Decision Memo

Crossings Fuels Reduction Project

USDA Forest Service

Bend-Fort Rock Ranger District, Deschutes National Forest

Deschutes County, Oregon

T 22 S., R 11E. Sections 5, 7, 8, 17 & 18 and in T 21 S., R 11 E. section 32

Decision

I have decided to reduce hazardous fuels within the Wildland Urban Interface (WUI) in the area described below and known as the Crossings Fuels Reduction Project. The project will reduce the risk of crown fires by changing the continuity of surface, ladder and canopy fuels within the forest using a variety of treatment methods. The results of this project will be an area adjacent to urban development and high value resources where alterations in fire behavior may improve firefighter safety and ability to control a wildfire should one occur, and reduce the potential for a high-intensity fire with subsequent adverse effects on forest resources. Treatments will include a combination of mechanical surface fuels treatments and commercial and non-commercial tree thinning on a total of 998 acres. Removal of hazardous fuels will include all size class of trees up to 21 inches diameter-at-breast-height (dbh) (See map page 8). Use of wildland fire (prescribed underburn) for fuel reduction was not included in this decision due to the amount and configuration of the current hazardous fuels, susceptibility of the lodgepole pine to mortality, and the proximity to urban development and the BPA power lines, however burning of slash piles will occur. This action is categorically excluded from documentation in an Environmental Assessment or Environmental Impact Statement. In accordance with Forest Service policy, this project was developed collaboratively with the Greater LaPine Community Wildfire Protection Plan Steering Committee, and was subject to a 30 day notice and comment procedure.

Location

The project area is located adjacent to the Newberry Estates Subdivision in LaPine Oregon in T.22 S., R 11E., sections 5, 7, 8, 17 and 18 and in T 21 S., R 11 E., Section 32 Willamette Meridian. (See Vicinity Map)

All activities are located within General Forest (Management Area 8) and Scenic Views (Management Area 9) Management Areas as described in the Deschutes National Forest Land and Resource Management Plan (Forest Plan). The Scenic Views Management Area, partial retention foreground, within the project area is ¼ mile along both sides of Forest Service Road 20, and the remainder of the area is within the General Forest Management Area. The entire project is within the Wildland-Urban Interface (WUI) identified in the Greater La Pine Community Wildfire Protection Plan (CWPP) signed December 2005. The Newberry Estates subdivision is identified as a first priority neighborhood community for managing hazardous fuels in the Greater LaPine CWPP.

Purpose and Need for Action

In the WUI as described in the Greater LaPine CWPP, the goal is to greatly reduce the chance of crown fires and reduce surface fuels, especially adjacent to residences. Hazardous fuels consist of live or dead vegetation including woody debris, grass, forbs, shrubs, and trees that contribute to one or a combination of risks for high intensity wildfire and rate of spread. Surface fuels are those flammable fuels including grasses, forbs, down wood, needles, and duff. Surface fuels carry fire along the ground and ignite the higher ladder fuels. Ladder fuels are small trees, shrubs, and lower branches on larger trees that enable a ground fire to leave the surface and burn into the crowns of larger trees. Crown fuels are the upper crowns of trees which, when above certain density thresholds, can burn as a continuous fuel layer or with lower

densities will burn only as individual trees from adjacent ladder fuels. The reduction of fuels will create conditions where wildfire will burn at lower intensities, reduce the production of embers, lessen the damage to the ecosystem from intense wildfire, and create conditions where firefighters can safely and effectively control wildfires. Treatments will reduce the risk of wildfire in close proximity to private land within the WUI.

The current condition in the Crossings area is a mix of forest conditions with trees 60 to 70 years old. The stands are dominated by lodgepole pine with some ponderosa pine throughout except in low lying areas. Stands which have been thinned previously are open overstory ponderosa pine with a lesser amount of lodgepole pine. The understory is a continuous shrub and forb layer, dominated by bitterbrush averaging 18 inches to 2 feet high intermixed with established lodgepole and ponderosa pine seedlings. These stands have little chance of crown fire, but the bitterbrush and sapling understory could maintain a fire in high fire conditions, which could cause ember spotting and mortality to the overstory trees.

The stands which have not been previously thinned in the Crossings area are dominated by pole size (5 to 12 inches (dbh)) trees through the stands. Ponderosa pine is present, but tends to be less prominent in areas of high tree stocking levels. Dead and down mountain pine beetle mortality in the lodgepole pine has built up dense fuels in some areas. These down fuels along with bitterbrush and seedlings increase the risk for these fuels to initiate and maintain a crown fire during high fire conditions. The crown canopies in these stands are dense enough to sustain a crown fire.

Proposed Action

The proposed activities include the combined use of mechanical shrub treatment (MST) and ladder fuel reduction (LFR) (includes non-commercial thinning) on about 460 acres, MST only on 37 acres, and commercial thinning from below (HTH) with non-commercial thinning and mechanical shrub treatment on about 501 acres in combination with these treatments. Slash (activity fuels) will be hand piled where surface fuels levels remain dense following proposed treatments. Hand piling is estimated to be needed on about 530 acres. In areas where crown canopies are dense and fuel loads are heavy, commercial thinning from below will be used to reduce canopy density and overall fuel loading if these trees are in excess of stocking needs. Trees that are more fire resistant will be favored to be left. These include the largest diameter trees and ponderosa pine whenever present. The project is expected to include, as a byproduct of the fuels reduction, a commercial timber sale of approximately 750 thousand board feet of wood fiber.

