



United States
Department of
Agriculture

Forest Service



Five Needle Pine Enhancement

Decision Memo

Umpqua National Forest

Cottage Grove Ranger District

July 2010



INTRODUCTION

Other sugar and white pine release projects have occurred on the Cottage Grove Ranger District in 2004, 2005 and 2007. In 2004, 60 acres of mature pine release and 60 acres of young plantation release and pruning were accomplished. A portion of those acres (30) initiated the release of sugar and white pine along the southern portion of Adams Mountain Way Trail. In 2005, work was continued north along the trail for approximately 42 acres to Brice Creek. In 2007, approximately 6 acres along 3.7 miles of FS roads 2263, 2263-717, and 2263-741 were treated as part of the Shrimp Stewardship timber sale.

Following the 2004 treatments, various specialists reviewed the projects. In an informal consultation letter dated June 30, 2005, Scott Center wrote "...treated stands remain functional spotted owl habitat post-treatment, of the same or possible higher quality than pre-treatment" (p. 5). Don Goheen, Forest Entomologist, and Ellen Goheen, Forest Pathologist from the Southwest Oregon Forest Insect and Disease Technical Center, visited the treated stands June 3, 2005. Overall, positive remarks were received. However, the Goheens did reference that sugar pines are at high risk of mountain pine beetle attack when surrounding basal areas exceed 180 square feet per acre on moderate-to-good sites in Southwestern Oregon. Most pine release with the 2004 project met these criteria with a few exceptions. The prescription was then implemented in 2005 and 2007 with variations in post-harvest fuel treatments and girdling depending on proximity to roads and fuel loading. Site visits to portions of the 2005 and 2007 treatments were made in 2010 by resource specialists in the development of this project.

LOCATION

All past and proposed current treatments of the five needle pine are within the Brice Creek Watershed. This area has the highest concentrations of sugar pine in stands on the Cottage Grove Ranger District. The 2010 proposed treatment areas occur within T22S, R01E, Sections 16, 20, 22-23, and 27-29 on Matrix land allocation (Figure 1).¹ Units A, B and C are adjacent to land designated as an Inventoried Roadless Area.

The treatment areas are (see Figure 1):

- Units A & B - 26 acres in two units adjacent to the Crawfish Trail along Road 2263-811;
- Unit C - 11 acres above the road and east of where the Crawfish Trail intersects Road 2263-717;
- Unit E - 4 acres east of Hobo Creek and downslope from a spur road off of Road 2263-740; and
- Unit F - 23 acres along a ridge between roads 2263-740 and 2200.

¹ Matrix lands include federal lands outside of reserves, withdrawn areas, Managed Late-Successional Areas, and Adaptive Management Areas.

