

**Environmental Assessment for FY 2000 Elected Prescribed Fires  
Bureau of Land Management  
Lakeview District, Klamath Falls Resource Area**

**Project Title:** *Stiles Spring Prescribed Burn Project (900 acres)*

**NEPA Document Number:** OR-014-99-09

**Location of Projects (See Maps 1 - 4):**

Stiles Spring T. 37 S., R.10 E., Sec.3, 4, 5, 9, 10 & 15 W.M. (900 acres)

## **BACKGROUND**

The Stiles Spring Project area has varied fuels including grass, brush, mixed conifer, and ponderosa pine. Researching the past fire history indicated that there has been a catastrophic fire event circa 1930's. Low intensity natural fires burned through these stands at 10 to 25 year intervals. The lack of natural fire has allowed the continuous build up of fuels to extreme levels. These fuels include natural fuels, very old logging slash, and limited area of old thinning slash. These fuels present a wildfire hazard. A wildfire in this area would reach intensities that jeopardize fire crew safety, the adjacent timber stands, and important wildlife habitat.

The Swan Lake, Sucker Springs and Cowboy Wildfires burned in areas to the east and west of the Stiles Springs Project. They represent the worse case scenario if catastrophic fire takes place. The Brown Brothers Timber Sale logged the upper Stiles Spring area in the 1960's. The lower Stiles Area was in private ownership until the late 1960's. In 1960, slash treatment was nonexistent and there was no reduction in the pre-harvest fuels in the project area.

## **CONFORMANCE WITH APPLICABLE LAND USE PLANS**

The proposed project is expected to conform with the following land use plans:

Klamath Falls Resource Area Management Plan/Record of Decision (June 2, 1995)(RMP)

Final Supplemental Environmental Impact Statement (FSEIS) on Management for Late Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (also referred to as the Northwest Forest Plan), April 13, 1994.

Klamath Falls Resource Area Fire Management EA #OR-014-94-09 (June 10, 1994)

## **NEED FOR PROPOSED ACTION**

The need for fire use on the landscape, as discussed in EA #OR-014-94-09, is to:

Reintroduce fire into areas where fire can influence ecosystem composition, structure, and function.

Restore sustainable function and structure to plant communities to improve forest health in fire-adapted ecosystems.

Reduce potential for a catastrophic wildfire (that could result in major losses of sustainable ecosystem resources) in areas having heavy fuel loadings and vegetation changes that developed with fire exclusion.

Reduce overall fire management cost by reducing the number of large acreage multi-burn period fires.

Reduce the number and type of suppression resources needed in extended attack and project fire situations.

## **PROJECT DESIGN FEATURES COMMON TO ALL ALTERNATIVES**

Follow Best Management Practices for soils and water identified in the Klamath Falls Resource Area's RMP Volume II page F-31.

Avoid storing petroleum products or the refueling of equipment and the use of other chemicals in or adjacent to Riparian Reserves.

Areas of anticipated ground disturbance, (for example fire lines and staging areas), will be surveyed for cultural resources prior to project activity. Reconnaissance level cultural resource survey will also be conducted in areas of high archaeological sensitivity where prescribed fire could negatively impact cultural sites and values.

Section 7 consultation would be initiated as required.

The area around the Historic Bald Eagle nest would be burned spring or fall depending on advice of the wildlife specialist.

No ignited fire will be done within 50 feet of Riparian Reserves. Fire will be allowed to back into the Riparian Reserves as long as a primarily light intensity

To prevent additional noxious weeds from spreading onto BLM administered lands, all equipment and vehicles will be cleaned prior to operating or leaving a job site that has noxious weed's populations. All dirt, grease and plant parts potentially carrying noxious weed seeds or vegetative parts are required to be removed; removal may be accomplished with a pressure hose.

Protect pine seedlings/saplings as much as possible, particularly clumps of several trees.

## **DESCRIPTION OF ALTERNATIVES**

Three action alternatives were developed to present a range of actions for managing fuels on approximately 900 acres in the project area. These three alternatives and the no action alternative are described below. Two of the Alternatives (A, B and C) involve prescribed fire. Alternative ( D ) is no action.

### **Alternative A - Proposed Action**

Under the Proposed Action, Management-Ignited Prescribed Fire would be used to achieve the overall objectives stated above. Specifically, in these areas, the reduction of fuel loadings would provide wildfire suppression opportunities. These areas were elected (as opposed to the random process described in EA#OR-014-94-09) to achieve presuppression fuel's treatment.

