United States Department of Agriculture

Forest Service

Pacific Northwest Region

March 2018

Hwy 46 Project

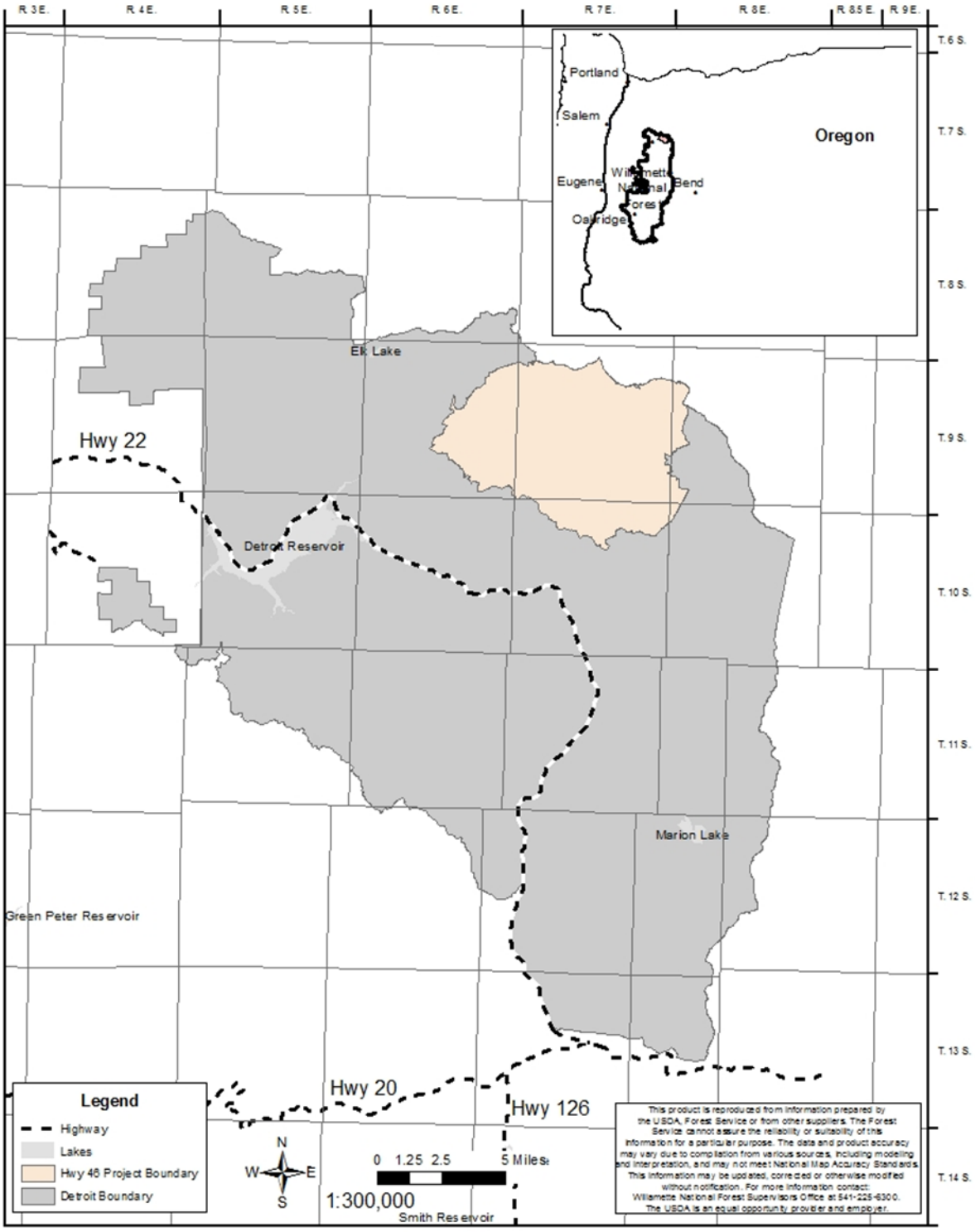
Draft Record of Decision

36 CFR 218 Objection Process *Draft*

Detroit Ranger District, Willamette National Forest
Marion County, Oregon

Legal Location: T 9 S, R 6 E, sections 1, 11 – 15, 21 – 28, 35 and 36, T 9 S, R 7 E, sections 3 – 36, T 9 S, R 8 E, sections 7, 18, 19, 30 and 31, T 10 S, R7 E, sections 1 – 6 and 8 – 12, T 10 S, R 8 E, section 6.; Willamette Meridian

Hwy 46 Project Vicinity Map



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Hwy 46 Project

Willamette National Forest
Marion County, Oregon

March 2018

Lead Agency:	**USDA Forest Service**
Responsible Official:	**GRADY MCMAHAN** **District Ranger** **Detroit Ranger District** **Willamette National Forest** **44125 N. Santiam Hwy SE** **Detroit, OR 97342** **503-854-4200**
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Project Website: http://www.fs.usda.gov/project/?project=47109

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Introduction

This ***draft***[1] Record of Decision (ROD) documents my selection of an alternative from the *Hwy 46 Project Final Environmental Impact Statement (FEIS).* The selection includes requirements for harvesting timber, harvest treatments, post-harvest fuels treatments, hazardous fuels treatments, harvest systems, temporary road construction, and road maintenance. This ROD contains a brief summary of the environmental analysis completed for this project, as well as my decision regarding which alternative to implement, and the rationale for my decision. It also documents the findings required by other laws and the rights of administrative review or objection of this decision. The FEIS completed for the Hwy 46 Project is incorporated by reference in this decision document.

Project Location and Description

The Hwy 46 project area is approximately 31,295 acres, located in the Breitenbush Watershed. Forest Road 46 (Hwy 46), the Breitenbush River and a powerline bisect the project area. The Hwy 46 project area is located approximately 6 miles northeast of the town of Detroit, Oregon, in Marion County.

31,136 acres in the project area are managed by the Willamette National Forest with the remaining 159 acres belonging to private land holders. The project area is composed mostly of a Douglas-fir and western hemlock overstory, with an understory shrub component of vine maple, salal, dwarf Oregon grape, sword fern and Pacific rhododendron. Historically, large scale disturbances have been from infrequent, high intensity fires. Approximately 40% of the stands within the project area were initiated between 1600 and 1800. Another round of fires burned portions of the landscape around the turn of the twentieth century, particularly in the northern part of the project area, with approximately 21% of the area in this age class. Although commercial logging started in the watershed shortly after that, it did not ramp up until the 1960s with even-aged management. From the mid-1990s, there has been virtually no stand replacing disturbance. During the summer of 2017 three large fires burned within the project area. These fires were typical of the western Cascades mixed severity fire regime and had a range of effects on the landscape, burning at total of 2,921 acres within the project area.

The project area is popular for recreation activities including: camping, hiking, hunting, fishing, bicycling, picnicking, target shooting, berry picking, viewing scenery, and driving for pleasure. Portions of the West Cascades National Scenic Byway and Cascading Rivers Scenic Bikeway are within the project area. The forested slopes along the Breitenbush River form an important scenic backdrop for the byway and river corridor. Several campgrounds along Forest Road 46 provide access opportunities to explore the area, enjoy a picnic or go for a short hike on a developed trail. Trailheads along the eastern project boundary provide entry to the Mt. Jefferson Wilderness. There are four special use permits for utilities within the project area as well as 71 recreation residences (summer homes). Additionally, the Breitenbush Hotsprings Resort (BBHS) is located in the middle of the Hwy 46 planning area. BBHS is a large employer in the area and also brings many visitors to the area from across the country and even internationally. Impacts from potential timber sales and maintaining a healthy forest environment for visitors to the BBHS is very important.

[1] This Record of Decision is a “draft” (a decision has not been made and this ROD has not been signed) per predecisional administrative review regulations at 36 CFR 218, effective March 27, 2013.

Purpose and Need

The purpose of this project is to (1) improve stand growth, diversity and structure and move stand structure from an overabundance of mid-seral stands to increase early and late seral stand structure in the watershed, and to diversify wildlife habitat in the watershed; (2) strategically reduce hazardous fuels; (3) restore sugar pine stands to encourage sugar pine regeneration; (4) treat powerline visuals; (5) restore riparian habitats, meadows, and hydrologic processes in the project area; and (6) provide forest products to the local economy.

Improve Stand Growth, Diversity and Structure and Move Stand Structure from an Overabundance of Mid-seral Stands

The proposed project is needed to improve stand conditions, diversity, density, and structure in the project area, providing benefits to vegetation, wildlife, and overall health of the forest.

