Draft Environmental Impact Statement

Summary

Five Buttes Project

Crescent Ranger District, Deschutes National Forest
Deschutes County, Oregon

Townships 21, 22, 23, 24 South and Ranges 5 ½, 6, 7, 8, 9 East
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA’s TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.
Abstract: The Forest Service is analyzing proposed vegetation management activities in the 160,000-acre Five Buttes project area on the Crescent Ranger District of the Deschutes National Forest. The purpose of the proposed actions includes reducing the risk that natural disturbance process such as insects, disease and wildfire, will lead to large-scale loss of forest resources and contributing to local and regional economies by providing timber and other wood fiber products. The proposed action (Alternative B) involves commercial and small-tree thinning of forested stands, salvage of dead lodgepole pine, prescribed burning, piling and disposal of activity-generated slash, construction of 6.4 miles of temporary roads, and obliteration of these roads following project implementation; activities in the proposed action would take place over 5,522 acres. One action alternative to the proposed action (Alternative C) was developed. Alternative C is similar to the proposed action, but would reduce the amount of commercial harvest by about 1,197 acres while adding about 3,563 acres of fuels treatments located strategically in the project area to work with past and current fuels reduction projects to contribute to a landscape-level reduction in the risk of large wildfire. Alternative C would require the construction (and subsequent obliteration) of 5.9 miles of temporary roads. All alternatives considered in this environmental impact statement are consistent with applicable local, state and national laws and regulations and with all applicable land management plans. Alternative C has been selected as the Preferred Alternative.

Reviewers should provide the Forest Service with their comments during the review period of the draft environmental impact statement. This will enable the Forest Service to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decisionmaking process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewers’ position and contentions. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. City of Angoon v. Hodel (9th Circuit, 1986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Send Comments to: Christine Frisbee, District Ranger
Crescent Ranger District
PO Box 208, Crescent, OR, 97733

Date Comments Must Be Received: March 12, 2007
The Deschutes National Forest proposes to conduct vegetation management activities within the 160,000-acre Five Buttes project area intended to reduce the risk of large-scale loss of forest resources to disturbance factors such as insect, disease and wildfire, as well as contribute to local and regional economies by providing timber and other wood fiber products. The area affected by the proposal is primarily within the area managed according to the Northwest Forest Plan; it predominantly includes mixed conifer forest, but also has mountain hemlock, ponderosa pine, and lodgepole pine stands. The project area contains habitat for wildlife species that rely on large trees and late- and old-structure forest as primary habitat components. The project area also includes the 21,000-acre Davis Fire of 2003; many thousands of acres of late-successional habitat and large trees were lost in this fire. Vegetation management activities are needed because vegetative conditions in the project area are such that risk of more large-scale loss of large trees and late-structure forest is extremely high. For instance, existing overstory ponderosa pine and Douglas-fir can not compete with true firs in overcrowded conditions. The trend in these forests is for the large-tree component to decline due to overcrowding from and competition with younger, smaller trees.

The project area includes the 48,900-acre Davis Late Successional Reserve (LSR). Some of the most desired characteristics of these stands (such as fire resistant large ponderosa pine and Douglas-fir) are placed at risk because the increasing true fir component creates a structure that allows ground fires to reach the crowns of the larger trees; the Davis LSR Assessment (2006 revision currently under review by the Regional Ecosystem Office) found that the most immediate need within the LSR was to reduce the risk of catastrophic effects of insect activity, disease or wildfire in the existing late- and old-structured stands.

To address the purpose and need, the Forest Service proposed about 5,522 acres of commercial thinning activities intended to culture large trees, reduce competition between invading understory trees and existing mature overstory trees, and improve overall forest health and resiliency against natural disturbance processes within treated stands.

The Notice of Intent (NOI) was published in the Federal Register on April 1, 2005. The NOI asked for public comment on the proposal from April 1, 2005 - May 1, 2005. The Crescent Ranger District held a public field trip to the Five Buttes Project area (July 9, 2005) that was attended by ten members of the public. As an additional effort to involve the public in the planning process, the District mailed a description of the project’s range of alternatives to the mailing list on January 11, 2006. Using comments from the public and from other agencies, the interdisciplinary team developed a list of issues to address.

**Key issues identified during project scoping were:**
- Activities proposed in the Five Buttes project may reduce the quality, effectiveness, and distribution of habitat available to the northern spotted owl. Effects to owl habitat may impede individual owl’s ability to establish and maintain breeding territories, may impact the owl’s prey base, and may interfere with the ability of juvenile owls to disperse across the landscape.
- The proposed action did not go far enough in providing landscape-level reduction in risk of large-scale loss of forest resources to disturbance events, specifically wildfire.

These issues led the agency to develop one alternative to the proposed action, for a total of three alternatives. The following is a summary of the alternatives:

**Alternative A: No Action**
Under the No Action alternative, current management plans would continue to guide management of the project area. No additional thinning or fuels treatments would be implemented to accomplish project goals. Custodial activity would continue, such as routine maintenance. Response to environmental emergencies, such as suppression response to a wildfire, would continue.