Proposed treatments may be accomplished using a variety of techniques and equipment that will accomplish the management objectives. It is most likely that these treatments will be accomplished using a mechanized feller-buncher or hand falling and whole tree yarding to remove trees from the stand including tops and branches. Grapple skidders may also be used to remove the logs to landings where they will be processed for hauling. Some building of temporary roads may be needed to access areas further from system roads. This will be followed by thinning of non-commercial trees (probably by hand, possibly by mechanical means through the timber sale contract) hand piling of non-commercial fuels in skid trails and landings, burning the piles and mechanical shrub treatment to reduce the fuel depth. Mechanical shrub treatment will utilize a small tractor, or a small tracked vehicle, with an attachment for mowing or grinding to reduce shrubs and small trees to eight (8) inches in height above the ground level. Tractor attachments may also include a tree shear for the three to six inch diameter trees to be grouped in an area for possible utilization. Implementation monitoring has shown that this type of treatment does not cause compaction or displacement that would qualify as detrimental soil condition (Soils Report project file). Temporary roads will be subsoiled and landings and major skid trails will be subsoiled where needed to meet Forest Plan Standards and Guides on an estimated 13.2 acres (see soils mitigation measures).

The following table shows the rationale for the selection of specific treatments within the Crossings project area.

Table 1 Purpose of Proposed Treatments

Purpose of Proposed Treatment	Effect on Fire Behavior	**Proposed Treatments**	Proposed Treatment Units	Acres of Proposed Treatment Unit
Reduce Surface Fuels	Reduces potential flame length	MST machine shrub treatment (mowing)	All Units	998 acres
		HP hand piling of excess fuels in units.	1, 2, 6, 8, 9, 11, 12, 13, 15, 16, 18, 19, 22, 26,	530 acres
Increase distance between ground vegetation and live crown of trees	Requires longer flame length to begin torching, reduces potential for individual tree torching	LFR ladder fuel reduction (pre commercial thinning)	All units except 36	961 acres
Decrease crown density while retaining big trees of resistant species	Makes tree to tree crown fire less probable, reduces crown fire potential. Less mortality for same fire intensity, restores historic structure	HTH Thin from below. Leave largest ponderosa pine then largest diameter lodgepole pine.	1, 6, 8, 9, 11, 13, 16, 18, 22, 34, 35	501 acres

Project Design Criteria and Mitigation Measures

Commercial Thinning

The proposed treatment with commercial removal will be thinning from below leaving the largest ponderosa pine. Ponderosa pine larger than 5 inches dbh would be left in preference to lodgepole pine. Trees within 35' of ponderosa pine larger than 18" would be cut. Trees within 25' of the largest ponderosa pine 5-18" would be cut. Lodgepole pine and saplings would be spaced 20' from each other.

In areas where commercial treatment would occur, 10-15% of each unit would be left untreated. These retention areas would be located to accommodate the needs of wildlife movement and use. Retention areas would not be located in the following: within 100 feet of Newberry Estates or the LaPine Cemetery, within 200 feet of the BPA powerline and within 200 feet of roads adjacent to the Forest Service boundary on the west side of the project (includes roads 020, 300, 350, 400, 490).

Mowing

The degree of mowing would vary depending on its proximity to private land and roads needed for fire suppression (i.e. BPA powerline and roads that occur immediately adjacent to the Forest Service boundary). Mowing within 100 feet of Newberry Estates and the LaPine Cemetery would retain 0-10% shrubs. Mowing within 100-400 feet of these areas, plus within 100 feet west and 200 feet east of the BPA powerline road, and within 200 feet of roads adjacent to the Forest Service boundary would retain 10-20% of the shrubs. Mowing outside of these areas would retain 20-30% of the shrub component. These retention areas would be left in patches scattered across the units.

Mitigation Measures

Scenic Views

With the objective to meet Forest Plan standards for Scenic views timing of clean-up activities and desired views conditions.

In Scenic Views, foreground areas along the 20 road will have stumps cut less than 6 inches in height and activities will be completed within two years. A denser thinned screen adjacent to the power substation will be left to reduce the visual impacts of that sight for visitors.

Invasive Plants

With the objective to implement the strategy for the prevention of invasion of noxious weed as found in the 2005 Region 6 Invasive Species Record of Decision. Precautions taken to prevent any weed parts or seeds from spreading into the project area will be used and include:

Ensure that all road-building equipment is free from mud, dirt, and plant parts prior to moving onto the project (Standard #2 2005 Region 6 ROD Preventing and Managing Invasive Plants).

Clean all equipment before entering and after leaving National Forest System lands. Remove mud, dirt, and plant parts from project equipment before moving it into project area and before proceeding to the next project. (Standard #2 2005 Region 6 ROD Preventing and Managing Invasive Plants)

Ensure that Ogden Group Camp is treated for weeds, especially at the water intake area if used for as a water source for equipment operations or fire protection.. This treatment is covered under the 1998 Deschutes National Forest Noxious Weed EA.