Increase Stand Health and Vigor

All of the stands in which overstory management is proposed have a high continuous overstory canopy cover, most averaging 80% or more. The trees are competing for sunlight, water, and nutrients causing reduced tree growth and vigor as well as limiting understory vegetation. The understory is mostly limited to shrubs with a few small trees scattered throughout resulting in predominantly single-storied stands in the plantations.

The desired future condition is to have healthy, vigorous stands which are diverse in species as well as in vertical and horizontal structure. The project would help improve stand conditions, diversity, density and structure with thinning, gaps, and dominant tree release. Thinning the overstocked stands would make more growing space and resources available to the remaining trees, resulting in decreased tree stress and development towards larger diameter stands. Stand vigor would also be increased as released trees develop into larger trees sooner, accelerating the development of some late successional characteristics. Structural diversity of the stands would be enhanced and tree species diversity would be increased.

Increase the Amount of Early Seral Habitat

With the cessation of clear-cut logging twenty years ago and continued fire suppression, early seral habitat has been substantially reduced within the project area. The powerline corridor contains most of the early seral habitat, and it encompasses less than 1% of the acreage in the project area. Historically, the Breitenbush watershed maintained about 9% early seral due to wildfire (USDA 1996, 2014). Patches of early seral habitat contribute to landscape heterogeneity and provide habitat for large herbivores, song birds, cavity nesters, and pollinators.

Less than 4% of the project area is early seral habitat (defined as less than 20 years old). The desired condition would be to increase quality early seral habitat in the project area closer to historic levels.

Increase the Amount of Late Seral Habitat

Historically, the Breitenbush watershed maintained about 60% of closed canopy late seral stands. Currently, the watershed has about 48% closed canopy late seral stands.

The desired condition would be to move the late seral habitat closer to historical levels.

Increase the Potential for Riparian Reserves to Function as Late Successional Habitat

Treatment of stands in Riparian Reserves would accelerate the ability of Riparian Reserves to provide

adequate stream shade, root strength and bank stability, sediment filtration and nutrient cycling, large wood supply to waterbodies and floodplains, organic matter input, and habitat for riparian-dependent wildlife.

Portions of Riparian Reserves within project area units consist of dense, overstocked, conifer-dominant stands with very little structural and species diversity and understory development. This lack of complexity and diversity is outside the natural range of variability and may be limiting nutrient cycling, deciduous organic matter input to waterbodies, and habitat for riparian-dependent wildlife.

This project would treat overstocked, conifer-dominant portions lacking structural and species diversity, in order to attain Aquatic Conservation Strategy Objectives.

Strategically Reduce Hazardous Fuels

The project area surrounds both the Breitenbush Hot Springs Resort and the Breitenbush and Devils Creek summer home tracts. These areas have been identified as communities at risk in the Marion County Community Wildfire Protection Plan, and were threatened by wildland fire during the summer of 2017. Much of the area that surrounds the structures within these communities is dense older forest with heavy fuel loadings.

The desired future condition is reduced horizontal and vertical continuity of fuels in and around the Breitenbush Wildland-Urban Interface to decrease potential impacts and risks to people, structures, and resources in the event of a wildfire.

Restore Sugar Pine

The primary range of sugar pine extends from northern Mexico, through the Sierra Nevada, Northern California, and Southern Oregon. The very northern extent of its range is in the Hwy 46 project area. Sugar pines are moderately shade tolerant, particularly when they are young, needing some protection from the sun as they establish. As they get older their tolerance for competition decreases, and other species can out-compete them if lower intensity disturbances, primarily wildfire, do not thin stand densities.

Past fire suppression, extensive logging, and white pine blister rust have reduced the population across its range (Waring and Angell, 2011). Most of the sugar pine found in the project area are lone big trees surrounded by dense Douglas-fir stands. The presence of these trees means that sugar pine has been part of this landscape for a long time and now appears to be losing its place in the ecosystem due to lack of disturbance allowing it to regenerate. One area of naturally regenerating sugar pine was found during project reconnaissance.

The proposed project is needed to restore sugar pine on the landscape with continued regeneration.

Treat Powerline Visuals

The Breitenbush viewshed corridor is an important scenic asset as it surrounds the Breitenbush Hot Springs Retreat and Conference Center and includes travel corridors (scenic byways) that are considered sensitive to scenic quality. A powerline corridor bisects the watershed and the straight lines of the powerline corridor do not appear natural on the landscape.

The existing straight line along the powerline corridor will be softened and a more natural appearing landscape will be created with this project

Restore Riparian Habitats, Meadows and Hydrologic Processes

Analysis found that 4.6% of the Riparian Reserves in the Hwy 46 project area had a deciduous and deciduous/shrub component. Deciduous leaves have a higher nutritional quality than coniferous needles with regard to contributions to the aquatic food web.

With the exclusion of fire, meadow habitat within the project area has been declining. A high elevation meadow has been encroached upon by conifers, resulting in a decline in plant diversity, pollinator habitat, and wildlife forage.

The current alignment of FS road 46-059 has disrupted the hydrology of the Short Lake Area. This road accesses Short Lake, a popular destination for dispersed recreation camping, as well as fishing, birding, boating and wildlife viewing. Rerouting the road would reduce sediment delivery to streams in the project area, improve water quality, and reduce road maintenance.

This project would increase the shrub and deciduous component adjacent to streams; restore the high elevation meadow; and, reduce the amount of road generated sediment entering streams in the area adjacent to FS road 46-059 (the Short Lake Road) by realigning the road to a more stable terrain.

Provide Forest Products to the Local Economy

The proposed project is needed to ensure the Willamette National Forest continues to supply a reliable supply of timber products as directed by the laws and guidance below and in doing so contributes to the stability of local, regional, and national economies and contributes to the annual Probable Sale Quantity (PSQ) target for the Forest.

Decision

Based on my review of public and agency comments; the effects analysis in the FEIS; supporting reports and documentation; and applicable laws, regulations, and policies; it is my decision to implement Alternative 2.

Alternative 2 will allow treatments on approximately 4,060 acres in the project area. Harvest treatments will include thinning, gap creation, dominant tree release, quality early seral habitat creation, sugar pine restoration, meadow restoration, hazardous fuels reduction, understory enhancement treatments, and skips. Harvest treatments will occur in stands ranging in age from approximately 20-145 years old and yield approximately 40 million board feet of timber. Post-harvest fuels treatments include pile and burn and post-harvest underburn. Approximately 9.2 miles of temporary road construction and reconstruction will occur. These temporary roads will be decommissioned by a timber purchaser at the end of timber sale activities. Approximately 108 miles of existing roads will be maintained. The Short Lake reroute would connect FS Rd 040 to FS Rd 045 by using Rd 059 (as signed in the field) with a new construction of a short section to be approximately 1000 feet in length. Road 059 (as signed in the field) is an existing road that is located on a broad flat ridge. Approximately 1 mile of road realignment will occur, including the Short Lake road realignment and 0.3 miles of realignment on FS road 2231 to accommodate hauling to Highway 22. Approximately 8.88 miles of road decommissioning and 4.07 miles of road storage will occur.

Table 1 describes the features of Alternative 2.

