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August 17, 2011

IN REPLY REFER TO:  
1790/5400 (ORL040)

## **DECISION RECORD #1 FOR WILDGAL-DIXIE FOREST HEALTH TREATMENTS ENVIRONMENTAL ASSESSMENT DOI-BLM-ORL040-2009-017**

### **INTRODUCTION**

The potential effects of multiple proposed actions are analyzed in the 2009 Wildgal-Dixie Forest Health Treatments Environmental Assessment (EA) # ORL040-2009-017. This assessment analyzed proposed commercial timber harvest (Wildgal Timber Sale), hazardous fuels treatments, stream channel restoration, and other actions proposed in the project area, as described in the EA.

The Klamath Falls Resource Area (KFRA) interdisciplinary team analyzed the proposed actions based on: (a) current resource conditions in the project area, (b) the results of monitoring previous activities within and surrounding the project area, (c) meeting the purpose and need as identified in the Wildgal-Dixie EA, (d) implementation of the management action and direction stipulated in the 1995 Klamath Falls Resource Area Resource Management Plan (RMP), and (e) comments from the public. The proposals presented and evaluated in the Wildgal-Dixie Forest Health Treatments EA reflect what the interdisciplinary team determined to be the best balance and integration of resource conditions, resource potentials, competing management objectives, and expressed interests and concerns of the public.

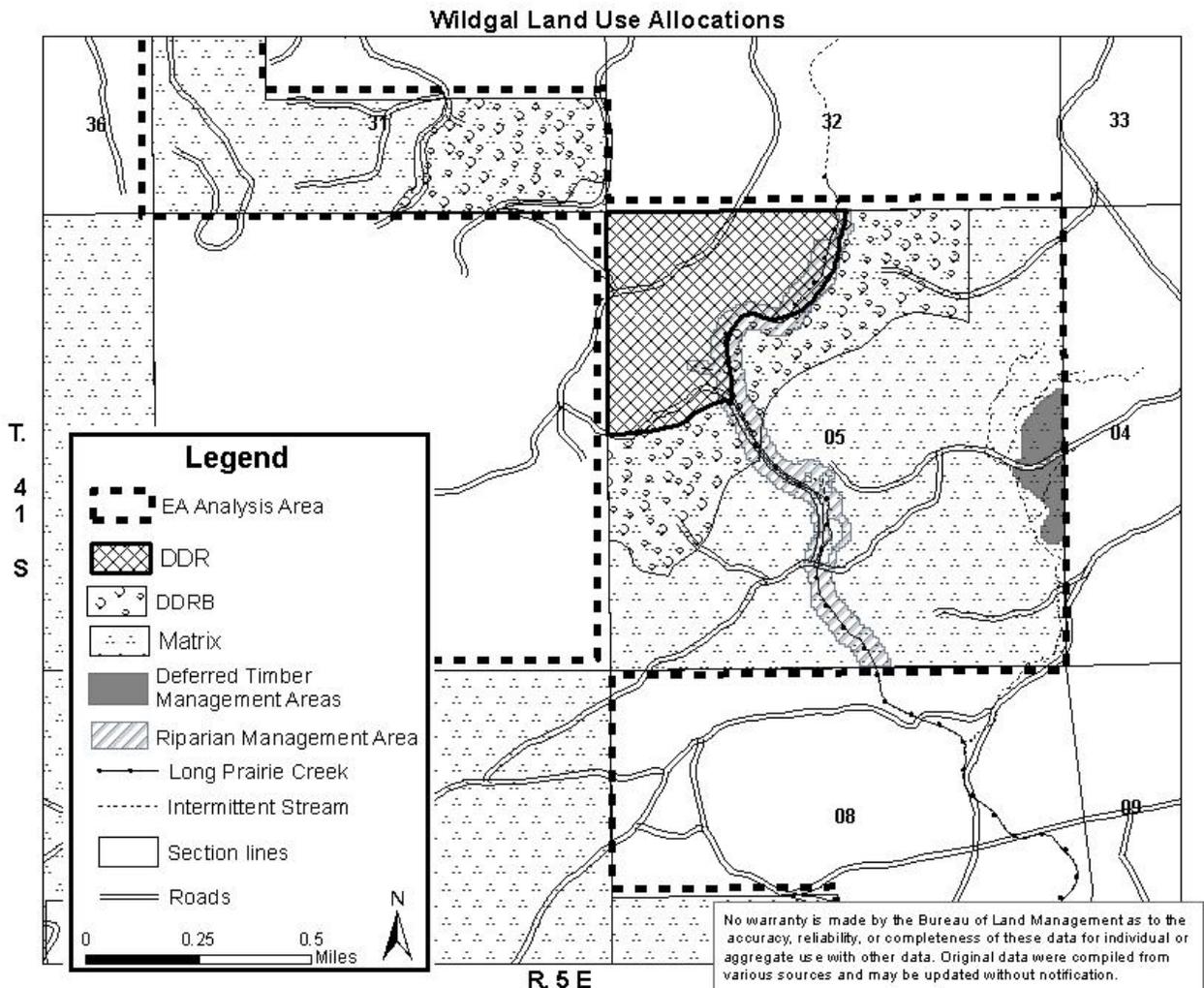
### **DECISION**

It is my decision to implement the Proposed Action alternative in the Wildgal-Dixie Forest Health Treatments EA. As part of this action, applicable Best Management Practices (BMPs) in Appendix D of the 1995 KFRA ROD/RMP and the Project Design Features in Appendix B of the EA will be applied. This decision will result in the implementation of the actions described in the EA and outlined below, and for reference are also shown in the Decision Record map located on page 8 of this document:

#### **Commercial Timber Harvest**

Matrix - Approximately 560 acres of commercial density management harvest of trees greater than 7" DBH (Diameter at Breast Height) will occur, including thinning of the interspersed 3-7" DBH trees. Stands will be thinned to a variable density range from 40 to 140 square feet per acre of basal area (within this range, ponderosa pine stands will be thinned to a lower average BA and mixed conifer to a higher average BA). \*Note: 560 acres includes thinning that would occur in riparian reserves, the District Designated Reserve (DDR) and the District Designated Reserve Buffer (DDR). Acreages below are not in addition to "Matrix" harvest.

- Riparian Reserves- Approximately 42 acres of commercial riparian thinning will occur in the outer portions of the riparian reserve in portions of both the plantation and mixed conifer stands to maintain large diameter pine, reduce stand density, and increase stand resiliency.
- DDR – Approximately 44 acres of the ponderosa pine/oak dominated stands will be thinned in portions of the DDR to maintain the large diameter pine within the stands.
- Harvesting will be implemented with ground based mechanized equipment including mechanical harvesters and rubber tired or tracked skidders.
- Six areas, each between three and five acres in size, within an existing 46 year-old ponderosa pine plantation will be harvested to a low density (40 square feet of basal area). These areas will then be planted with other conifer species to promote regeneration, uneven-aged stand development, and diversity within the plantation.
- Small non-treatment retention clumps (1-5 acres in size) will be included within the DDRB and the surrounding density management area to assist in attaining variation in stand density, provide buffers for Survey and Manage species, and maintain Northern Spotted Owl nesting, roosting and foraging (NRF) habitat. The DDRB is approximately ¼ mile buffer around the DDR.
- The DDRB, excluding the retention clumps mentioned above, will be thinned to a density of 120 square feet per acre of basal area to maintain and promote late successional characteristics (large trees, dead tops, snags, mistletoe brooms and multi-story structure).
- Slash disposal and hazardous fuel reduction treatments will include whole tree yarding of thinned material followed by burning or utilization of the landing piles as firewood or biomass.



### **Non-Commercial Thinning**

Approximately 115 acres of thinning (primarily 3"-12" DBH) will occur in portions of Section 31 through stewardship or service contracts. Thinned material will be mechanically cut and yarded to a loading point. Depending upon market conditions and available funding, this material could be utilized as small diameter sawlogs, chipped and hauled off site for utilization, sold for firewood, or burned on-site. If the material is utilized, any residual, unusable material will be burned in accordance with an approved burn plan.

### **Roads**

The following actions will occur:

- Obliterate (block and re-contour) approximately 0.8 miles of existing road segments that are within Riparian Reserves or are no longer needed for travel management purposes (see map on page 8).
- Construct approximately 0.5 miles of new road (most of this mileage is needed to replace sections of obliterated road mentioned above).
- On road 41-4E-3 in Section 5, eliminate the road crossing over Long Prairie Creek by removing the culvert and excess fill. In order to restore the channel bed at this crossing and the stream banks upstream and downstream, the crossing and banks will be recontoured and stabilized. The grazing enclosure will be expanded to protect this area so the stream side vegetation will have time to recover.
- Implement surfacing and drainage improvements including brushing, spot surfacing, ditching, installation of waterbars, and renovation of small existing road segments where needed and feasible to meet ACS objectives and to facilitate implementation of the Proposed Action.

### **Riparian Management**

The livestock grazing enclosure along Long Prairie Creek in Section 5 will be expanded as mentioned above to include approximately eight additional acres and 0.3 miles of stream to improve riparian and streambank conditions along the creek. The resulting enclosure will be permanent.

### **Hazardous Fuels Management**

Prescribed underburning and/or pile burning of approximately 870 acres will occur. The desired fire behavior is 1-2 foot flame lengths in the timber litter. Greater flame lengths are desirable in the patches of wedgeleaf *ceanothus*. This activity includes the construction of approximately ten miles of fireline (including handline, plowline, and wetline methods). Burn units will include underburning in Riparian Reserves and oak stands. Burning within Riparian Reserves will be in accordance with Appendix D of the KFRA ROD RMP. Burning will occur after timber harvest and thinning activities. Maintenance underburning will be scheduled on a 10-30 year rotation, with the intent to mimic the historic fire return interval.