Soils

With the objective to reduce displacement and compaction damage to soils by limiting the amount of surface area covered by logging facilities, and limiting equipment operations to specified areas and ground conditions. Options include:

- Commercially thinned units will have any temporary roads reclaimed
- Maintain spacings of 100 to 150 feet for all primary (main) skid trail routes except where converging at landings
- Restricting skidders and tractors to designated areas (i.e., roads, landings, designated skid trails), and limiting the amount of traffic from other specialized equipment off designated areas. Harvester shears will be authorized to operate off designated skid trails at 30 foot intervals and make no more than two equipment passes on any site-specific area to accumulate materials.
- Avoid equipment operations during times of the year when soils are extremely dry and subject to excessive soil displacement.
- Avoid equipment operations during periods of high soil moisture, as evidenced by equipment tracks that sink deeper than during dry or frozen conditions.
- Operate equipment over frozen ground or a sufficient amount of compacted snow to protect mineral soil. Equipment operations should be discontinued when frozen ground begins to thaw or when there is too little compacted snow and equipment begins to cause soil puddling damage (rutting)

With the objective to protect or maintain the quality of soil properties and shallow rooted vegetation by continuing equipment operations to locations and conditions that are less susceptible to soil puddling and compaction damage. Confine equipment impacts to designated areas that can be mitigated following harvest and post-harvest activities.

If winter logging option is not used, locate designated skid trails and log landings on well-drained sites, upslope from potentially wet areas. In Units 1, 6, 8, 11, 13, 16, 18, 22, 26, and 34, mechanized activity will remain out of swales and depressions where there is potential for seasonal high water table.

With the objective to reduce the extent of detrimentally disturbed soil to meet management objectives. Restore and stabilize detrimentally disturbed soils prior to seasonal runoff events. To bring current detrimental conditions over 20% and units where treatments may cause a detrimental condition over 20% of the area to levels below that threshold.

Reclaim primary logging facilities in portions of the following activity areas 8 (1.6 ac.), 9 (5.3 ac.), 13 (0.7 ac.), 18 (4.6 ac.), 19 (0.3 ac.), and 35 (0.7 ac.) which are expected to exceed allowable limits of detrimental soil conditions following mechanical treatments. Options for mitigating the effects of project activities include the use of subsoiling equipment to loosen compacted soils on temporary roads and logging facilities, redistributing humus-enriched topsoil in areas of soil displacement damage, and pulling available slash and woody materials over the treated surface to establish effective ground cover protection.

Cultural Resources

With the objective to protect and maintain the ability to interpret cultural resources in place.

All inventoried cultural properties will be avoided during project implementation. Cultural properties found during implementation would be protected through the use of contract clauses and consultation with archeological specialists

Wildlife

Management activities should be tailored to provide habitat diversity including horizontal, vertical and vegetative species diversity necessary for the maintenance of these wildlife species (deer, elk, woodpeckers, and songbirds can serve as indicators) at the appropriate population levels. The horizontal diversity is of primary importance to deer and elk , while vertical diversity is of primary importance to cavity dependent wildlife species as well as songbirds, which require a variety of tree sizes for nesting, perching, and feeding.

The following mitigation measures and project designs are to meet Standards and Guidelines described above:

Shrub Habitat

With the objective to provide shrub retention necessary to provide a seed source for shrub re-establishment, movement of ground nesting birds as well as maintaining nesting habitat, foraging habitat for deer during the migration periods, bat prey species habitat (moths), as well as habitat for chipmunk and ground squirrels. The untreated acreage would be distributed in a mosaic of islands of untreated shrubs, varying in size from 0.1 - 10 acres (depending upon the size of the area and the percentage to be left). Include logs and rock outcrops within untreated patches such that, where possible, these key features retain no-treatment buffers of at least 25-50 feet. Spacing between 5-10 acre islands would be about 300 ft and would generally not exceed 1000 feet. Spacing between the smaller islands (less than 5 acres) would be less than 300 feet to capture key features.

●Mechanical shrub treatments will occur adjacent to the subdivision, private land, and specified roads at a 6" height minimum. Retain the following percentages in untreated islands:

Newberry Estates

Retain 0-10% of the shrubs within 100 feet.

Retain 10-20% of the shrubs within 100-400 feet.

Retain 20-30% of the shrubs outside of 400 feet.

Improved Order of Redmen Cemetery

Retain 0-10% of the shrubs within 100 feet.

Retain 10-20% of the shrubs within 100-400 feet.

Retain 20-30% of the shrubs outside of 400 feet.

BPA Powerline Road (areas outside of Newberry Estates and Cemetery retention areas)

Retain 10-20% of the shrubs within 100 feet west of the powerline road.

Retain 10-20% of the shrubs within 200 feet east of the powerline road.

Shrub retention outside of these areas would be 20-30%.

Roads adjacent to BLM/Forest Service Boundary (areas outside of Newberry Estates and Cemetery retention areas)

Retain 10-20% of shrubs within 200 feet of these roads.

Shrub retention outside of this area would be 20-30%.

Snags/ Course Woody Matereial/ Green Tree Replacements

With the objective to provide habitat for primary and secondary cavity nesters as well as coarse wood dependent mammalian species, maintenance of snags, CWM, and GTRs is necessary. The snags and CWM can be randomly distributed over the unit, in clumps, singles, and not met in every acre but totaled for the combined acreage. The Crossings Project area does not specifically target snags or CWM for removal. The overall project design is to reduce the density of understory green trees on national forest lands near and adjacent to a wildland urban interface for the purpose of lowering fire risk.

For snag and CWM dependent species, the goal is to provide habitat for these species that has been outlined in the best available science, which is now DecAid. The goal is to attempt to maintain levels of snags and CWM that coincide with those in DecAid. The Crossings project area barely provides habitat at the 30% tolerance level for cavity nesters and is very inadequate in providing CWM for species dependent upon this habitat. The mitigation measures described below have been incorporated into the project design to retain snags and down wood and minimize snag loss.