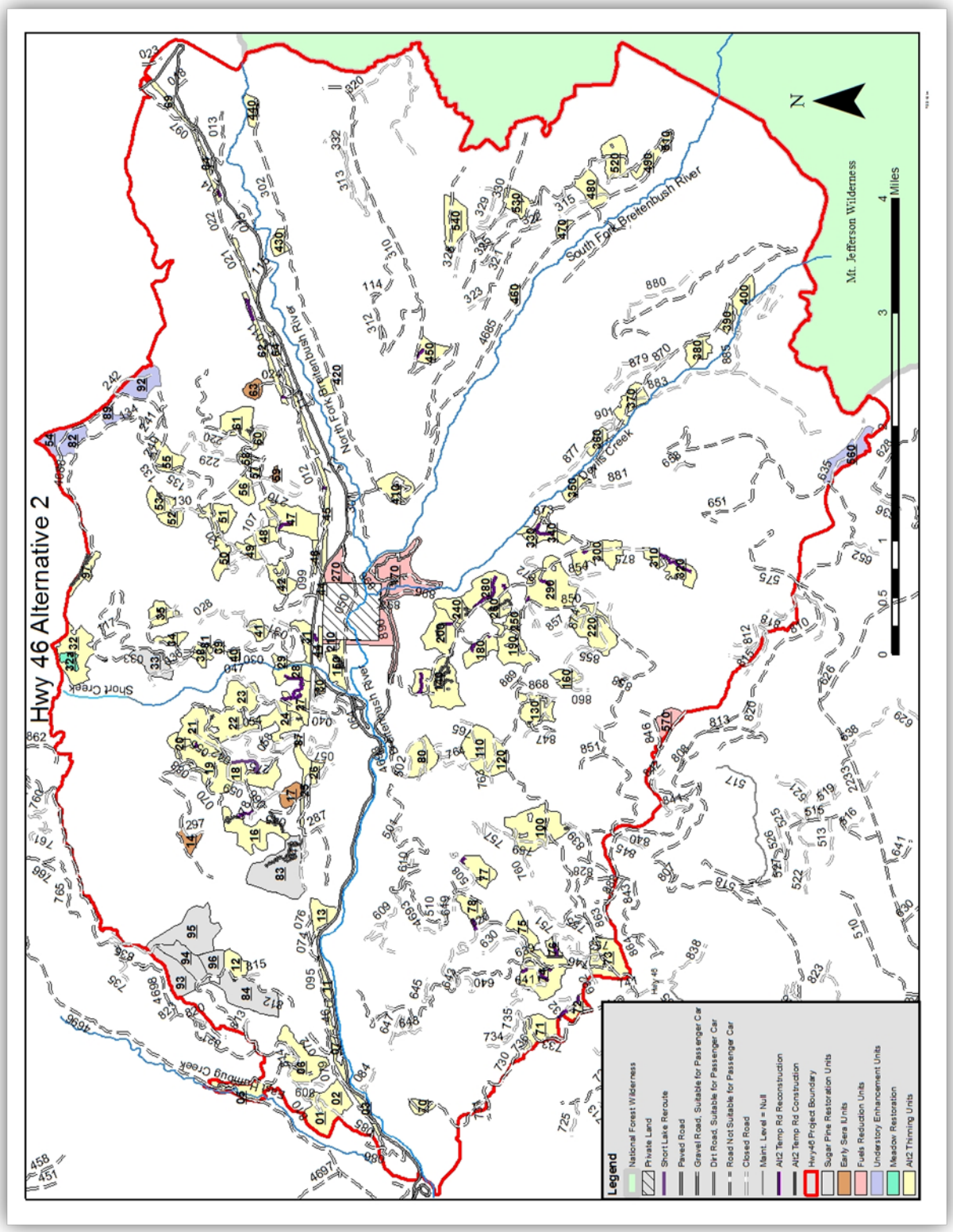
Table ROD-1. Summary of Treatments and Connected Actions for Alternative 2

Proposed Activity	Unit of Measure	Alternative 2	Purpose – Need Addressed
Timber Harvest Treatments			
Thinning outside Riparian Reserves	Acres	1785.45	1,3,4,5,6
Thinning in Riparian Reserves	Acres	703	1,3,4,5,6
Quality Early Seral Habitat Creation	Acres	43	1,6
Sugar Pine Shelterwood	Acres	92	1,2,3,6
Gaps	Acres	47.8	1,3,4,6
Dominant Tree Release	Acres	72.75	1,3,5,6
Skips	Acres	910	1,5
Meadow Restoration	Acres	8	1,5,6
Total	**Acres**	**3662**	-
Estimated Volume	**MMBF**	**~40**	
Non-Commercial Treatments			
Understory Habitat Enhancements	Acres	155	1,2,5
Riparian treatment	Acres	20	1,5
Hazardous Fuels Treatment (WUI)	Acres	223	2
Total Non-Commercial Treatment	**Acres**	**398**	
Post-Harvest Fuels Treatments in Timber Harvest Units			
Pile and Burn (mechanical and/or hand treatments)	Acres	886	2
Post-Harvest Underburn	Acres	1102	2
Connected Actions			
Harvest System			
Helicopter	Acres	317	6
Skyline	Acres	1510	6
Ground	Acres	926	6
Transportation			
Temporary Road Reconstruction	Miles	4.01	-
Temporary Road Construction	Miles	5.11	

Proposed Activity	Unit of Measure	Alternative 2	Purpose – Need Addressed
Road Maintenance/Haul Route	Miles	108	-
Road Realignment	Miles	1	5
Road Storage	Miles	4.07	
Road Decommissioning	Miles	8.88	5
Gravel Pit Management	Each	10	
Post-Harvest Planting			
Early Seral Planting	Acres	45	1
Shelterwood Planting	Acres	94	1,3
Gap Planting	Acres	45	1,3
Dominant Tree Release Planting	Acres	Up to 74.25	1,3

Purpose – need addressed:
1 improve stand growth, diversity and structure, and move stand structure from an over abundance of mid-seral
2 reduce hazardous fuels
3 restore sugar pine
4 treat powerline visuals
5 restore riparian habitats, meadows and hydrologic processes in project area
6 provide forest products to the local economy.

Figure ROD-1. Map of Alternative 2



Project Design Features and Monitoring Specific to Alternative 2

While not repeated here, I am fully incorporating all project Design Features, Mitigation and Enhancement, and Monitoring included in the FEIS in Sections 2.6, 2.7 and 2.8 as part of Alternative 2.

Design Features, Mitigation and Enhancement, and Monitoring are included to minimize the environmental effects of the project activities and to ensure project activities are implemented to comply with standards and guidelines, goals, objectives, conservation strategies, and Best Management Practices. I am satisfied that all practical measures to protect the environment are encompassed in this list and the measures have been proven effective in minimizing adverse impacts.

Briefly, Design Features and Mitigation and Enhancement have been included that will:

- Respond to public safety concerns
- Reduce compaction and undesirable soil damage
- Reduce contamination and sedimentation to aquatic areas
- Protect water quality and reduce damage to stream channels
- Reduce the introduction and spread of invasive plants
- Reduce noise disturbance
- Protect road infrastructure
- Protect heritage resources
- Reduce impacts to the recreating public
- Reduce impacts to the Breitenbush Hot Springs Resort
- Minimize effects to species of concern
- Protect any discovered threatened, endangered or sensitive (TES) species

Monitoring and evaluation is also an important component of this decision. Monitoring will be focused on the proper implementation of the Design Features and Mitigation and consistency with the Forest Plan standards and guidelines throughout all phases of the project. Monitoring may also be used to gather and evaluate information to improve future projects.

Decision Rationale

Competing demands placed upon the Forest Service necessitate that I make decisions for the responsible management of ecosystems and resources to fulfill the mission of the Forest Service and meet the requirements of laws and regulations. Every effort was made to develop and choose an alternative that best responds to the components of the purpose and need, desired conditions, objectives, public and agency concerns, and maintains key resource values. I understand that my decision may not be acceptable to all members of the public. However, I believe I have chosen the best course of action to meet the needs identified for land management in the project area. Implementing Alternative 2 will make important progress in moving the area toward desired conditions for vegetation, fuels, and habitat, while contributing to local and regional economies.

My decision meets the requirements of the National Environmental Policy Act (NEPA) and is based on the best science and information available. My decision involved balancing several considerations, including which alternative or combination of treatments best meets the purpose and need and project objectives, while at the same time protects watershed health, ensures soil productivity, provides for

human health and safety, maintains recreational opportunities, maintains effective wildlife habitat, and protects cultural resources.

I reached my decision after careful consideration of public and agency comments, issues identified during the planning process, supporting reports and documentation in the project record, and the environmental effects of the alternatives described in the FEIS. My decision was based upon several conclusions as a result of my consideration of the effects of the project on the environment.

Notable conclusions for Alternative 2 include:

- treating the most acres without significant differences in effects to the environment when compared with Alternative 3
- contributing the largest supply of reliable timber products (~40 MMBF), and in doing so, better contribute to the stability of local, regional and national economies
- treating the most acres when compared with Alternative 3, thereby improving stand conditions, diversity, density, and structure over a larger area
- moving the most acreage of mid-seral stands towards a multi-story stand condition which will become quality late seral habitat in a shorter amount of time
- creating the most acreage of quality early seral habitat, increasing the current amount in the project area by about 90 acres
- improving conditions for sugar pine on the most acres when compared with Alternative 3
- restoring 8 acres of wet meadow
- repairing and maintaining the greatest number of roads (108 miles), providing a road system that meets the public and management access needs, while reducing the risk of sediment reaching streams and impacts to aquatic species and habitat
- decommissioning 8.88 miles of road that is no longer needed

Response to Purpose and Need

Improve Stand Growth, Diversity and Structure and Move Stand Structure from an Overabundance of Mid-seral Stands

The proposed project is needed to improve stand conditions, diversity, density, and structure in the project area, providing benefits to vegetation, wildlife, and overall health of the forest.