### **Oak Woodland Management**

Approximately 150 acres of the 290 acres of Oregon white oak will be hand thinned within oak woodland units 1-5. No oak greater than 12" DBH will be cut. The oak trees within these stands will be thinned to a variable spacing of 15-30 feet to increase overall health and vigor of the remaining individual oak trees. The resulting slash will be hand treated by lopping, piling and burning, or lopping and made available for firewood within the denser patches to limit fuel loading. In areas with more scattered oak patches or clumps, the cut oak trees will be lopped and scattered.

### **Mitigation**

No additional mitigation was deemed necessary and thus none was described in the EA or in this Decision Record.

## **CONSULTATION AND COORDINATION**

Consultation with the U.S. Fish and Wildlife Service (FWS) as required under Section 7 of the Endangered Species Act (as amended) was completed for the Wildgal Timber Sale EA for all the proposed treatments listed above. The BLM made a “May Affect, Not Likely to Adversely Affect” determination for the northern spotted owl. There is one spotted owl that may be affected from the planned project. The spotted owl nest stand is on private lands adjacent to the project area. No suitable habitat (nesting, roosting and foraging) will be treated within the owl core area and all suitable habitat within the home range and the remainder of the project area will be maintained as suitable habitat post-harvest. Dispersal habitat within the project area will also be maintained. The FWS concurred with this determination and issued a concurrence letter on July 21, 2011 (81450-2011-I0045).

There are no other listed species that occur within the project area or that would be affected from the project, therefore the BLM made a “No Effect” determination for all other listed species. Also no designated critical habitat occurs within the project area therefore the BLM made a “No Effect” determination for designated critical habitat.

## **PUBLIC INVOLVEMENT**

Public scoping input and EA comments were considered in development and refinement of the proposed action and alternatives, and in this decision.

### **Scoping Issues and Comments**

The KFRA requested public scoping input on the Wildgal-Dixie EA on September 16, 2009. The scoping letter outlined the proposed treatments for the analysis area. Four scoping response letters were received. The following scoping comments were received and were addressed in the EA (see EA Appendix C):

#### **Hydrology and Fisheries**

- *Do not propose to put tractors inside, or drag trees with single end suspension in stream buffers.*
- *Protect riparian and aquatic areas.*

#### **Vegetation**

- *Include a stand simulation model that projects future recruitment of large snags and wood (to mitigate for the large snag deficit) with and without thinning,*
- *Carbon is more safely stored in the forest than if it is removed,*
- *Logging will make a bad situation worse in terms of cumulative impacts with past federal and non-federal forest management in this area (including snags, dead wood, riparian wood, carbon).*
- *Don't thin to uniform spacing. Use variable density thinning techniques to establish a variety of microhabitats, break up fuel continuity, create discontinuities to disrupt the spread of other contagious disturbances such as disease, bugs, weeds, fire, etc.*
- *Restore open oak woodlands,*
- *Like to see commercial products resulting from this project used for the highest purpose and the taxpayers appropriately compensated.*

#### **Roads**

- *Close or decommission more roads in the analysis area.*

#### **Weeds**

- *Take proactive steps to avoid the spread of weeds. Avoid and minimize soil disturbance. Retain canopy cover and native ground cover to suppress weeds.*

#### **Wildlife**

- *The agencies need to retain more owl habitat in order to increase the chances that spotted owls and barred owls can co-exist.*

#### **Fire**

- Prescribed burning is a useful tool when used appropriately.

Range

- Expanding the grazing exclosure might be a good idea, but even better would be a more comprehensive review of grazing impacts on forest health and watershed health followed by implementation of significant limits on livestock grazing.

**DECISION RATIONALE**

The decision to implement the actions described in the Proposed Action alternative in the Wildgal-Dixie Forest Health Treatments EA meets the purpose and need identified in the EA and meet the vision established in the Klamath Falls Resource Area RMP to manage the land and natural resources under its jurisdiction in western Oregon to help enhance and maintain ecological health of the environment and the social well-being of human populations.

**Alternatives Considered**

The No Action Alternative is rejected because it does not meet the resource management objectives for the Matrix identified in the Klamath Falls RMP and the Northwest Forest Plan. It would not address or alter many of the existing conditions and trends relative to desired healthy vegetative conditions, resource protection, and watershed restoration that were identified in the EA. With No Action, these conditions would not be improved or mitigated; certain undesirable ecological trends would continue unchanged, and, in some cases, would be exacerbated with the passage of time. In addition, economic opportunities from timber harvesting as directed in the KFRA RMP would be foregone and no forest stand thinning or fuels reduction benefits would be realized.

Other alternatives or actions that were also considered but dropped from detailed analysis (see EA page 14) include; improving (instead of removing) the Long Prairie Creek crossing in Section 5 for vehicle use and no treatment of NRF habitat. These alternatives were rejected because they would not meet one or more parts of the Purpose and Need section of the EA.

