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# Decision Notice and Finding of No Significant Impact

# **Blowout Thin Project**

Detroit Ranger District, Willamette National Forest,

Linn County, Oregon

Legal Location: T10S, R5E and R6E; T11S, R5E; T11S, R6E; W.M.

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# **Background and Decision**

# **Background**

The Blowout Thin Environmental Assessment documents the environmental effects associated with a proposal to commercially thin about 926 acres of plantations and regenerated stands and regenerate about 59 acres of fire regenerated stands in the Blowout Creek drainage on the Detroit Ranger District, about three miles south of Detroit, OR. The planning area is southeast of Detroit Lake, southwest of Cooper's Ridge, west of Coffin Mountain, north of Scar Mountain, and east of Lucky Butte. Primary drainages include Blowout, Divide, Beard, K, Cliff, Ivy, Hawkins, and Lost Creeks. Elevations within the planning area range from approximately 1,500 feet at Detroit Lake to over 5,700 feet at Coffin Mountain. Oregon State Highway 22, heading east of the Detroit Ranger Station provides access to the forest arterials and roads that lead to the Blowout Thin Planning Area.

Stand conditions on National Forest System (NFS) lands in the Blowout Thin Planning Area are characterized by young forests that were either planted after regeneration timber harvesting or regenerated naturally after fires. Stands that were planted following regeneration harvesting (the primary harvest method applied to the Willamette National Forest for the last half century) were planted from the 1950s through 1980s. The Blowout Watershed Analysis (USDA Forest Service, 2000) identified about 4200 acres of such stands that are greater than 40 years old in the Blowout Watershed. Clearcutting and subsequent planting of primarily Douglas-fir were implemented to comply with sustainable yield timber management objectives of the time. Minor amounts of salvage, selection harvest, and commercial thinning also occurred in the project area. Approximately 10,522 acres or 39% of timber stands in the project area are less are than 50 years old, with many of these stands in need of commercial thinning to reduce stand density and maintain overall stand growth for meeting various resource objectives.

The Blowout Thin Project includes proposed harvest units that were included in the Blowout Environmental Assessment of 1995. These units were associated with the Pin, Nasty, and Skyhawk Timber Sales. These sales were not implemented because the average tree diameter was not marketable at the time. One sale from that environmental assessment, Echo Timber Sale, was sold and a portion of the sale is being logged at this time.

The primary purpose of this project is to meet the vegetation management objectives identified in the Blowout Watershed Analysis (2000). Because of the current conditions of stand density and age, future growth projections, and expectations of increased tree-competition induced mortality, several management objectives discussed in the Watershed Assessment (WA) are not being met. For example, the Blowout WA identifies vegetation management action objectives of minimizing the spread of insects and diseases, designing timber harvest units to minimize blow down, and improving stand vigor (Blowout WA, Management Implications, pp. 9-10). Current conditions and management in the project area are not supporting these objectives.

Other purposes of this project are to improve forest health, increase vegetative diversity, reduce long term fire risk and provide for various resource outputs, including an ecologically sustainable yield of timber for commercial products and timber commodities from matrix lands.

There is a need for this project to:

- 1. Reduce current stocking levels to enhance growth and vigor of the remaining trees and to reduce future losses from fire, insects, disease, and from snow breakage.
- 2. Regenerate stagnated overstocked second growth stands that will no longer respond to thinning in order to enhance growth and yield on matrix lands as per Forest Plan direction.
- 3. Regenerate root rot pockets within the stands to be commercially thinned in order to limit the spread of *Phellinus weirii* and other root rot species.
- 4. Accelerate the attainment of late-successional stand characteristics in the riparian reserves to provide water quality and provide wildlife habitat benefits.
- 5. Bring open roads in the project area to Forest Plan standards.

The Environmental Assessment documents the analysis of four action alternatives, along with the No Action Alternative to meet these needs. I have reviewed the EA, the related documents, and public input. My decision is based upon that review and I have found the analysis to be in full compliance with direction from the amended Forest Plan.

Documents in the project record are available for public review at the Detroit Ranger Station on Highway 22 in Detroit, Oregon.

#### **Decision**

I have decided to select Alternative 5 – Modified to implement timber harvest (including both thinning and regeneration harvest) on approximately 751 acres within the Blowout Thin project area. This decision is based on my review of the analysis presented in the Blowout Thin Environmental Assessment, the comments received from the public during the 30-day comment period, and feedback from Forest Service logging system specialists during the initial layout of the project. I am modifying Alternative 5 as it is described in the EA by converting some of the regeneration units to thinning units and altogether dropping two regeneration units. Alternative 5 – Modified will lower the number of acres harvested through regeneration from 59 to 30. During the layout and cruising phase of this project, it became apparent that because of buffers some of the regeneration units would become impractical or would no longer make sense from a silvicultural perspective. For example, in regeneration units 13 and 14, the required no-harvest stream buffers are 172 feet for non-fish bearing streams and wetlands. Because of the

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<sup>&</sup>lt;sup>1</sup> Layout and crusing for the Blowout Thin project occurred in fall 2006. This decision reflects the updated acreage, logging system, and estimated timber volume information generated during these activities. Table 4 in Appendix A contains the updated information.

configuration of the units, there was little acreage left to regenerate once the buffers were applied. Therefore, I am changing the following units from regeneration units to thinning units:

Unit	Harvest Prescription (Alternative 5)	Acres	Logging System	Harvest Prescription (Alternative 5 - Modified)	Acres	Logging System
13	Regeneration	6	Skyline/Helicopter	er Unit Deleted n/a		n/a
14	Regeneration	6	Skyline/Helicopter	Unit Deleted	n/a	n/a
161	Regeneration	1	Ground/Helicopter Thinning (acreage absorbed in Unit #16)		n/a	Ground/Helicopter
191	Regeneration	12	Skyline/Helicopter	Thinning (acreage absorbed in Unit #19)	n/a	Ground/Skyline/ Helicopter

Table 1. Alternative 5 - Modified Harvest Units Changed

Similarly, this layout and cruising modified the unit boundaries and provided more accurate on-the-ground information. Consequently, the number of acres to be thinned has been reduced in Alternative 5 – Modified and there have been some minor changes to the proposed logging systems. Table 2 provides a comparison of Alternative 5 and 5 – Modified.

	Alternative 5	Alternative 5 – Modified
Thinning Acres	926	721
Regeneration Acres	59	30
Skyline acres	549	413
Ground-based acres	287	218
Helicopter acres	149	120
Temporary road construction	3.05	3.02

Table 2. Comparison of Alternative 5 and Alternative 5 – Modified

Alternative 5 – Modified will harvest densely stocked, natural and previously managed stands on 751 acres. This alternative will include commercial thinning on 721 acres and regeneration harvest on 30 acres. Stand conditions for the units in this alternative can be found in table SH-1 in Chapter 3 of the EA. Total volume of commercial timber harvested is expected to be 11.7 million board feet (MMBF).

The 721 acres of commercial thinning will be thinned to an average basal area of 120 to 160 square feet per acre, depending on the unit. Diameter limits will be prescribed for white pine, cedars, and noble fir in some of the units in order to retain sufficient numbers of these species. Small (less than one acre) *Phellinus weirii* root rot pockets occurring in some of the proposed units will be treated by removing all Douglas-fir and western hemlock from the root rot pocket plus any of these species within 50 feet of the last confirmed tree. The opening will then be planted with root rot resistant tree species.

The 30 acres of regeneration harvest units will be planted with varying mixes of Douglasfir, western white pine, noble fir, western red cedar, and sugar pine. Reforestation will provide for future timber harvest and for a diverse habitat for various plant and wildlife species.

The timber sales from this proposal are likely to occur over a two-year period, beginning in 2007.

Construction, reconstruction, or modification of landings for helicopters, skylines, and ground-based yarding systems will occur.

Harvest systems will include 218 acres of ground based systems, 413 acres of skyline yarding, and 120 acres of helicopter yarding. About 7 (approximately ½ to 1 acre in size) helicopter landings will be needed, some of which may require minor additional clearing.

This action includes the construction of 3.02 miles of temporary road. Upon completion of sale activities, the new temporary roads will be decommissioned by scarification, seeding, and maintenance of natural drainage patterns.

