Brady Butte Prescribed Fire Underburn



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Decision Memorandum on Action and for Application of: Categorical Exclusion 516 DM2, Appendix 1, 1.12 – Hazardous Fuel Reduction (PLAN CONFORMANCE AND CATEGORICAL EXCLUSION DETERMINATION) Bureau of Land Management (BLM)

Project Name: Brady Butte Prescribed Fire Underburn

CX Log #: OR-014-04-25

BLM Office: Klamath Falls Resource Area
County: Klamath County, Oregon

Location: Gerber Block - 41 S, R 14 ½ E, S: 1-3, 10-15, and 22-24.

DESCRIPTION OF THE PROPOSED ACTION (Including Purpose and Need)

The proposed action is to treat approximately 3300 acres with prescribed fire. The primary sources of ignitions will be hand ignition, aerial ignition, and ATV ignition. Secondary treatment options consist of hand and mechanical thinning along fire lines (not within any riparian areas). Treatment areas are pine and juniper woodlands within the unit and are discernable on the attached aerial photographs of the project area. Non-forested areas will not be burned. This is the fourth prescribed fire entry since 1985. This entry was originally scheduled for a later date but it has been moved up due to an impending timber sale in the same area which conflicts with our original ignition date.

The purpose of the proposed action is to restore fire as a natural ecological facet for this parcel of land and reduce areas of hazardous fuels and concomitant risk of catastrophic wildfire.

The criteria and project design features (PDF's) as described in the fuels programmatic consultation (1-10-02-I-98) will be followed for all federally threatened and endangered species (Bald Eagle, Shortnose Sucker) within the project area (refer to Appendix A). The small tributary to Antelope Creek in Sections 9, 109, and 15 will be excluded from the project area to avoid any potential impacts to suckers.

The specific prescribed fire objectives for the Brady Butte Rx Underburn are:

- 1) Increase herbaceous understory and vegetation in FM9 (Fuel Model 9=Hardwood litter, Long needle forest floor litter), and improve overall health and condition of the unit.
- 2) Continue a system of rotational burning within the Gerber block that will result in a network of burned and unburned areas.
- 3) Reduce: 1 Hour Fuels 70-100% 10 Hour Fuels 40-100% 100 Hour Fuels 20-70% 1000 Hour Fuels 10-50%

Duff Load 20-60%

- 4) Maintain acceptable levels of shrub species such as bitter brush, sage brush, mountain mahogany, etc.... Brush areas may be excluded from the burn at KFRA biologist's discretion.
- 5) Minimize mortality of residual trees. Underburning should result in no more that:
 - 40% mortality in 0"-8" DBH pine.
 - 8% mortality in 8"-20" DBH pine trees.
 - 5% mortality in 20"+ DBH pine trees.

*The BEHAVE program "predicts" the amount of mortality expected (shown above) based on fuel types, fuel loading, fuel moisture and relative humidity. However, various measures, including pretreatment by mechanical means and adjusting timing of burns, have been taken on the Klamath Falls Resource Area to effectively minimize the predicted mortality and still achieve fuel reduction objectives. Mortality varies across a burn unit, but overall, the resulting mortality on KFRA burns has been far less that what the model predicts. Similar mortality reduction measures will be implemented on this project as needed (see Appendix C - Tree and Brush Treatment Guidelines). Although future burns cannot be guaranteed to have as low mortality as experienced with past burns, it should be less than what BEHAVE predicts.

IMPLEMENTATION DATE

This project is expected to be implemented FY 2006. Depending on funding and environmental parameters this project could last over a period of two to three years.

PLAN CONFORMANCE

The proposed project has been reviewed and found to be in conformance with one or more of the following BLM plans or programmatic environmental analyses:

Klamath Falls Resource Area Plans

- Klamath Falls Resource Area Record of Decision and Resource Management Plan (1995), as amended (1999)
- o Klamath Fálls Resource Area Fíre Management EA (OR-014-94-09; 1994)

District and Regional Plans

- Klamath Interstate Habitat Management Plan (1982)
- Integrated Weed Control Plan (IWCP) and Environmental Assessment (EA) OR-014-93-09
- Vegetation Treatment on BLM Lands in Thirteen Western States FEIS and ROD (1991)
- Supplement to the Northwest Area Noxious Weed Control Program FEIS and ROD (1987)
- Lakeview District Fire Management Plan Phase 1 (1998)
- Wildland and Prescribed Fire Management Policy (1998)
- Rangeland Reform '94 FEIS and ROD (1995)

- Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (1997)
- Standards for Land Health for Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (1998)
- Interior Columbia Basin Strategy (2003)
- Lost River (Deltistes luxatus) and Shortnose (Chasmistes brevirostris) Sucker Recovery Plan. U.S. Fish and Wildlife Service (1993)

LIMITATIONS

There are a number of limitations on the use this hazardous fuels reduction CX. The project:

- a) shall not exceed 1,000 acres for mechanical methods (crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing) and shall not exceed 4,500 acres for prescribed fire,
- b) shall be conducted in wildland-urban interface or in Condition Classes 2 or 3 in Fire Regime Groups I, II, or III outside the wildland-urban interface.
- c) shall be identified through a collaborative framework as described in A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan,
- d) shall be conducted in accordance with BLM and DOI procedures and applicable land/resource management plans (refer to Plan Conformance section above),
- e) shall not be conducted in wilderness areas or where it would impair the suitability of WSA's for preservation as wilderness,
- f) shall not include the use of herbicides or pesticides,
- g) shall not involve the construction of new permanent roads or other new permanent infrastructure,
- h) may include the sale of vegetative materials if the primary purpose is hazardous fuels reduction.

COMPLIANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT

The proposed action is categorically excluded from further analysis or documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM2, Appendix 1, 1.12 if it does not meet any of the following Exceptions (listed in 516 DM 2, Appendix 2; IM No. OR-2002-130).

Will the proposed action meet the following Exceptions?

Exception	Yes No
Have significant adverse effects on public health or safety?	()(X)
2. Have adverse effects on such unique geographic characteristics or features, or on special designation areas such as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; sole or principal drinking water aquifers; prime farmlands; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks. This also includes significant caves, ACECs, National Monuments, WSAs, RNAs.	()(X)

3. Have highly controversial environmental effects (40 CFR 1508.14)?	()(X)
4. Have highly uncertain and potentially significant environmental effects or unique or unknown environmental risks?	()(X)
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	()(X)
6. Be directly related to other actions with individually insignificant, but significant cumulative environmental effects? This includes connected actions on private lands (40 CFR 1508.7 and 1508.25(a)).	()(X)
7. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places? This includes Native American religious or cultural sites, archaeological sites, or historic properties.	()(X)
8. Have adverse effects on species listed or proposed to be listed as Federally Endangered or Threatened Species, or have adverse effects on designated critical habitat for these species? This includes impacts on BLM-designated sensitive species or their habitat. When a Federally listed species or its habitat is encountered, a Biological Evaluation (BE) shall document the effect on the species. The responsible official may proceed with the proposed action without preparing a NEPA document when the BE demonstrates either 1) a "no effect" determination or 2) a "may effect, not likely to adversely effect" determination.	()(X)
9. Fail to comply with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act (water resource development projects only)?	()(X)
10. Violate a Federal, State, Local, or Tribal law, regulation or policy imposed for the protection of the environment, where non-Federal requirements are consistent with Federal requirements?	()(X)
11. Involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E)) not already decided in an approved land use plan?	()(X)
12. Have a disproportionate significant adverse impacts on low income or minority populations; Executive Order 12898 (Environmental Justice)?	()(X)
13. Restrict access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites; Executive Order 13007 (Indian Sacred Sites)?	()(X)
14. Have significant adverse effect on Indian Trust Resources?	()(X)
15. Contribute to the introduction, existence, or spread of: Federally listed noxious weeds (Federal Noxious Weed Control Act); or invasive nonnative species; Executive Order 13112 (Invasive Species)?	()(X)
16. Have a direct or indirect adverse impact on energy development, production, supply, and/or distribution; Executive Order 13212 (Actions to Expedite Energy-Related Projects)?	()(X)

The proposed action would not create any significant adverse environmental effects or meet any of the above exceptions.