- Retain all existing snags as supplemental wildlife trees for roosting and foraging except when they pose a hazard, conflict with other resource protection, or compromise project logistics (Wildlife and Log Implementation Strategy, LRMP Standard WL-38). The following should be the minimum:

- In lodgepole pine PAGs, leave an average of 4.0-4.5 snags per/acre. Snags should be selected based on the following criteria: >12" dbh and > 20 feet in height, the tallest trees preferred. If >12" dbh trees are not available prior to harvest activities, select among the largest available.

- Ponderosa Snags: Sufficient trees to serve as green tree replacements would remain in the units following harvest and post sale activities. Retain all ponderosa pine snags >16" dbh. If 4 ponderosa pine snags per acre >16" dbh do not exist, retain those of the largest available.

- Logs would not be salvaged unless they are in concentrations excess to wildlife and soils needs. The following would be a minimum as described in the Eastside Screen:

Forest Type	Pieces/acre	Diameter small end	Piece length & Total Lineal length
Ponderosa pine	3-6	12"	>6 ft., 20-40 ft.
Lodgepole pine	15-20	8"	>8 ft., 120-160 ft.

- Decay class 1 and 2 down logs would be left, preferably the entire tree. CWM in advanced stages of decomposition would be left in all harvest units where available.

- Maintain a 25-50 foot no treatment buffer around all logs associated with mechanical shrub treatments.

• In harvest or thinning units where mechanical or hand slash piles are being created, and where existing CWM is below eastside screen levels, leave 1 slash pile per acre or slash concentration post-treatment to supplement qualifying logs (displayed in above table). These slash piles should be approximately 100 - 200 sq. feet (10-15 feet in diameter). These piles would be signed to ensure they are retained. If some units do not have machine piling or hand piling, pile retention would be on a site-specific basis. In defensible space units, if piling occurs, the piles would not be retained in urban interface boundaries, and would not be left within 200' of defensible roads. Piles would not be left within a 300' view of roads containing scenic views allocations or houses and would not be left at landings. Designation of pile locations would be coordinated between a landscape architect, fuels, and wildlife personnel.

•A minimum of 10% (a goal of 10-15%) of each harvest unit would be retained untreated for wildlife habitat. To maintain a high density of snags and CWM, place these areas where higher densities of this habitat occur.

Raptors

With the objective to prevent disturbance and possible abandonment of nests the following will be followed. (No active Raptor nests were identified in the project area from surveys.)

•In the event that an active raptor nest site is located in the vicinity of the project area, the project biologist should immediately be notified so that the appropriate mitigation measures are adhered to. New active raptor nests would be protected from disturbance.

•Any active raptor nest found during management activities would be protected from disturbing activities within ¼ mile (l mile for the use of explosives) of the nest by restricting site disturbing operations during the following periods:

Northern goshawk	March1 – August 31 (WL-3)
Cooper's hawk	April 15 – August 31 (WL-19)
Sharp-shinned hawk	April 15 – August 31 (WL-19)
Red-tailed hawk	March 1 – August 31 (WL-3)
Golden Eagle	January 1 – August 31 (M3-15)

•Maintaining the forested character of an area at least 300 feet in radius around the nest would protect any new or active red-tailed hawk nest sites. While timber management may occur, maintain an average of at least 4 dominant overstory trees per acre suitable for nest and perch trees; ponderosa pine favored where possible.

•Determine the status of an old nest site within Unit-6 during the 2006 breeding season to determine if the site may be occupied.

Big Game

With the objective to offset the loss of hiding cover in the project area and disturbance from the high density of roads, a minimum of 10-15% of the units would be retained in untreated clumps, one half acre and larger, dispersed throughout the units (foaraging habitat should not be more than 600 feet from cover). The clumps should have no commercial or pre-commercial thinning or mowing. Clumps should include areas with high levels of coarse woody material and should be excluded from post-harvest fuels treatments. The following would occur adjacent to private and other public lands:

•No untreated clumps would be left within 200 feet of all roads bordering BLM lands.