Alternative 5 – Modified will prescribe road maintenance activities on 56.57 miles of existing forest roads needed for timber haul. Road maintenance activities will include cutting hardwood trees along roads, felling hazard trees for the life of the road, clearing and grubbing, surface blading, replacing drainage structures, reshaping ditches, and placement of aggregate surfacing.

To allow better access to harvest areas and to reduce adverse impacts to resources, 29.75 miles of existing forest roads will be reconstructed. Reconstruction activities will include sections of asphalt patching, subgrade repair, culvert replacement, erosion repair, new culvert installation, brushing, slump repair, clearing and grubbing, road widening, and crushed rock placement.

Three existing rock pits (Hawkins, McCoy and Cub Point) will be used to produce crushed aggregate, pit run aggregate, and riprap for the road maintenance needs.

The following system roads will be closed and closure devices installed: boulders will be used to close Rd. 1000-112 and gates will be installed on Rd. 1003-448 north of proposed unit 24, Rd. 1011-557 in proposed unit 17, Rd. 1003-456 in proposed unit 17, and Rd. 1003-354 on the west edge of proposed unit 17. Tributary roads closed by default because they are behind the above closures will include Rd. 1000-101, Rd. 1003-450, and Rd. 1011-558. The total length of road behind these closures is about 1.25 miles. Currently, 1.14 miles of the roads behind the gates are drivable with a four wheel drive vehicle.

All units in Alternative 5 – Modified will receive fuel treatments to reduce logging slash which may include one or more of the following: yarding of trees with the top attached to the last log; limbing to be done at the landing; broadcast burning of slash fuel and the creation and burning of landing, hand, and machine piles.

All units with harvest activities will have landing piles burned following harvest. Hand piling treatments will be focused along the roadsides 66 ft. into the unit. On units

adjacent to private land boundaries hand piling will be 100 ft into the unit. These treatments will be more effective as fuel breaks for wildfire suppression. Alternative biomass utilization will occur if a market exists for wood fiber or firewood.

Prescribed fire will take place during the spring or fall season. Grapple pile and hand pile burning generally takes place in the fall and broadcast burning generally takes place in the spring, but can be implemented in the fall if weather and fuels conditions warrant.

Approximately 195 of the 297 acres of riparian reserve adjacent to and within proposed thinning units will be thinned. The riparian reserve strategy provides for the retention of existing stream shading vegetation and adequate levels of large wood in Riparian Reserves associated with regeneration harvest units.

Alternative 5 – Modified will include leaving live green trees, of suitable sizes, within some of the proposed regeneration harvest units for future snag and down wood creation. The treatment will occur 4 to 5 years after harvest. In the proposed regeneration units, mortality of some of the remaining trees is expected to occur following broadcast burning. Follow-up snag and down wood creation will occur to meet prescribed post harvest levels for snags and down wood.

Slash, slash piles and landing debris created through operations along mainline roads and dispersed sites will be cleaned up to improve visual quality along roads that are used for recreation traffic if funding is available.

Post-sale activities include:

- tree planting;
- wildlife tree and coarse woody debris creation;
- noxious weed survey and treatment;
- monitoring (including noxious weeds, heritage, Blowout Creek water temperatures, and wildlife trees);
- precommercial thinning;
- gate replacement;
- erosion control seeding, slope stabilization and restoration;
- restoration of popular dispersed sites along Blowout and Divide Creeks;
- stream restoration, including large wood, structure maintenance, and floodplain restoration; and
- aerial fertilization.

A complete list of post-sale activities can be found in Appendix E of the EA.

# **Mitigation Measures**

This decision implements the following mitigation measures described in the EA on pp. 26-33:

#### **Fishery Resource**

Any project activity such as culvert replacement that must occur within fishbearing and other perennial streams will comply with Oregon Department of Fish and Wildlife (ODFW) seasonal restrictions on in-stream work activities. In the Blowout Creek watershed, in-stream work must occur between June 1 and September 30. Best Management Practices, including placement of sediment barriers, provision of flow bypass, and other applicable measures, will be included in project design as necessary to control off-site movement of sediment.

Haul will be prohibited on native-surfaced roads during the winter rainy season (weather dependent typically between November 1 and May 31). The objectives are to maintain water quality and fish habitat.

#### Wildlife Habitat

#### **Big Game**

Restrict all project activities and close the gate on Forest Road 10 to reduce disturbance to big game in winter range (closure is weather dependent – typically from January 1 – April 15). Restrict helicopter yarding operations during opening weekend (dates vary each year) of buck deer and Cascade elk rifle season on Saturday and Sunday to reduce potential conflicts with the hunting public.

#### **Peregrine Falcon**

The following table summarizes Peregrine Falcon restrictions.

Restricted Activity Season Restricted		Units Affected		
All operations	Jan 15 – Jul 31	1, 16, 17 south of Rd. 1003, and 18.		
Air operations	Jan 15 – Jul 31	Units 1, 19, and 24 are the only affected units planned for helicopter yarding <sup>2</sup> .		
Air operations	Jan 15 – September 30	Unit 16		
Rock source blasting at Hawkins and Cub Point rock pits.	Jan 15- July 31	Hawkins and Cub Point rock pits.		

Table 3. Alternative 5 – Modified Peregrine Falcon Restrictions

#### **Harlequin Duck**

Restrict project activities in units 7 and 8 from March 15 – July 15 to avoid potential disturbance. Surveys may be conducted to determine if harlequin duck activity is occurring adjacent to or within the sale units. If harlequin ducks are determined, by protocol surveys, to be absent in the sale area, this restriction may be lifted for the year surveys are conducted.

<sup>&</sup>lt;sup>2</sup> Other units that would be affected if they were to be helicopter yarded are: 4, 6, 7, 11, 12, 17 north of Rd. 1003, 21, 23, 26, 104, 106, 121.

#### **Northern Spotted Owl**

The following table summarizes Northern Spotted Owl restrictions.

Table 4. Alternative 5 – Modified Northern Spotted Owl Restrictions

Restricted Activity	Season Restricted	Units Affected
Project activities including helicopter operations, associated with units in matrix and not likely to adversely affect habitat units in CHU, within 1/4 mile of occupied or suitable unsurveyed habitat having potential to disturb.	Mar 1 – Jun 15	Units 1, 3, 6-12, 16, 18-21, 23, 26, 101, and portions of units 2, 4, 5, 17, 24.
Blasting in the Matrix land allocation and units in CHU which are not likely to adversely affect habitat.	March 1 – Jun 15	1-6, 12, 16-18, 23, 24
Blasting within 1 mile of any occupied or unsurveyed suitable spotted owl habitat associated with units that are likely to adversely affect habitat in CHU's.	March 1 – Sep 30	104, 106, 121
Blasting and Rock Crushing in LSR within 1.0 mile of any occupied or unsurveyed suitable spotted owl habitat.	March 1 – Sep 30	McCoy rock pit <sup>3</sup>
Blasting and rock crushing at Hawkins and Cub Point rock pits. Rock loading and hauling not restricted.	Mar 1 – Jul 15	Hawkins and Cub Point rock pits.
Helicopter operations associated with units in CHU which are likely to adversely affect habitat.	Mar 1-Sep 30	16 <sup>4</sup>
Project activities in CHU which are likely to adversely affect habitat with the potential to disturb nesting spotted owls within 65 yards of occupied or suitable unsurveyed habitat.	Mar 1 – July 15	106, 121

#### **Sensitive Botanical Species**

In order to protect the existing sensitive lichen sites, no thinning should take place within 100 feet of these occurrences, and no regeneration harvest within 340 feet. Refer to the integrated prescriptions in the project file for those units with lichen protection measures.

<sup>&</sup>lt;sup>3</sup> The suitable habitat at McCoy pit is surveyed yearly which may result in restrictions being lifted earlier than September 30. The habitat adjacent to McCoy pit is occupied by a pair of spotted owls that nested in 2004 and not in 2005. These recommendations comply with the terms and conditions from the Biological Opinions from USFWS for this project.

<sup>&</sup>lt;sup>4</sup> Other units that would be affected if they were to be helicopter yarded are: 104, 106, 121

#### **Noxious weeds**

The spread of noxious weeds and other invasive non-native plants will be minimized through preventative measures taken prior to and during harvest operations. These mitigation measures constitute a prevention plan, as directed in the Mediated Agreement (1989), and are consistent with the Pacific Northwest Region Final Environmental Impact Statement for the Invasive Plant Program, 2005, hereby referred to as the R6 2005 FEIS. The R6 2005 FEIS culminated in a Record of Decision, hereby referred to as R6 2005 ROD that amended the Willamette National Forest Plan by adding management direction relative to invasive plants (USDA Forest Service, 2005a). This project is also consistent with the Willamette National Forest Noxious Weed Prevention Guidelines (USDA Forest Service, 2005b).