Increase Stand Health and Vigor

Alternative 2 would help improve stand conditions, diversity, density and structure with thinning, gaps, and dominant tree release. Thinning the overstocked stands would make more growing space and resources available to the remaining trees, resulting in decreased tree stress and development towards larger diameter stands. Stand vigor would also be increased as released trees develop into larger trees sooner, accelerating the development of some late successional characteristics. Stuctural diversity of the stands would be enhanced and tree species diversity would be increased.

The plantations that will be treated are generally characterized by dense monocultures of Douglas-fir. Competition is high with mortality occurring in many of the stands. Crown ratios are small, leading to reduced diameter growth. Although fairly well established on some of the northerly slopes, regeneration is suppressed by the overstory and growing slowly. Fire regenerated stands are older than the plantations in this project, and tend to have larger trees. Species composition in the overstory varies from pure Douglas-

fir to mixed Douglas-fir with noble fir, western white pine, western hemlock, western redcedar, pacific silver fir, and sugar pine. Understory regeneration is variable and is predominantly western hemlock with western redcedar, grand fir, pacific yew, and mountain hemlock at the higher elevations. These stands are similar to the plantations in that there is high competition between the overstory trees and suppression in the regeneration.

Alternative 2 also provides enhancement of understory vegetation on approximately 155 acres. The principle objective of these treatments is to increase sunlight to the forest floor to enhance or restore desirable vegetation other than trees.

Increase the Amount of Early Seral Habitat

When project planning began, less than 4% of the watershed was estimated to be in early seral habitat (defined as less than 20 years old). Prior to the fires of 2017, the powerline corridor contained most of the early seral habitat in the project area, encompassing less than 1% of the acreage in the project area. It is estimated that 521 acres (1.6%) of early seral habitat was created in the project area as a result of the 2017 fires. Historically the Breitenbush Watershed maintained about 9% early seral due to wildfire (USDA 1996, 2014). The desired condition would be to increase quality early seral habitat in the project area to get the percentage closer to the historical level of 9%. Alternative 2 would best accomplish this goal.

Increase the Amount of Late Seral Habitat

Historically, the Breitenbush watershed maintained about 60% of closed canopy late seral stands. Currently, the watershed has about 48% closed canopy late seral stands. There is currently a need to enhance, create, and maintain stands of trees in the Breitenbush watershed with late seral characteristics. Late-Successional Reserves (LSR) are to be managed to protect and enhance conditions of late-successional and old-growth forest ecosystems. Silviculture treatments are to benefit the creation and maintenance of late-successional forest conditions and are subject to review by the Regional Ecosystem Office (REO). In the Hwy 46 Project, there are 38 units that are either completely within or have a portion within the LSR, totaling 1,018 acres. Of this, 35 units encompassing 808 acres are prescribed for commercial thinning. These stands are previously managed, densely stocked plantations, less than 80 years old.

Increase the Potential for Riparian Reserves to Function as Late Successional Habitat

Portions of Riparian Reserves within project area units consist of dense, overstocked, conifer-dominant stands with very little structural and species diversity and understory development. This lack of complexity and diversity is outside the natural range of variability and may be limiting nutrient cycling, deciduous organic matter input to waterbodies, and habitat for riparian-dependent wildlife. Alternative 2 will treat approximately 703 acres of riparian reserves, which will increase stand and species diversity.

Strategically Reduce Hazardous Fuels

The project area surrounds both the Breitenbush Hot Springs Resort and the Breitenbush and Devils Creek summer home tracts. These areas have been identified as communities at risk in the Marion County Community Wildfire Protection Plan. Much of the area that surrounds the structures within these communities is dense older forest with heavy fuel loadings and narrow road access that could inhibit fire suppression activities in the event of a wildfire.

Fire suppression over the past century has resulted in increased fuel loading throughout forest ecosystems. In 2014 51 acres of mastication work was completed within the Breitenbush Hot Springs, and between 2006 and 2012 50 acres of fuels reduction was completed by the US Forest Service within the summer home tracts. While this work has improved defensible space conditions and access for fire suppression

resources there is still a substantial risk from wildfire within these communities. In 2017 the Scorpion and Little Devils fires both threatened the Breitenbush Hot Springs Resort and the summer home tracts. During the fire, work was begun within the Breitenbush and Devils Creek summer home tracts to improve defensible space. Due to the amount of fuel loading and narrow ingress/egress, the structures were classified as “prep and leave” and determined to be non-defensible. Additional fuels reduction work will make these structures easier and safer to defend in the event of another wildfire threatening this community.

Alternative 2 will reduce horizontal and vertical continuity of fuels on approximately 229 acres in and around the Breitenbush Wildland-Urban Interface to decrease potential impacts and risks to people, structures, and resources in the event of a wildfire.

Restore Sugar Pine

Fire suppression over the last 100 years, extensive logging, and the introduction of white pine blister rust at the turn of the 20th century have reduced the population of sugar pine across its range (Waring and Angell, 2011). Most of the sugar pine found in the project area are lone big trees surrounded by dense Douglas-fir stands. The presence of these trees means that sugar pine has been part of this landscape for a long time and now appears to be losing its place in the ecosystem due to lack of disturbance allowing it to regenerate. One area of naturally regenerating sugar pine was found during project reconnaissance.

Alternative 2 will restore sugar pine on approximately 94 acres in 10 stands with a combination of treatments including releasing existing sugar pines, thinning, prescribing burning and planting rust resistant seedlings.

Treat Powerline Visuals

The Hwy 46 project area encompasses the Breitenbush viewshed corridor. This viewshed is an important scenic asset as it surrounds the Breitenbush Hot Springs Retreat and Conference Center and includes travel corridors (scenic byways) that are considered sensitive to scenic quality. A powerline corridor bisects the watershed and the straight lines of the powerline corridor do not appear natural on the landscape.

The existing straight line along the powerline corridor will be softened and a more natural appearing landscape will be created with the cutting of gaps along the corridor.

Restore Riparian Habitats, Meadows and Hydrologic Processes

The previously managed stands in the Hwy 46 Project Area were harvested and replanted using direction that pre-dates the Willamette Land and Resource Management Plan (1990) and prior to the Northwest Forest Plan (1994). As a result, the majority of these forest stands were set on a management-induced trajectory that has led to artificially dense, conifer-dominated stands, with tree densities above the range of natural variability expected in this area, suppressing shrub and forb diversity in the understory. Analysis found that 4.6% of the Riparian Reserves in the Hwy 46 project area had a deciduous and deciduous/shrub component. Deciduous leaves have a higher nutritional quality than coniferous needles with regard to contributions to the aquatic food web. Alternative 2 will improve riparian habitat on 20 acres along 3.2 miles of streams in dense plantations with fall and leave treatments to increase structural and species diversity.

With the exclusion of fire, meadow habitat within the project area has been declining. A high elevation meadow has been encroached upon by conifers, resulting in a decline in plant diversity, pollinator habitat,

and wildlife forage. Alternative 2 will restore 8 acres of high elevation meadow, and enhance approximately 6 acres of dry meadow.

The current alignment of FS road 46-059 has disrupted the hydrology of the Short Lake Area. This road accesses Short Lake, a popular destination for dispersed recreation camping, as well as fishing, birding, boating and wildlife viewing. The Short Lake road will be realigned to a more stable terrain, restoring hydrologic processes and decreasing road generated sediment deliver to streams in the project area.

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Provide Forest Products to the Local Economy

Several laws direct and allow the Forest Service to provide the sustainable harvest of trees from the Nation's forests including Multiple-Use Sustained-Yield Act of 1960 and the National Forest Management Act of 1976. One of the strategic goals of the Forest Service is to provide and sustain benefits to the people of the United States and the world as a whole. To accomplish this goal, one of the objectives is to provide a reliable supply of forest products over time consistent with achieving the desired conditions on National Forest System (NFS) lands and to maintain or create processing capacity and infrastructure in local communities. (USDA Strategic Plan FY 2014-2018). Additionally, the Willamette National Forest Land and Resource Management Plan as amended by the Northwest Forest Plan, includes goals to produce an optimum and sustainable yield of timber that helps maintain the stability of local and regional economies, and contribute valuable resources to the national economy on a predictable and long-term basis. The current PSQ annual target for the Willamette National Forest is 111 million board feet (MMBF) as amended by the Approval of PSQ Estimates for Northwest Forest Plan Forests (1998). Through implementation of the proposed action the Detroit Ranger District would contribute approximately 40 MMBF to the Willamette National Forest PSQ target and to the local economy.

Other Alternatives Considered

The Hwy 46 project considered three alternatives, including a no-action alternative. A comparison of the alternatives is included in Chapter 2 of the FEIS; the expected effects of these alternatives are described in detail in Chapter 3.

