

**USDA Forest Service  
Deschutes National Forest  
Crescent Ranger District  
Klamath and Deschutes Counties, Oregon**

**Decision Notice  
and  
Finding of No Significant Impact (FONSI)  
  
Seven Buttes Return Vegetation Management Project  
Part A\***

## **Location**

The Seven Buttes Return planning area spans seven subwatersheds and 160,000 acres. Approximately 143,370 acres are national forest system lands, managed by the Deschutes National Forest. The balance is privately owned. The project area is located about 50 miles south of Bend, Oregon in Townships 21, 22, 23, 24 South and Ranges 5 1/2, 6, 7, 8, 9 East.

## **Purpose of the Project**

About 133,000 acres of the project area-or 80 percent-lies within the range of the northern spotted owl, and so falls under the guidance of the Northwest Forest Plan.

The Crescent Ranger District began a proactive approach to forest health issues in the project area in 1996 with the Seven Buttes Environmental Assessment. The Seven Buttes Return Project continues to work towards the broad goal of improving landscape resistance to stand replacement events, such as those caused by insect, disease, and fire. This project also has a goal of manipulating vegetation where necessary to promote, maintain, and protect large trees on the landscape. Other objectives include development, maintenance, and enhancement of wildlife habitat conditions appropriate for other Northwest Forest Plan management goals, as well as opportunities for social benefits, such as improved scenic quality and improved public safety. This project will also provide yields of forest products, which have social benefits, such as economic value to timber sale purchasers and local sources of wood products (such as fuel wood for heating homes).

A 50,000-acre late-successional reserve (LSR) provides a focus for the project's purpose because much of this LSR's forestland is at high risk of large-scale habitat loss caused by insects, disease or

catastrophic fire. This condition was recognized in the Northwest Forest Plan and the final draft of the northern spotted owl recovery plan. However, the differences between LSRs west and east of the Cascade Crest were not well defined for the project area until a more site-specific review took place by the Deschutes National Forest development of a series of white papers and through the development of the Davis LSR Assessment.

This review concluded that whereas westside LSRs tend to require low levels of management to maintain their beneficial character, eastside LSRs represent a management dilemma. Specifically, the Davis LSR consists of about 30,000 acres of dry mixed conifer forests that are too dense to be sustainable over the long term. However, much of these same stands provide northern spotted owl nesting, roosting, and foraging habitat (or "NRF") for the short term. Unlike other lands in the west where large-scale damage has already occurred from insects, disease or fire, the Seven Buttes Return planning area has a large percentage of its forest still alive and green. As the Davis LSR Assessment notes, however, a high percent of the forest is highly susceptible to pathogen attack because of high stand densities and a mix of tree species with unusually high amounts of lodgepole pine and white fir, which are the most susceptible to these attacks. Historically in many of these stands, low intensity fire occurred every 5 to 10 years, which kept the tree densities lower and controlled the expansion of lodgepole pine and white fir.

Aggressive fire suppression efforts and other management actions implemented over the last century have interfered with that natural process, leaving the stands in their current condition. Although this condition leaves many forests unstable and unsustainable, it also provides more habitat for the northern spotted owl on the edge of its range than was historically present. Without management, this habitat for the spotted owl is likely to be lost over time, with the large trees-a key component that is the most difficult to replace-at high risk because of competition from the over-dense small trees. The large ponderosa pine and Douglas fir are also at greater risk from fire than in the past when low intensity ground fires cleared debris and small trees from the lower levels of forest without affecting the thick bark ponderosa pine and Douglas fir. With current densities and multiple layers, fires now burn with more intensity and are more likely to reach the crowns, putting large trees at greater risk of loss.

The LSR assessment recommends that much of the LSR remain off limits to vegetation management, at least until actual forest damage occurs. For other portions of the LSR, the assessment recommends that treatments occur to reduce risk. As a follow-up to the LSR assessment, the Deschutes National Forest developed a strategy for dealing with the Seven Buttes planning area in 1996. The first entry was planned and documented in the Seven Buttes Environmental Assessment. The Seven Buttes Return Project represents the second entry.