#### **Recreation and Visual Quality**

To mitigate log hauling and recreation traffic conflicts during the peak recreation use season, hauling is restricted on weekends and holidays as follows:

Holidays, all harvest units:

• No log hauling on Memorial Day, July 3-5, or Labor Day weekends between 4:00 PM Friday or the day before the three day weekend begins and midnight the last day of the three day weekend.

Weekends, beginning of Memorial Day weekend through end of Labor Day, all ground and skyline yarded logs:

• Road 10 (Blowout Rd), No log hauling between the hours of 5:00 PM Friday night to 8:00 AM Saturday morning and 5:00 PM Saturday to midnight Sunday.

Weekends, beginning of Memorial Day weekend through end of Labor Day weekend, all helicopter yarded logs:

• Road 10 (Blowout Rd), No log hauling between the hours of 5:00 PM Friday night to 8:00 AM Saturday morning and 5:00 PM Saturday to 8:00 am Sunday.

#### **Heritage Resources**

All National Historic Preservation Act eligible sites and potentially eligible sites must be avoided during all project activities.

Changes to the current unit configurations and/or the addition of any new units, will require consultation with the District Archaeologist in order to protect known and unknown heritage resources.

Project activities planned outside of the area defined in the heritage resource inventory schema must be coordinated with the district archaeologist prior to initiation. This includes the establishment of harvest landings, helicopter landings, guy-line equipment anchors, slash burning, silvicultural treatments, and subsoiling in high probability areas.

After harvest and prior to cultivating skid roads, a re-entry survey must be conducted in those areas deemed high probability for the occurrence of heritage resources.

Coordination with the district archaeologist is essential to ensure the protection of heritage resources.

In order to extend protection to heritage resources which have not yet been discovered, but which may be uncovered during the course of project activities, the appropriate timber sale provisions must be included in all project prospectus and contracts. The contract clause outlines the procedures to follow in the event heritage resources are inadvertently discovered or disturbed during project activities. If material is inadvertently discovered, suspend operations and consult the District Archaeologist.

#### Soil Productivity and Slope Stability

All skyline units shall have at least partial suspension yarding to avoid excessive soil displacement.

Subsoiling is proposed in some ground-based units in order to reduce compaction at heavily used haul roads (dirt spurs), skid roads, and landings. Subsoiling will not occur on all the skid roads, reused and new, because of the potential for problems with root pruning and excessive soil disturbance.

## **Decision Rationale**

# Rationale for Selecting Alternative 5 – Modified

Alternative 5 – Modified is consistent with the requirements of the amended Willamette National Forest Land and Resource Management Plan to manage the project area for multiple uses and for a sustained yield of forest products over time. This project meets the purpose of the project, as stated above, by improving forest health, increasing vegetative diversity, and providing for various resource outputs, including an ecologically sustainable yield of timber for commercial products and timber commodities from matrix lands. The alternative meets the needs of the project by applying thinning and regeneration prescriptions to reduce current stocking levels to enhance growth and vigor of the remaining trees and to reduce future losses from fire, insects, disease, and from snow breakage. Alternative 5 – Modified also uses regeneration prescription (where practical) to regenerate stagnated overstocked second growth stands that will no longer respond to thinning. The alternative accelerates late successional characteristics in riparian reserves and brings open roads in the project area up to forest plan standards.

Alternative 5 – Modified responds best to the three significant issues identified for the project: stand health, growth, and vigor; water quality; and economic viability.

For the issue related to stand health, Alternative 5 – Modified (along with the other three action alternatives) propose a mix of silvicultural prescriptions that are intended to thin overstocked stands and lessen the stands' susceptibility to blow down, insect and disease infestations, and resource damaging fires. This alternative includes 30 acres of regeneration harvest (reduced from 60 acres in Alternative 5). After reviewing the analysis in the EA and the public comments on the project, I am convinced that selective use of regeneration harvest is appropriate and necessary in some situations. As discussed in the EA, the Forest Service silviculturist prescribed regeneration treatment based on

stand-specific age, density, and condition data. Given the additional protections afforded resources in regeneration units, I believe regeneration of certain stands can meet both silvicultural objectives and provided a reasonable level of environmental protection. As discussed earlier in this decision, I have found it necessary to reduce the regeneration acreage by almost 50% when stream-protection buffers were applied to these units.

During the scoping phase of the project, water quality and economic viability were also raised and considered significant issues for the project. Specifically, the water quality issue focused on temporary road construction and maintenance and reconstruction of existing roads and whether these activities affect slope stability, amount of sediment introduced into streams, and therefore water quality. The economic viability issue concerned the use of helicopter logging and the costs and scheduling conflicts associated with this yarding method. I believe Alternative 5 – Modified provides the best mix of actions that best protect water quality and still allow the timber sale to be economically efficient.

For water quality, Alternative 5 – Modified includes a number of Best Management Practices to insure channel bank stability, and provide adequate buffers to reduce sediment inputs and minimize peak flow effects. The riparian reserve strategy provides for the retention of stream shading vegetation and adequate levels of large wood in riparian reserves. Commercial thinning is planned within Riparian Reserves but outside of prescribed no-harvest buffers. Vegetation thinning will not occur within primary shade zones. Canopy closures within the secondary shade zone will not be reduced below 50 percent canopy closure post harvest. Average canopy closure will be at least 70 percent for the riparian reserve.

Thinning unit no-harvest buffers for Alternative 5 – Modified:

- 172 feet for perennial fish-bearing streams (Class I, II)
- 50 to 150 feet for perennial non-fish bearing streams (Class III)
- 50 feet for intermittent or ephemeral streams (Class IV)
- 50 to 150 feet for unstable headwalls and wetlands

Regeneration unit no-harvest buffers for Alternative 5 – Modified:

- 344 feet for perennial fish-bearing streams (Class I, II)
- 172 feet for perennial non-fish bearing streams (Class III and IV)
- 172 feet for wetlands

In addition, compared to Alternative 3, Alternative 5 – Modified contains less temporary road reopening and construction. This eliminates the need for the six stream crossings and culvert replacements and provides a higher level of protection of watershed resources.

Alternative 5 – Modified also minimizes the use of helicopter logging to improve the economic efficiency of the sale compared to the other action alternatives. (See discussion of the other alternatives below.)

During the 30-day EA comment period, two comments were received: one from the American Forest Resources Council (AFRC) and one from Oregon Wild. The AFRC comment encouraged the agency to pursue economically viable timber projects and was

generally supportive of the proposed project. While not the least expensive alternative considered (in terms of logging and haul costs), Alternative 5 – Modified provides the right mix of helicopter, skyline, and ground-based logging to minimize environmental effects while still providing for an economically efficient sale.

The Oregon Wild comment expressed concerns that can be categorized into three broad groupings:

- Disagreement as to whether regeneration harvest in necessary for this project
- Concern that the role of fire is overstated in the EA
- Questions concerning the adequacy of red tree vole surveys

I carefully reviewed and considered Oregon Wild's comments. I believe while Alternative 5 – Modified may not align completely with the group's stance on some issues, the selected alternative is reasonable and balanced and the effects are disclosed in the EA.

As discussed elsewhere in this decision, regeneration harvest remains a silvicultural tool that I believe has a role in certain situations. In their comment, Oregon Wild encourages the agency to create diverse habitat at the landscape scale. They say that the habitat created by regeneration harvest is already over-represented on private lands and that the stagnant, high mortality forests slated for regeneration actually provide habitat for a wide variety of species. The analysis does not concur with this view. Within the project area, forage habitat is under represented and with riparian reserves and wildlife-related set asides, stagnant, high mortality forests are likely to remain well represented into the future.

While I respect the difference in opinion expressed by Oregon Wild on this topic, I believe that the use of regeneration harvest is warranted in this project. As outlined above, adjustments have been made and the number of regeneration acres in Alternative 5 – Modified is half that in Alternative 5.