Alternative 1 – No Action

Alternative 1 – No-Action assessed the current management situation of the affected environment as well as the future conditions should an action not be implemented. The No-Action alternative should not be confused with a baseline. Whereas a baseline is essentially a description of the affected environment at a fixed point in time, the No-Action alternative considered what effects would occur to forest ecosystems and resources in the project area if no action is taken.

Under the No-Action alternative, no timber harvest, fuels treatments, or associated activities (i.e. road maintenance, storage and decommissioning) would occur in the Hwy 46 project area at this time. The purpose and need of the proposed action would not be met under the No-Action Alternative; therefore, this alternative was not selected.

Alternative 2 – Proposed Action

Alternative 2 is the proposed action and was developed to fully meet the purpose and need for this project. Alternative 2 proposed to treat approximately 4,046 acres in the project area and would yield

approximately 40 million board feet of timber. Approximately 9.1 miles of temporary road construction would occur and approximately 108 miles of existing road would be maintained under Alternative 2.

Alternative 3 – No Harvest in fire regenerated stands

During the public scoping process, two key issues were identified from comments and questions:

> ***Key Issue #1:*** Log truck traffic on the roads into and around the Breitenbush community poses a public safety concern. Issue includes public safety (Breitenbush community, bikeway, scenic byway, motorcyclists, etc.), and associated dust and noise associated with logging. This issue was addressed in both alternatives 2 and 3 by identifying haul routes over Boulder Ridge and away from the Breitenbush community where possible.
>
> ***Key Issue #2:*** Harvest treatments should not occur in fire regenerated stands

Alternative 3 was developed in response to Key Issue #2. Alternative 3 eliminates harvest in fire regenerated stands.

Alternative 3 proposed to treat approximately 3,022 acres in the project area and would yield approximately 24 million board feet of timber. Approximately 6.3 miles of temporary road construction would occur with decommissioning by a timber purchaser at the end of sale activities. Approximately 98 miles of existing road would be maintained under Alternative 3. Approximately 8.88 miles of road decommissioning will ocurr.

Because harvest would occur in plantations only under Alternative 3, proposed acres for harvest treatment decrease by 988 acres from Alternative 2. Alternative 3 proposes 17.5 fewer acres of gap creation; 13 fewer acres of dominant tree release; 640.5 fewer acres of thinning; 195 fewer acres of skips; and 29 fewer acres of regeneration harvest than Alternative 2. Alternative 3 would reduce acres of sugar pine restoration to 9 acres. There would be no meadow restoration in Alternative 3. While this alternative would still meet much the purpose and need, it would do so to a lesser degree; therefore, Alternative 3 was not selected.

Environmentally Preferable Alternative

The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) require that the record of decision specify “the alternative or alternatives which were considered to be environmentally preferable” (40 CFR § 1505.2(b)). “Environmentally preferable” is interpreted to mean the alternative(s) that would cause the least damage to the biological and physical components of the environment, and which best protects, preserves, and enhances, historic, cultural, and natural resources (CEQ, *40 Most Asked Questions Concerning CEQs National Environmental Policy Act Regulations*, 46 Federal Register 18026). The environmentally preferable alternative is not necessarily the alternative that will be implemented, and it does not need to meet the purpose and need for the project.

Factors considered while identifying the environmentally preferable alternative included: (1) fulfilling the responsibility of this generation as trustee of the environment for future generations; (2) providing for a productive and aesthetically pleasing environment; (3) attaining the widest range of beneficial uses of the environment without degradation; (4) preserving important natural components of the environment, including biodiversity; (5) balancing population needs and resources use; and (6) enhancing the quality of renewable resources (42 CFR § 101(b)). Additionally, economic and technical considerations and statutory missions were considered (40 CFR § 1505.2(b)).

Based upon the factors considered above, examination of the FEIS, discussions with the interdisciplinary team, and consideration of agency and public comments, I have concluded that Alternative 2 is the environmentally preferable alternative. Alternative 2 will:

- Improve stand growth, diversity and structure and move stand structure from an overabundance of mid-seral stands, increasing the acreage of both early and late seral stand structures.
- Strategically reduce hazardous fuels, protecting both public and private infrastructure.
- Restore sugar pine as a key component of the planning area.
- Treat powerline visuals, improving visual quality of a scenic byway.
- Restore riparian and understory habitats, meadows and hydrologic processes which will improve water quality and slope stability.
- Provide forest products to the local economy, contributing to economic stability of the region.
- Decommission 8.88 miles of road that have been identified as unneeded and/or high risk for sedimentation.

Specific Issues of Concern

Several specific issues of concern were brought forth during the scoping comment period and the 45-day comment period for the Hwy 46 Draft Environmental Impact Statement (DEIS). These issues were given careful consideration and in many cases incorporated into project design, alternatives, analysis, and design features. These issues are discussed in more detail in Chapter 2 and 3 of the FEIS, as well as the Response to Comments found in Appendix J. However, I wanted to summarize a few of these issues and my conclusions.

2017 Wildfire Effects on the Hwy 46 Analysis

Concerns were raised about why the Forest Service moved forward with issuing the DEIS shortly after the fires were contained. As the fires drew to a close in the fall of 2017, I knew it was critical to understand the impacts of the fires on the Hwy 46 planning area. I asked my specialists to visit the area even before all suppression efforts were completed in order to understand the impacts. Also, during the fire there was a lot of helicopter suppression ongoing in the Hwy 46 planning area which gave us an aerial look at fire impacts almost daily. Field and satellite data allowed us to gather information about ongoing fire severity and potential impacts. We found the fires burned a total of 2,921 acres in the project area, directly affecting portions of only eight proposed vegetation treatment units. Of the eight units that had fire burn into them, fire effects were generally of very low intensity mostly burning ground fuels with occasional torching of individual trees. These areas were visited by the District Silviculturist and were judged to still be in need of treatment. It was also estimated that only 521 acres of the entire planning area had burned hot enough to create early seral conditions.

Historically, wildfires have burned throughout time on the landscape of the Hwy 46 planning area. Wildfires are a natural process and have contributed to maintaining a diverse, healthy ecosystem on the landscape, ensuring a mix of seral stages through time. In 2017, an estimated 521 acres of early seral habitat was created by these fires. More early seral might have been created had suppression efforts not been implemented to protect private and public infrastructure. Although the wildfires helped move the early seral percentage closer to the desired historical average of 9%, the overall goal has not yet been attained. Implementation of this project is still needed to more fully attain the purpose and need of

increasing the amount of early seral habitat. Because of this, I decided it was important to continue to move this project forward on the originally planned timeline.

Treating Fire Regenerated Stands

Concerns were raised about why the proposed action (alternative 2) included treating stands that are fire regenerated. I decided to direct my team to develop and analyze alternative 3 that would elimated fire regenerated stands from harvest. Upon evaluating alternative 3 and going to the field to look even more closely at the fire regerated stands, I have found that the fire regenerated stands are overstocked, dense stands of timber whose structure is very similar to the second growth units that are included in the Hwy 46 planning area. These stands of trees are in the stem exclusion stage, resulting in stagnating growth and reduced vigor of the tree stands. Because of this, I find that treatment of these stands is needed.

Early Seral Creation in the Project Area

Concerns were raised about the proposal of the Hwy 46 project to increase the amount of early seral within the watershed. The concern included the idea that there is no shortage of early seral forest at the regional scale due to the amount of regeneration harvest occurring throughout the northwest.

In considering this, I reviewed the original purpose and need for the action. One of the purpose and needs for the proposed project is to improve stand conditions, diversity, density, and structure in the project area, providing benefits to vegetation, wildlife, and overall health of the forest. In studying the vegetative diversity of the planning area, it became clear that currently the large amount of clearcutting that occured mostly between 1970 and 1990 have resulted in a great over-representation of mid-seral stand types with an under-representation of early seral stand types and an even greater under-representation of late seral stand types. In looking at the entire planning area, the only private land that could provide possibilities for addititional early seral is the Breitenbush Hotsprings Resort. Early seral does not meet their management goals at all. I believe vegetative diversity is important at the planning area scale or at most, the watershed scale. Discussing vegetative diversity at the regional scale does not promote health and diversity of the Breitenbush planning area.

As stated earlier, even after the additional early seral created by the 2017 wildfires, early seral structure only exists in about 5.6% of the watershed at best. Also, much of this early seral is related to the powerline corridor which is definitely not quality early seral structure. In analyzing the planning area to locate places that will support the needed quality early seral, specialists evaluated factors such as aspect, slope, distance from opened roads, and – most important – areas that were in a plant association type that would grow quality early seral vegetation after tree removal. Unfortunately, only 4 units totaling 45 acres were located that fit all criteria for the potential to create high quality early seral. Because of this, only these 4 units were proposed for early seral creation. 45 acres out of the 32,295 acre planning area is about 0.1% of the area. Although the addition of this small amount of quality early seral will not increase the overall percentage of quality early seral greatly, I feel that any added quality early seral in a planning area that is lacking in this seral stage is very important and should be retained in the project proposal.