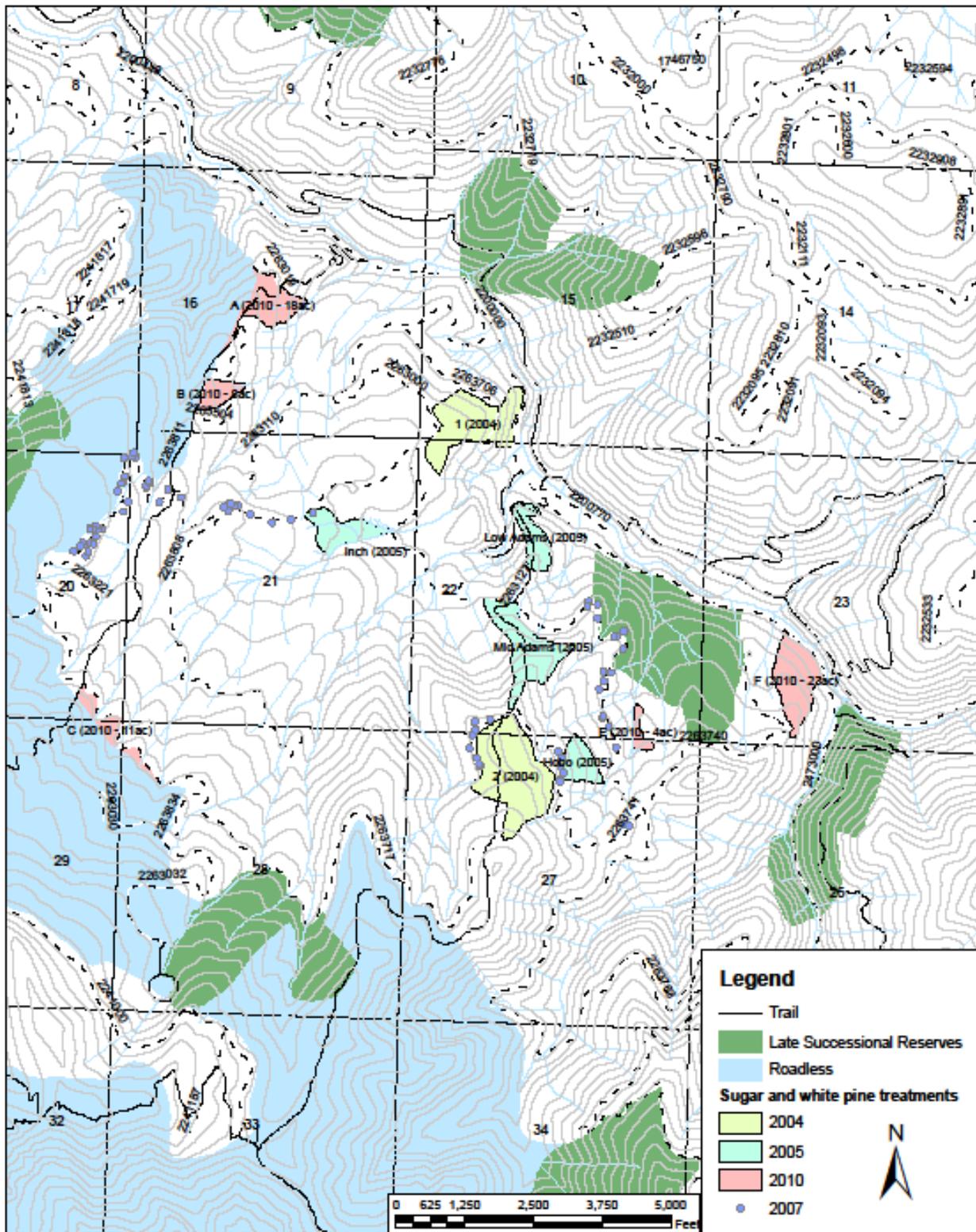


Figure 1. Five Needle Pine Enhancement on the Cottage Grove Ranger District.

PURPOSE AND NEED, PROPOSED ACTION

The purpose of this project is to preserve the District's sugar pine and white pine. Sugar and white pine health will be improved by reducing conifer density surrounding the pines. Currently the mature sugar pine on the Cottage Grove Ranger District are experiencing reduced growth rates due to inter-tree competition from surrounding western hemlock, Douglas-fir, incense-cedar, and western redcedar. Reduced growth and vigor have created a condition where the pines are susceptible to mountain pine beetle. Individual sugar pines are dying from mountain pine beetle infestation. The sapling white pine and intermediate sugar pine are also vulnerable to white pine blister rust.

In his 1996 paper "Silvics of Sugar Pine: Clues to Distribution and Management," William W. Oliver wrote "...sugar pine is particularly responsive to gaps created in the canopy." In *Silvics of North America, Volume 1. Conifers* (1990), sugar pines reaction to competition is documented as: "A seral species, it becomes less tolerant with age, and overtopped trees decline unless released."

The Brice Creek Watershed Analysis (1997) includes Recommendations for Disease and Insect Protection (Chapter 5 – Vegetation Recommendations). Recommendation #6 is: "To maintain large individual sugar pines or western white pines, remove competing vegetation of all sizes and ages around individual trees to the dripline plus 20 feet" (p. 176).

The proposed action includes the following requirements by resource area. These requirements are summaries taken from resource specialist reports and site visit reviews.

Silviculture: The overall intent of the density reduction around the five needle pine is to reduce the residual basal area to at or below 180 square feet. This maximum density has been recommended to improve and maintain sugar and western white pine health by Don and Ellen Goheen, USFS Southwest Service Center Entomologist and Pathologist, respectively, during past reviews of similar projects. Clearing around targeted pines reduces tree stress, leaving healthier pines the ability to repel attacks from bark beetles. This, in turn, makes the trees less attractive to further attacks by beetles.