There would be up to three entries to achieve the objectives. All entries will be ignited so a mosaic burn pattern may be achieved. The first entry would normally be in the spring to reduce the chance of burning off all of the duff and to reduce tree mortality. The second entry could be spring or fall depending on conditions to limit tree mortality and maintain duff retention; also, the grass will be present to retain soil. The third entry would be in the fall to reduce the 1000-hour fuels. This would prepare the stand for random-selection maintenance burns or low intensity wildfire.

Fire trails if needed would be constructed by hand crews and/or All Terrain Vehicle and Plow. All actions would incorporate the best Management Practices described in the Klamath Falls Resources Area's RMP Volume II page F-31. In addition fire trails would be designed and located (where feasible) to be utilized for future segments of a Swan Lake non-motorized access trail (Klamath Falls RMP/ROD page 51).

### **Alternative B- Handpile and Burn**

Some areas with concentrated fuels could be hand piled. Fuels could be cut with small mechanical devices and hand piled. Hand piles would be burned in the fall of the year. This alternative would have a high implementation cost and would reduce a small portion of duff, also could damage soils by the intense heat by pile burning.

### **Alternative C- Mechanical Hazard Reduction**

Under Alternative C, areas would be treated with a spider hoe or similar machine to pile fuels. Piles would be burned in the fall of the year. This alternative, like Alternative B, would have high implementation costs. Also, this alternative could displace and compact soils and would reduce a small portion of duff, also could damage soils by the intense heat by pile burning. Much of the area is too steep for this alternative.

## **Alternative D- No Treatment**

Under Alternative D, the areas would not be treated.

Excessive fuel loadings could contribute to increased fire intensity in the event of a wildfire. Such fire potential could jeopardize crew safety during wildfire control efforts, potentially impacting the adjacent timber stands and critical habitat.

## **AFFECTED ENVIRONMENT**

The general affected, environment is described in chapter 3 of the Klamath Falls Resource Area Resource Management plan/Environmental Impact Statement (September 1994).

Cultural Resources: Limited a cultural resource survey has been conducted by the BLM within the immediate vicinity of the Stiles Spring prescribed burn. Some reconnaissance level survey was performed by BLM staff within the Swan Lake Rim area in 1998. Though no sites were recorded on BLM administered lands, two areas of stacked rock features were observed on adjacent private lands. A cultural resource survey was performed under contract on the southern end of Swan Lake Rim, also in 1998. Three lithic scatters of moderate extent and intensity were identified. No prehistoric rock features were encountered. A survey has been conducted along the eastern slope of Swan Lake Rim as related to land transfers associated with the Wood River property acquisition. Numerous lithic scatters of varying extent and intensity, and sites containing stacked rock features were encountered.

A major portion of the Stiles Spring burn is located along the steep western slope of Swan Lake Rim. Very steep slopes do not generally exhibit a high sensitivity for archaeological resources. Significant resources are not anticipated along the steep slope within the burn area. Other areas within the boundaries of the planned burn are expected to contain cultural sites. There is the potential for significant sites, including stacked rock features, within two stretches of the burn unit.

The majority of the burn area remains to be surveyed prior to initiating project activities. A reconnaissance level survey will be employed to investigate areas of high archaeological sensitivity, planned fire lines, and staging areas.

Wildlife Habitat: The Stiles spring project area is an important wintering range for Elk. Elk migrate up to 60 miles to come to this area.

Threatened/Endangered Animal Species: There is a Historic Bald Eagle nest in the burn area.

Special Status Plants: No known populations occur within the project area.

Noxious Weeds: No known populations occur within the project area. However, a 1998 survey of the southern portion of Swan Lake Rim found numerous noxious weed sites.

## ENVIRONMENTAL CONSEQUENCES

In general, impacts associated with elected burns would be the same as those described for random burns in Environmental Assessment#OR-014-94-09 on fire management.

Cultural Resources: Prior to project activity, sites will be identified and measures taken to ensure that fire lines are not constructed through sites. Sites known to be particularly susceptible to fire damage, such as prehistoric rock art and historic structures, will be protected from project activity. Areas of stacked rock features are of particular concern to the Klamath Tribes and should not be incorporated within burn units. Procedures need to be implemented to discourage ignition within known site boundaries and attempts made to retain archaeological sites within unburned islands. Measures should be implemented to monitor the potential impacts of increased site visibility, for example unauthorized collection, due to removal of organic material.

Alternative A: The proposed action would reduce the residual fuels and encroaching shade tolerant conifers with minimal impact to the existing trees. Similar stands treated with prescribed fire have resulted in minimal mortality to residual trees.