For fire, I have reviewed the EA and I do not believe the role of wildfire in the project area has been overstated. One of the needs for this project is to enhance growth and vigor of remaining trees and reduce future losses due to fire, insects, disease and snow breakage. Given the current overstocked condition of stands in the project area, I believe it is reasonable to be concerned with the area's susceptibility to natural events, including fire. Nowhere in the EA is it said or implied that fire is the sole, or indeed, primary force driving this project.

Concerns were also expressed as to whether red tree vole surveys were done. Surveys for red tree voles were completed in fall 2006 and were conducted according to the regional protocol. A number of nests were found; however, all were inactive. A more complete discussion of these surveys can be found in the EA on pp.96-97 and in Appendix B of this decision.

# Other Alternatives Considered

In addition to the selected alternative, I considered three other action alternatives along with the no action alternative.

#### Alternative 1—No Action

Under the no action alternative, current management plans would continue to guide management of the project area. No timber harvest treatments would be implemented. Forested stands would continue to develop under existing conditions and current stand density levels and growth trends would continue. None of the post-harvest projects listed in the EA nor the road closures, maintenance, or reconstruction would be implemented under the no action alternative.

I choose not to select the no action alternative because it does not meet the purpose and needs identified for the project. The EA states that one of the primary purposes of the project is related to the current overstocking of the stands in the project area and the need to thin these units. The no action alternative does not meet this purpose. Furthermore, the no action alternative does not meet any of the identified needs for the project including the need to enhance growth and vigor of stands in the project area, regenerate stagnated, overstocked stands and root rot pockets, accelerate late successional stand characteristics in riparian reserves, and bring open roads in the project area up to forest plan standards.

Overall the no action alternative does not meet the identified purpose and need for this project and continues the overstocked, unhealthy condition of stands in the project area.

#### Alternative 2

Alternative 2 proposes to meet the purpose and need by thinning and regenerating 985 acres of forested stands in the Blowout project area. The expected timber volume from this alternative is 10.8 mmbf. This alternative is different than Alternative 5 – Modified in that it relies heavily on helicopter logging as the dominant logging system. (There are 376 acres in Alternative 2 harvested by helicopter compared to 120 acres in Alternative 5 – Modified .) This alternative includes 50.55 miles of haul road maintenance, 26.16 miles of road reconstruction, no temporary road reconstruction or temporary road reopening proposed. Of the four action alternatives, Alternative 2 has the second lowest cost/benefit ratio.<sup>5</sup> Because of the considerable costs associated with the helicopter logging in this alternative, associated costs for Alternative 2 are higher than any other action alternative.

I choose not to select this alternative because of the high reliance on helicopter logging in this alternative. During both the scoping and comment period phase of this project, I heard concerns related to the feasibility of the project, particularly how it related to the use of helicopters to log. I do not believe that the environmental effects disclosed in the EA warrant such a high use of helicopter logging for this project.

<sup>&</sup>lt;sup>5</sup> The cost/benefit ratio is defined as the gross value of the timber divided by all of the associated costs (including logging, road, fuel treatment, and post sale activities costs). The higher the number in this ratio, the greater the timber economic benefit received per dollar spent on costs.

#### Alternative 3

Alternative 3 proposes to meet the purpose and need by harvesting 985 acres through a combination of thinning and regeneration. The expected volume is 10.8 mmbf. Alternative 3 contains a relatively high number of acres that utilize ground and skyline logging and consequently a low number of acres of helicopter logging. (Alternative 3 logs 21 acres with helicopter compared to 120 acres in Alternative 5 – Modified.) To support the ground operations, 4.1 miles of temporary road construction is needed along with 1.2 acres of temporary road reopening. (By comparison, Alternative 5 – Modified contains 3.02 miles of temporary road construction and no temporary road reopening.) Because of the low utilization of helicopter logging, the costs associated with Alternative 3 are lower than Alternatives 2 and 5. Overall, Alternative 2 has the highest cost/benefit ratio.

I choose not to select Alternative 3 for a number of reasons. Although the alternative has a low number of acres logged by helicopter (addressing a significant issue identified for the project), the reliance upon ground based and skyline logging does come with an environmental cost. Although the alternative meets the project's purpose and need and is consistent with the relevant management direction, there are hydrology-related concerns with the road and access work. Because of the temporary road construction and reopening, this alternative requires the crossing of six streams. Therefore, the risk to hydrology, stream channels, and water quality is considered "moderate" for Alternative 3 (compared to "low" for Alternatives 2, 4, and 5). While I certainly appreciate the need to plan an economically viable timber sale, I do not believe the potential trade-off in terms of hydrology and water quality is necessary in this case.

#### Alternative 4

Alternative 4 proposes to meet the purpose and need by harvesting 926 acres of forested stands through thinning prescriptions. There is no regeneration harvest included in this alternative. The expected volume resulting from the implementation of Alternative 4 is 9.2 mmbf (compared to 10.8 mmbf in Alternatives 2 and 3 and 11.7 mmbf in Alternative 5 – Modified). Alternative 4 contains a fairly even mix of ground, skyline, and helicopter logging (278 acres logged through ground systems, 295 skyline, and 353 acres of helicopter). While Alternative 4 has the lowest associated costs of the four action alternatives, the cost/benefit ratio for Alternative 4 is also the lowest.

I did not choose Alternative 4 because I believe it has an unnecessarily high number of helicopter-logged acres and it does not include any regeneration harvest. One of the needs of the project is to regenerate stagnated overstocked second growth stands that will no longer respond to thinning. I do not believe that Alternative 4 adequately meets this need. While in my decision I have choose to modify Alternative 5 by dropping some regeneration units and changing others to thinning units, this is primarily because some of the regeneration units are not practical once buffers are put in place. I believe that the need to use regeneration harvest is warranted in some situations. I also do not believe that it is necessary to rely upon helicopter logging to the extent that Alternative 4 does. As discussed earlier, one of the significant issues in this project is the economic viability of the proposed timber sale. The high costs and uncertainty associated with helicopter logging makes Alternative 4 an unwise choice for me.

## **Public Involvement**

The areas proposed for harvest in the Blowout Thin Project were initially included in the Blowout Environmental Assessment, completed in 1995. The sales that originally included these units were not implemented because the average tree diameter was too small to be marketable. One sale from that environmental assessment, Echo Timber Sale, was sold and a portion of that sale has been logged. The harvest units from the 1995 Blowout Environmental Assessment that did not sell were later grouped into the current Blowout Thin Project.

The Blowout Thin Project was initiated in 2004, and was first listed in the winter 2004 edition of the Forest Focus – the quarterly schedule of proposed actions (SOPA) for the Willamette National Forest. The project has since appeared in the Forest Focus through winter 2007.

The scoping letter for Blowout Thin was mailed to the Confederated Tribes of Siletz, Confederated Tribes of Grand Ronde, and the Confederated Tribes of Warm Springs on June 22, 2004. No comments were received from the tribes.

Scoping comments were received in response to this scoping letter from Oregon Natural Resources Council (ONRC) (now Oregon Wild) and Freres Lumber Co. Additional clarification of ONRC's comments was made by Chandra LeGue of ONRC during a telephone conversation March 23, 2005. These scoping comments along with input from the interdisciplinary team were used to develop the three significant issues identified for this project.

The EA was released for a 30-day comment period on December 4, 2006. Two groups submitted comments: Oregon Wild and the American Forest Resource Council. Another group (Cascadia Wildlands) contacted the district via a phone call and inquired as to when the comment period ended; however, no written or oral comments were received from the group. Appendix B of this Decision Notice contains the responses to the comments contained in these comment letters.

# Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following.

**Context:** The selected alternative is limited in geographic context (40 CFR 1508.27(a)). The area of proposed activity is relatively small when considered in a watershed perspective. There is not an expectation that significant indirect effects will occur with the implementation of Alternative 5 – Modified. Likewise, cumulative effects are expected to be negligible and are documented in the EA in Chapter 3.