Aquatics: Avoid treatment on steep slopes of headwaters of any tributaries.

Recreation/Trails/Roads:

1. Do not create snags that would pose falling hazards to hikers, vehicle traffic, or other trail and road users. Girdled trees should be at a minimum one tree height distance from trails or roads to prevent hazards.
2. Along Crawfish Trail, maintain vegetation clearing widths (two feet from centerline in each direction) and heights (eight-foot corridor) to permit mountain bike trail use. There should be no overhanging brush or residual slash left within this corridor.
3. Leave all shrubs and hardwoods within 20 feet of the centerline of the trail for visual screening.

4. All cut trees within 20 feet of the Crawfish Trail centerline should be cut flush with the ground or as close as possible to prevent sharp stobs from creating hazards to mountain biking, and to maintain visual trail character.
5. Where no legacy trees over 26 inches are left in a release area along the trail, leave additional trees (including western hemlock) in the 12-26 inch diameter classes to maintain close to but not exceeding 180 square-feet of basal area.
6. All project-created slash and brush six inches or less in diameter should be scattered over the slope break out of view from the trail or piled at least 20 feet away from the trail centerline, where there is no opportunity for removing from view. Piles that are in view of the trail that are to be burned will be chunked so as to completely burn material to mineral soil. After completion of burning, blackened pile areas should be scattered and/or unburned branches and slash thrown on top to reduce visual impacts to trail.

Wildlife

1. If a suspected TES species is found during the operating period, activities will cease until the Cottage Grove Ranger District wildlife personnel can be contacted and an identification and evaluation can be made.
2. Created canopy openings will not exceed $\frac{1}{4}$ acre on any given pine and will not exceed $\frac{1}{4}$ acre total on any given acre of suitable owl habitat.
3. Large conifers with a minimum diameter of 26 inches will be retained.
4. Retaining existing snags is of great importance. If treating the area around a pine would result in the need to fall an existing large snag to address safety considerations, then do not treat the area around that pine or that area where the snag poses a hazard.
5. If appropriate, retain Douglas-fir or cedar as standing snags (girdled) unless such girdling would create dense snag patches that pose wildfire risks or are in close proximity (one tree height distance) to the trail or road.
6. Where possible (more than one tree-height distance from trail or roads), minimize impacts to existing hardwood tree species and large snags by girdling nearby trees instead of falling.
7. Any and all trees felled during this project will be retained on site unless small enough to be consumed in the proposed burning or where close enough to the road to provide firewood opportunity.
8. Hand-piled slash will be retained as wildlife habitat where fuel loading permits. However, where piles are adjacent to active trails and roads, piles will be burned. Fuels treatment will occur around target pines and will not exceed $\frac{1}{2}$ acre per acre and ladder fuels may be pruned up to eight feet.
 - a. Handpile specifications will address size and physical location so that damage to standing trees, snags, and coarse downed wood is minimized.

9. Some or all of the restoration activities will occur during the primary breeding season (March 1 to July 15). Avoid treatment where nesting wildlife species are found. Treatment of units E and F will be implemented last to further delay activity in the core nesting, roosting, foraging habitat areas for northern spotted owl (NSO). This delay will likely result in treatment of these units after July 1, and may delay treatment beyond the July 15 window.

Botany

1. During implementation, if a five needle pine is found to be near the lichen *Peltigera pacifica* - a regional sensitive species, the treatment for the pine would not be implemented within a 100' radius around the Sensitive Species occurrence.
2. Fuels piles would not be placed or piled/burned on or within 33-feet of *Peltigera pacifica*, a sensitive lichen.

DECISION AND RATIONALE

I have decided to proceed with the five needle pine release project described above. The release will improve the growing conditions of the residual sugar and western white pine allowing them more ability to repel bark beetles and help retain these species as a healthy component of the forests in the Brice Creek drainage.