These two projects provide a large measure of protection across the landscape during the first decade of a 20-year strategy. Within the second decade of that strategy, the remaining high-risk stands will be reviewed, with a goal of reducing risk still farther. However, by reducing risk at proposed scale in the first decade, a substantial amount of habitat protection will have been accomplished at a landscape scale for both treatment units and in untreated areas that lie adjacent, or close by.

Outside the LSR, adjacent forests are also at high risk and so similar strategies for treatment apply to the entire planning area. Those lands are classified as Matrix (42,000 acres), and Administratively Withdrawn (22,000 acres). Lands designated as Congressionally Withdrawn (22,000) in the planning area are mainly Wilderness where no vegetation management was included with this proposal.

Riparian Reserves (19,000 acres) overlay many of these designations and in general the planning strategy was to avoid them because their current condition is good. In some places, however, salvage and green tree thinning has been proposed to improve specific stretches of stream, or to improve conditions in campgrounds or within bald eagle habitat, which overlap Riparian Reserves.

## Decision

I have decided to implement Alternative 3 of the Seven Buttes Return Vegetation Management Project because it takes an important strategic step toward achieving beneficial landscape-scale changes in vegetation conditions.\*\* Few easy choices exist for vegetation management in the project area. On the one hand, denser forests play an important role in the Davis Late-Successional Reserve and surrounding lands by providing habitat for species such as northern spotted owls. On the other hand, the density of the forest combined with the dry climate and less capable growing sites means that these stands are at risk of attack by insects, disease and fire. Large-scale loss of these habitats would have a long-term impact to spotted owls, bald eagles, and a host of other species associated with the large-tree habitats in the project area.

In order to meet stand density goals that achieve meaningful risk reduction, an unavoidable consequence of thinning in owl nesting, roosting, foraging (NRF) habitat is the short-term loss of cover, which results in less useful habitat for the owls. Rather than meeting the full complement of owl needs (NRF), the changes brought on by thinning mean the habitat is not as attractive for nesting and roosting, although it can still provide usable habitat for dispersal and to some degree, foraging. Yet, without thinning, the large-tree component of the NRF habitat is the most vulnerable. Because this component takes the longest to replace once it has been lost, returning a stand to NRF after large tree loss will take a much longer period than returning a stand to NRF after thinning.

The Seven Buttes Return Vegetation Management Project Environmental Assessment studied four alternatives in detail: A no action alternative and three action alternatives. Alternative 2 implements the greatest amount of thinning over the largest area, but proposes to do so at a lower intensity level that will require more maintenance in the future. When compared with Alternative 2, Alternative 3 treats fewer acres of habitat in such areas as Maklaks Mountain, Davis Mountain and Hamner Butte, which reduces short-term impacts to these connectivity habitats. Although avoiding these areas in the short-term leaves them vulnerable to loss, treating on nearby stands provides an indirect benefit to these same areas by reducing risk at a landscape scale. Thus, as these untreated areas lose their large-tree character through natural processes, the nearby stands will be available to provide similar habitat during the next 20 years. Alternative 3 also includes higher intensity treatments in places where such actions have minimal short-term impact (e.g. those areas not being used by spotted owls). This higher intensity approach will reduce

the need to re-enter these areas as soon as the lower intensity strategy.

A portion of each action alternative proposes thinning in vegetation types that are not currently providing spotted owl nesting, roosting and foraging habitat (NRF). Another portion of each alternative proposes thinning in NRF. Because thinning in owl NRF habitat will have a short-term adverse impact to owls that use the project area, a separate level of consultation with the US Fish and Wildlife Service is required. Legal action against the USFWS is pending, which has resulted in delays to consultation requests. Although this situation is not expected to continue indefinitely, no date has been set for resolution.