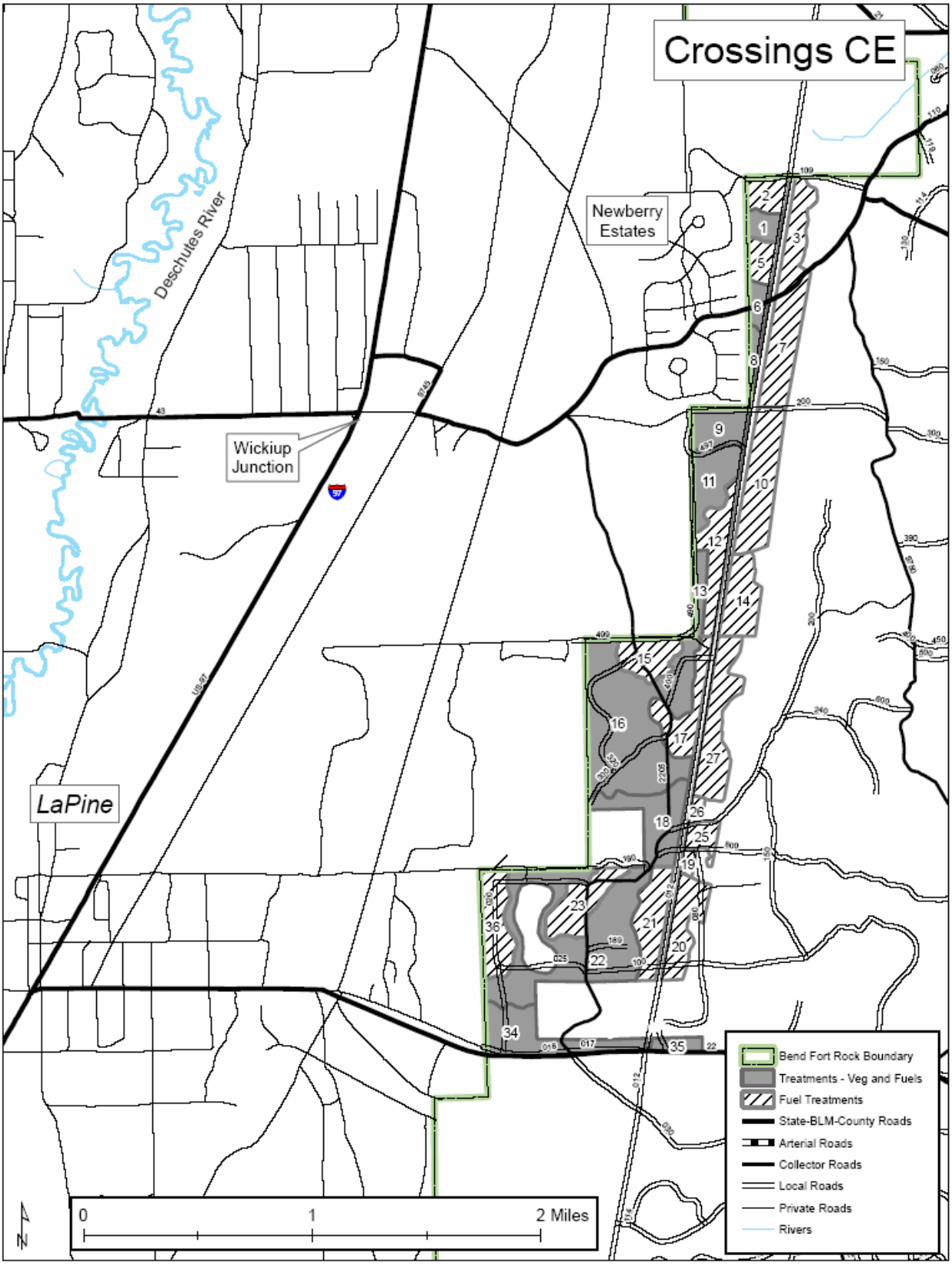
•Only 10% of units 1-3, 5-9, and unit 18 would be retained in untreated clumps to benefit fire management strategy. All other units would retain 10-15% in untreated clumps.

- Retention patches would be strategically located to mimic a corridor throughout the units, and placement and size (half acre or larger) should be worked out with the project wildlife biologist.

Woodpeckers/Cavity Nesters/Other Landbirds

> With the objective to avoid potential nest abandonment, nest destruction, and loss of broods for bird species that would nest within or immediately adjacent to the project area.

Do not conduct green tree harvest or mowing during the period April 1-August 15. Implement treatments where possible during fall, winter, and early spring (September through March). If the specified restriction period must be compromised, project activity at the beginning of the period (within the first month) would be considered.


Crossings CE
Newberry Estates
Deschutes River
Wickiup Junction
LaPine
Bend Fort Rock Boundary
Treatments - Veg and Fuels
Fuel Treatments
State-BLM-County Roads
Arterial Roads
Collector Roads
Local Roads
Private Roads
Rivers
0
1
2 Miles

Reasons for Categorical Exclusion

Proposals may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are within one of the categories identified in Forest Service Handbook (FSH) 1909.31.2, and there are no extraordinary circumstances related to the actions that may result in a significant individual or cumulative effect on the quality of the human environment.

Category of Exclusion

The appropriate category of exclusion is found in the Forest Service Handbook 1909.15 Section 31.2 Category 10. This category allows hazardous fuels reduction activities using mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres. These are limited to areas in wildland-urban interface; and condition classes 2 or 3 in Fire Regime Groups I, II, or III, outside the wildland-urban interface. This category of exclusion will be identified through a collaborative framework and be conducted consistent with agency and Departmental procedures and applicable land and resource management plans. This category also shall not be conducted in Wilderness areas or and shall not include the use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure and may include the sale of vegetative material if the primary purpose of the activity is hazardous fuels reduction.

Rationale

The activities proposed have been through a collaborative framework process as described in "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10-Year Comprehensive Strategy". The project is within the WUI as identified by the Greater LaPine CWPP. The CWPP was developed through collaboration and the CWPP steering committee was consulted with the development of the Crossings project with presentations at meetings and discussion of desired treatments. The steering committee responded to the proposed actions with a letter from Jim Gustafson, the LaPine fire chief. This letter was favorable towards the proposed action and wanted more.

Relationship to Extraordinary Circumstances

In determining the appropriateness of using the categorical exclusion, a determination of the potential impact to the resource conditions identified in FSH 1909.15 Section 30.3(2) must be made. The following is the list of the potential effects to the resource conditions from the project activities.

1. Federally listed threatened or endangered species or designated habitat or species proposed for federal listing or proposed critical habitat:

No federally listed threatened or endangered plant or aquatic species or their habitat occurs within the project area (Botany Biological Evaluation & Wildlife Biological Evaluation in project file).