Road Mileage Considered for Decommissioning is Too Small

Although support was expressed for decommissioning roads that were no longer needed in the planning area, concern was expressed that the proposal to decommission only 1.99 miles of road was not enough given the total miles of system road in the planning area (now measured at 216.04 miles). I agree with this statement and feel it is important to take a hard look at our existing road system. I asked the IDT to meet once again as a group to review the Road Investment Strategy again. New GIS mapping tools were used to look at each road. The FEIS now outlines 8.88 miles of road to decommission that are no longer needed.

Public Involvement

Public involvement efforts during the development of the Hwy 46 project included public meetings, open-houses, scoping letters, field trips, meetings with interested parties and landowners, and publication of the project in the Willamette National Forest Schedule of Proposed Actions and Willamette National Forest website. Below is a timeline illustrating public involvement efforts for the Hwy 46 project:

- July 15, 2011: Tribal input field trip into the Hwy 46 planning area.
- July 29, 2011: Breitenbush Community input field trip into the Hwy 46 planning area.
- August 3, 2011: Timber industry input field trip into the Hwy 46 planning area.
- August 15, 2011: Environmental Advocate input field trip into the Hwy 46 planning area.
- November 17, 2011: Breitenbush Collaborative begins meeting
- July 1, 2015: Project published in the Willamette National Forest Schedule of Proposed Actions
- March 9, 2016: Notice of Intent (NOI) to prepare an EIS published in the Federal Register
- March 9, 2016: Scoping letter and background information mailed to members of the public, organizations, and state/federal agencies that have expressed interest in receiving information on District projects
- May 25, 2016: Public field trip to view and discuss Hwy 46 project at Detroit, Oregon
- October 20, 2017: Notice of Availability (NOA) and initiation of 45-day comment period for Draft Environmental Impact Statement (DEIS) published in the Federal Register
- October 20, 2017: Notice of Availability (NOA) and initiation of 45-day comment period for DEIS published in the *Statesman Journal*

Members of the public, organizations, and state and federal agencies were invited to provide comments and concerns about the Hwy 46 project during the public scoping comment period from March 10th through April 25, 2016. Scoping comments received varied from those that wanted more clarification on proposed activities to specific suggestions for project implementation. Scoping comments were used to help develop planning issues, alternatives, and effects analysis for the DEIS.

Members of the publics, organization, and state and federal agencies were invited to provide comment on the DEIS during the 45-day comment period from October 20th through December 4th, 2017. Twenty-three letters were received from members of the public, federal officials, public interest organizations, and private businesses. Comments received varied from general statements of support or opposition to requests for additional analysis. Comments on the DEIS and the corresponding responses are located in Appendix I (FEIS). A complete record of all letters, including names and addresses of individuals, agencies, and organizations that submitted a letter during the 45-day comment period, is available online in the Hwy 46 EIS Public Reading Room at https://cara.ecosystem-management.org/Public//ReadingRoom?Project=47109

All correspondence and comments are available in the project record at the Detroit Ranger District office, as well as the public reading room online.

Tribal Consultation

Tribal consultation for the Hwy 46 project began in 2011 during the early planning stages of the project and included field visits with tribal representatives. On July 15, 2011 the Grand Ronde and Warm Springs

Tribes participated in a field visit to the project area. Representatives from both tribes have also participated in collaborative meetings. The Siletz Tribes consulted independently with field visits and meetings. The Detroit Ranger District consulted with the Klamath Tribes, the Confederated Tribes of Grand Ronde, the Confederated Tribes of Siletz Indians and the Confederated Tribes of Warm Springs. A consultation package and invitation to comment was sent to the Tribes listed above on January 28, 2016. No comments were received. The Tribes were invited to provide comment on the DEIS during the 45-day comment period from October 20 through December 4, 2017. No comments were received.

Consultation with other Agencies

United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)

Upper Willamette River Chinook

This analysis found that the Hwy 46 Project "may affect, not likely to adversely affect" Upper Willamette spring Chinook salmon. This is due to the potential for "take" as defined in the ESA. Take is prohibited by the ESA unless it is authorized by the "fisheries" agencies (National Marine Fisheries Service for salmon). In order for the Forest Service to obtain authorization we must conduct consultation with the fish agencies under Section 7 of the ESA. Consultation is anticipated to be completed by May 2018.

Northern Spotted Owl

The Biological Assessment for Willamette Planning Province of Oregon for FY 2018 LAA Projects within the Willamette National Forest with a Potential to Modify Habitat and/or Disrupt Northern Spotted Owls of LAA Projects with the Potential to Modify the Habitat and/or Disrupt Northern Spotted Owls – Willamette Planning Province – FY 2016/17 was used to determine effects. A biological assessment was submitted August 1, 2017 and a biological opinion was signed August 31, 2017 which includes the Hwy 46 project. This project would need to be completed prior to a final decision notice being signed for this project. The determination expected to be made in the Biological Assessment for the Hwy 46 project, which would be completed and concurrence received from the USFWS prior to the final decision notice is signed, is this project may affect and is not likely to adversely affect spotted owls by disturbance.

U.S. Environmental Protection Agency (EPA)

During project scoping, the EPA submitted a list of recommendations for analysis and project design. This letter was reviewed and recommendations incorporated. During the project 45 day comment period, the EPA submitted a letter of support. Per Forest Service regulations, this FEIS will be filed with the EPA's Office of Federal Activities in Washington, DC, who will publish a notice of availability in the Federal Register.

Oregon State Historic Preservation Office

The 1995 Programmatic Agreement (PA) among the USDA Forest Service PNW, the Advisory Council on Historic Preservation, and the Oregon State Historic Preservation Officer (SHPO) Regarding Cultural Resource Management in the State of Oregon by the USDA Forest Service, (amended in 2004), provides a process by which the Forest Heritage Specialist may certify that the Forest has complied with Section 106 of NHPA for the project. In accordance with this PA, an appropriate inventory was conducted during the summers of 2013, 2014, 2015 and 2016. All known cultural sites in the Area of Potential Effect (project area) were protected by avoidance, resulting in a determination of "No Historic Properties Affected" on December 28, 2016. Documentation was provided by SHPO and copies have been retained in the Forest and District Heritage files.

Findings Required by Other Laws and Regulation

The Selected Alternative complies with the following laws and regulations:

The National Environmental Policy Act (NEPA), 1969 – NEPA establishes the format and content requirements of environmental analysis and documentation. Preparation of the Hwy 46 FEIS was prepared in full compliance with these requirements.

The National Forest Management Act (NFMA), 1976 –The Hwy 46 Project is consistent with the National Forest Management Act (NFMA) 16 USC 1604(g)(3)(E)(i) through (iv) and 16 USC 1604(F)(i) and (v) because no timber harvest, other than salvage sales or sales to protect other multiple-use values, shall occur on lands not suited for timber production; Soil, slope, or other watershed conditions will not be irreversibly damaged; there is assurance that such lands can be adequately restocked within five years after harvest; protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment, where timber harvests are likely to seriously and adversely affect water conditions or fish habitat; the harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber; any shelterwood cutting and other cuts designed to regenerate an even-aged stand of timber would be used as a cutting method on National Forest System lands only where is determined to be appropriate to meet the objectives and requirements of the Forest Plan; cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain; cuts are carried out according to the maximum size limit requirements for areas to be cut during one harvest operation; stands of trees are harvested according to requirements for culmination of mean annual increment of growth, and; the interdisciplinary review as determined by the Secretary has been complete and the potential environmental, biological, esthetic, engineering, and economic impacts on any advertised sale area have been assessed, as well as the consistency of the sale with the multiple uses of the general area.

Forest Plan Consistency – Actions analyzed in the Hwy 46 DEIS are consistent with a broad range of Forest Plan Standards and Guidelines that have been discussed and disclosed throughout the document. The timber stand treatments associated with the project are consistent with the goals and management direction analyzed in the Willamette National Forest Land and Resource Management Plan FEIS and Record of Decision. Road improvements are designed to be consistent with the 1994 Northwest Forest Plan amendments to the Forest Plan and the Aquatic Conservation Strategy objectives.