**Surveys**

Surveys for Wildlife, Botanical, and Survey and Manage resources have been completed:

- Surveys were completed for survey and manage terrestrial mollusks according to 2001 ROD without annual species review. The chace sideband snail was the only survey and manage mollusk located. It was located in section 05 and section 31 at eight locations with six of these in treatment units. All six locations will be buffered prior to implementation of the project to protect the individuals and the microsite habitat characteristics.
- Surveys for the great gray owl (survey and manage) were conducted in 2010 and 2011 within suitable habitat in the project area. No great gray owls were detected during these surveys.
- Surveys were conducted around the known spotted owl territory. A spotted owl pair was located on private lands adjacent to the project area.
- Northern goshawk surveys were conducted in 2010. One active nest site was located plus an additional three alternate nests. All nest trees have been buffered and will be protected during implementation.
- Required cultural surveys are completed; cultural resources were located and will be avoided during project implementation.

**Consideration of Public Comments**

I have reviewed the public comments summarized below and have discussed them with the interdisciplinary team of specialists on my staff. The EA and this DR contain the requisite site specific information to implement the proposed action. The comments received do not provide any substantially new information or new analysis, nor do they identify substantial new data gaps that indicate additional

analysis is needed. Finally, the comments do not identify any significant new data which would alter the effects described in the EA. I am confident that the Wildgal-Dixie EA plus the supplemental information, including responses to public comments contained in this DR, in addition to the comprehensive analysis done in the Klamath Falls Resource Area RMP/EIS to which the EA is tiered, represents a thorough analysis of potential effects associated with actions identified in the Wildgal-Dixie Forest Health Treatments EA.

### **Plan Conformance and Consistency with other Direction**

The Klamath Falls Resource Area initiated planning and design for this project to conform and be consistent with the 1995 Klamath Falls Resource Area Resource Management Plan. In December 2008, this plan was revised with the Klamath Falls Record of Decision and Resource Management Plan (2008 ROD/RMP).

On July 16, 2009 the U.S. Department of the Interior, withdrew the Records of Decision (2008 ROD) for the Western Oregon Plan Revision and directed the BLM to implement actions in conformance with the resource management plans for western Oregon that were in place prior to December 30, 2008. Since project planning and preparation of National Environmental Policy Act documentation for these projects began prior to the effective date of the 2008 ROD, these projects have been designed to comply with the land use allocations, management direction, and objectives of the 1995 Resource Management Plan. Following a March 31, 2011 decision by the United States District Court for the District of Columbia in Douglas Timber Operators et al. v. Salazar, which vacated and remanded the administrative withdrawal of the Klamath Falls 2008 ROD and RMP, the KFRA evaluated this project for consistency with both the 1995 RMP and the 2008 ROD and RMP. Based upon this review, I have determined that the selected alternative is consistent with both the 1995 ROD/RMP and the 2008 ROD/RMP. Although the selected alternative contains some design features not mentioned specifically in the 2008 ROD/RMP, these design features are consistent with the ROD and RMP.

On July 21, 2011 the KFRA received direction (Instruction Memorandum No. OR-2011-063) in consideration of the Survey and Manage Settlement Agreement reached on July 6, 2011 pertaining to *Conservation Northwest et al. v. Sherman et al.*, Case No. 08-1067-JCC (W.D.Wash). The Courts set aside the 2007 RODs, putting into effect the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures, Standards and Guidelines* (USFS et al. 2001) (2001 ROD) (hereinafter referred to the 2001 S&M ROD). Projects within the range of the northern spotted owl are subject to the Survey and Manage Standards and Guidelines in the 2001 S&M ROD as modified by the 2011 Survey and Manage Settlement Agreement. The 2011 Survey and Manage Settlement Agreement makes four modifications to the 2001 S&M ROD: (A) acknowledges existing exemption categories (2006 Pechman Exemptions); (B) updates the 2001 Survey and Manage species list; (C) establishes a transition period for application of the species list; and (D) establishes new exemption categories (2011 Exemptions). The Wildgal project area was surveyed for S&M terrestrial mollusk, vascular plants and the great gray owl in conformance with the 2001 S&M ROD and the 2011 S&M Settlement Agreement (see Table A).