**Intensity:** Ten elements of impact intensity identified in 40 CFR 1508.27b have been considered in assessing the potential significance of project effects. They are as follows:

- 1. No significant adverse *direct or indirect effects to the environment* from this project were identified during the environmental effects analysis. No significant irreversible or irretrievable commitments of resources, such as loss of soil productivity, water quality, wildlife habitat, or recreational opportunities, will result from this project. As described on pages 1-158 of Chapter 3 of the EA<sup>6</sup>, adverse effects and the reasons they are not expected to be significant include:
  - Water Quality effects to water quality are expected to be minor (EA, pp. 34-37).
  - Fisheries effects to fish and/or their habitat are expected to be minor and negligible (EA, p.50-54).
  - Big Game small increase in forage values; otherwise little change from the existing condition (EA, p. 69).
  - Threatened/Endangered, and Sensitive Species Effects to Peregrine falcon, Harlequin duck, California wolverine, Bald eagle, Pacific fringetailed bat, Pacific shrew, and Oregon slender salamander range from no effect to very small impact (EA, pp. 85-92). The project will not jeopardize the Northern Spotted Owl (EA p.87).
  - Survey and Manage Species There is no habitat for Great grey owl and amphibians. Red tree vole surveys did not detect any active nests (EA pp.95-96).
  - Sensitive/Management Indicator Species (MIS) There are no effects to MIS habitat from this project (EA, pp. 97-98).
  - Botanical Species no direct effects to known lichen sites are expected, but individual fungi sites may be negatively affected in the short term. These effects are not likely to result in a trend toward Federal listing or loss of viability for Survey and Manage and sensitive fungi species (EA, pp. 102-103).
  - Soils –effects to soil displacement, compaction, instability, and nutrient loss are expected to be minimal. (EA, pp. 129-137).
  - Heritage Resources there are no direct or indirect effects expected from this project (EA, p. 119).
- 2. Significant effects to public health and safety are not anticipated to result from implementation of Alternative 5 Modified.
- 3. The supporting documentation located in the EA and Project Record provides sufficient information to determine that this project will not significantly affect any known unique characteristics of the geographic area such as park lands, prime

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<sup>&</sup>lt;sup>6</sup> All page numbers in the section refer to Chapter 3 of the EA

farmlands, wetlands, wild and scenic rivers, or ecologically critical areas such as historic or cultural resources.

There are no park lands or prime farmlands in the project area. All wetlands will receive adequate protection buffers to avoid any disturbance from timber harvest. Culvert replacement activities that occur within wetland areas will employ Best Management Practices to protect downstream resources from impacts (EA, pp. 20-40).

A cultural resource survey has been completed on all proposed treatment areas. The reentry field survey for the Blowout Thin Timber Sale did not locate any new sites. However, previous surveys in the project area located three lithic scatter sites immediately adjacent to the timber sale boundaries. These three sites are considered potentially eligible to the National Register of Historic Places (NRHP) and must be protected from project activities or evaluated to determine their eligibility to the NRHP.

- 4. The project is unlikely to have *highly controversial* effects. The nature of potential effects on the human environment from Alternative 5 Modified is well established and not likely to be highly controversial. While the public may perceive some aspect of the project (e.g., regeneration harvest) to be controversial, there is no known scientific controversy over the impacts of the decision.
- 5. The project effects do not entail *uncertain*, *unique*, *or unknown risks*. The effects on the human environment from Alternative 5 Modified are not uncertain and do not involve unique or unknown risks. All proposed actions are standard practices that have been previously implemented with known cause and effect relationships.
- 6. The action will not establish a *precedent for future actions* with significant effects, because it conforms to all existing Forest Plan direction and is applicable only to the project area
- 7. No potentially significant *adverse cumulative effects* of the project have been identified (EA pp. 26-28, 33, 38, 54-55, 82-84, 79-80, 85-92, 96, 98, 103, 106, 113, 119, 132-133, and 135-137).
- 8. This action will not cause loss or destruction of significant scientific, cultural, or historical resources. An appropriate review has been conducted by this undertaking (as discussed in Factor 3). Both previously known and unknown significant cultural sites discovered in field surveys will be avoided. Because cultural resources will not be affected by this action there will be no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. (EA, pp. 117-119).
- 9. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

For the Northern Spotted Owl: The first biological opinion for habitat modification in the Blowout analysis area is 1-7-95-F-290. Under this biological opinion, 132 acres of regeneration harvest and 1501 acres of thinning were included in the consultation. Under this opinion, Echo timber sale will remove 43.4 acres of suitable habitat by regeneration harvest. Blowout Thin proposes to harvest a maximum of 60 acres (now 30 acres in Alternative 5 – Modified) by regeneration harvest and a maximum of 926 acres (now 721 acres in Alternative 5 – Modified) by thinning harvest. The second biological opinion for habitat modification in the Blowout analysis area is 1-7-97-F-396. Under this biological opinion, consultation was completed for 350 acres of regeneration harvest. No sales were developed under this proposal. Records indicate sale planning was cancelled for these acres due to other priorities.

In August 2005, two Biological Assessments (BA) were submitted to USFWS for treatments occurring in critical habitat unit OR-14, for effects to critical habitat. One BA addressed units which were "may affect not likely to adversely affect" designated critical habitat, the second BA addressed units which were "may affect and are likely to adversely affect." Biological opinion 1-7-05-I-0516 was issued on 09/22/2005 and concurred with our determination of "may affect, but is not likely to adversely affect" northern spotted owl designated critical habitat. No additional terms and conditions were included in opinion 1-7-05-I-0516. Biological opinion 1-7-06-F-0047 was issued 02/16/2006 and concurred with our determination of "may affect, likely to adversely affect" (LAA) northern spotted owl designated critical habitat. This opinion requires seasonal restrictions from March 1 – July 15 on units 13, 104, 106, 121, 161 that are LAA, where activities have the potential to disturb nesting spotted owls.

For other Endangered or Threatened species, there is no expectation that the Blowout Thin project will result in adverse effects to either the species or their habitat (EA, pp. 80-93).

For Upper Willamette River Chinook Salmon: ESA informal consultation was completed with the receipt of a letter of concurrence from USFWS (ref. 2006/05971; Jan. 18, 2007) agreeing with the Forest Service determination that the proposed action "are not likely to adversely affect" (NLAA) Upper Willamette River spring-run (UWR) steelhead (*Oncorhynchus mykiss*), and UWR Chinook salmon (*O. tshawytscha*), which are listed as threatened under the Endangered Species Act (ESA).and it will have no adverse modification of proposed Critical Habitat.

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA, (pages 142-146). The action is consistent with the Willamette National Forest Land and Resource Management Plan (EA, pages 138-142).

# Findings Required by Other Laws and Regulations

This decision to implement Alternative 5 – Modified is consistent with the intent of the forest plan's long term goals and objectives listed on pages IV-2 to IV-44. The project

was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for Management Areas 5a, 9b, 9c, 11a, 11c, 14a, 16a, and 16b; where activities will occur implementing this decision (EA, Chapter 1, pp. 9-13). (Willamette National Forest Land and Resource Management Plan, pp. 138 to 239).

This decision is consistent with all applicable Acts and Regulations such as the National Forest Management Act (NFMA) of 1976, National Environmental Policy Act (NEPA) of 1969, Endangered Species Act (ESA) of 1973, Clean Water Act (CWA) of 1972 and section 319 of the 1987 CWA, Civil Rights Act (CR) of 1964, Title VI and Environmental Justice (EJ) Executive Orders 11988 and 11990, The Preservation of Antiquities Act of June 1906 and the National Historic Preservation Act of October 1966, Executive Order 12962 on Recreational Fishing, and Executive Order 13186 on Neotropical Migratory Birds. (EA, Chapter 3).

In addition, the August 1, 2005, and the January 9, 2006, U.S. District Court orders in the Northwest Ecosystem Alliance et al. v. Rey et al (NEA), Civ. No, 04-844, WD Wash. set aside the 2004 Record of Decision (ROD) to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines. The Court re-instated the January 2001 ROD for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, as amended by the 2001 and 2003 Annual Species Reviews. The Order allowed projects to continue or be implemented if they complied with the 2001 ROD as amended. The Blowout Thin project is in compliance with the 2001 ROD. Subsequently, on November 6, 2006, the Ninth Circuit Court of Appeals in Klamath-Siskiyou Wildlands Center et al. v. Boody et al. (Klamath) No. 06-35214 (CV 03-3124 District of Oregon) held the 2001 and 2003 Annual Species Reviews regarding the red tree vole were invalid under Federal Land Policy and Management Act and National Environmental Policy Act as to the two Bureau of Land Management sales at issue in that case. Although the Klamath opinion is specific to the two named BLM timber sales, red tree vole surveys have been completed for harvest units in the Blowout Thin Project and are discussed in the EA (EA pp. 84, 96, and 101-102). No red tree voles were located so no protection measures are included in the selected Alternative 5 – Modified.