Northwest Forest Plan Aquatic Conservation Strategy - The Aquatic Conservation Strategy (ACS) is an integral part of the Northwest Forest Plan and was developed to maintain and restore the ecological health of watersheds and aquatic ecosystems on public lands through implementation of four components:

1) riparian reserves 2) key watersheds 3) watershed analysis 4) watershed restoration. Based on the analysis presented in this FEIS and Appendix E, the ACS Objectives would be met in each alternative.

The Preservation of Antiquities Act, June 1906 and the National Historic Preservation Act, as amended, October 1966 – Section 106 of the National Historic Preservation Act (NHPA) of 1966 (amended in 1976, 1980, and 1992) is the foremost legislation governing the treatment of historic properties (a.k.a. heritage or cultural resources) during project planning and implementation. Other legal framework considered the effects of its actions on heritage resources is listed below:

- 36 CFR800 (Protection of Historic Properties),
- 36 CFR 63 (Determination of Eligibility to the National Register of Historic Places), and
- 36 CFR 296 (Protection of Archaeological Resources), and
- Executive Order 13007 – Sacred Sites

The 1995 Programmatic Agreement (PA) among the USDA Forest Service PNW, the Advisory Council on Historic Preservation, and the Oregon State Historic Preservation Officer (SHPO) Regarding Cultural Resource Management in the State of Oregon by the USDA Forest Service, (amended in 2004), provides a process by which the Forest Heritage Specialist may certify that the Forest has complied with Section 106 of NHPA for the project.

In accordance with this PA, an appropriate inventory was conducted during the summers of 2013, 2014 and 2015. All known cultural sites in the Area of Potential Effect (project area) were protected by avoidance, resulting in a determination of "No Historic Properties Affected" on December 28, 2016. Documentation was provided by SHPO and copies have been retained in the Forest and District Heritage file.

Clean Air Act Amendments, 1977 – The alternatives are designed to meet the National Ambient Air Quality Standards through avoidance of practices that degrade air quality below health and visibility standards. This project is consistent with by the 1990 Clean Air Act and the 1977 Clean Air Act and its amendments (See Chapter 3.2 and 3.12).

The Clean Water Act, 1987 – This act establishes a non-degradation policy for all federally proposed projects. Compliance with the Clean Water Act would be accomplished through planning, application and monitoring of Best Management Practices (BMPs). Based on the analysis presented in this FEIS, TMDL requirements for the Breitenbush River Basin would be met in each alternative (See Chapter 3.4).

The Endangered Species Act (ESA), December 1973 – The ESA establishes a policy that all federal agencies would seek to conserve endangered and threatened species of fish, wildlife and plants. Biological Evaluations for plants and wildlife were prepared, which describe possible effects and impacts of the proposed action on sensitive, and other species of concern that may be present in the project area. A Biological Assessment (BA) was prepared for the northern spotted owl, and spring Chinook salmon.

This analysis found that the Hwy 46 Project "may affect, not likely to adversely affect" Upper Willamette spring Chinook salmon. This is due to the potential for "take" as defined in the ESA. Take is prohibited by the ESA unless it is authorized by the "fisheries" agencies (National Marine Fisheries Service for salmon). In order for the Forest Service to obtain authorization we must conduct consultation with the fish agencies under Section 7 of the ESA. Consultation is anticipated to be completed by May 2018.
The Biological Assessment for Willamette Planning Province of Oregon for FY 2018 LAA Projects within the Willamette National Forest with a Potential to Modify Habitat and/or Disrupt Northern Spotted Owls of LAA Projects with the Potential to Modify the Habitat and/or Disrupt Northern Spotted Owls – Willamette Planning Province – FY 2016/17 was used to determine effects. A biological assessment was

submitted August 1, 2017 and a biological opinion was signed August 31, 2017 which includes the HWY46 project.This project would need to be completed prior to a final decision notice being signed for this project. The determination expected to be made in the Biological Assessment for the Hwy 46 project, which would be completed and concurrence received from the USFWS prior to the final decision notice is signed, is this project may affect and is not likely to adversely affect spotted owls by disturbance.

Magnuson-Stevens Fishery Conservation and Management Act, 1976 (MSA) – Essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act is designated in all areas except above impassible dams (Big Cliff and Detroit Dams), and natural migration barriers. The Magnuson-Stevens Fishery Conservation and Management Act reauthorization in 1996 established a new requirement for essential fish habitat that requires Federal agencies to consult with the National Marine Fisheries Service on activities that may adversely affect essential fish habitat. Essential fish habitat for the Pacific coast salmon fishery means those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem. The species designated in the Breitenbush River is spring Chinook salmon.

Technically the Breitenbush River upstream Big Cliff and Detroit Dams is not considered EFH but since reauthorization of the act the USACE has constructed an adult fish collection facility and is actively transporting Chinook salmon above the dam. Therefore, we treat the Breitenbush upstream of Detroit Dam as EFH. This project would not adversely affect EFH because of the no cut buffers we established along EFH fish bearing streams, project design elements, and the implementation of Best Management Practices (BMPs).

Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164. Development of Rock Quarries would conform to the requirements of the act, which sets forth mandatory safety and health standards for each surface metal or nonmetal mine. The purpose for the standards is to protect life by preventing accidents and promoting health and safety.

Inventoried Roadless Areas and Wilderness – All treatments in the IRA would maintain and meet the 9 roadless area characteristics in CFR 294.11 Best Management Practices and Design Elements would be in place to protect: soil, water, and air; plant and animal communities and habitat for TES species; classes of recreation and landscapes; cultural properties and unique areas.

Alternative 2 would have temporary adverse effects due to increased noise during harvest activity. There are no direct benefits to Wilderness from any of the proposed alternatives.

Prime Farmland, Rangeland, and Forestland – No prime farmland, rangeland, or forestland occurs within the project area.

Survey and Manage Species – Alternative 2 complies with the Northwest Forest Plan as amended by the 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines. Pre-disturbance surveys were conducted and site management applied consistent with the January 2001 species list.

Management Indicator Species (Aquatic) – The Willamette Forest Plan recognized anadromous and resident salmonids as economically important species and designated them as management indicator species for riparian habitat and water quality. The most common salmonid sport fish that occurs on the Detroit Ranger District is coastal cutthroat trout. The Hwy 46 project would maintain and improve habitat conditions for aquatic Management Indicator Species in the project area. Therefore, the Hwy 46 project would not contribute to a negative trend in viability of this species.

Management Indicator Species (Terrestrial) – The Willamette Forest Plan recognized elk and deer as economically important species that are commonly hunted, and designated them as management indicator species for winter range. Designated management indicator species for old growth and mature conifers are pileated woodpecker, marten, and northern spotted owl. The bald eagle was selected as a management indicator species for old growth conifers near large bodies of water, and the peregrine falcon was selected as a management indicator species for cliff nesting habitat. The Hwy 46 project would maintain habitat conditions for elk, deer, pileated woodpeckers, marten, bald eagles and peregrine falcons in the project area. The Hwy 46 project would not contribute to a negative trend in viability for any of the terrestrial wildlife management indicator species.

Executive Orders 11988 and 11990: Floodplains and Wetlands – Executive Order 11988 requires government agencies to take actions that reduce the risk of loss due to floods, to minimize the impact of floods on human health and welfare, and to restore and preserve the natural and beneficial values served by floodplains. Proposed harvest treatments would not occur within 100-year floodplains. Executive Order 11990 requires government agencies to take actions that minimize the destruction, loss, or degradation of wetlands. Streamside riparian areas, seeps, springs, and other wet habitats exist in the project area. These areas would be either avoided, or managed according to the amended Willamette Forest Plan Standards and Guidelines. Riparian Reserves would also be protected with design features. As a result, proposed treatments in Riparian Reserves would be consistent with Executive Orders 11988 and 11990.

Executive Order 12898: Environmental Justice – Executive Order 12898 requires that federal agencies adopt strategies to address environmental justice concerns within the context of agency operations. With implementation of either action alternatives, there would be no disproportionately high and adverse human health or environmental effects on minority or low-income populations. Nearby communities would mainly be affected by economic impacts connected with contractors implementing harvest, road reconstruction, tree thinning, planting, and other fuels treatment activities. Racial and cultural minority groups could also be prevalent in the work forces that implement activities. Contracts contain clauses that address worker safety.

Executive Order 12962: Recreational Fishing – The June 7, 1995, Executive Order requires government agencies to strengthen efforts to improve fisheries conservation and provide for more and better recreational fishing opportunities, and to develop a new policy to promote compatibility between the protection of endangered species and recreational fisheries, and to develop a comprehensive Recreational Fishery Resources Conservation Plan. Proposed activities in the project area would promote the restoration of riparian function in stands in corridor and headwater aquatic reserves and to develop additional large wood to stream reaches that currently lack adequate amounts. This would improve fish habitat and would provide better future fishing opportunities for the public.