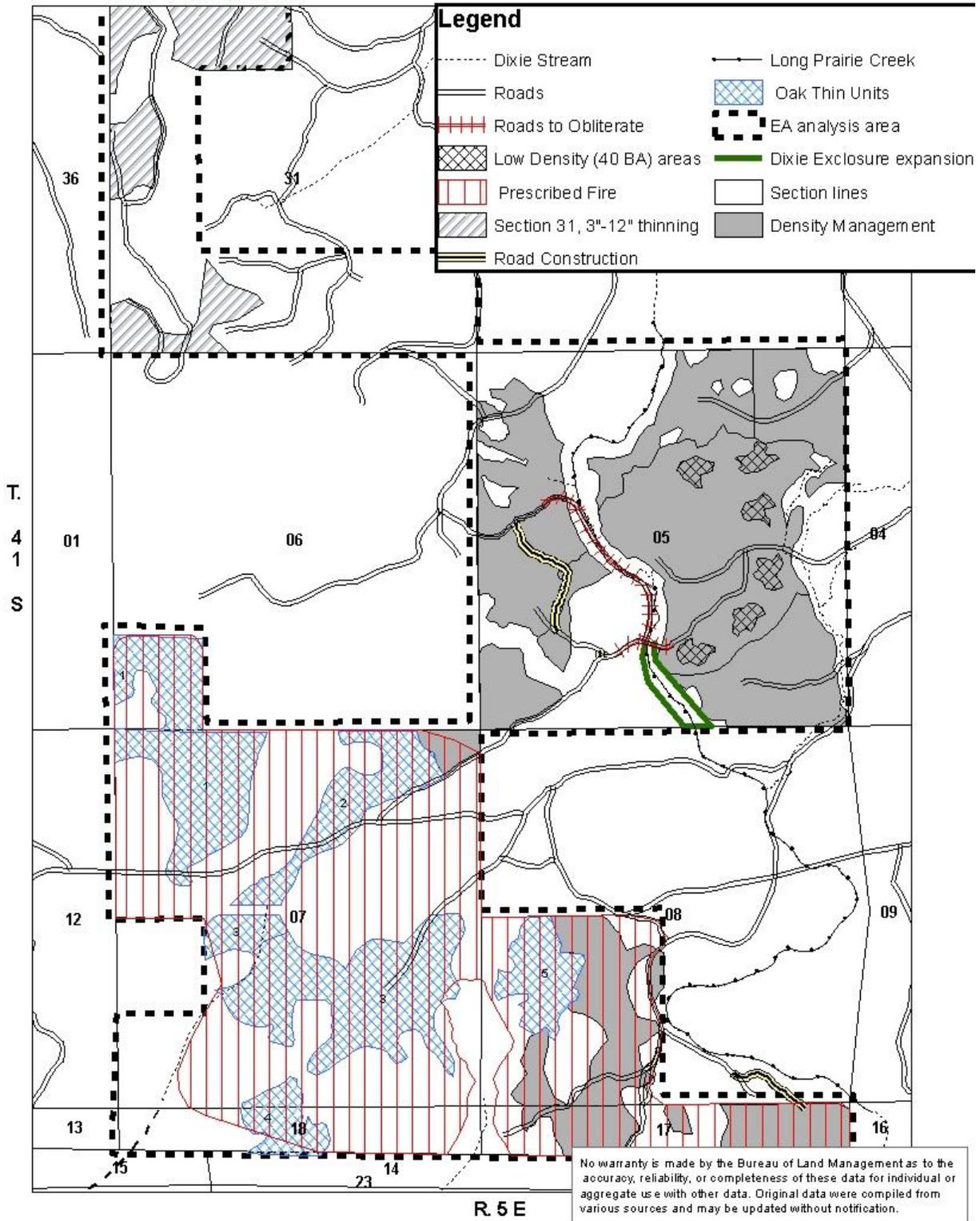
The action of the selected alternative will help to move this portion of the landscape towards the desired future condition considered in development of the RMPs. The actions will comply with the Endangered Species Act, the Native American Religious Freedom Act, cultural resource management laws and regulations, and Executive Order 12898 (Environmental Justice). This decision will not have any adverse effects to energy development, production, supply and/or distribution (per Executive Order 13212).

### **Finding of No Significant Impact**

No significant impacts were identified. No impacts beyond those anticipated in the KFRA RMP/EIS will occur. Refer to the accompanying Finding of No Significant Impact.



# Wildgal-Dixie Decision Record Treatments Map



## APPENDIX A

### 2001 ROD COMPLIANCE REVIEW: SURVEY & MANAGE WILDLIFE AND BOTANY

Environmental Analysis File

Lakeview District BLM – Klamath Falls Field Office

**Project Name:** Wild Gal Timber Sale

**Prepared By:** Steve Hayner

**Project Type:** Timber harvest, road obliteration, road construction, oak thinning, prescribed burning, mechanical and manual thinning

**Date:** 08/09/2011

**Location:**

Township	Range	Sections
40S	5E	31
41S	5E	5,6,7,8,17,18

**S&M List Date:** January, 2001

Species listed below were compiled from the 2001 Record of Decision and include those vertebrate and non-vertebrate wildlife and non-vascular and vascular botanical species whose known or suspected range includes the Klamath Falls Resource Area according to the protocols listed below. There are no known sites for Category B, D, E, and F species within the project area. There is one known site of the Chace sideband snail (cat B) within the adjacent Late-successional reserve. (Refer to Table A - Survey & Manage Wildlife and Botany Species.)

- Survey Protocols for Survey and Manage Strategy 2 Vascular Plants Version 2.0 (December 1998)
- Management Recommendations for Survey and Manage Lichens Version 2.0 (March 2000)
- Natural History and Management Considerations for the Northwest Forest Plan Survey and Manage Lichens Based on Information as of the Year 2000 (USDA Forest Service R6-NR-S&M-TP-03-03 2003). Survey Protocols for Survey and Manage Category A & C Lichens in the Northwest Forest Plan Area Version 2.1 (2003)
- 2003 Amendment to the Survey Protocol for Survey and Manage Category A and C Lichens Version 2.1 (2003)
- Survey Protocols for Survey and Manage Component 2 Bryophytes Version 2.0 (1997)
- Survey and Manage Protocols Protection Buffer Bryophytes 2.0 (1999)
- Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan (PNW-GTR-476 October 1999), and Handbook to Additional Fungal Species of Special Concern in the Northwest Forest Plan (PNW-GTR-572 January 2003)
- Survey Protocol for the Great Gray Owl within the Range of the Northwest Forest Plan v3.0 (Jan. 2004)
- Survey Protocol Aquatic Mollusk Species From the Northwest Forest Plan Version 2.0 (Oct. 1997)
- Survey Protocol for S&M Terrestrial Mollusk Species v 3.0 (Feb. 2003).