2. Forest Service sensitive species:

Plant species – There are no sensitive plant species or high probability habitat within the project area.(Botany Biological Evaluation in project file)

Aquatic Species – There are no sensitive aquatic species or habitat within the project area. There are no wetlands, streams or lakes within the project area.

Wildlife Species – There are no sensitive wildlife species or habitat within the project area.(Wildlife Biological Evaluation and Report in project file)

3. Flood plains, wetlands, or municipal watersheds:

There are no floodplains, wetlands, or municipal watersheds within the project area.

4. Congressionally designated areas such as wilderness, wild and scenic rivers, and national recreation areas:

There are no congressionally designated areas within the project area.

5. Inventoried roadless areas:

There are no inventoried roadless areas in the project area.

6. Research Natural Areas:

There are no existing or proposed Research Natural Areas in the project area.

7. American Indian and Alaska Native religious or cultural sites, archaeological sites, or historic properties of areas:

Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this decision. A '*no properties affected'* determination was made. Consultation has occurred under the Programmatic Agreement with the State Historic Preservation Office (SHPO). All cultural sites will be avoided.(Cultural Resources Report and SHPO concurrence in project file)

Other relevant resource conditions considered

Scenic resource objectives for ponderosa pine foregrounds is to maintain or create a visual mosaic of numerous, large diameter, yellow-barked trees with stands of younger trees offering visual diversity and a sense of depth in landscapes viewed from travel routes. Old Growth characteristics, such as yellow, deeply fissured bark are desirable. Management emphasis will focus on leaving the largest diameter trees and the healthiest crowns and forms in every stand. Visual variety will be provided by leaving occasional gnarly, old overmature "character trees"(from S&G M9-4 & M9-6) Thinning from below and leaving the largest trees on the landscape perpetuates the desired condition in the visual corridor areas. Mitigation measures meet the timing of Cleanup Activities desired in the Forest Plan.

Invasive species – No known noxious weeds have been found in the project area. Prevention strategies are included in the project mitigation measures as found in the 2005 Region 6 Invasive Species Record of Decision..

The BLM is currently planning fuels reduction on adjacent lands they manage; and privately-owned adjacent lands will likely have fuels reduction treatments following direction in the Greater LaPine CWPP

Conclusion

Based on the conclusions regarding the effect to the resource conditions listed above, I have found that no extraordinary circumstances exist with the proposed project activities that may result in a significant direct, indirect, or cumulative effect on the quality of the human environment.

PUBLIC INVOLVEMENT

The proposal to treat hazardous fuels has been listed in the *Schedule of Projects for the Deschutes and Ochoco NFs and the Prineville BLM* since Winter 2004 under the title Crossings Fuels CE. A proposal for the project was brought before the Greater La Pine Community Wildfire Protection Plan Committee on August 9, 2005. The Greater La Pine CWPP steering committee evaluated neighborhoods and developed a protection plan for the Greater La Pine area finalized in December 2005. This group prioritized neighborhoods at risk to loss from wildfire. The Newberry Estates neighborhood has been identified as one of the highest risk neighborhoods. The Chief of the La Pine Fire Department, representing the Greater LaPine CWPP steering Committee, encouraged the completion of the Crossings project.

An initial scoping letter with a proposed action for the Crossings Fuels Treatment CE was mailed to 70 individuals, groups and agencies August 16, 2005. Notice in the local Bend newspaper The Bulletin was made on September 6, 2005.

Consultation with the Confederated Tribes of the Warm Springs reservation, Burns Paiute tribe, and the Klamath Tribes was conducted with the scoping letter and copies of the Preliminary Decision Memo. No response was received from these governments.

A 30-day comment period was provided in order for to afford those interested in or affected by this activity an opportunity to make their concerns known. Those who have provided comment or otherwise expressed interest this proposed action by the close of the comment period specified in the 2002 Appeal Regulations of 36 CFR 215.11(a) shall be eligible to file an appeal.

Comments received

Response to Scoping

Three scoping letters were received in response to the scooping letter sent out. All letters were supportive of the proposal, some concerns were raised. A synopsis of these concerns and how they are addressed in this decision follows:

Fuels

Comment: "Mechanical fuel reduction such as thinning must be coupled with prescribed burning to adequately restore fire regimes."

Response: Changing fire intensities and maintaining a sense of place for the residents is an objective within the Wildland Urban Interface. Reintroduction of fire in close proximity of private land owners is difficult to conduct but may be in future plans as stands develop fire resistance and fuel loadings are reduced to a point where prescribed fire can be used safely. The tree composition of all stands includes lodgepole pine .Prescribed fire was not planned since this would kill much of the lodgepole pine and possibly bring stands below minimum stocking levels. Future maintenance will need to include mechanical shrub treatments.

Comment: "Research demonstrated that thinning alone (without subsequent treatment of activity fuels and maintenance treatments) actually increases fire hazard in both the short- and long-term."

Response: This project will treat activity fuels in commercial thinning units with whole tree yarding where tops and branches are removed to the landing. Non-commercial thinning fuels will be treated through follow-up with mechanical shrub treatment activities. Long-term maintenance treatments are expected to be needed to maintain desirable fuel loadings. Future maintenance treatments can be expected to be needed and conducted.

Commercial Thinning

Comment: "You should analyze the possibility of setting a 12" diameter limit on the commercial thinning."