**Alternative B: The Proposed Action**
The Proposed Action includes a variety of vegetation management activities across approximately 5,522 acres, and would harvest approximately 18.9 million board feet of timber. Activities include:
• Thin to create or maintain single story stands and culture large trees (1,175 acres);
• Thin to reduce stand competition but retain multi-story canopy and large trees (3,153 acres);
• Thin to reduce stand competition, culture large trees and retain a combination of single story and multi-story canopy (1,160 acres); and
• Salvage dead lodgepole pine (34 acres);

Alternative B would also include activities to reduce natural fuels within harvest units, and would pile and dispose of activity-generated fuels.

In order for Alternative B to be implemented, the following are connected actions:
• About 34 miles of currently closed Maintenance Level 1 roads would be opened to allow timber hauling and other activities. Roads would be closed following implementation.
• Road maintenance, especially blading and brushing, would be performed on about 110 miles of Maintenance Level 1 and 2 roads.
• About 6.4 miles of temporary roads would be constructed to facilitate economical timber harvest removal. These would be obliterated following implementation and restored to a condition that is hydrologically functional and able to revegetate more quickly.

**Alternative C**

This alternative was developed to address both key issues associated with landscape scale fire behavior modification and retention of spotted owl habitat. Alternative C emphasizes reducing the likelihood and size of another large fire event like the Davis Fire of 2003, and the protection of key assets such as spotted owl home ranges, bald eagle habitat, and late- and old-structured stands. This alternative would strategically place fuels treatments on the landscape to coordinate with past treatments to create and maintain fuel modifications around identified habitats. As a result of more effective protection, some important habitat for the Northern spotted owl, such as Nesting, Roosting and Foraging (NRF) and dispersal habitat proposed for active management in Alternative B, was deferred from active management for the foreseeable future. This resulted in the reduction of the amount of commercial timber harvest by about 1,197 acres. Alternative C would harvest approximately 14.4 million board feet of timber.

Management activities would take place on approximately 7,797 acres and would include:

• Thin to create or maintain single story stands and culture large trees (688 acres);
• Thin to reduce stand competition but retain multi-story canopy and large trees (2,387 acres);
• Thin to reduce stand competition, culture large trees and retain a combination of single story and multi-story canopy (1,160 acres);

Alternative C would include activities to reduce natural fuels within harvest units, and would pile and dispose of activity-generated fuels, and would add 3,563 acres of units in which only fuels-reduction activities and no commercial harvest would take place.

In order for Alternative C to be implemented, the following are connected actions:
• About 44 miles of currently closed Maintenance Level 1 roads would be opened to allow timber hauling and other activities. Roads would be closed following implementation.
• Road maintenance, especially blading and brushing, would be performed on about 118 miles of Maintenance Level 1 and 2 roads.
• About 5.9 miles of temporary roads would be constructed to facilitate economical timber harvest removal. These would be obliterated following implementation and restored to a condition that is hydrologically functional and able to revegetate more quickly.
• Future maintenance of fuel behavior modification barriers would require underburning and small tree thinning, subject to site-specific NEPA review.
Major conclusions include:

**Soils**
All activities have been designed to result in detrimental disturbance that is at or below the 20% Regional Standard. All areas were active management is to occur would continue to function as productive sites.

**Forested Vegetation**
Active management in the Five Buttes project area is one of a series of several projects (Seven Buttes, Seven Buttes Return) developed over the past ten years to modify the impacts that disturbance events will have on this landscape. Analysis has shown that the vegetative structure is constantly changing and cannot be sustained in any one place on the landscape for the long-term. Neither action alternative would eliminate risk of disturbance processes; however, both would take steps necessary to limit the amount and severity of large scale changes, help provide for a mix of vegetative conditions to be present at any time, and increase the resiliency of forested stands to disturbance processes.

**Fire and Fuels**
The potential effectiveness of fuels treatments in reducing the loss of late successional habitat to a large, severe wildfire was evaluated using risk modeling procedures. Active management scenarios, especially under Alternative C but also under Alternative B, significantly decreased the average burn probability when compared to the no action alternative (A). Expected loss of owl habitat was substantially reduced by Alternatives B and C.

**Wildlife**
This Davis Late Successional Reserve Assessment strives to achieve the desired balance of vegetative conditions spatially distributed over the landscape through time. In many plant association groups, “suitable habitat” is transient and may not be attained in any one location for very long, especially for late-successional species that require climatic climax conditions in fire-adapted landscapes on the eastside of the Cascades. Alternatives B and C move the Reserve in the direction to develop, enhance, and protect northern spotted owl habitat over time.

All alternatives, including passive management, “May Effect, and are Likely To Adversely Affect” the northern spotted owl. In Alternative A (no action), no risk reduction activities would occur; therefore, the potential remains for large-scale loss of northern spotted owl habitat, similar to the scale seen in the Davis Fire of 2003. In Alternatives B and C, active management would occur in occupied spotted owl territories and Nesting, Roosting, Foraging habitat would be affected across the project area in the short-term.