#### **Statement of Compliance**

On July 21, 2011 the KFRA received direction (Instruction Memorandum No. OR-2011-063) in consideration of the Survey and Manage Settlement Agreement reached on July 6, 2011 pertaining to *Conservation Northwest et al. v. Sherman et al.*, Case No. 08-1067-JCC (W.D.Wash). The Courts set aside the 2007 RODs, putting into effect the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures, Standards and Guidelines* (USFS et al. 2001) (2001 ROD) (hereinafter referred to the 2001 S&M ROD). Projects within the range of the northern spotted owl are subject to the Survey and Manage Standards and Guidelines in the 2001 S&M ROD as modified by the 2011 Survey and Manage Settlement Agreement. The 2011 Survey and Manage Settlement Agreement makes four modifications to the 2001 S&M ROD:



Oregon shoulderband (Helminthoglypta hertieni) <sup>2</sup>	B4	No	No	No	No	Jun 2010 Oct 2010	0	This species was removed from the list under the S&M settlement agreement
Fluminicola no. 3	A	Yes	No	No	No	N/A	N/A	No suitable habitat within analysis area
Fluminicola no. 1	A	Yes	No	No	No	N/A	N/A	No suitable habitat within analysis area
Vascular Plants								
Cypridium fasciculatum <sup>5</sup>	C	Yes	Yes	Yes	Yes	1996/2005/ 2010	0	N/A
Cypridium montanum <sup>5</sup>	C	Yes	Yes	Yes	Yes	1996/2005/ 2010	0	N/A

<sup>1</sup>Pre-disturbance surveys for great gray owls are required since there is suitable nesting habitat within the project area. The required habitat characteristics of suitable habitat include: (1) large diameter nest trees, (2) forest for roosting cover, and (3) proximity [within 200m] to openings that could be used as foraging areas (Survey Protocol for the Great Gray Owl within the range of the Northwest Forest Plan v3.0, January 12, 2004). Surveys for the great gray owl were conducted in 2010 and 2011 using the 2004 protocol designed to meet the 2001 Survey and Manage Standards and Guidelines. Survey protocol used was “Survey protocol for the Great Gray Owl within the Range of the Northwest Forest Plan (2004).” No great gray owls were located within the Wildgal project area.

<sup>2</sup> Equivalent-effort pre-disturbance surveys are required for the Chace Sideband and the Oregon Shoulderband (Survey Protocol for S&M Terrestrial Mollusk Species v3.0, 2003). The chace sideband is associated with open talus or rocky areas in forested habitat. Vegetation types include dry conifer/hardwood forest as well as oak communities (unpublished USDA/USDA 2005) The Oregon shoulderband is associated with rocks and wood debris in rocky areas within forest habitat often adjacent to areas with substantial grass or seasonal herbaceous vegetation (USDA/USDI 2004b). The Oregon shoulderband was removed from the Resource Area survey list in 2002 under the Annual Species Review process due to the change in the known and suspected range. No Chace sideband or Oregon Shoulderband snails were located in the Wildgal project area.

<sup>3</sup>Suitable habitat for the Crater Lake tightcoil is “perennially wet situations in mature conifer forests, among rushes, mosses and other surface vegetation or under rocks and woody debris within 10 meters of open water in wetlands, springs, seeps and riparian areas...” (pg. 43, Survey Protocol for S&M Terrestrial Mollusk Species v3.0, 2003). Surveys were conducted along the perennially portions of Long Prairie Creek. No Crater Lake tightcoil snails were located in the Wildgal project area.

<sup>4</sup>The evening field slug’s range was extended to include the KFRA in March 2003 (pg. 2 and 3 2002 Annual Species Review and Appendix A pg32. Survey Protocol for S&M Terrestrial Mollusk Species v3.0, 2003). This species may be found in perennial moist situations in mature conifer forests or meadows amongst rushes, mosses and other surface vegetation or under rocks or woody debris within 10 m of open water in wetlands, springs, seeps, and streams. Surveys were conducted along perennial portions of Long Prairie Creek. No Crater Lake tightcoil snails were located in the Wildgal project area. .

<sup>5</sup>Surveys for Cyperidium fasciculatum and Cypridium montanum were conducted in 2004 within the project area. No sites were found.

<sup>6</sup>Fluminicola no. 1 and 3 - No suitable habitat is found within the analysis area. The pebblesnail is generally found in bodies of water with gravel-boulder substrates and moderate flow. It prefers cold, oligotrophic water with high dissolved oxygen content. It is typically found in springs and avoids areas with dense macrophyte beds.