Response:. Setting arbitrary diameter limits does not ensure meeting goals of reducing the crown density nor the selection of fire resistant species. Thinning from below will remove trees of smallest diameter first up to the trees needed to meet desired stocking levels. The research reference used as a basis for a 12" diameter limit shows that the most effective fuels treatments are thinning from below with no diameter limit to a stocking level of 45 ft^2s basal area was the most effective treatment of three treatments. This is the similar methodology planned for Crossings Fuels reduction Project.(Mason et al. Investigation of Alternative Strategies for Design, Layout and administration of Fuel Removal Projects; Rural Technology Initiative, July 2003)

Response to 30-day Comment Opportunity

The preliminary decision was sent out for review and a 30-day comment period. It was sent to 76 individuals and groups. The time for the comment period started with a legal notice in Bend's The Bulletin on March 10, 2006. Three letters and one phone call were received during the comment period. The phone call was in support of the project; the other three were letters representing Blue Mountain Biodiversity

Project, The Central Oregon Chapter of the Sierra Club and the Oregon Department of Fish and Wildlife. Comments were identified and are as follows:

Comment: “There was no analysis of potential soil impacts, recreational impacts, scenic view impacts, etc.”

Response: There is analysis of soil impacts, recreational impacts and scenic view impacts – they are documented in specialists’ reports and mitigations were developed to reduce or eliminate impacts to these resources. In accordance with CEQ regulations and agency policy, activities that are categorically excluded from an EA or EIS require a determination that no extraordinary circumstances exist which may cause a significant impact . The project design meets this as displayed in the findings section of the Decision Memo.

Scenic Views

Comment: “What are the guidelines regarding management of "scenic views" Management Areas and how would commercial thinning and the other activities proposed affect scenic views?”

Response: The LRMP Record of Decision identifies areas which are in the lodgepole pine plant associations as having the objective of modification in order to treat mountain pine beetle affected stands. Management emphasis will focus on leaving the largest diameter trees and the healthiest crowns and forms in every stand. In Partial retention foregrounds, normal siviculturally prescribed spacings are acceptable. The proposed actions will open stands and enhance views of large diameter trees and immature trees as well as add “visual depth” to the forest that is not apparent at this time.

Noxious Weeds

Comment: “There should be discussion of the effects of the project on introducing invasive plants and post-project monitoring of invasive weeds in the area should be planned. Soil disturbance and native plant removal could open the way for invasive plant introduction from passing vehicles on the roads, hikers, dogs, airborne seeds, etc, as well as off road vehicle dispersal.”

Response: Mitigation and monitoring are planned for the possibilities of noxious weed introduction. Mitigation and design criteria are listed in the Decision Memo. Prevention of invasive plant introduction was considered in project planning (i.e. existing condition; sources of spread; prevention measures to mitigate that; remaining risk after prevention measures). This is compliant with the 2005 Record of Decision for the R6 Invasive Plant Program – Preventing and Managing Invasive Plants ROD.

Fuels

Comment: “Please don't thin down to a 45 square foot basal area or close to that, as it's not just fuels that need to be considered but also removal of microclimate moisture from shade and down wood and shrubs, increased wind speeds and drier conditions with increased solar radiation from overstory canopy removal and too much removal of larger trees- in this case, "large" trees may be only 12-15" dbh. Further the benefits of leaving more trees and canopy for wildlife, aesthetics, recreation, controlling global warming, etc. should be taken into account as well as foreseeable rapid regrowth of highly flammable lodgepole pine and small seedlings if openings are too large.”

Response: Thinning treatments will reduce the risk of crown fire occurring adjacent to predetermined defensible areas and private homes near the forest boundary. All treatments are within WUI and are designed to reduce the potential fire intensity and rate of spread of fires on NFS lands and to protect adjacent private land from our fires and to protect NFS lands from fires that start on private land. This treatment is also necessary in order to improve fire fighter safety during subsequent wildfire events in the area. Thinning slash will be treated with handpiling and burning. Clumps and areas for wildlife have been included with the treatment units to meet wildlife needs. In addition units will be mowed to reduce shrub densities changing the area to a fuel model 9 which generally produces flame lengths less than 4’ under extreme fire weather. The treatments will change fire behavior and effects. Fires in lighter fuels with more

open canopies will be easier to control than crown fires or fires in brush habitats and will cause less tree mortality. Maintenance treatments will be needed to maintain these conditions with mowing of regeneration of seedlings and brush.

Comment: "Logging the larger trees increased fire risk as opposed to the smaller diameter trees. This increases surface winds and dries out the available surface fuels."

Comment: "Logging the larger trees and overstory could actually increase fire risk as pointed out in table 1 (Agee, 2005) by increasing surface winds, drying out surface fuels and removing the most fire-resistant trees."

Response: As the description of activities shows it is intended to leave the largest most fire resistant trees in the area. Fires in lighter fuels with more open canopies will be easier to control than crown fires or fires in brush habitats and will cause less tree mortality.

Comment: "Yet your very cursory Decision Memo fails to disclose what size of trees and how many of them and the percentage of the overstory would actually be removed and fails to analyze the effects of this removal based on Agee's conclusions re: both fire risk and wildlife habitat."

Response: To address this, an inclusion of the planned spacing and selection of leave trees was added to the mitigation section of the Decision Memo. The most fire resistant, ponderosa pine, larger trees will be left. The largest healthy lodgepole pine will be left where there is no ponderosa pine to maintain overstory cover and stocking.

Soils

Comment: "Subsoiling only alleviates compaction - you fail to disclose the scientific controversy regarding subsoiling, in that it mixes soil layers (profiles) and may impair soil fertility and productivity."