As a result, I conclude that the Blowout Thin Project complies with the January 9, 2006 NEA Order by complying with all survey and manage requirements in the 2001 ROD for Amendments to Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines.

# Administrative Review or Appeal Opportunties

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. Appeals can be submitted in several forms, but must be received by Forest Supervisor Dallas Emch, the Appeal Deciding Officer, within 45 days from the date of publication of notice of this decision in the Statesman Journal, Salem, Oregon. The publication date in the Statesman Journal, newspaper of record for the Detroit Ranger District, is the exclusive means for calculating the time to file an appeal. Attachments received after the 45 day appeal period will not be considered. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

#### Appeals may be:

- 1) **Mailed** to: Appeal Deciding Officer, Dallas Emch, Forest Supervisor; ATTN: Appeals, 211 E 7th Avenue, Eugene, OR 97440.
- 2) **Emailed** to: appeals-pacificnorthwest-willamette@fs.fed.us. Please put APPEAL and "Blowout Thin Decision" in the subject line.

Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to the email address above. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

- 3) **Delivered** to: Willamette National Forest, Supervisor's Office at 211 E. 7th Ave, Eugene, OR 97401, between the hours of 8:00 am and 4:30 pm, M-F.
- 4) **Faxed** to: Willamette National Forest, Supervisor's Office, ATTN: APPEALS at (541) 225-6222.

The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

### Contact Person

For further information on this decision, contact Richard Hatfield, Natural Resource Planner, HC 73, Box 320, Mill City, OR 97360. Phone: (503) 854-4219.

Copies of the Environmental Assessment and this Decision Notice can be found on the Willamette National Forest Website at:

http://www.fs.fed.us/r6/willamette/manage/nepa/current\_detroit.html

# Implementation Date

As per 36 CFR 215.9, if no appeal is received, implementation of this decision may occur on, but not before, the 5th business day following the close of the appeal filing period (215.15). When an appeal is filed, implementation may occur on, but not before the 15th business day following the date of appeal disposition (36 CFR 215.2).

/s/ Paul Matter	January 30, 2007
PAUL MATTER	Date
District Ranger	

# Appendix A – Alternative 5 – Modified Summary and Map

Table 5. Alternative 5 – Modified Harvest Units

Unit	Acres	Harvest Prescription	Logging Systems	Temp. Road Constr. (mi.)	Temp. Road Re- opening (mi.)	Fuels Treatment	Estimated Timber Volume (in mbf)
1	7	Regeneration	Helicopter	0	0	BCB 7 ac	210
2	48	Thinning	Skyline	0.42	0	HP 5 ac	720
3	13	Thinning	Ground	0.10	0	HP 1 ac	195
4	12	Thinning	Skyline	0.03	0	GP 5 ac	180
5	100	Thinning	Ground/ Skyline	0.93	0	HP 4 ac	1500
6	7	Thinning	Ground	0	0	GP 14 ac	105
7	24	Thinning	Skyline	0	0	HP 2 ac	360
8	50	Thinning	Skyline/Ground	0.18	0	HP 1 ac	750
9	36	Thinning	Ground/Skyline	0	0	GP 37 ac	540
10	12	Thinning	Skyline	0.71*	0	YTA 17 ac	180
11	32	Thinning	Ground	0	0	GP 36 ac	480
12	14	Thinning	Ground	0	0	GP 14 ac	210
16	19	Thinning	Skyline/ Helicopter	0	0	GP 17 ac YTA 3 ac	285
17	89	Thinning	Ground/Skyline	0.15	0	HP 4 ac	1335
18	31	Thinning	Ground/Skyline	0.12	0	HP 3 ac	465
19	92	Thinning	Ground/ Helicopter/Skyline	0	0	GP 44 ac	1380
20	15	Thinning	Skyline	0.04	0	HP 1.5 ac	225
21	24	Thinning	Ground/Skyline	0	0	HP 1 ac	360
23	3	Thinning	Skyline	0.02	0	HP 1 ac	45
24	88	Thinning	Skyline/Helicopter	0.32	0	HP 1.5 ac	1320
26	12	Thinning	Ground/Skyline	0	0	HP 1 ac	180
101	5	Regeneration	Skyline	0*	0	BCB 6 ac	150
104	9	Regeneration	Ground	0	0	BCB 11 ac	270
106	3	Regeneration	Skyline/Ground	0	0	BCB 5 ac	90
121	6	Regeneration	Skyline	0	0	BCB 5 ac	180
Total	751		unit 10 would also be	3.02	0		11,716

<sup>\*</sup>Portion of temp road construction for unit 10 would also be used for unit 101

HP - Hand Pile (and burn); MBF - Thousand Board Feet; YTA - Yard Tops Attached; CCF - Hundred Cubic Feet; GP - Grapple Pile; BCB - Broadcast burn

Table 6. Alternative 5 – Modified Summary

	Unit of Measure	Alt. 5
Thinning	Acres	721
Regeneration Harvest	Acres	30
Total Harvest Area	Acres	751
Estimated Timber Volume	MBF	11,716
Ground	Acres	218
Skyline	Acres	413
Helicopter	Acres	120
Haul Road Maintenance	Miles	56.57
Reconstruction	Miles	29.75
Road Closures	Miles	1.25
Temp. Road Construction	Miles	3.02
Temp. Road Reopening	Miles	0
Helicopter Landings	Number of	7
All landings (Heli+Skyline+Ground)	Acres of	19
Hand Pile and Burn	Acres	26
Grapple Pile and Burn	Acres	167
Yard Tops Attached	Acres	20
Broadcast Burn	Acres	59
Total	Acres	272

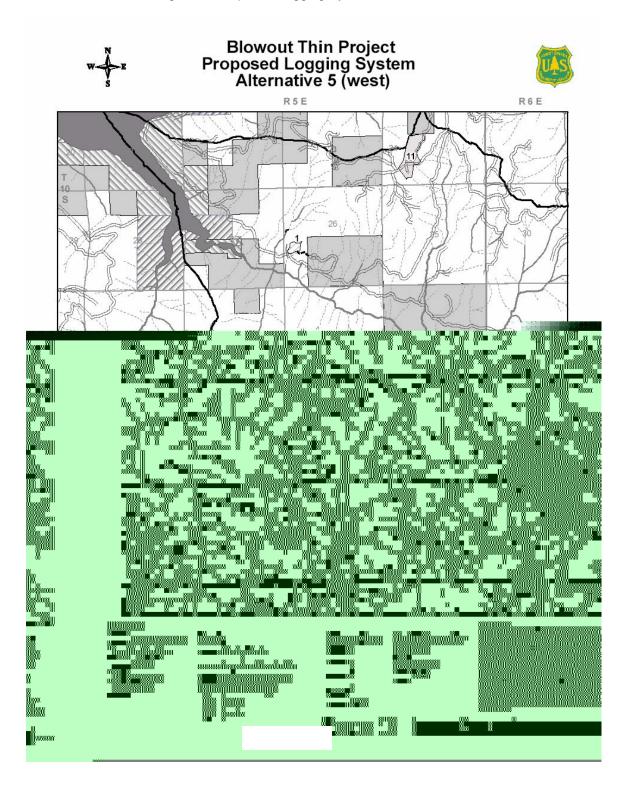


Figure 1. Proposed Logging System for Alternative 5

Blowout Thin Project Proposed Logging System Alternative 5 (east) 516 ATTENTION
This product is reproduced from geospatial information prepared by the U.S. Department of Agriculture Forces Service. GIS data and product accuracy may vary. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forcest Service reserves the right to correct, update, modify, or replace GIS products without notification. For more information contact the Wilamette National Forest Supervisors office 04/11/2006 Legend Project Area Bndy Roads Stream Class Non FS Ownership Logging System COE === Existing Roads ground /// FSCOE -- Temp Road Construction PVT helicopter helicopter = Reopening of Temp Roads skyline Helicopter Landings Logging Service

Figure 2. Proposed Logging System for Alternative 5

Blowout Thin Project Road Maintenance, Reconstruction, and Closures Alternative 5 R5E R6E S Legend ATTENTION
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accurate only at certain scales, based on modeling or
interpretation, incomplete while being created or
revised, etc. Using GIS products for purposes other
than those for which they were created may yield
inaccurate or misleading results. The Forest Service
reserves the right to correct, update, modify, or replace Blowout Thin Project Area Reconstruction Proposed Road Closures Major Roads Rock Source Maintenance 0.5 0 contact the V Miles - Lakes and Perennial Streams

Figure 3. Alternative 5 Road Maintenance, Reconstruction, and Closures

## **Appendix B – Blowout Thin EA Response to Comment**

#### Introduction

The Environmental Assessment was available for public review and comment from December 4, 2006 to January 3, 2007. Two written comments were received during the comment period: one from Oregon Wild, another from the American Forest Resources Council.

