Chapter 1 Purpose of and Need for Action

Introduction

The Forest Service has prepared this environmental impact statement in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This environmental impact statement discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives.

Background

Relatively recent damage from defoliating insects (spruce budworm and tussock moth), uncharacteristic wildfire effects associated with the 1996 Wheeler Point fire, and dense forests containing low vigor trees are symptoms of impaired forest health and deteriorating ecosystem integrity. The causes of these symptoms are related to historical changes in species composition, forest structure, and stand density, in part due to past suppression actions and harvest. If composition, structure, and density are not moved back within their historical ranges of variation, then insect and fire problems will continue into the future.

Disturbance has played a large part in the recent history of the forested landscape in the Kahler Project area (Wickman 1992, Johnson 1994, Lehmkuhl et al. 1994, Oliver et al. 1994, Tanaka et al. 1995), and is responsible for the condition that we see today (Powell 2011). Fire suppression and past harvest have caused a shift in stand density, structure, and species composition away from the range of variability historically associated with dry forests. In turn, this shift has altered the availability and distribution of habitat for terrestrial wildlife species, including Forest Plan Management Indicator Species and Region 6 Sensitive Wildlife Species.

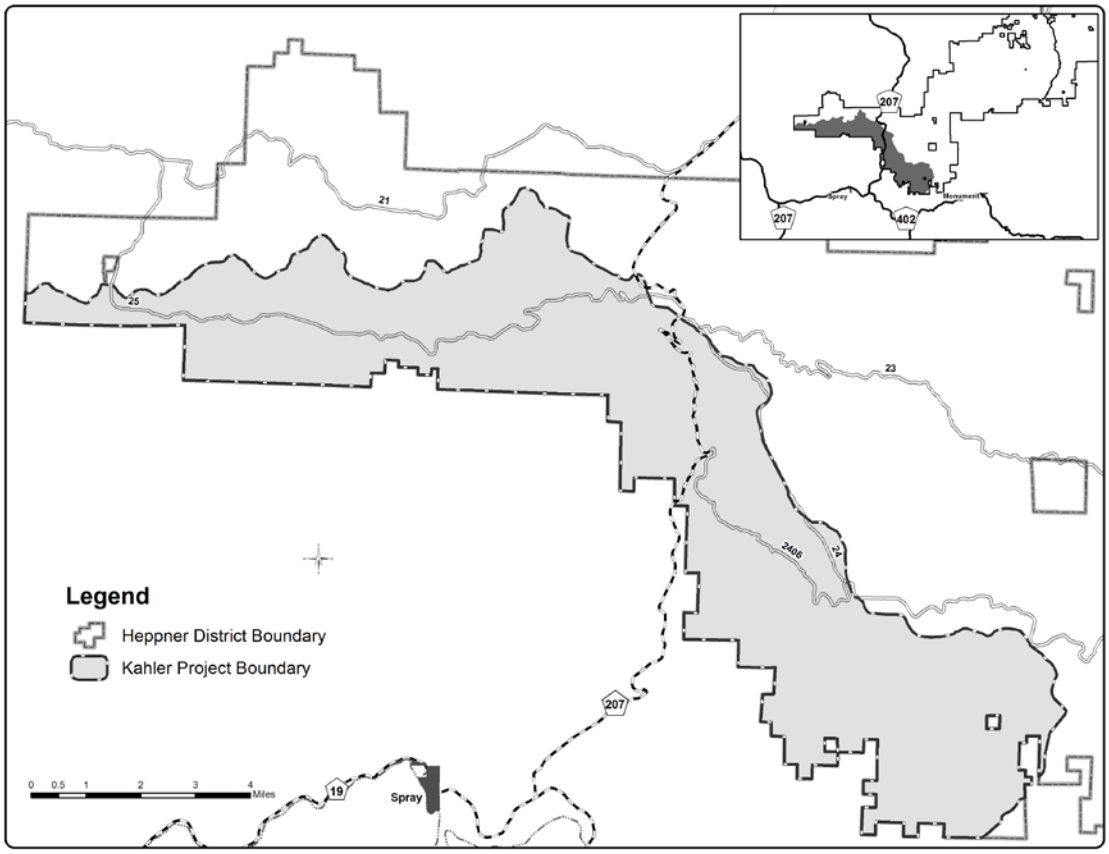
Treatment of the project area will help foster early seral recruitment, lead to increased individual tree vigor, and increased resilience to wildfire and insect related disturbance that will incorporate and address wildlife and aquatic habitat issues associated with the current landscape.