The alternatives can therefore be considered as the following separate parts:

Part A:	Portions of the alternatives that do not adversely impact NRF. Treatment units may include NRF within their boundaries, but this habitat will be avoided unless ground verification indicates it does not serve as NRF.
Part B:	Portions of the alternatives that have an adverse impact on NRF and so require consultation with USFWS. Once consultation is completed, a decision will be made on these units, taking into account the biological opinion of the USFWS.
Part C:	Portions of the alternatives that proposed salvage south of Davis Lake and along Odell Creek. A change must be made in the Davis LSR Assessment's standards before these treatments can proceed. ***

In order to proceed with the portions of the project that do not impact NRF, this decision concerns that part of the selected alternative that avoids impacts to NRF. Table DN-1 lists specific treatment units that fall within each part of the alternative.

Based on the analysis documented in the environmental assessment (EA), I have decided to implement Part A of Alternative 3 of the Seven Buttes Return Project. This decision comprises the following actions:

- Understory thin approximately 5,950 acres. Of this thinning, approximately 3,080 acres aim to maintain multi-storied stands, which although not historically present in large amounts, currently have the potential for providing spotted owl nesting, roosting, and foraging habitat in the future if treated now. In addition, approximately 2,870 acres of thinning have a long-term objective of developing single-storied stands in ponderosa pine and similarly dry forests. This will provide greater amounts of a fire-climax conditions across the landscape. Currently this condition is greatly under-represented from the amount present historically.
- For most of the thinning areas, commercial timber sales will be the means of accomplishing these vegetation management objectives. Ground-based harvest and yarding systems will be used over most of these harvest areas (e.g. mechanical harvesters, skidders). Temporary road construction is

associated with these harvest areas as well, although the amount will not be determined until sale layout occurs.

- Thinning in Unit 810 will be dropped as part of this alternative. This will avoid treatment in most of the Maklaks habitat block, and maintain northern spotted owl habitat connectivity at least for the short term. Direction in the Davis LSR Assessment calls for deferring treatment in this old-growth management area until such time that the stand begins to lose its LOS character.
- Small tree thin approximately 230 acres. These stands are overly dense and in need of small tree thinning but do not have commercial thinning opportunities
- Salvage 560 acres, primarily in lodgepole pine stands that have been struck by mountain pine beetles and other pathogens.
- Harvest total volume of approximately 14.1 million board feet (MMBF) or 27,065 CCF (hundred cubic feet).

Other features of this alternative include the following:

- Alter access to East Davis Lake and Lava Flow Campgrounds at Davis Lake. An intersection between Road 4600-855 and Hwy 46 will be reconstructed allowing more direct access from Hwy 46 to the East Davis Lake Campground. The portion of Road 855 north of the new intersection will be closed (for about one mile). A portion of Road 850 that has been seasonally closed because of bald eagle protection requirements will be opened year round by moving the gate from its current location to the north about a third of a mile. This will allow improved access to the dispersed campsites along the east shore of Davis Lake without impacting bald eagles. This access change is displayed in Figure 2.
- Move or eliminate some campsites that are below high water on the Davis Arm of Wickiup Reservoir (between Hwy 46 and the lava flow at Davis Lake). This will move impacts away from the water and begin to restore vegetation. Fire rings may be moved further from the water to discourage use below the high water. Barriers may be installed and vegetation restored. Access to dispersed sites from Forest Road 4654 will be discouraged and other user-created roads will be eliminated. A user-created spur road off of Hwy 46 that traverses a steep bank will be closed (Figure 2).
- Close motorized access to a dispersed campsite situated at the end of Forest Road 4660-400 (Ranger Creek Road). This road also serves as a portion of the Metolius-Windigo Horse Trail, which continues from the end of the road north along the west side of Davis Lake. The road is often wet with water channeling in the tire ruts, even in July. With this decision, the road will be closed to motor vehicles. It would continue to function as a foot and horse trail. (This portion of the Metolius-Windigo Trail may be relocated in the future). The dispersed camp at the end of the road, known as "honeymoon camp" would not be accessible by motor vehicles. Barriers would also be placed at the campsite to eliminate the possibility of motorized vehicles driving out onto the meadow around Ranger Creek and Davis Lake (Figure 2).
- Riparian Reserves for the Odell Watershed (Odell, Odell Lake, and Moore subwatersheds) are to be designated as described in the Environmental Assessment Appendix C. These reserve boundaries are recommended in the Odell Watershed Analysis (USDA Forest Service, 1999).
- During harvest layout, retention areas will be identified for each unit. Within the range of the