Executive Order 13186: Migratory Birds – Migratory birds are protected under the Migratory Bird Treaty Act of 1918 (16 U. S.C. 703-704). The U.S. Fish and Wildlife Service is the lead federal agency for managing and conserving migratory birds in the United States. However, under Executive Order (EO) 13186, all federal agencies are charged with the conservation and protection of migratory birds. A Memorandum of Understanding (MOU 2008) between the Forest Service and U.S. Fish and Wildlife Service requires, during NEPA planning, that the FS, to the extent practical, evaluate and balance long-term benefits of projects to migratory birds against any short- or long-term adverse effects. It also requires the FS to consider approaches, to the extent practical, for identifying and minimizing take of migratory birds that is incidental to otherwise lawful activities. Region 6 has compiled some information to assist biologists in disclosing effects to avian species during NEPA planning (Forest Service and Bureau of Land Management 2013). Effects to FS sensitive birds, federally ESA listed birds, birds that are Management Indicator Species and migratory bird species that have been identified by USFWS as

Species of Conservation Concern in the Northern Pacific Forest (USFWS 2008) and that have habitat in the proposed treatment units are addressed in Chapter 3.

Seasonal restrictions are recommended in the Hwy 46 design features (Table 13) on specific units to protect owls. This would minimize disturbances to nesting migratory birds and reduce the likelihood of harm to individual birds. Design features to retain existing snags where possible, and to retain live trees, create snags, and fall trees for dead wood sources would provide structural features migratory birds would use.

Executive Order 13443: Facilitation of Hunting Heritage and Wildlife Conservation – August 17, 2007, Executive Order requires Federal agencies "to facilitate the expansion and enhancement of hunting opportunities and the management of game species and their habitat." The proposed creation and enhancement of early seral habitat in the project area would improve forage for game species and provide better hunting opportunities for the public.

Other Jurisdictions – There are a number of other agencies responsible for management of resources within the project area. The Oregon Department of Fish and Wildlife is responsible for management of fish and wildlife populations, whereas the Forest Service manages the habitat for these animals. The Oregon Department of Fish and Wildlife has been contacted regarding this analysis and Nancy Taylor, a biologist with the agency, has participated in early collaboration and has attended public field trips.

Proposed harvest treatments within riparian areas have been designed to comply with "Sufficiency Analysis for Stream Temperature – Evaluation of the adequacy of the Northwest Forest Plan Riparian Reserves to achieve and maintain stream temperature water quality standards" (USDA Forest Service and USDI BLM, 2004). This document was prepared in collaboration with Oregon Department of Environmental Quality and United States Environmental Protection Agency to provide documentation of Northwest Forest Plan compliance with the Clean Water Act with regard to state water quality standards for stream temperatures. As such, it redeems several of the Forest Service responsibilities identified in a "Memorandum of Understanding between USDA Forest Service and Oregon Department of Environmental Quality To Meet State and Federal Water Quality Rules and Regulations" (USDA Forest Service and Oregon DEQ, May 2002). The Sufficiency Analysis provides current scientific guidance for management of riparian vegetation to provide effective stream shade, including appropriate methods of managing young stands for riparian objectives other than shade, such as production of large wood for future recruitment.

Oregon Department of Environmental Quality and the Oregon Department of Forestry are responsible for regulating all prescribed burning operations. The USDA Forest Service Region 6 has a Memorandum of Understanding with Oregon Department of Environmental Quality, Oregon Department of Forestry, and the USDI Bureau of Land Management regarding limits on emissions, as well as reporting procedures. All burning would comply with the State of Oregon's Smoke Management Implementation Plan and, for greater specificity, see the memorandum of understanding mentioned above.

The project area includes portions of the Breitenbush River and the South Fork Breitenbush River which have been determined to be eligible for inclusion into the national Wild and Scenic River System. Until suitability is determined, the area within ¼ mile on either side of the Breitenbush River is to be managed to meet Wild and Scenic River (Recreation) Standards and Guidelines as outlined in Management Area 6c in the Willamette National Forest Land and Resource Management Plan (1990). The actions proposed in Alternatives 2 and 3 will not jeopardize the eligibility of either the Breitenbush River or South Fork Breitenbush River for inclusion in the national Wild and Scenic River System.

Energy Requirements and Conservation Potential – Some form of energy would be necessary for projects requiring use of mechanized equipment. Commercial thinning and some partial cutting units would involve both heavy and small machines for yarding logs during the implementation period. Projects such as road reconstruction and maintenance could require heavy machinery for a small amount of time. Both possibilities would result in minor energy consumption. Alternatives that harvest trees could create supplies of firewood as a by-product, which would contribute to a supply of energy for the local community for home heating.

Pre-Decisional Administrative Review (Objection)

This ***draft*** Record of Decision is subject to pre-decisional administrative review (objection) pursuant to 36 CFR 218.

Who may file an objection (36 CFR 218.5): Only individuals, or organizations that submitted specific written comments during any designated opportunity for public participation (scoping or public comment periods) may object.

Objection requirements (36 CFR 218.8): An objection must meet all of the requirements described in 36 CFR 218.8:

a) Objections must be filed with the reviewing officer in writing. All objections are available for public inspection during and after the objection process.

b) Incorporation of documents by reference is not allowed, except for the list of items in 36 CFR 218.8 that may be referenced by including date, page, and section of the cited document, along with a description of its content and applicability to the objection. All other documents must be included with the objection.

c) Issues raised in objections must be based on previously submitted specific written comments regarding the proposed project or activity and attributed to the objector, unless the issue is based on new information that arose after the opportunities for comment. The burden is on the objector to demonstrate compliance with this requirement for objection issues.

d) At a minimum, an objection must include the following:

(1) Objector's name and address as defined in §218.2, with a telephone number, if available;

(2) Signature or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the objection);

(3) When multiple names are listed on an objection, identification of the lead objector as defined in §218.2. Verification of the identity of the lead objector must be provided upon request or the reviewing officer will designate a lead objector as provided in §218.5(d);

(4) The name of the proposed project, the name and title of the responsible official, and the name(s) of the national forest(s) and/or ranger district(s) on which the proposed project will be implemented;

(5) A description of those aspects of the proposed project addressed by the objection, including specific issues related to the proposed project; if applicable, how the objector believes the environmental analysis or draft decision specifically violates law, regulation, or policy; suggested remedies that would resolve the objection; supporting reasons for the reviewing officer to consider; and

(6) A statement that demonstrates the connection between prior specific written comments on the particular proposed project or activity and the content of the objection, unless the objection concerns an issue that arose after the designated opportunity(ies) for comment.

Timeline for filing of objections (36 CFR 218.9): Evidence of and responsibility for timely filing is described in 36 CFR 218.9. Objections must be postmarked or received by the Reviewing Officer, Forest Supervisor, within 45 days from the date of publication of notice of the objection period in the *Federal Register* and the *Salem Statesman Journal*, the newspaper of record for the Detroit Ranger District, Willamette National Forest. The publication date in the *Federal Register* is the exclusive means for calculating the time to file an objection. Those wishing to file an objection should not rely upon dates or timeframe information provided by any other source.

Submitting an objection: Objections may be submitted in the following ways:

Electronic Submission: Electronic objections will be accepted through the Forest Service online comment system available at https://cara.ecosystem-management.org/Public/CommentInput?project=47109

Mail: Objections can be mailed to the Reviewing Officer at the address below. Objections delivered by mail must be received before the close of the fifth business day after the objection filing period.

Forest Supervisor, Reviewing Officer
Willamette National Forest
Attention: Objections
3106 Pierce Parkway, Suite D
Springfield, Oregon 97477

Hand delivery: Objections may be hand delivered to the Supervisor's Office at the address above between 8:00am and 4:30pm, Monday through Friday except legal holidays

Implementation

If no objections are filed, my decision will be finalized (signed) and implementation of my decision may occur on, but not before, the fifth business day following the end of the 45-day objection-filing period. If an objection is filed, a written objection response will be completed by the Reviewing Officer within 45 to 75 days after the end of the 45-day objection-filing period. At that time, my decision will be finalized (signed) and implementation could begin immediately thereafter.

Contact Person

For additional information concerning this decision or the Forest Service objection process, contact: Lyn Medley, NEPA Planner at 541-854-4228 or lmedley@fs.fed.us.

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(Record of Decision has not been signed)

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Grady McMahan Date
District Ranger, Responsible Official
Detroit Ranger District, Willamette National Forest