I have reviewed the Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management, 1994), Umpqua Land and Resource Management Plan (USDA Forest Service, 1990), and specialist reports on the Five Needle Pine Enhancement Project. With the implementation of Best Management Practices including retention of pre-existing snags, as well as creation of additional snags in some areas, and applying a buffer where no cutting of trees or piling of slash would occur near Sensitive Species, I believe implementation of the project will not cause substantial negative impacts to the environment.

I have considered the previous treatments in the area, including the sugar pine enhancements in 2004, 2005, and 2007. Due to the size, scale and duration of the current and past Five Needle Pine Enhancement projects, as well as the minimal impacts associated with them, I do not anticipate any cumulative effects from implementation of this project.

FINDINGS AS REQUIRED BY LAW, POLICY AND REGULATION

Finding of Consistency with Applicable Forest Service Management Direction and the National Forest Management Act

I, Deborah Schmidt, District Ranger for the Cottage Grove Ranger District, am the Responsible Official for this project. Based on my review of the interdisciplinary analysis for the 2010 Five Needle Pine Enhancement project, I find that the project is consistent with the Standards and Guidelines of the Umpqua National Forest Land and Resource Management Plan, as amended by the Northwest Forest Plan, and is therefore consistent with the National Forest Management Act. This finding includes all of the following determinations documented in the specialists' reports for this project:

- This project would not prevent attainment of the goals and objectives of the Aquatic Conservation Strategy.
- It is consistent with all of the Standards and Guidelines in the 1994 Northwest Forest Plan, as amended and the 1990 Umpqua National Forest Land and Resource Management Plan, as amended.

Therefore, I find that the 2010 Five Needle Pine Enhancement project is consistent with all applicable Forest Service management direction.

Finding of Consistency with State Historic Preservation Office Policies

This project would not include any ground disturbing activities. Therefore it is consistent with the National Historic Preservation Act.

Finding of Non-Jeopardy to Endangered, Threatened or Sensitive Species and No Adverse Effect to Species Covered Under the Fisheries Conservation and Management Act

There is no federally designated Essential Fish Habitat, federally listed endangered or threatened aquatic species, or State sensitive fish species within Brice Creek. The District Fisheries Biologist has determined that this project would have no effect on any threatened species or their critical habitat, no effect on Essential Fish Habitat, and no impact on any sensitive species. This amendment complies with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

The District Botanist has determined that this project would have no effect on threatened or endangered species or their critical habitat. The determination of effects to plant and fungi species on the R6 Regional Forester's Sensitive Species list and to other rare and uncommon species resulted that the project may impact individuals or habitat of several species but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the populations due to the very small amount of disturbance associated with the project.

The Wildlife Biologist has determined that there will be no effect to Northern Spotted Owl (NSO) Critical Habitat or Managed Owl Conservation Areas, and no noise-related disturbance impacts to nesting resulting from this project. The project is not expected to impact survival and reproduction of Northern Spotted Owls (NSO) based on the small amount of suitable nesting, roosting, and foraging habitat that would be impacted. The project may affect, likely to adversely affect the NSO based on when the project is implemented. The targeted implementation date is prior to July 15th which is the end of the primary breeding season for the NSO. However, proposed project activities are not expected to occur before July 13 and the actual treatment of the 3.25 acres within the 800-meter core area would be the last priority area to be treated. Thus it would likely occur after the July 15 date that triggers the end of the breeding season. Force account crews implementing the work are also instructed to survey for young owls that could potentially be in the area prior to cutting any trees.

The project is not expected to affect other threatened or endangered species or their critical habitat. For R6 Regional Forester's sensitive species or Management Indicator Species listed in the Umpqua National Forest Land Management Plan (USDA Forest Service, 1990), the project is expected to either have no impact or may impact some species' individuals or habitat

but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Finding of the Absence of Adverse Effects to Extraordinary Circumstances

The Five Needle Pine Enhancement project was listed in the April 2010 Umpqua National Forest Schedule of Proposed Actions. Due to the previous scoping and public acceptance of similar past projects implemented on the District, no additional scoping was conducted. One phone call was received inquiring about the prescription for trees to be cut. No further input was received and no issues developed regarding the proposed action.