northern spotted owl, generally 15% retention areas will be included in commercial timber harvest units as directed in the matrix standards (NWFP C-41). This will apply in all allocations under the NWFP (Matrix, Late Successional Reserve, Administratively Withdrawn) because the rationale for the 15% reserves in Matrix applies to these other areas as well. Specific areas have been identified to increase the area of retention up to 25%. East of the owl range, 15% of units will also be retained to maintain habitat connectivity. Under current direction, retention areas designated east of the owl range would not have the same long-term restrictions as those associated with retention areas designated under the Northwest Forest Plan.

- The removal of trees greater than 21 inches in diameter (breast height) may occur for the reasons described in Appendix B (page 11) and the LSR Assessment (page 3-28). In NRF habitat within the LSR, any large trees (>21" dbh) will only be removed from the site after site-specific approval of the District Ranger (LSRA page 3-28). As a general rule, large tree removal should be rare, which means that large trees will comprise fewer than 5 percent (on average) of the trees to be removed during project activities.
- Slash created as a result of activities associated with the project will be treated, especially in areas where there is a high risk of fire starts. Refer to EA Appendix A, and Table DN-1 for the expected unit-by-unit methods. Depending on conditions following the commercial treatment, a different method for a particular unit may need to be used. For example, a grapple pile unit may be underburned if conditions allow. Similarly, an underburning unit may require mechanical treatment before it can be burned because of post-harvest fuel levels.
- Mitigation measures and management objectives have been described for each treatment unit. Mitigation measures include actions taken to avoid, minimize, reduce, eliminate, or rectify adverse impacts of management activities. A list of mitigation measures and objectives can be found in the EA Appendix B.

Except for the treatment units that will be included in a separate decision (Part B and Part C as listed in Table DN-1), all other actions described for Alternative 3 (EA page 18) will be implanted as part of this decision.

## Issues and Alternatives Considered

The interdisciplinary team developed a proposed action to deal with approximately 16,000 acres of at-risk stands. These treatments intend to meet the LSR and other objectives to provide for long-term benefits to late-successional habitats, which would in turn benefit northern spotted owls over the long term.

The project's two primary issues demonstrate a key element of the tradeoffs involved in this project: In order to provide high quality suitable owl habitat and certain eagle habitats, higher stand densities and multi-storied structure need to be maintained. However, on drier growing sites, these are the very stands at greatest risk, especially key habitat components, such as large trees, which once they die cannot be replaced for decades. Once dead, large trees certainly continue to provide important habitat components, such as large snags, yet critical living structures are lost until the large-tree component can be replaced.

Therefore, taking no action will lead to diminished effectiveness of the spotted owl habitat.

In addition to the northern spotted owl issue, action alternatives proposed various amounts of treatment to relieve overcrowding within Bald Eagle Management Areas (BEMAs). Current densities put large trees at risk unless some action is taken. These large trees make up important components of eagle nesting habitat. At the same time, high quality winter roosting habitat needs to be available for eagles to be able to fully use these BEMAs. Actions that create more resistant stands will tend to reduce the amount and distribution of that high-quality winter roosting habitat in the long-term.