Proposed Project Location

The proposed project area is located about 40 miles southwest of the town of Heppner, Oregon, and is within Grant and Wheeler counties. Legal locations that the proposed project is within are as follows: T7S, R24E, Sec 13, 14; T7S, R24E, Sec 8-18, 20-24; T7S, R25E, Sec 4-10, 14-27, 34-36; T7S, R26E, Sec 31; T8S, R25E, Sec 1, 2, 11-14; T8S, R26E, Sec 5-30, 33-35 (Willamette Meridian).

The planning (analysis) area contains approximately 32,000 acres and is located in the following subwatersheds: Alder Creek (170702040108), Lower Kahler Creek (170702040104), Upper Kahler Creek (170702040103), Haystack Creek (170702040105), and Bologna Canyon (170702040101). The majority (approximately 19,900 acres) of the planning area is located in Wheeler County with approximately 12,900 acres located within Grant County (see Figure 1).

Figure 1-1.Vicinity map



Proposed Action

The Kahler project proposes to use variable density thinning with skips and gaps to reduce tree density, shift species composition, and promote old forest structure across approximately 12,000 acres within the project area. There will be an option to remove select young (<150 years old) grand fir and Douglas-fir trees that are 21 inches or greater in diameter and interacting with the crown of a desirable leave tree. Tree species preference will be for ponderosa pine and western larch. Diseased trees and those with severe mistletoe infestations will be targeted for removal where they are outside historical ranges. Trees may be removed using ground-based, skyline, or helicopter methods. Minimum snag and downed wood standards will be maintained. Thinning of western juniper (7 inches to 21 inches in diameter) may occur within commercial harvest units in order to reduce and/or eliminate its encroachment into upland forest stands. Treatment is also proposed in Class 4 riparian areas in order to maintain or improve the quality of upland forest habitat, the diversity and productivity of riparian plant communities, and water availability for native vegetation.

Purpose and Need for Action

The purpose of the Kahler Dry Forest Restoration Project is to restore dry forest conditions and thereby create a resilient, fire adapted landscape by moving the project area towards its range of variability in forest structure, tree density, species composition, and associated wildlife and aquatic habitat. There is a shortage of old forest single stratum (OFSS) structure forest in the project area. This type of forest is characterized by a single overstory layer, with medium to large

trees of early successional tree species such as ponderosa pine or western larch. Currently, only 6% of the forested land within the project area is classified as OFSS, whereas historically 40-60% of the forest would have been in this condition.

Specific needs for the Kahler Project area are as follows:

- Restore and promote open stands of old forest dominated by ponderosa pine, thereby moving the area toward its historical range in structure, density, and species composition.
- Maintain and promote old trees (>150 years old) throughout the project area.
- Provide a supply of commercial forest products to support and maintain local infrastructure.
- Reduce insect and disease risk, where currently outside the historical range, for dry upland forests and associated wildlife.
- Reestablish the character of a frequent fire regime to the landscape to aid in maintaining open stand conditions and fire-tolerant species, improve big game forage, and reduce conifer encroachment.
- Reduce encroachment of western juniper and conifers into areas where they did not historically occur to improve big game forage, the quality of grassland and steppe-shrubland habitat for wildlife, the diversity and productivity of riparian plant communities, and water availability for native vegetation.
- Provide, develop, and enhance effective and well-distributed habitats throughout the Forest for all existing native and desired nonnative vertebrate wildlife species, particularly those associated with late and old structural stages in dry upland forest stands (e.g. white-headed and Lewis' woodpecker).
- Provide for a high level of potential habitat effectiveness at the landscape scale to meet the needs of big game in the winter range management area.
- Address issues in big game habitat including the existing extent and distribution of cover, the quantity and quality of forage, and disturbance associated with roads and trails open to full-sized vehicles and OHVs.
- Reduce the risk of loss from wildfire by improving fire sighting capabilities and creating defensible space around Tamarack Rental Cabin, Fire Lookout, and communication sites..

Decision Framework

Given the purpose and need, the deciding official reviews the proposed action, the other alternatives, and the environmental consequences in order to make the following decisions:

- Whether forest plan amendments will occur at this time.
- Will harvest occur in Class IV Riparian Habitat Conservation Areas (RHCA).

- Whether harvesting Douglas-fir and grand fir 21 inches and greater will be harvested to improve stand structure.