Public responses submitted on the Blowout Thin EA were documented and analyzed using a process called content analysis. This is a systematic method of compiling and categorizing all of the public viewpoints and concerns submitted during the official comment period for the EA. Content analysis helps the Forest Service identify issues and concerns with the Environmental Assessment and helps the decision maker arrive at an informed decision.

## I. Process and Planning

**Comment #1:** Alt 4 is more to our liking: because it focuses on thinning young stands and avoids regen harvest and temp road construction, while still producing 9.2 mmbf. (letter #1)

**Response:** All five alternatives were analyzed in the EA and considered in the decision. For the reasons outlined in this Decision Notice, Alternative 5 – Modified was selected.

**Comment #2:** AFRC is concerned with the number of seasonal and wildlife restrictions that make timber sales difficult to complete within contract timelines. Fire restrictions on top of seasonal and wildlife restrictions can often limit workdays to 4-5 hours. This becomes a larger issue when helicopter logging is required. On the Detroit RD, recreation restrictions for helicopter logging and often very dense fig conditions in the winter make logging very difficult. AFRC would like for sales to allow winter harvesting on improved roads or allow for roads to be improved so winter harvesting can be accomplished where possible. (letter #2)

**Response:** Some restrictions (e.g., fire and wildlife) are unavoidable. The Blowout project and Alternative 5 – Modified have attempted to minimize the restrictions placed on the project while providing the necessary measures to mitigate the effects of the proposed actions.

#### II. Alternatives

Comment #3: It is an indication that the range of alternatives was not very diverse when the effects of preferred alternative 5 is described as "similar to alternative 3," which is in turn described as "similar to alternative 2." (letter #1)

**Response:** For some components, the alternatives are indeed similar. However, the alternatives differ in a number of important ways (e.g., logging systems, temporary road construction and reopening, regeneration harvest). The significant issues identified for the project (see Chapter 1 in the EA) were used to develop the range of alternatives.

#### III. Silviculture

Comment #4: Regeneration harvest is unneeded. The alleged "problem" being address by regeneration harvest of nine areas totaling 59 acres, from a landscape perspective, actually represents habitat diversity. Small pockets of "stagnant" forest with high levels of suppression mortality actually provides habitat for a wide variety of species. Regeneration harvest will just create more of a habitat that is already over-represented on non-federal lands. The matrix standards & guidelines do not require the FS to maximize fiber production on matrix lands. The EA says that MA14 lands are to be managed to produce an optimum sustained yield of timber based on the growth potential of the land, but MA14 is trumped by the Matrix land allocation in the Northwest Forest Plan and there is no direction to maximize timber production in the NWFP. In fact, the matrix is a place where ecological and timber production are to be balanced. Alt 4 yields over 9 mmbf, and clearly allows the Forest Service to adequately meet the timber objectives of the matrix land allocation. (letter #1)

**Response:** As discussed in the EA (Chapter 3, pp. 5-9), stand-specific data was considered in the silvicultural treatments that prescribe regeneration harvest. In the opinion of the district silviculturist, some stands will not respond to thinning.

The intent (and desired outcome) of the Blowout project is not maximize silvicultural and timber production objectives. There are however, legitimate forest health considerations that call for regeneration harvest. Presumably the comment takes issue with regeneration harvest and the elimination of "small pockets of 'stagnant' forest with high levels of suppression mortality." No cut areas—including those in riparian reserves—will provide these pockets of dead and dying trees.

There is no evidence provided that regeneration harvest will provide more of a habitat that is over represented nor is there any mention in the comment as to whether this type of habitat is adequately provided on federal lands.

**Comment #5:** The young stand thinning prescriptions should be as variable as possible and should retain significant dead wood elements in order to achieve the greatest habitat diversity. (letter #1)

**Response:** As discussed in the EA (Chapter 2, p.35), the thinning prescriptions included for this project will provide intra-stand variability through a number of means including spacing adjustments for logging systems, mitigations for special habitats, and post-harvest planting of minor species in created openings.

# **Water Quality**

Comment #6: Thinning in riparian reserves must carefully analyze the trade-off between long-term value of large trees and the short-term loss of wood volume that is being "captured" and removed. Contrary to common assumptions, thinning is not a zero sum game. The wood that is removed is not replaced for decades, and if a disturbance event comes along during that time, the absolute volume of wood recruited to streams WILL be adversely affected. To better balance these competing values, the Forest Service should retain more trees (dead or alive) near streams. (letter #1)

Comment #7: AFRC would like to see the Detroit RD use more thinning treatments inside the Riparian Reserves. Many other National Forests are prescribing small, no cut buffers (50 feet) to be left to maintain stream temperatures. Thinning inside the Riparian Reserves achieves the management objectives of moving them faster into late seral habitat. We encourage the Detroit RD to take a serious look at more of these types of riparian thinning to accelerate the development of desired riparian conditions. The larger no cut buffers on the Blowout Thin project increase unit costs and does not help to achieve the management objectives of the Riparian Reserves. (letter #2)

Response: Thinning within the Riparian Reserve is only to be done to obtain the Aquatic Conservation Strategy Objectives. These objectives are varied and require site specific evaluation. The Blowout Thin prescriptions are just that: site specific and designed to obtain the ACSO. These prescriptions range from 25 feet to 172 feet depending on site characteristics and benefits to aquatic and terrestrial resources found within the reserve. They evaluate all components needed to restore and maintain the health and viability of the site and landscape riparian area while meeting the Water Quality Management Plan as agreed to by the State of Oregon to restore the water quality of the area. With these site specific prescriptions, it is anticipated that all components of the riparian reserve: stand health, large wood for the stream, large wood for terrestrial, bank stability, shade, microclimate, wildlife habitat, bank stability and leaf litter recruitment, are accounted for in a way that meets physical, biological and economical objectives.

#### Fire and Fuels

Comment #8: The EA should NOT attribute ANY fire control benefit to these treatments because the local fire regime is characterized as infrequent and high severity, so (a) even after treatment there will still be plenty fuels on site to carry stand replacing fire, and (b) even if there was a brief fuel hazard effect, the probability that any given stand would be visited by high severity fire during the brief time period that fire hazard was reduced is very very small. It's is more likely that logging activities will start a fire when slash and heavy fuels are present than a natural high severity fire will occur during the brief period of reduced fuels.

The EA is rife with misinformation about fire. Fire is a not a bogeyman, and in the highly unlikely event of fire, this project won't have any measurable beneficial effect, nor will "no action" have any negative effect. The EA is especially lacking a probabilistic analysis of the likelihood of fire during the brief period of altered fuels. (letter #1)

**Response:** The EA (Chapter 3, p. 58) discusses that as a result of active fire suppression in the past it would be reasonable to conclude that many of the stand replacing fires have been minimal. Although the Blowout Thin area is a FRCC 1 and not outside the historical range of variability for fire interval the susceptibility to fire should be tempered with the current fuel profiles which are above standards and guides under the Willamette National Forest Plan. The elevated risk to large fires due to fuel continuity and arrangement that are present across the landscape and evident in photos 1, 2 and 3 documented in Chapter 3 p. 10.

The EA (Chapter 3, p. 60) discusses that fire events occur when a combination of weather and fuel factors create optimum conditions. Due to the large numbers of roads and

managed stands within the watershed fire suppression forces have had increased access and are able to suppress smaller fires that may have gotten larger.

**Comment #9:** Future fires do not really reduce instream large wood, but salvage logging does. Fires consume mostly small wood, whereas salvage captures and removes mostly large wood. The kind that streams need.

**Response:** It is well documented that low intensity fires do not reduce large wood and usually consume small wood. A more intense stand replacing fire will however consume larger fuels if the fuel moistures are low enough..

**Comment #10:** Hydrophobic soils are also not usually a concern because the phenomena is limited in spatial scope and is usually quickly broken up by seasonal rains.

