Rocky Restoration

Purpose and Need

The overall purpose for the Rocky Restoration project is to conduct restoration activities within the planning area to improve the health and vigor of forested stands, and improve conditions for wildlife and aquatic resources, while reducing the risk of human-caused fires spreading from public access roads on to nonfederal lands and to provide a location for fire suppression personnel to actively engage a fire safely. In order to meet this overall purpose, there are underlying needs to:

- Restore stand health to improve resiliency to insects and disease
- To enhance diversity within plantations
- To enhance and restore pine/oak habitat and riparian reserves
- Provide opportunities to safely engage an active fire near private land
- To provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies, and to supply forest products in a cost effective manner

By restoring stand healthy and enhancing diversity, stands would increase diameter and height growth, leaf area, and improve health of the residual stands. To restore health and increase growth, forested result in larger wind-firm trees that are resilient to insects, disease and wildfire. These second-growth plantations are experiencing a slowing of growth due to overcrowding and some are experiencing sress and suppression caused mortality (The Forest Plan describes this need on p. Four-91, FW-372 & Four-292). In riparian areas where aspen is present, there is a need to reduce competition with encroaching conifers to allow aspen for greater access to available resources.

Existing plantations do not have the mix of tree species that were present historically and they are relatively uniform in terms of tree size and spacing. There is a need for greater variability of vertical and horizontal stand structure; and for more sunlight on the forest floor to create greater diversity of ground vegetation and to increase the quantity and palatability of forage plants. (The Forest Plan describes this need on p. Four-67).

In existing areas of pine/oak habitat, if no action is taken, over time the stands would continue to become increasingly dense, resulting in a period of low structural diversity that could last more than 100 years. Diversity would continue to decrease if no action is taken, and species such as deer and elk that require more open stands for foraging would decline.

There is a need for action as pine/oak habitat condition within the planning area have missed disturbance cycles that have lead overcrowded stand with high density levels of non-fire resistant tree and shrub species which has limited natural regeneration of Oregon white oak. Also there is a need to restore riparian conditions within the plantations because they currently do not meet all of the current and future needs associated with aquatic and riparian resources (The Forest Plan describes this need on p. Four-17 to 20, Northwest Forest Plan Standards and Guidelines p. C-32). If no action is taken, stands would have reduced capability to provide elements, including wildlife habitat, stream shade, standing and downed woody structure, stream channel and bank stability, and micro-climate conditions, of a fully functioning pine/oak and riparian ecosystems.

With the adjacent private lands and the Pine Hollow Wildland Urban Interface included in the eastern portion of the planning area, there is a need to reduce the risk of human-caused fires spreading to private lands and to provide a location for fire suppression personnel to actively engage a fire safely. The effects from the Rocky fire from 1973 are still present on the ground, and many of the homeowners in the area remember the concerns from that incident. This project looks to provide for opportunities to safely engage the fire and reduce the risk to private land.

To provide forest products consistent with the Northwest Forest Plan goal of maintaining the stability of local and regional economies, and to supply forest products in a cost effective manner, there is a need to

keep forests healthy and productive to sustainably provide forest products in the matrix in the future. (Northwest Forest Plan ROD p. 26, Forest Plan p. Four-26).

Land Use Allocations

The desired future condition of the project is to improve forest health enhance resiliency to insects, disease and wildfire while providing opportunities for effective fire suppression near adjacent private land. Achieving this desired future condition would meet the overall goals of the land allocations within the planning area.

Several land allocations for NFS lands as designated by the Mt. Hood National Forest Land and Resource Management Plan (Forest Plan), as amended by the Northwest Forest Plan, are found within the planning area. The four primary Forest Plan land allocations in the planning area are Key Site Riparian Area (A9), Scenic Viewshed (B2), Pine/Oak Wildlife Emphasis (B4), and Wood Product Emphasis (C1). An overlapping secondary land use allocation in the planning area, Pileated Woodpecker/Pine Marten Habitat Area (B5), occurs on approximately 9% of the acres proposed for treatment. Where applicable, the more stringent standards and guidelines would be applied where land use allocations overlap.

The majority of the planning area (approximately 50% of the planning area) is within C1-Timber Emphasis land use allocation. The goal for this land is to provide lumber, wood fiber, and other forest products on a fully regulated basis, based on the capability and suitability of the land. A secondary goal is to enhance other resource uses and values that are compatible with timber production (pages 4-289 thru 4-290).

Management area Pine/Oak Wildlife Emphasis (B4) is 32% of the planning area, and is along the eastern portion of the planning area (pages 4-234 thru 4-235). The goal of this area is to maintain key deer and elk winter habitat with additional emphasis on nesting and forage production for year-round turkey and squirrel habitat. Secondary goals are to maintain a healthy forest condition through a variety of timber management practices and to provide summer dispersed recreational opportunities.

Approximately 8% of the planning area is B2-Scenic Viewshed land use allocation, as described by the Forest Plan (pages 4-218 thru 4-220). The goal for this land use allocation is to provide attractive, visually appealing forest scenery with a wide variety of natural appearing landscape features. This management area should utilize vegetation management activities to create and maintain a long term desired landscape character. The major characteristics are for the visual character of the landscape resulting from prescribed visual quality objectives within distance zones from selected viewer positions. For this project, the Rock Creek Reservoir and campground serve as the main viewer position.

Management area A9-Key Site Riparian Area (pages 4-179- thru 4-180) encompasses approximately 2% of the planning area. The goal of this area is to maintain or enhance habitat and hydrologic conditions, notable for their exceptional diversity, high natural quality.