DOCUMENTATION OF MITIGATION and PROJECT DESIGN FEATURES

Note: although none of the conditions for the above exceptions are met, some resources discussed are potentially affected. Mitigation Measures and Project Design Features below are applied to prevent the adverse conditions discussed in the exceptions:

Exception No.	Can Be <u>Mitigated</u>	Cannot Be <u>Mitigated</u>	Mitigation Measures and Project Design Features	
7	Yes		Cultural sites that are identified will be avoided.	
8	Yes		The criteria and project design features (PDF's) as described in the fuels programmatic consultation (1-10-02-1-98) will be followed for all federally threatened and endangered species (Bald Eagle, Shortnose Sucker) within the project area, if found. See Appendix A for Project Design Features.	
		8 8 E S	Special Status Plant Species – Will flag and avoid digging fireline where populations exist.	
15	Yes		See Appendix B for weed mitigation measures.	

SURVEYS AND CONSULTATION

Surveys and/or consultation may be needed for special status plants and animals, for cultural resources, and other resources as necessary:

Surveys:	1) are completed	2) will be completed	3) are not needed
SS Plants SS Animals Cultural Resources	JW 7/13/05	TC 7/13/2005	
Other Surveys Consultation:	1) is completed	2) will be completed	3) is not needed
SS Animal Consultation	SN# 7/14/05		
Botanical Consultation Cultural Consultation (SS = Special Status)		TC 7/13/2005	W 413/05

PERSONS AND AGENCIES CONSULTED

US Fish and Wildlife Service -- Fire and Fuels Programmatic Consultation. Klamath Tribes -- Consultation occurs on a bimonthly basis with Dr. T. Canaday Oregon Department of Forestry - Alvin Lobber

SUMMARY OF FINDINGS and CX DETERMINATION

The proposed action will not create unacceptable environmental impacts or require the preparation of an environmental assessment (EA) or environmental impact statement (EIS). The proposed action has been reviewed against the criteria for an Exception to a categorical exclusion (listed above) as identified in 516 DM 2, Appendix 2, and does not meet any Exception. The application of this categorical exclusion is appropriate, as there are no extra ordinary circumstances potentially having effects that may significantly affect the environment. The proposed action is, therefore, categorically excluded from additional NEPA documentation.

Prepared By: Steve Underwood, Prescribed Fire Operations Specialist

Reviewed By: Klamath Falls Resource Area Interdisciplinary Team

Approved Name: Jon Raby

By:

(Signature)

Name: Jon Raby

Resource Area

Manager

7/14/05

ADMINISTRATIVE REVIEW OPPORTUNITY

Any party that is adversely affected and determined to be a party to the case, may appeal the implementation of the proposed action to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. A notice of appeal must be filed in this office (at the address below) within 30 days of this decision. The appellant has the burden of showing that the decision is in error.

An appellant may also file a petition for a stay (suspension) of this decision during the time that the appeal is being reviewed by the Board pursuant to Part 4, Subpart B, 43 CFR Part 4.21. The petition for a stay must accompany the notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must be submitted to each party named in this decision, to the Interior Board of Land Appeals, and the Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. The appellant has the burden of proof of demonstrating that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of

decision pending appeal shall show sufficient justification based on the following standards:

- a) The relative harm to the parties if the stay is granted or denied,
- b) The likelihood of the appellant's success on the merits,
- c) The likelihood of immediate and irreparable harm if the stay is not granted, and
- d) Whether the public interest favors granting the stay.

CONTACT PERSON

For additional information concerning this project, contact:

Joe Foran, Klamath Falls Resource Area, 2795 Anderson Avenue, Building 25, Klamath Falls, Oregon 97603-7891 or telephone: 541-883-6916.

Appendix A - Wildlife Project Design Features (PDF's) From the Fuels Programmatic Consultation

Steps that will trigger re-initiation or further discussions with USFWS:

- If an eagle nest is occupied, then spring burning will not be allowed until site-specific discussions/consultations are completed with FWS.
- If a spotted owl is nesting in an area, then spring burning will not be allowed until sitespecific discussions/consultations are completed with FWS on this matter.
- Construction of fire lines directly adjacent to or crossing a stream occupied by fish, especially suckers.
- Emergency situations that go outside planned operations (e.g. escaped fire in eagle or owl areas, retardant spill near riparian zones, newly discovered nest sites near or in burn units).
- If the level or rate of habitat modification or disturbance exceeds any of the levels described in the BA and associated BO.
- Projects that do not meet the criteria discussed in the BA or are beyond the scope of the PDF's.

