heavy thinning (leaving under 100 trees per acre, as proposed in this project) did not produce larger trees in the long term. They concluded: "Thinning accelerated the development of large diameter trees by about 20 years such that there were more live trees > 18" dbh in the two decades following thinning, relative to the unthinned stand, but this advantage was short-lived. Three decades after thinning, there were more live trees > 18" dbh in the unthinned stand and five decades after thinning there were twice as many live trees >18" dbh in the unthinned stand relative to the thinned stand. A similar trajectory was observed for the live trees > 24" dbh." (Issue Paper for Western Oregon. Oregon State Habitat Office, NMFS. Kim Kratz, Ph.D. 7-23-10. page 9). The study found:"… under most conditions, heavy thinning (i.e., below 100 trees per acre) of riparian conifer forests will probably not lead to more instream wood…. Thinning does accelerate the diameter growth rate of the remaining trees, but the tradeoff is that there are fewer trees available to fall into the stream…. An unthinned stand will produce a high number of very large diameter trees, but it will take a couple of decades longer relative to a heavily thinned stand. Overall, an unthinned stand will produce a higher number of both live and dead trees across a range of diameter classes and will produce far more dead wood over a much longer time frame relative to a heavily thinned stand." (Issue Paper for Western Oregon. Oregon State Habitat Office, NMFS. Kim Kratz, Ph.D. 7-23-10. Appendix 1. pg 38). Therefore, the Forest Service should eliminate any riparian reserve logging leaving less than 100 TPA.

Response #25: The citation referenced in the comment was not traceable to any peer reviewed professional journal article and the FS was unable to locate the said reference as cited. The intent of riparian thinning is to generate a mature stand of trees that provide useful large wood to the aquatic environment faster and for a longer duration. Larger wood persists in the aquatic environment longer than small wood (Beechie, T.J, Pass, G., Kennard P. Bilby, R.E. and Bolton B. 2000. Modeling recovery rates and pathways for woody debris recruitment in northwestern Washington streams. North American Journal of Fisheries Management, 20: 436-452) (Beechie, T. J. and Sibley, T. H. 1997. Relationships between channel characteristics, woody debris, and fish habitat in northwestern Washington streams. Transactions of the American Fisheries Society, 126: 217–229).

The overall rationale for thinning riparian reserves from an aquatic habitat standpoint is summarized as follows; the primary concern is that, if riparian areas are not thinned, their ability to reach site potential tree height (180-200 feet) in the riparian areas will be reduced and the timeframe to reach that height will be at a minimum greatly extended. Many of the riparian stands are already in a state of diminished crown ratio percentage for the height and age of the trees due to overcrowding. This condition can lead to further loss of structural integrity of the trees as the low crown ratio does not provide enough photosynthetic area to allow the trees to put on girth/diameter that would otherwise strengthen the tree. Current growth is primarily vertical due to competition for sunlight and other important characteristics of growth are not being adequately provided. By applying most of the available energy to vertical growth the trees are not able to support heavy snow loads, which increases the probability of trees breaking off or falling over.

The overall intent of thinning these stands is to open the entire canopy by removing some of the poorly developed existing trees, especially their crowns, to provide the remaining trees room to expand and increase photosynthetic area that will lead to the production of more energy the trees can invest in other types of growth other than vertical. Opening the over-story canopy and allowing sunlight to penetrate to the forest floor will stimulate growth of under-story plants such as young trees,, shrubs and forbs and assist in creating a multi-layered forest such as previously existed.

Comment #26: The Forest Service should be cautious about thinning in spotted owl dispersal habitat close to nest sites, such as units 2803, 2888 and 3048. Because of new information on barred owls, the Forest Service should conduct surveys to make sure owls are not utilizing stands slated for logging. Logging should be deferred on any stands close to nest sites until after the spotted owls have progressed in recovery goals. Thinning can degrade spotted owl foraging habitat as well as the habitat of its prey, such as flying squirrels. The EA justifies this by saying (page 109): “Despite the decrease in recruitment, the size of trees available for long-term snag and down wood recruitment would be larger within thinned stands.” However, the EA fails to quantify the loss of dead wood recruitment and the potentially catastrophic short-term impact on the near-by NSO nest sites.

Response #26: Logging effects to spotted owls were thoroughly analyzed in the EA which includes consultation and concurrence from the U.S. Fish and Wildlife Service. A separate Decision Notice will be issued for three commercial thinning units that are now in spotted owl critical habitat. Consultation will be re-initiated under the 2012 USFWS Final Critical Habitat Rule. Gaps will be dropped from units 2803 and 2888 since they are now in critical habitat under the new rule. Spotted owl surveys are not required under the U.S. Fish and Wildlife Service spotted owl methodology for estimating the number of northern spotted owls affected by proposed federal actions. Additionally, most of the dispersal habitat being affected will remain dispersal habitat. The only places where dispersal habitat will be removed is in some of the thinning gaps which will be small patches creating a mosaic across a large landscape where such habitat is not currently limited. This project will not affect any foraging habitat.

Comment #27: Cascadia Wildlands is generally supportive of creating a fuel break along FS 2160 adjacent to roadless/wilderness forest if the intention is to better manage wildfire that may occur in the area in the future and if it is part of a larger wildfire management strategy for the roadless/wilderness complex. The EA, page 5, states the fuel break would "provide future options for fire management" in the Diamond Peak Wilderness, Inventoried Roadless Areas and the OCRA. However, the EA fails to describe what those options are.

For instance, if this fuel break is created, will future fire management be treated as a wildland prescribed-fire with less suppression effort? If not, if fire suppression activities would not change with this fuel break, we fail to see its point. The NEPA document failed to be clear about what the precise intentions of the fuel break are and what the long-term plans are for managing the roadless/ wilderness area when wildfires do ignite.

Response #27: Creating the fuelbreak will increase our options for future fire management if fire comes out of the DWP, IRAs, or OCRA (EA p. 4). Long-term planning for managing wilderness/roadless fires is outside the scope of this project. See Response #17.

Appendix B – Errata to the EA

The ages for units 2691a, 2866, and 3162a were incorrect in Table 13 (EA p. 49).

Correction: The average age for each of these units is 20 years.

EA, p. 158 states that if the Camp Marsh area is required as a landing for this project, the camp would be rehabilitated by removing logging slash and debris, as well as replanting or reseeding with native vegetation.

Correction: Camp Marsh will not be needed as a landing for this project.

EA, pp. 5 and 21 state that the fuelbreak would provide future options for fire management in and adjacent to the Diamond peak Wilderness, Inventoried Roadless Areas, and the Oregon Cascade Recreation Area.

Correction: The fuelbreak would provide future options for fire management adjacent to the Diamond peak Wilderness, Inventoried Roadless Areas, and the Oregon Cascade Recreation Area in situations where there is potential for fire to escape from these three types of areas.

EA, pp. 19 and 50 states that rust-resistant white pine and western redcedar will be planted in the three acre gaps.

Correction: Rust-resistant white pine is tolerant of laminated root-rot and western redcedar is resistant to laminated root rot and will be planted in the three acre gaps.

EA, p. states that two written comment letters were received as a result of the scoping update.

Correction: Six written comment letters (from five groups or individuals) were received as a result of the scoping update.

Landbirds, EA p. 132.

Correction: Direct, Indirect, and Cumulative Effects - Alternative B.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.