Neither Alternative B nor C appreciably affects existing snag density and recruitment over time and across the landscape.

**Fisheries**
The determination in the Biological Assessment was that implementation of this project is Not Likely to Adversely Affect (NLAA) bull trout or their habitat. The project May Impact Individuals or Habitat of redband trout, but Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species (MIIH).

There is no harvest or temporary road construction inside riparian reserves adjacent to stream channels. At Davis Lake and Dell Springs, all activities within the riparian resources have been designed to comply with the Riparian Reserve and Key Watershed standards and guidelines as specified in the Northwest Forest Plan.

**Water Quality**
The project area contains two streams (Crescent Creek and Odell Creek) that are listed on the EPA’s 303(d) list of water quality impaired water bodies. No actions associated with this project would change the condition of any waterway or water body in the project area.
Invasive Plants
Based on the vectors and proposed activity, Alternative C was determined to have the greatest risk rating for introduction and spread of existing populations of invasive plants. However, the 2003 Davis Fire created more favorable conditions for introduction of invasive plants than any activity considered in the Five Buttes project and Alternative A (no action) has the greatest potential for another wildfire of that proportion.

Economic and Social
Neither action alternative would generate revenues that exceed all the costs associated with the project. Alternative C is the most expensive because of the non-timber related activities that are required to reduce the risk of disturbance on a landscape scale. Alternative B has the greatest economic efficiency of the action alternatives. The Benefit/Cost ratio is 0.96.

Unroaded, Inventoried Roadless Area Resources
No activities are planned within areas considered unroaded, or within Inventoried Roadless Areas.

Wild and Scenic River
In Alternatives B and C, portions of units fall within the wild and scenic river interim corridor (1/4 mile each side of the creek) totaling 94 acres of understory thinning. Two units are within 100 feet of the rivers edge, but they are non-commercial (“fuels only”) and activities would be accomplished by hand. Understory thinning would highlight and maintain the large ponderosa pine trees within the corridor that are currently competing with understory trees for scarce water and nutrients. Also, thinning would allow the careful reintroduction of prescribed fire. Other values associated with the immediate river environment, such as water quality, fish and wildlife and riparian plant communities would have a measure of protection provided by a minor reduction in risk of an uncharacteristic wildfire in the area.

Issues to Resolve and Decision to be Made
Based upon the effects of the alternatives, the responsible official will decide to:

- Select the proposed action, an action alternative that has been considered in detail, modify an action alternative, or select the no-action alternative.
- Identify what mitigation measures will apply.
- Determine what monitoring will be necessary and where it will be completed.

The Forest Supervisor will evaluate the alternatives by:

- Examining how well they meet the underlying purpose and need for action;
- Considering their responsiveness to the issues and concerns raised by the public and other agencies; and
- Reviewing their likely environmental effects, and in particular, their short- and long-term impacts and benefits to the habitat of Federally-listed threatened and endangered species.

How to Comment
This DEIS is made available for a 45-day Comment Period, under the provisions of the National Environmental Policy Act (40 CFR 1500-1508), and Notice, Comment, and Appeal Procedures for National Forest System Projects and Activities, (36 CFR 215). The Forest Service will accept comments as provided in §215.6(a)(4), beginning on the day following the date of publication of the Notice of Availability (NOA) in the Federal Register. In order to be considered in the Final Environmental Impact Statement, comments must be received within the formal comment period, which is expected to end on March 12, 2007. However, the official comment period timelines will be posted in the Federal Register, and on the Website indicated above.

Comments, including names and street addresses of respondents, will be available following the close of the comment period for public review at the Crescent Ranger District (see address and business hours below).

Commenters must submit comments or other expressions of interest in order to have standing to appeal the forthcoming decision (215.6). For appeal eligibility, each individual or representative from each organization submitting comments must either sign the comments or verify identity upon request.
Comments will be read, reviewed, and considered regardless of whether it is one comment repeated many times by many people, or a comment submitted by only one person. Additionally, emphasis will be placed on the substantive content of comments, rather than the number of times a comment is received (or the number of signatures on petition or form letter response).

Comments may be submitted electronically to comments-pacificnorthwest-deschutes-crescent@fs.fed.us. Electronic comments will only be accepted at this e-mail address, and may be part of the e-mail or in an attachment using only Microsoft Word, rich text format, or Adobe PDF. The project name must be written in the subject line of the e-mail.

Written comments may be mailed to the Crescent Ranger District, P.O. Box 208, Crescent, Oregon 97733. Comments will also be accepted by phone, number 541-433-3200, or by facsimile, number 541-433-3224. Comments may be hand-delivered to the Crescent Ranger District during regular business hours, which are Monday through Friday, 7:45 AM to 4:30 PM (except legal holidays). Please identify the comment with the project name.

Thank you for your participation in this project. Your comments will help guide this decision. For more information, contact Marcy Boehme, Interdisciplinary Team Leader, at 541-433-3200 or Chris Mickle at 541-433-3216.