**APPENDIX B**

**WILDGAL-DIXIE FOREST HEALTH TREATMENTS EA COMMENTS AND RESPONSES**

Upon completion of the EA, the public was notified on July 1, 2011 and given an opportunity to comment during a thirty (30) day public comment period. One comment letter was received. The following comments were received during and after the 30-day EA comment period.

Hydrology and Fisheries

*Comment: Large diameter trees in the riparian reserves should not be logged in order to facilitate yarding.*

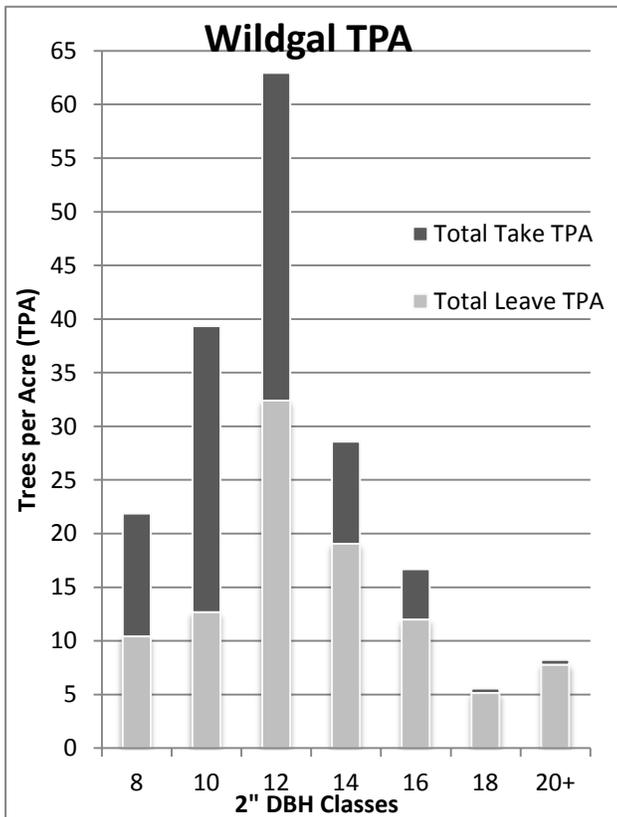
Response: Large diameter trees were not marked for cutting in the riparian reserves in accordance with internal specialist recommendations to retain late successional characteristics and meet ACS objectives. No yarding corridors will be needed that will necessitate the removal of large trees from riparian reserves.

*Comment: Where on Long Prairie Creek and East Fork Beaver Creek would full riparian buffers not be implemented and what are the impacts of treatments in those areas?*

Response: Portions of the outer half of riparian reserves will be treated by thinning small diameter trees. These treatments are expected to reduce competition for retention trees and accelerate stand vigor and diversity. No sedimentation or runoff related impacts are anticipated from harvest in the outer half of riparian reserves. No riparian treatments are proposed along East Fork Beaver Creek or its intermittent tributaries.

*Comment: The EA does not disclose and analyze the location and effects of authorized stream crossings*

Response: The only stream that may be crossed during harvest is an intermittent tributary to Long Prairie Creek in Section 5. The BMPs included on page 70 of the EA will be used to minimize effects of the crossing.



*Comment: The location and impacts of streamside pumping (water drafting) sites (pg. 73 of EA) are not disclosed or analyzed in the EA.*

Response: The effects of streamside pumping are expected to be negligible when the BMPs on page 73 are implemented.

Vegetation

*Comment: Please utilize and implement the knowledge we have gained through field trips by retaining large-diameter Douglas-fir, ponderosa pine and incense cedar trees for their disproportionate ecological, fire-resiliency, recreation and social values.*

Response: According to cruise data, approximately 98.9% of the trees scheduled for harvest are twenty (20) inches in diameter or smaller, thereby resulting in retention of most of the large diameter trees of all species in the harvest area. The Wildgal TPA figure shows approximate retention/harvest levels of trees based upon post-marking plot data and actual pre-harvest cruise data for the sale area. More detailed data about stand and species tables are available at the KFRA office.

*Comment: The impacts of yarding corridors on late-successional habitat, “edge” effects, and connectivity were not fully analyzed and disclosed in the EA.*

Response: The EA discusses on page 22 that “Density Management thinning ... would continue to maintain connectivity and late successional habitat over time by retaining a high percentage of the older and larger trees. The amount of skid trails that would be utilized within the project area would not exceed 12% as referenced in the EA under the PDF’s on pg. 68 EA (RMP D-23). On average the skid trails used for land based yarding are 8-10 ft. and width. The density management prescription is designed to maintain the larger trees and would maintain a higher canopy closure (>60%) as described in the EA on page 34. Therefore the density management prescription and land based yarding would maintain connectivity for special status species such as the spotted owl as described in the EA on page 34. These narrow trails will not result in negative edge effects issues for the special status species assessed in this EA. For all special status species no detrimental edge effect or connectivity issues would occur due to the density management prescription, small percentage of skid trails and retention of the high percentage of older trees. The habitat effects from the proposed project to special status species are described on page 37-40 of this EA.