The Northwest Forest Plan land use allocations overlap allocations within the Forest Plan. This planning area includes Riparian Reserve (16%), Late-Successional Reserve (2%) and the majority of the area is Matrix (82%). Treatments would be located in Matrix and Riparian Reserve areas. Riparian Reserve includes areas along rivers, streams, wetlands, ponds, lakes, and unstable or potentially unstable areas where the conservation of aquatic and riparian-dependent terrestrial resources receives primary emphasis. Late-Successional Reserves, in combination with other allocations and standards and guidelines, are to maintain a functional, interactive, late-successional and old-growth forest ecosystem. Matrix consists of Forest Service lands outside of designated areas (i.e., Congressionally Reserved Areas, Late-Successional Reserves, Adaptive Management Areas, Administratively Withdrawn Areas, and Riparian Reserves).

Standards and guidelines in the Mt. Hood Forest Plan were not written to specifically address fuels reduction or oak restoration. Exceptions to the Forest Plan standards are allowed under the Forest Plan, if they are identified during the interdisciplinary process. The exceptions were identified during the interdisciplinary planning analysis and the IDT process concluded that these exceptions were within the purpose and need for action. Forest Plan page 4-45 states that for “should” standards “action is required;

however, case-by-case exceptions are acceptable if identified during interdisciplinary project planning, environmental analyses. Exceptions are to be documented in environmental analysis (National Environmental Policy Act 1969) public documents."

Proposed Action

In order to restore and enhance stands to more historical conditions, four vegetation treatments are proposed within the Rocky Restoration planning area. Thinning activities would remove trees that are overcrowding stands. This overcrowding has resulted in higher density related mortality risk, lack of regeneration, and increased risk of crown fire.

Stands where the dominant species and fire regime are appropriate, such as ponderosa pine, Oregon white oak, Douglas-fir, and western larch which are adapted to low intensity, frequent fire return intervals, would be treated so that future underburning could occur to maintain stand conditions. Fuels created from thinning activities as well as naturally accumulated fuels would be treated by piling and burning.

Aspen Thinning/Meadow Enhancement

Proposal would be the removal of conifer within existing aspen clones and remove competing conifers on the edge of the clone that is within 50 feet of the aspen canopy on 21 acres. Prescribed burning would occur within the aspen clone once vegetative treatments have been implemented. Vegetative treatments would be a mix of mechanical and hand work and would include a variety of treatments including but not limited to cutting, pulling, burning, and fencing.

Plantation Thinning

Plantation treatments would be an intermediate variable density thinning from below treatment to approximately 40-120 ft^2 of basal area in even-aged managed units designed to address high density issues that are leading to fuels and forest health concerns. These concerns are stress related mortality, limited species diversity, limited structural diversity, and limited natural regeneration of Oregon white oak. The overall desire for these treatments would be to move riparian areas as well as the upland portions of the plantations towards a properly functioning late-successional area with a large tree component that is currently absent in the majority of the stands due to wildfire, past activities and high tree densities. Where applicable sapling thinning to approximately 40-100 trees per acre to promote and develop more resilient stand conditions as well as brush and piling treatments would be implemented based on site conditions. Where possible, snags should be created to meet Forest Plan Standards. Prescribed burning, pile burning, and/or mechanical fuels treatments would be applied to these treatment areas as well. Mechanical fuels treatments could include, but would not be limited to, lop and scattering, mechanical piling, masticating, or biomass collection. Biomass collection would include machine piling and removal of materials.

Oak Restoration Thinning

Oak Restoration Thinning consists of thinning to approximately 40-100 trees per acre to promote and develop more resilient ponderosa pine/oak habitats to more historic conditions. An emphasis would be placed on removal conifer encroachment out of meadows and around existing legacy ponderosa pine, aspen and Oregon white oak. Where applicable, sapling thinning to approximately 40-100 trees per acre to promote and develop more diverse stand conditions as well as brush and piling treatments would be a implemented based on site conditions. Prescribed burning, pile burning, and/or mechanical fuels treatments would be applied to these treatment areas as well. Mechanical fuels treatments could include, but would not be limited to, lop and scattering, mechanical piling, masticating, or biomass collection. Biomass collection would include machine piling and removal of materials.

Underburning

Underburning would occur in stands that have stand composition and structure that can support underburning without any thinning activities prior to treatment. Underburning in stands ready for a natural disturbance would maintain stand density and regeneration levels, while maintain fuel loadings that closely mimic historical. Underburning is the use of prescribed fire underneath existing or residual trees to treat natural fuels such as, dead woody material, needle litter and dead brush.

Table 1. Proposed Action for the Rocky Restoration Planning Area

Proposed Area	Acres
Aspen Thinning/Meadow Enhancement	21
Plantation Thinning	5,416
Oak Restoration Thinning	1,740
Underburning	1,323
Total	8,500

Road Actions

Year Round Road Closure (35.3 miles) treatments would block vehicles from entering the closed road the entire year through the use of gates or other treatments. These roads would remain available for administrative access for Forest Service administrative uses as well as uses for activities such as search and rescue, wildland firefighting and for permitees. These roads would remain on the Forest's transportation system and receives minimal maintenance as there is no public traffic allowed. The roads proposed for administrative closure include; 4800012, 4810011, 4810015, 4810017, 4810019, 4810130, 4810141, 4810160, 4810190, 4810200, 4810221, 4811022, 4811171, 4811190, 4812140, 4820012, 4820014, 4820016, 4820018, 4820026, 4820130, 4820180, 4860120, 4800130, 4810013, 4810014, 4810016, 4810018, 4810140, 4810150, 4810161, 4810180, 4810181, 4810191, 4810220, 4810222, 4810223, 4810224, 4810225, 4810230, 4811011, 4811021, 4811022, 4812141, 4813120, 4820011, 4820025, 4820133, 4820160, 4820190, 4800014, 4820132, 2710022, 2710170, and 4820131.