- Alternative 1 (No Action) proposes no management activities. The forest conditions would change according to natural disturbance processes such as insect and disease outbreaks and wildfire. Vegetation trends would continue to shift from stands dominated by large pine and Douglas fir to very dense stands dominated by poles and small diameter true fir. No merchantable wood products would be utilized. This alternative was not selected because it would not meet the objectives of reducing the risk of insects, disease, or large-scale fire. Densely stocked stands and those with high loadings of natural fuels would not be treated and these areas would continue to be at risk to insects, disease, and fire.
- Alternative 2: This alternative would treat the largest area (about 16,000 acres) with light to moderate thinning prescriptions. This alternative was not selected because although it reduces risk on the largest area of any of the alternatives, the strategy will lead to repeated entries sooner (within 20 years). By applying this less selective strategy, this alternative means that most of the stands treated in this round will require treatment at about the same time in the future in order to maintain them in a reduced risk condition.
- Alternative 4: Was developed to consider the cumulative effects to watersheds and to allow for a comprehensive restoration plan to be developed for three subwatersheds. This alternative was not selected because the benefits of such a comprehensive approach do not justify the delay in implementing the vegetation management restoration elements. Alternative 3 does not foreclose the opportunity to consider these other restoration actions.

## Public Involvement

Public involvement in the planning process began in January 2000 when notice of the project was published in the Schedule of Projects for the Ochoco and Deschutes National Forests. Comments from the public were solicited when the project proposal or notice of the proposal was mailed to 315 individuals, agencies, and groups in January 2000. The proposed action was also posted on the Deschutes National Forest's web site.

A number of letters and phone calls were received during the scoping period. Some of the comments expressed support for the purpose of the project and expressed a desire that the alternatives accomplish that purpose. Questions were raised about the need to avoid treatments in some areas because of wildlife habitat concerns (for example, lynx). And questions were raised about the effectiveness of these restrictions at accomplishing the desired effect. A suggestion was also made that road closures should

only be proposed when specific needs for resource protection could first be demonstrated.

In May/June 2001, the environmental assessment was mailed to interested and affected parties for review and comment. Two comments supported the general restoration purpose of the project. Other comments offered suggestions for additional alternatives to consider (for example, a "restoration-only" alternative), because of doubts regarding the appropriateness of using timber sales to accomplish restoration work within a late successional reserve. In response, I have clarified in some depth the purpose of the project at the outset of this decision notice

Comments raised concerns regarding species viability. Comments raised concerns with the economic analysis (lack of taking ecosystem benefits into account); and concerns with the high percent of ground-based activity occurring. Comments raised concerns with the project activities that overlap ONRC mapped unroaded areas, and with potential impacts to roadless values. These comments have received specific responses in Appendix E of the environmental assessment.

Although several comments resulted in clarifications to the EA, no substantial additional analysis was conducted to respond to these comments.

## **Finding of No Significant Impact**

I have determined that implementing Part A of Alternative 3 is not a major Federal action that would significantly affect the quality of the human environment; therefore an Environmental Impact Statement will not be prepared. This determination is based on the site-specific environmental analysis documented in the Environmental Assessment and supporting documents (e.g. the biological evaluation and the biological assessment), which describe direct, indirect and cumulative impacts of this decision. This determination is also made with consideration of past, present, and reasonably foreseeable future actions on National Forest land and other ownership's within potentially affected areas that could have a cumulatively significant effect on the quality of the human environment.

I have found the context of the environmental impacts of this decision is limited to the local area and is not significant. I have also determined the severity of these impacts is not significant, considering the following factors of intensity:

1. The analysis considered both beneficial and adverse effects (EA pages 28-78).
2. There are no known adverse impacts to public safety. Prescribed burning will affect air quality for a short period in the immediate vicinity of the activity. Timber haul will be regulated and conform to Deschutes Road Use rules. Treatments along main travel routes are designed to reduce icing and other hazards. Treatments in recreation sites will be regulated to minimize conflicts (EA pages 1, 2, 3, 50-52, 52-53, 75)
3. No unique characteristics of the geographic area such as cultural resources and wetlands will be adversely affected (EA pages 54, 76).
4. The effects on the quality of the human environment are not likely to be highly controversial (EA



pages 28-78).