Public Involvement

The Notice of Intent (NOI) for preparation of an Environmental Assessment (EA) was published in the Federal Register on March 11, 2013. The NOI asked for public comment on the proposal from March 11,2013 to April 10, 2013. A second NOI for an Environmental Impact Statement was published on August 1, 2014 to notify the public that the NEPA document was going to be elevated to an EIS. Using the comments from the public, other agencies, and Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warm Springs Reservation, the interdisciplinary team developed a list of issues to address.

Issues

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations explain this delineation in Sec. 1501.7, "…identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)…". A list of non-significant issues and reasons regarding their categorization as non-significant may be found in the project record.

As for significant issues, the Forest Service identified the following issues during scoping:

- Issue 1: Thinning, juniper removal, prescribe fire and use of the road system have the potential to impact the quality, quantity and distribution (across the landscape and adjacent to open roads) of big game habitat within the analysis area. As a result, population levels and herd distribution may be impacted.

Differences in alternatives would be measured by:

  - Proximity of cover and forage to open roads and trails.
  - Acres of winter range forage improvement (commercial and non-commercial thinning, juniper treatment, forage seeding, and burning).
  - Quantity, quality, and distribution of cover (winter range and summer range).
  - HEI – Habitat Effectiveness Index in the C3 and E1 management areas.
  - Miles of existing closed roads, non-system roads reopened for use and temporary roads created.

- Issue 2: Thinning would have the potential to affect the quantity and distribution of dense multi-strata ponderosa pine and mixed conifer stands at the stand and larger landscape scale in the dry upland forest Potential Vegetation Group (Powell et al. 2007). Thinning may reduce the habitat for dense, multi-strata associated species of wildlife such as pileated woodpecker and other wildlife that utilize dense mixed conifer and ponderosa pine stands.

Differences in alternatives would be measured by:

- Acres and proportion of the analysis area in moderate and high density patches.
- Acres and proportion of the analysis area in late and old multi-strata stands.
- Distribution of dense, multi-strata stands in older age classes at the larger landscape scale.
- Assessment of the adequacy of connectivity network (Eastside Screens).

- Issue 3: Use of temporary roads and re-opening of existing closed roads has potential to increase stream sedimentation.

Differences in alternatives would be measured by:

- Miles of temporary roads used and miles of system road use.
- Miles of temporary roads before and after harvest.
- Mile of closed system roads and temporary roads used in RHCAs

- Issue 4: Mechanical treatments in Class 4 RHCA's could increase stream sedimentation.

Differences in alternatives would be measured by:

- Total acres proposed for treatment within RHCA's
- Acres of mechanical treatments proposed within RHCA's

Forest Plan Amendments

It is anticipated that the Kahler Dry Forest Restoration Project will require amendments to the Umatilla Land and Resource Management Plan in order to carry out the proposed action. Potential amendments may include the following:

1. The Habitat Effectiveness Index (HEI) and cover standards in the Winter Range Management Area (Monument and Kahler Basin Winter Ranges, combined) are below Forest Plan minimums. To modify existing cover conditions in the C3 management area, a Forest Plan amendment would be needed.

2. The wildlife portion of the Eastside Screens amendment to the Forest Plan (specifically item 6 d, Scenario A), will be amended to authorize two actions:

Some of the large, but young, Douglas-fir and grand fir trees that are ≥ 21 inches DBH, but less than 150 years in age (at breast height), will be removed from any of the structural stages being treated, ***except for units classified as the old forest single stratum structural stage*** (OFSS; this stage is called "single stratum with large trees" in the Eastside Screens).

Thinning treatments will occur in treatment units classified as OFSS, which is below HRV; the thinnings would only involve trees < 21 inches DBH, and there would be no net loss of LOS following the treatment (e.g., the units classify as OFSS before treatment, and they will classify as OFSS after treatment).

3. Existing HEI in the western portion of project area is currently at a minimum due to cover conditions resulting from the Wheeler Point Fire. Modification of additional cover may result in an HEI that is below Forest Plan standards. An amendment to the Forest Plan would be required in this case.

4. Approximately 11 acres of management area C1 – Dedicated Old Growth immediately surrounds the Tamarack lookout site. Any timber harvest within this area will require a Forest Plan amendment. Replacement of affected C1 acres with adjacent or nearby old forest stands, if necessary, would also require a Forest Plan amendment to change Forest Plan management areas allocations.