The Proposed Action (Alternative A) would mimic natural forces by creating a mosaic of burned and unburned areas, which would change the fuel loading and future fire behavior. The resulting mosaic would benefit big game habitat by diversifying the vegetation that is available for food and for cover. There is a trade off regarding air quality, because a planned and executed prescribed fire would impact air quality for a short time, but avoid more detrimental smoke impacts associated with an unplanned wildfire event. Soil disturbance and compaction associated with fire trail construction would be minimal compared to mechanical methods in (Alternative C).

Previous burning projects completed in the same geographical area (Swan Lake), which have similar affected environment, provide examples of expected impacts expected with Alternative A.

### Alternative B:

This Alternative would reduce a small portion of duff, also could damage soils by the intense heat from pile burning.

### Alternative C:

Under Alternative C, areas treated with a spider hoe or similar machine could displace and compact soils and would reduce a small portion of duff and also could damage soils by the intense heat from pile burning.

Alternative D:

The Swan Lake, Sucker Springs and Cowboy Wildfires are some good examples of expected impacts associated with the no action (Alternative D).

Residual Impacts:

Fire trails would be visible from the air for three to five years and less from Swan Lake Valley.

Limited soil erosion from fire trails.

**CONSULTATIONS**

The Fish and Wildlife Service will be consulted on potential impacts of prescribed fire to Threatened and Endangered species.

The Klamath Tribes will be consulted and given the opportunity to comment prior to commencing proposed project activities. Landowners adjacent and Grazing permittees will be contacted prior to burning. In addition, the Klamath Falls Resource Area's Interdisciplinary Team reviewed the proposal (see attached signature page).

**SUPPLEMENT No. 1**

To EA Files and Planning Record

For the Stiles Springs Elected Prescribed Fires Environmental Assessment FONSI and Decision Notice signed on March 29, 1999, parts of two sections in T.37 S., R.10 E., Sections (11 & 14) were left out of the areas to be burned. The total acreage within the project area boundary, originally estimated at 900 acres, actually totals 1201 acres. Not all the total project area burn acres will receive a complete underburn due to the prescribed burning methods employed. Approximately 800 acres will receive a complete underburn. The remaining 400 acres will receive a broadcast burn over 40-60 percent of the area, burning approximately 150 acres. The prescribed fire project was found to have done a complete and sound environmental analysis, except for the minor legal errors. These changes in acreage do not create additional impacts to resources in the area and will not have a significant effect on the human environment.

\_\_\_\_\_/s./ Teresa A. Raml\_\_\_\_\_  
Manager, Klamath Falls Resource Area.

\_\_\_\_12/8/99\_\_\_\_\_  
Date

## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

for the

Stiles Spring Prescribed Burn Environmental Assessment

### **FONSI Determination**

I have reviewed this environmental assessment, including the four alternatives and their environmental impacts. It is my determination that burning for fuels reduction is in conformance with the Klamath Falls Resource Area RMP. Further it is my determination that implementation of the Proposed Action (Alternative A) as amended by Supplement No. 1, would not have any significant impacts on the human environment and that an environmental impact statement is not required.

This determination of no significant impact is based on this environmental assessment and the project design features, including the use of Best Management Practices for soils and water and other resources, and notification of adjacent landowners. Another consideration for my determination is that the absence of prescribed fire in these areas could result in wildfires that alter the ecosystem in ways that result in undesirable effects.

Based on the information in the environmental assessment and the information presented above, it is my determination that none of the alternatives analyzed constitutes a significant impact affecting the quality of the human environment greater than those addressed in the following documents:

- Final Klamath Falls Resource Area Management Plan and EIS (FEIS) (Sept. 1994), and its Record of Decision (June 2, 1995);
- Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (April 1994); also known as Northwest Forest Plan;
- Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth forest related species within the Range of the Northern Spotted Owl (Feb. 1994);
- Klamath Falls Resource Area Fire Management Programmatic EA No. OR-014-94-09 (June 10, 1994);
- Klamath Falls Resource Area Integrated Weed Control Plan EA (July 21, 1993);
- Range Reform FEIS- Klamath Falls Resource Management Plan/EIS (June 2, 1995).

In consideration of the above, I find that an Environmental Impact Statement is unnecessary and will not be prepared.

**DECISION RECORD**  
**for the**  
**Stiles Spring Prescribed Fire Environmental Assessment**

**DECISION**

My decision is to implement the Proposed Action (Alternative A) of the Stiles Spring Prescribed Fire Environmental Assessment.