**Response:** No disagreement with the statement. The potential for hydrophobic soils are discussed in the Hydrology section in Chapter 3.

**Comment #11:** The EA failed to recognize that thinning is just as likely to make fire hazard worse instead of better, because thinning opens the canopy and makes the stand hotter, dryer, and windier.

**Response:** The EA (Chapter 3, p.61) under Alternatives 2, 3, 4 and 5 (Effects of Thinning Treatment) discusses that proposed thinning would open stands creating canopies that are less susceptible to fires by treating ladder fuels and surface fuels to reduce opportunities for fire spread and intensity. The discussion continues to talk about the decomposition rates of activity generated fuels and the amount of risk that fire management is willing to take and still be within Willamette National Forest Plan Standards and Guides.

#### Wildlife

Comment #12: The EA says that thinning will result in large snags sooner, but this fails to recognize that thinning both captures mortality and removes it from the site, and thinning increases vigor of the remaining trees which delays their recruitment as snags. Thinning has adverse impacts on snag habitat and LWD recruitment to streams and soils. In order to better mimic natural disturbance the Forest Service should leave more dead wood behind. (letter #1)

**Response:** Chapter 3, Environmental Consequences – Stand Health, Growth and Vigor, pages 11-12 discusses the reduction in mortality resulting from thinning. Also discussed are the growth rates of unthinned, thinned and regenerated stands. Stand diameters over time are listed for existing and treated stands in Table SH-3 on pages 12-13. Additional relevant information continues on pages 14-16.

In Chapter 3, environmental consequences – snags and downed wood, pages 74-80 also address your concerns.

Thinning does have an adverse impact on the smallest diameter trees in the stand which are dying from competition related stresses. Thinning does not have an adverse impact on snag habitat and large woody debris as you stated, thinning has the opposite effect.

The stands being thinned are of inadequate diameter to provide large diameter dead wood. Over time large wood will become available faster with thinning than will be produced by natural processes. Delaying recruitment means larger trees will be recruited into the ecosystem than in stands where recruitment is relying on natural processes of stress induced mortality of the smallest trees.

The comment mentions the mimicking of natural disturbance in these stands by leaving more dead wood. Natural disturbance is usually fire induced mortality from stand replacing fires. Another form of natural disturbance is insect induced mortality from attacks to competition stressed trees or blow down in the area creating a source of insects which attack adjacent stressed trees. Natural processes in untreated stands take decades longer than treated stands to create large diameter trees which then provide LWD when killed by natural disturbance events.

Comment #13: Stands over 80 years old should be surveyed for red tree voles using techniques that will confidently determine the presence or absence of the species, i.e. not just ground transects. The RTV survey protocol is prone to false negatives and is known to miss a significant number of active red tree vole sites, therefore violating the 2001 ROD requirement that survey protocols "confidently" determine species' presence/absence. The Forest Service must follow the 2001 S&M ROD. As confirmed by recent court rulings, any subsequent amendments to survey and manage requirements adopted after the 2001 ROD that were not adopted pursuant to NEPA and NFMA procedures must be disregarded.

The fact that the agency found so few Red tree vole nest is highly suspect. The protocol says that Red tree vole populations tend to be clumped (protocol at page 3). They appear to be a colonial or semi-colonial species that move from nest to nest over the course of several weeks. (protocol at page 7). Red tree vole "sites" are made up of groups of active and inactive Red tree vole "nests."

The fact that the agency found so few Red tree vole nests, and the fact that the EA contains no evidence that they followed the 2/18/00 protocol or performed the intensive search 100 meters around the known Red tree vole nest(s) is grounds for redoing the Red tree vole surveys to finally determine the extent of the Red tree vole site in this sale area. (letter #1)

**Response:** As disclosed in the EA, red tree vole surveys were conducted in fall 2006 according to regional protocol (version 2). Although a number of nests were detected, none were found to be active.

The recent court rulings you refer to are not related to survey protocols. Survey protocols are developed using the best available science to provide a consistent approach to locating the target species. As stated in the protocol the modified line transect methods do not assume 100 percent detection but are based on a modified detection function approach. Approximately 68% of each acre surveyed will be covered by the line transect method. The protocol also recognizes that in some stands where old growth conifers are present detection may be difficult and additional climbing may be needed to locate red tree vole nests.

Inactive red tree vole nests were located during transect surveys. Red tree vole experts, including Eric Forsman from Oregon State University, visited these sights and climbed additional trees in the stands proposed for treatment and adjacent stands in an attempt to locate active nests. No active nests were located in habitat in or adjacent to units which had inactive red tree vole nests.

Comment #14 AFRC would lie to voice some concerns with the project's influence to elk habitat. The Willamette National Forest may not be using the best available science to inform decisions that influence deer and elk habitat. The Wisdom model may be outdated as more current elk habitat models are more effective at evaluating the habitat needs of elk. The Wisdom model overstates the need to enhance thermal cover; more recent research (e.g., Cook and Irwin [1995] and Wisdom and others [2005]) has found that thermal cover is not as important as previously thought and it is far less important than providing quality and quantity forage for elk populations.

AFRC would like to see the Detroit Ranger District take a more aggressive approach to create foraging opportunities in elk emphasis areas. At a minimum, AFRC would like to suggest the use of multiple small patch cuts (3-5 acres) to provide early successional habitat for species such as Columbian black-tailed deer and Roosevelt Elk. (letter #2)

**Response:** The Forest established the current model to assess effects on big game habitat in the 1990 Willamette Forest Plan. We also recognize the pitfalls in establishing a model as a standard and guideline rather than the management direction to which an appropriate model can be applied as a tool. This is an issue that is more appropriately addressed at the programmatic, not project level.

# **Transportation**

**Comment #15:** Temporary roads are temporary in name only. The impacts on soil and watershed quality linger for long periods of time. (letter #1)

**Response:** Two of the action alternatives include temporary road construction and reopening. The soil and water effects of temporary roads are disclosed in Chapter 3 on pp. 21 - 41 and 127 - 137.

**Comment #16:** The use of temporary roads to facilitate the use of traditional harvesting systems may often be needed but use of these temporary roads will increase the revenue by excluding the use of helicopter yarding. These temporary roads can always be removed or made inaccessible to vehicles after logging operations. (letter #2)

**Response:** In some cases it may be prudent to build or reopen temporary roads to access the timber. In other cases, the environmental trade-off may be too great and helicopter logging may be needed. Alternative 5 – Modified looked to provide a good balance of environmental protection and economic feasibility.

# **Logging Systems/Economics**

**Comment #17:** AFRC would like to see all timber sales be economically viable. Traditional harvesting systems (ground-based or skyline) should be used when possible to

achieve an economically viable sale and increase the revenue to the government. Aerial yarding is extremely costly and should only be used in situations where unique environmental concerns render conventional logging systems not an option. We are happy to see that effort has been made in the alternatives on this project to limit the helicopter logging on this project. AFRC encourages you to select an alternative that minimizes helicopter use. (letter #2)

**Response:** One of the significant issues identified for the project is the economic viability of the timber sale. A rationale for selecting Alternative 5 – Modified is that it minimizes the use of helicopter logging thereby providing an economically viable timber sale.

#### **Comment Letters**

The comment letters listed here are directly addressed in the preceding response to comment. Two comments letters were received for the Blowout Thin project. Both comments were read and addressed in the response to comment.

- #1 Doug Heiken, Oregon Wild
- #2 Jacob Groves, American Forest Resource Council

# **Appendix C – Errata to the Environmental Assessment**

- 1. Cover page: Project is in Linn County, not Lane County
- 2. Chapter 2, Table 2.8, p.38 Under "Jobs provided in logging" and "Jobs provided in sawmills," the figures for Alternative 3 and 4 are reversed. The two lines of the table should read as follows (changes are in bold):

	Unit of Measure	Alt.1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
	Impacts to the Local Economy					
Jobs provided in logging (3.5 jobs per MMBF)	Number of	0	38	38	32	38
Jobs provided in sawmills (4.0 jobs per MMBF)	Number of	0	44	44	37	44

- 3. Chapter 3, p. 159 "List of Appendices" There is no Appendix F "Big Game Effectiveness." This information was brought into the EA and can be found on pp. 72-73 (Table WL-3).
- 4. Chapter 1, p. 14 "Public Involvement" "Grand Rhonde" should be Grand Ronde and "Chandra La Gue" of ONRC should be Chandra LeGue.