*Comment: Most of the findings in the EA are based on the assumption that harvest activities will be focused on ground and ladder fuels (smaller diameter thinning). That prescription is not possible if 5 acres stands will be logged down to 40 BA.*

Response: The six areas that will be harvested down to 40 BA are located within a 46 year old even-aged ponderosa pine plantation in the analysis area. The purpose of the prescription is to promote species diversity by opening the overstory canopy sufficiently to promote successful survival of other species of conifers proposed to be planted in the openings. In addition, the prescription is designed to promote uneven-aged stand development and structural diversity within the plantation.

#### Roads

*Comment: Page 69 of the EA indicates that the BLM may be re-opening previously decommissioned roads in a Key Watershed, and fails to disclose the location and impacts of this proposed activity.*

Response: There is no proposed action to re-open previously decommissioned roads in the analysis area. Further, the Long Prairie Creek watershed is not a Key Watershed under the Northwest Forest Plan.

#### Wildlife

*Comment: The EA contains no substantive protections for large trees and snags serving as suitable habitat within the NSO home range, and the EA does not include quantifiable information about the number of large-diameter trees to be removed or the purpose for their removal.*

Response: Current levels of snags are described on page 17 of the EA where it states “The area averages 2.4 snags per acre greater than 20” DBH, however has very few snags less than 20” DBH”. Snag retention is addressed in the PDF’s on page 73 “Approximately 1.9 snags per acre will be retained with a minimum diameter at breast height (DBH) of 16”, or largest available if less than 16” (RMP/ROD, Page 26-27). Provide snag mitigation measures for White-headed Woodpecker, Black-backed Woodpecker, Pygmy Nuthatch, and Flammulated Owl. Increase snag retention requirements from 1.9 to 2.5 snags per acre (USDA/USDA 2001 pp. 34). There is no plan to remove snags within the project area unless they present a direct safety hazard. The TPA figure included above quantifies the amount and diameters of large trees that were marked for removal under the proposed thinning in this analysis area. As stated above, over 98% of the 22,494 total trees scheduled for harvesting are twenty (20) inches in diameter or smaller. However, removing trees larger than twenty (20) inches is in conformance with the direction in the KFRA RMP. Generally, trees greater than twenty inches in diameter are removed to meet one of the following objectives or purposes;

- When they are beneath a larger, older legacy tree and are designated for harvest to promote resiliency in the larger tree as well as reduce ladder fuel development.
- When a particular clump is very dense with trees greater than twenty inches. To promote growth and resiliency in the clump, trees are thinned to a lower basal area. The largest, healthiest, and most desirable and resilient tree species are retained in the clump when this occurs.

*Comment: The EA discusses snag retention, but fails to quantify the number of snags to be felled or removed and the impacts to wildlife from snag removal/felling.*

Response: No snags are designated for felling or removal under any alternative in this EA. The only snags likely to be removed are those that present a direct safety hazard to operators or those that were marked to remove while they were green trees and have subsequently died.

#### NEPA

*Comment: Inadequate Range of Alternatives; Consideration of more than one action alternative would have greatly aided informed analysis and decision-making.*

Response: The KFRA did consider the analysis of more than one set of actions or alternatives and decided not to fully analyze them in detail due to the objectives in the purpose and need and direction in the RMP. Page 14 of the EA discusses this process and each action considered in greater detail.

*Comment: The EA did not provide a thorough cumulative impacts analysis of the proposed logging and road construction in combination with other federal logging and private logging activities and ORV use.*

Response: The EA discusses on page 16 that it is expected that rotational harvests will continue on private industrial lands adjacent to the analysis area. Further, the cumulative effects of no action are discussed in the Vegetation section on page 22 of the EA, and cumulative effects discussions related to harvesting are included in the Wildlife analysis.

#### Soils

*Comment: Tractor yarding should be minimized. Ground-based logging causes higher incidences of root damage and scarring of residual trees.*

Response: Ground based yarding in timber sales is currently the preferred economical method for density management and is appropriate for the terrain of the project area. BMPs and contract stipulations are followed during thinning operations to minimize the occurrences of stand damage. In addition, the KFRA FEIS (Page 4-11) fully analyzed the environmental impacts to soils associated with ground-based logging. One of the benefits associated with using ground-based logging in dry forest stands with dense understories of trees less than 7" DBH is that it allows the BLM to require thinning of trees greater than and less than 7" DBH concurrently in a single stand entry. Thinning and whole tree yarding with ground-based equipment meets multiple objectives including reducing ladder fuels and overall fire risks, retention of desirable species for silvicultural purposes, and maintenance of uneven-age structure.

*Comment: The EA appears to contemplate activities such that "the 20 percent standard [for detrimental soil conditions] is exceeded" which violates the BLM's standards and guidelines.*

Response: The BMPs included in the EA say "to limit detrimental soil conditions to less than 20% and if this standard is exceeded, then treatments such as ripping, backblading or seeding may be required" to limit possible soil damage where higher soil moisture conditions exist.