Response: The project mitigation measures address the soils impact. The project design criteria and mitigation measures will ensure meeting the guidelines for the soil resource. Subsoiling with a winged subsoiler has been shown to fracture compacted soil with minimal mixing. Restoration treatments, such as subsoiling, are consistent with Regional policy (FSM 2520,R-6 Supplement No. 2500-98-1) and LRMP interpretations of standards and guidelines SL-3 and SL-4.

Wildlife

Comment: "…..the project area bisects a four mile section of the South County mule deer migration corridor. ODFW provided recommended conservation measures."

Comment: "Thus for instance, we are wary of your heavy-handed plans to mow down and grind up too many shrubs and small trees. Mechanical shrub treatment is planned for all sale units - would the entire area be mowed down and ground up? This would seriously impair aesthetics for local residents as well as deprive Neotropical song birds nesting habitat and other small animals of cover, food, shade, etc."

Comment: "Neotropical migrant and native forest bird species, including small woodpeckers, pigmy, Western Screech, Flammulated Owls, and other owl species should have been addressed - are there any provisions to protect these species during nesting and fledging seasons? Have impacts to these species been assessed? As well what about forest bats, small mammals- including Pine Martens which are known to inhabit Lodgepole Pine dominated forests?"

Response; Project mitigation measures have been designed to accommodate for these wildlife species. These include no treatment retention areas and seasonal restrictions for each species which may use the area.

Commercial Thinning

Comment: "The plan calls for returning the area to its more historic ponderosa pine forest composition from its current Lodgepole Pine dominance, but also includes cutting of Ponderosa Pine up to 21" dbh.

Would it be possible to set a lower dbh cap of 14" or even 12" for Ponderosa Pines and potentially 16" to 18" for Lodgepole as well?"

Comment: "We suggest you require a 10" dbh cap on commercial thinning removal since you admit that trees are mostly only 60 - 70 years old with already open canopy in much of the managed stands and are dominated by pole size trees (5" to 12" dbh) in the unmanaged stands."

Comment: "Do not log the over story trees or the larger mature trees. These trees are the most fire resistant compared to the smaller diameter Lodge Pole. The larger diameter, mature trees are the hardest to replace from a wildlife view."

Response: Setting arbitrary diameter limits does not ensure meeting goals of reducing the crown density nor the selection of fire resistant species. Thinning from below will remove trees of smallest diameter first up to the trees needed to meet desired stocking levels. The largest ponderosa pine will be left with the largest lodgepole pine next.

FINDINGS REQUIRED BY OTHER LAWS

This decision is consistent with the Deschutes National Forest Land and Resource Management Plan (Forest Plan) and its accompanying Final Environmental Impact Statement as amended the Revised Continuation of Interim Management Direction Establishing Riparian, Ecosystem, and Wildlife Standards for Timber Sales (Eastside Screens 1995). The project implements the prevention of noxious weed invasion strategy as found in the 2005 Region 6 Invasive Species Record of Decision. The Forest Plan is amended by the Inland Native Fish Strategy, which provides standards and guidelines for protection of watersheds and riparian habitat conservation areas. There are no riparian habitat conservation areas within the project area. No activities are proposed within Old Growth Management Areas. The project area is not within the Northwest Forest Plan. There is no perennial water or riparian habitat within the planning area. The project was designed in conformance with Forest Plan standards and incorporates appropriate guidelines for General Forest and Scenic Views Management allocations.

IMPLEMENTATION DATE

This project may be implemented 5 days after this legal notice if no appeal is received. If an appeal is filed, implementation may occur on, but not before, the 15th business day following the date of the appeal disposition. In the event of multiple appeals of this decision, the implementation date is controlled by the date of the last appeal disposition.

ADMINISTRATIVE REVIEW OPPORTUNITIES

The 30 day notice and comment period ended on April 10, 2006. This decision is subject to appeal pursuant to 36 CFR 215. Any written notice of appeal of the decision must be fully consistent with 36 CFR 215.11(a) that states "an appeal may be filed by any person who, or any non-federal organization or entity that has provided comment or otherwise expressed interest in a particular proposed action by the close of the comment period specified in sec. 215.6". The notice of appeal must be filed hard copy with the Regional Forester, ATTN: 1570 APPEALS, 333 S.W. First Avenue, P.O. Box 3623, Portland, Oregon, 97208-3623, faxed to (503) 808-2255, sent electronically to appeals-pacificnorthwest-regional-office@fs.fed.us, or hand delivered to the above address between 7:45AM and 4:30PM, Monday through Friday except legal holidays. The appeal must be postmarked or delivered within 45 days of the date the legal notice for this decision appears in The Bulletin. The publication date of the legal notice in The Bulletin is the exclusive means for calculating the time to file an appeal and those wishing to appeal should not rely on dates or timeframes provided by any other source. Electronic appeals must be submitted as part of the actual e-mail message, or as an attachment in Microsoft Word, rich text format or portable document format only. E-mails submitted to e-mail addresses other than the one listed above or in other formats than those listed or containing viruses will be rejected.

CONTACT PERSONS

For additional information concerning this decision, Contact Phil Cruz (District Ranger) or Peter Powers (Project Leader) at the Bend- Fort Rock Ranger District, 1230 NE Third Street, A-262, Bend, OR 97701 or via telephone at 541-383-4000

/s/ Phil Cruz

PHIL CRUZ DATE: 7-27-2006

District Ranger

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