For fuel treatment units adjacent to or containing Bald Eagle nest sites:

- No fuel treatments will be planned within the core area (as identified by the BLM wildlife biologist) of a bald eagle nest site during the nest season. Nesting season is considered January 1st August 15th. The wildlife biologist may adjust these dates if the young have fledged prior to Aug. 15th (usually the fledging date plus 2 weeks). The core area will consist of the withdrawn area around the nest and the disturbance area around the nest. Generally the disturbance area is considered ¼-mile or ½ mile line-of sight. This distance may vary depending on topography and site-specific information.
- Smoke management will be planned in such a way to avoid adverse effects of residual smoke on nest sites adjacent to burn units
- A BLM wildlife biologist will be consulted about eagle use of the area before the fuel treatments are initiated to ensure the eagle situation is closely monitored.
- A biologist/designee will monitor the nest area during the burns to ensure that objectives and PDF's are met (smoke management, fire intensity, etc).
- In areas where prescribed fire activities are being planned, remove the brush, ladder fuels and large down woody debris within the dripline (approximately 30+ ft.) of the eagle nest trees and potential or identified perch/roost trees to reduce ladder fuel. The brush would be piled away from the nest and burned.
- So fire activity will be reduced immediately adjacent to the nest trees during the broadcast burning of the area, personnel will be required to complete one or more of the following:
 - a) Pull back of 10 and 100 hour fuels 30' from the base of the nest trees/perch trees
 - b) Construct fire line around the nest trees/perch trees
 - c) Use foam, water, or other retardants to protect the nest tree (foam would not be allowed if the nest tree is in a riparian zone).
 - d) Ladder fuels would be removed from the dripline (30ft.)
- Fuel treatments can proceed in the core area, if no nesting has occurred by May 6 (last date documented for initiation of incubation, Frank Isaacs, personal communication)
- If the nest is occupied or spring burning is preferred because of excess fuel loading or to meet other resource objectives, then spring burning will not be allowed until site-specific discussions/consultations are completed with USFWS on this matter.
- Aircraft used during prescribed fire operations would maintain a buffer >1/2 mile distance from the
 nest during the nesting season (this distance may vary if topographical features allow). No buffer

- would be necessary outside the nesting season.
- In instances when verifying nesting status was necessary prior to activities taking place, survey
 protocols used by Oregon Eagle Foundation annual bald eagle survey flights would be followed.

For units adjacent to or containing Bald eagle roost sites:

- If no birds are sited in the area, fuel treatments may be initiated and continue as long as the conditions are favorable. If bald eagles are using the area for roosting, the units should only be entered between 9:00 AM and 3:00 PM.
- Smoke management will planned in such a way as to avoid adverse effects of residual smoke on occupied roost sites adjacent to burn units
- A BLM wildlife biologist will monitor eagle use in the area before the fuel treatments are initiated to ensure that the eagle situation is closely monitored.
- In areas where prescribed fire activities are being planned remove the brush, small trees, and large down woody debris within the dripline (approximately 30+ ft.) of the potential (>20") or identified perch/roost trees to reduce ladder fuel. The brush would be piled away from the nest and burned.

For units adjacent to or containing fish habitats or riparian areas:

• Fuel treatment objectives within the RR's are to protect the overhead canopy from catastrophic fire and increase the productive vigor of trees and plants within the riparian areas. At the same time retain and protect the CWD and overhead cover important to stream function and aquatic habitats. The 50 foot boundary that's used for various PDF's is not necessarily biologically based but rather used to set a minimum standard that both protects aquatic habitat and simplifies designing treatment units. In areas where a 50-foot boundary does not make practical sense, and some other boundary is more appropriate, there should be an opportunity on a case-by-case basis to assess the affect of the new boundary on aquatic species and habitats.

Mechanical fuels treatments in riparian reserves:

Treatment methods that would disturb the least amount of soil (limiting activities to the dry season, pulling line to each tree, and minimizing skid trails) would be used in the Riparian Reserves. No ripping, piling, or mechanical site preparation (except for designated skid trails crossings, roads, or yarding corridors) would occur in RR's.