Alternative A - This alternative proposes prescribed fire on approximately 1200 acres of federal land. Approximately 800 acres will cover 100% of the area in an underburn while approximately 400 acres will receive a 40-60 % broadcast burn of fuels. All burns will be ignited to achieve a mosaic pattern of burned and unburned fuels.

**NEED FOR THIS DECISION**

The lack of natural fire the past several years has allowed the continuous buildup of fuels to extreme levels. These fuels include natural fuels, very old logging slash, and a limited area of old thinning slash.

**MITIGATION MEASURES**

- No fire will be ignited within 50 feet of Riparian Reserves. Fire will be allowed to back into Riparian Reserves, contingent on maintaining a light intensity burn;
- All equipment and vehicles will be cleaned prior to operating or leaving a job site that has noxious weed populations. All dirt, grease and plant parts will be removed by a pressure hose or other method acceptable to the contracting officer;
- Construct fire lines to protect cultural sites, raptor nests, and/or vegetation patches including clumps of pine seedlings/saplings;
- Construct waterbars on fire trails to minimize erosion;
- Exclude constructing firelines through cultural sites;
- Protect historic sites from fire damage;
- Exclude areas of stacked rock features within burn units;
- Implement procedures that discourage ignition within known cultural site boundaries and retain archaeological sites within unburned islands;

**LIMITATIONS ON IMPLEMENTING THE DECISION**



No Limitations

## **DECISION RATIONALE**

Up to three prescribed burn entries would be conducted within approximately a 10-year period to achieve the objectives. The first burn would normally be in the spring to reduce the chance of burning all the duff and to reduce the potential for tree mortality. The second burn would be a few years later, either in the spring or fall, when conditions exist that limit tree mortality, and retain duff and soil. The third burn would be in the fall to reduce the 1000 hour fuels.

The Stiles Spring Prescribed Fire Project will 1) reduce the potential for a wildfire in areas having heavy fuel loadings and vegetation changes that developed with fire exclusion; 2) reintroduce fire into areas where fire has influenced natural development and maintenance of ecosystem composition, structure, and function; and 3) restore sustainable function and structure to plant communities to improve forest health in fire-adapted ecosystems.

The decision stated above is consistent with the goals and objectives of the Final Klamath Falls Resource Area Resource Management Plan and Record of Decision (June 1995), the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl, the Klamath Falls Resource Area Fire Management Programmatic EA (No. OR-014-94-09), and the Klamath Falls Resource Area Integrated Weed Control Plan EA (No. OR-014-93-09). The impacts created by the above decision do not require further analysis as noted in the FONSI determination.

The Environmental Assessment and FONSI were sent out for a public comment and review period of 30 days. The comment and review period ad was published in the Herald & News on December 15, 1999. No comments were received during the comment period.

## **Administrative Remedies**

Protests of this decision must be filed with the Field Manager within 15 days after publication of this notice in the Herald and News, BLM /Klamath Falls Field Office, 2795 Anderson Avenue, Bldg. 25, Klamath Falls, OR 97603. Protests should contain a written statement of reasons for protesting the decision. To be considered complete, a protest must contain, at a minimum:

- 1) the name, mailing address, telephone number, and interest of the person filing the protest,
  - 2) a statement of the issue or issues being protested,
  - 3) a statement of the parts of the specific EA being protested by referencing specific pages, paragraphs, sections, tables, maps, etc. included in the document,
  - 4) a copy of all documents addressing the issue or issues that you submitted during the planning process or a reference to the date the issue or issues were discussed by you for the record,
  - 5) a concise statement explaining why the Field Manager's decision is believed to be incorrect.
- This is a critical part of your protest. Document all relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, and available

planning records (for example, meeting minutes or summaries, or correspondence).

A protest which merely expresses disagreement with the Field Manager's proposed decision, without any data, will not provide us with the benefit of your information and insight. In this case, the Field Manager's review will be based on the existing analysis and supporting data.

Before deciding to file a protest, I encourage you to please contact me to determine if your concerns might be met in some way other than via a protest or to assist you in the protest process if it is appropriate. This notice meets the requirement for purposes of protests under 43 CFR subpart 5003 – Administrative Remedies. Thank you for your continued interest in the multiple use management of your public lands.

\_\_\_\_\_/s./ Teresa Raml\_\_\_\_\_  
Manager, Klamath Falls Resource Area

\_\_\_\_01/25/2000\_\_\_\_\_  
Date