Based on my review of the interdisciplinary analysis and the input I have received from the public, I find that although this project may affect, likely to adversely affect the Northern Spotted Owl due to the timing of implementation on 3.25 acres of core NSF habitat within the breeding season (prior to July 15), the risk is minimal due to the small scale and late timing of the project. Implementation of the project on these acres will not occur before July 13 and may occur after the July 15 end of the breeding season. Therefore I find that the project does not adversely affect any of the extraordinary circumstances listed in 1909.15, 30.3(2). Specifically, I find that this project does not adversely affect: (a) any Forest Service sensitive species, (and the risk to endangered or threatened species or their critical habitats is minimized due to the scale and timing of the project as mentioned above); (b) floodplains, wetlands or municipal watersheds; (c) Congressionally designated areas such as wilderness or national recreation areas; (d) inventoried roadless areas; (e) research natural areas; (f) and Native American religious or cultural sites, or archaeological or historic properties and sites, as these areas will be protected from harvest activities to insure preservation of the sites.

Finding of Consistency with All Applicable Federal Laws and Regulations

This project would not preclude consideration of the Fairview Inventoried Roadless area from future wilderness consideration and thus meets the requirements of the Wilderness Act, 1964 (FSH 1909.12 Chapter 71.1 (Parts 1 and 3). The inventoried roadless area is more than 7,100 acres, meeting the minimum 5,000-acre criteria for wilderness consideration without the need for additional unroaded areas beyond the roadless boundary.

The unroaded area between existing roads and the inventoried roadless area consists of approximately 11 acres of Matrix lands that would receive some five needle pine release treatment. This area does not have high value as an unroaded area due to its proximity to roads and the noises associated with them, nor will it affect the adjoining inventoried roadless area for consideration as potential wilderness in the future.

Based on my review of the actions associated with this project and all applicable specialists' reports, I find that the project is consistent with the Clean Air Act, Clean Water Act, Endangered Species Act, National Forest Management Act, and the National Historic Preservation Act. Therefore, I find that the 2010 Five Needle Pine Release project is consistent with applicable Federal laws and regulations.

Finding of Exclusion from Further National Environmental Policy Act Analysis

My review considered: (1) the actions associated with this project; (2) the lack of environmental consequences documented in the interdisciplinary analysis; (3) the consistency of this project with applicable laws, regulations, and management direction; (4) the non-jeopardy to

endangered or threatened species or heritage resources; and (5) the absence of adverse effects to extraordinary circumstances. I find that this project is not significant in either context or intensity (40 CFR 1508.27) and presents no extraordinary circumstances (FSH 1909.15). I also find that this project will produce no substantial adverse environmental effects, individually or cumulatively, on the physical, biological, or social components of the human environment.

I have reviewed the past, present, and reasonably foreseeable actions in the area, including the activities that may contribute to cumulative effects. I do not believe that the 2010 Five Needle Pine Release project would contribute to adverse cumulative effects on the physical, biological, or social components of the human environment.

Therefore, I find that the 2010 Five Needle Pine Release project is categorically excluded from analysis in an Environmental Assessment or Environmental Impact Statement (EIS) (40 CFR 1508.4 and FSH 1909.15, Chapter 30.3, Part 2) and that the category of exclusion is Category 6 as identified in Forest Service Handbook 1909.15, Chapter 31.2(6) based on the proposed activities of timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road as codified at 36 CFR 220.6(e)(6).

Project Implementation

This decision shall be implemented in accordance with Forest Service regulations contained in 36 CFR, Part 215.9. I intend to implement the proposed activities effective immediately so as to complete the project prior to the increased risk of fire and shutdown of operations due to fire restrictions anticipated later in the summer.

Minor changes may be needed during implementation to better meet on-site resource management and protection objectives. In determining whether and what kind of further NEPA action is required based on any such changes, I will consider whether the proposed change(s) is a substantial change to the intent of the decision as planned and already approved, and whether the change is relevant to environmental concerns. Connected or interrelated proposed changes regarding particular areas or specific activities will be considered together in making this determination. The cumulative impacts of these changes will also be considered.

Contact Person

For additional information concerning this project, contact Lisa Winn, Interdisciplinary Team Leader/District Silviculturist; (541) 767-5040; email address lwinn@fs.fed.us.

/s/ Deborah G. Schmidt

July 13, 2010

DEBORAH G. SCHMIDT
District Ranger,
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DATE