- To protect the thermal regime adjacent to streams and to maintain stream bank stability a nomechanical-entry spacing for treatments would occur from the natural topographic break to the
 stream. In areas where a topographic break is not evident the following guidelines would be
 implemented: On intermittent streams with slopes less than 10 percent a 50 foot no entry buffer
 would be established on each side of the stream.
- On slopes greater than 10 percent an 80 foot no entry buffer would be established.
- On perennial and/or fish bearing streams with less than 10 percent slopes a minimum 100 feet no entry buffer would be established.
- On perennial and/or fish bearing streams with slopes greater than 10 percent a no entry buffer 160 foot would be established.
- Hand treatments would be recommended within the no-mechanical-entry zones in order to meet fuel management objectives.

Ignitions within the riparian reserves:

- In general terms, ignition of broadcast fires should not occur within a minimum of 50 feet from the stream channel within the riparian reserves. The specific distance for lighting fires within the RR will depend on topography, habitat, ignition methods, and fuel moisture.
- Ignition line location nearest the stream should be based on topography and ignition methods and should be sufficient to protect water quality, CWD, and stream overhead cover. If it's wet don't pour fuel on it. If CWD directly touches the high water mark of the stream, or the CWD may be affected by high flows, don't ignite it. If there is a thick vegetation cover that extends out from the

- stream to the line of ignition then move the line of ignition into the forest stand, away from the stream.
- Mobile ignition methods, e.g. ping-pong ball ignition, recommend an increased ignition distance from the stream of at least 50 feet on slopes of 35 percent or less. On slopes greater than 35 percent increase ignition distance to 100 feet.
- Recommend the ignition line location near large open meadows, associated with the stream channels, be located at the toe of the slope above the meadow elevation as much as possible in order to protect meadow vegetation.
- When igniting fuels on the lower end of the window of moisture content, increased ignition spacing from stream would be recommended to further protect CWD and overhead cover components.

Roads and temporary fire trail access in riparian reserves:

- No new roads will be constructed within the RR unless they replace an existing road that is
 causing more resource damage. If possible use new technology construction methods for building
 temporary roads into treatment units (including but not limited to wood chip constructed roads)
- The resource advisor will approve any use of existing roads and landings within the RR.
- Minimal or no grading of the existing roads will be done to maintain the existing ground cover and vegetation and to decrease sediment movement.

Chemical fire retardants and fueling in riparian reserves:

- No use of chemical retardants would occur within the full width of the Riparian Zone (per KFRA RMP).
- In cases of escaped or wildfire control soap based retardants may be applied to within 50 feet of a stream that contains water.
- No refueling within the riparian reserves, unless approved by a resource advisor.
- No staging areas will occur in the riparian reserves, unless approved by a wildlife biologist.

Streamside pumping sites:

- Pumping on small streams should not reduce the downstream flow of the stream by more than half the flow.
- If possible avoid the construction of temporary pump chances, when necessary use temporary plastic dams to create chances and remove these dams when not actively pumping.
- All pumping located on fish bearing streams must have a screen over the intake to avoid entrainment of small fish.
- Recommend that pump intake be suspended near the thalweg (deepest/highest quantity of flow) of the stream. Avoid placing pump intakes on the substrate or edges of the stream channel.

Post-fuels treatments for access roads and temporary fire trails:

- Installing drainage dips, or water bars, in accordance with RMP BMPs to reduce surface run-off is recommended.
- A layer of duff (average of ½ inch after final burn) will be retained to protect soil from erosion during the wet season.
- Mulch and seeding or other methods of soil stabilization are to be applied to any exposed soil surfaces prior to the wet season to reduce surface erosion.
- Surfacing roads in accordance with RMP BMPs (Roads C-1-8) is recommended for all naturally surfaced roads not proposed for decommissioning or closure.
- Design blockages (close or decommission) upon completion of treatments to minimize nonauthorized use of roads and trails within treatment areas.
- Recommend placement of residual slash on trails upon completion of mechanical treatments.

Appendix B - Weed Mitigation Measures

All vehicles and equipment will be cleaned off prior to operating on BLM lands. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.

High concentrations of noxious weeds in the immediate area of mechanical operations shall be mowed to ground level prior to the start of project activities.

All equipment and vehicles operating off of main roads shall be cleaned off prior to leaving the job site when the job site includes noxious weed populations. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.