5. The degree of possible effects on the human environment are not highly uncertain, nor are there unique or unknown risks involved (EA pages 28-78).
6. The actions should not set a precedent for future actions which may have significant effects, nor do these actions represent a decision in principle about a future consideration (EA pages 28-78).
7. These actions are not related to other actions that, when combined, will have significant impacts (EA pages 28-78).
8. The field surveys for sites, objects, etc., listed or eligible for listing in the National Register of Historic Places have been completed. All known sites will be mitigated either through avoidance or through data recovery so that no activity will take place which will contribute to the loss or destruction of significant scientific, cultural, or historic resources. Any sites found during operation of the timber sales and related activities will be protected. (EA page 54, Appendix.B-10).
9. As described in the Environmental Assessment (EA), Biological Evaluation (BE), Biological Assessment (BA), activities included with this decision are not likely to adversely impact any threatened or endangered species of plant or animal. Actions to improve conditions in bald eagle habitat near Davis Lake and Wickiup Reservoir are expected to have a long-term beneficial effect on bald eagles by reducing a trend in large-tree loss. Short term, the selected alternative may affect, but is not likely to adversely affect bald eagles (EA page 28, 39-44). Surveys for sensitive plants that are thought to occur in the project area have been conducted for units included in this decision. Timber harvest and other ground disturbing activities have been designed to avoid adverse impacts to known species (EA pages 28, 29-43, 63-65, Appendix B pages 3 to 9).
10. None of the actions implemented by this decision threatens a violation of the Federal, State, or local law, or requirements imposed for the protection of the environment. (For example, effects from this action will meet or exceed state water and air quality standards.) (EA pages 28-78).

## Other Findings

This decision is consistent with the Deschutes National Forest plan as amended by the Northwest Forest Plan (1994), the Revised Continuation of Interim Management Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales (commonly known as the "Eastside Screens," USDA, 1995), and the Inland Native Fish Strategy (INFISH, USDA, 1995).

This project complies with the consistency standards of 36 CFR 219.10(e). No timber will be harvested from lands not suited for timber production as defined in 36 CFR 219.14. Based on research and experience, all lands being harvested can be adequately restocked within 5 years of final harvest. All manipulation of vegetation will comply with the seven requirements of 36 CFR 219.27 (b).

The harvest and post-harvest vegetation management activities are consistent with the strategy of prevention in accordance with the Pacific Northwest Region's Vegetation Management EIS (1988) and the mediated agreement (1989).

Where applicable, the vegetation management treatments will be consistent with direction found in the ROD/FEIS for managing Pacific yew.

## Implementation Date

Timber sales resulting from this decision are scheduled for implementation beginning in the Spring/Summer of 2002.

## Administrative Review

This decision is subject to administrative review (appeal) pursuant to 36 CFR 215. Any written notice of appeal of this decision must be fully consistent with 36 CFR 214.14 and must include the reasons for the appeal. A written notice of appeal must be filed with the Reviewing Officer within 45 days of the date legal notice of this decision appears in the Bulletin (Bend Oregon). File notice of appeal with:

**Harv Forsgren**  
**Regional Forester/USDA Forest Service**  
**PO Box 3623**  
**Portland OR 97208**  
**Attention: 1570 Appeals**

For information contact:

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Responsible Official: \_\_\_\_\_ 1

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\* Part A includes a set of treatment units that do not affect northern spotted owl nesting/roosting/foraging (NRF) habitat. See page 3 of this decision for further explanation.

\*\* This decision notice will refer to the rationale for selecting the entire Alternative 3, although the actual decision described here focuses on one portion of that Alternative (Part A) to implement at this time.

\*\*\* Although this third group of treatment units has no impact on NRF, it has been delineated and delayed in order to complete a technical review by the Regional Ecosystem Office (REO).

<sup>1</sup> Date this decision was published: \_\_\_\_\_

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[Deschutes and Ochoco National Forests Website](http://www.fs.fed.us/centraloregon/manageinfo/nepa/documents/crescent/7buttesreturn/decisionnotice.html)

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Last Update: 8/13/01

R.A. Jensen

