

**Environmental Assessment #OR-014-98-03
For Elected Prescribed Burning On 455 Acres
Bureau of Land Management
Lakeview District, Klamath Falls Resource Area**

Project Title: Elected Prescribed Burning on Upper Swan, Little Yainax, and Stukel Units

Location of Projects (See attached maps):

Upper Swan: T. 37 S., R.10 E., Sec. 24 & 25 W.M.
T. 37 S., R. 11.5, Sec. 31
(160 acres, generally located northeast of Swan Lake Rim.)

Little Yainax: T. 37 S., R.12 E., Sec. 27
(20 acres, generally located on Old Johnny Out and Yainax Butte Timber Sale areas)

Stukel: T. 40 S., R.10 E., Sec. 1
(115 acres, generally located in Stukel Mountain Timber Sale area.)
T. 39 S., R. 10 E., Sec. 25
(160 acres, generally located in Stukel Mountain area)

BACKGROUND

The Upper Swan Project is a large brushfield left after a big 1930's wildfire. The fuels present a fire hazard because they exceed five feet high in many areas and include dead material in the aged brushfield. A wildfire in these fuels could reach intensities that jeopardize fire crew safety, the adjacent Late-Successional Reserve on the Winema National Forest, and adjacent private and national forest lands.

During Summer 1992, the John Springs Wildfire burned the area to the north and east of the Little Yainax Project. The Johnny Out Timber Sale and the Stukel Mountain Timber Sale harvested the smaller white fir in the project areas, but left considerable preharvest fuels from the 1962 wind storm or previous bark beetle attacks, along with conifers of little or no value in excess of the required stocking.

Specifically, reduction of brushfields and forest fuel loadings will provide wildfire suppression opportunities. These areas were elected (as opposed to the random process described in EA#OR-014-94-09) to achieve presuppression fuels treatment.

Preliminary analysis resulted in dropping 300 acres in the Upper Swan area from this proposal for prescribed burning and proposing that area for alternative action under a categorical exclusion.

Section 7 consultation (per the Endangered Species Act) was conducted on the Upper Swan unit due to the location of a bald eagle roosting site in the vicinity.

Plant surveys conducted on the proposed burn areas did not identify any special status species plants.

AFFECTED ENVIRONMENT

The general affected environment is described in Chapter 3 of the Klamath Falls Resource Area Resource Management Plan/Environmental Impact Statement.

Stukel Mountain: Forest vegetation is an uneven-aged eastside ponderosa pine stand intermixed with western juniper woodlands. Thinning operations in the pine stands in 1997 removed approximately 25 to 35 percent of the basal area to maintain the vigor of residual stand. Post harvest canopy closure ranges from 40 to 70 percent. Although harvest operations required that trees be whole-tree yarded, some residual slash still remains. Significant beetle mortality from 1991 through 1994 has added to the high fuel loads in much of the stand. Western juniper is encroaching into much of the pine stands increasing the water stress on existing pines.

Swan Lake: The Swan Lake elected burn area has a bald eagle roosting site (the bald eagle is Federally listed as threatened).

Little Yainax: A large infestation of the noxious weed musk thistle, totaling 60 acres, occurs in the Little Yainax area. This infestation has tripled over the past four years.

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 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.

DESCRIPTION OF ALTERNATIVES

Four action alternatives were developed to present a range of actions for managing the vegetation on approximately 455 acres that have a potential for wildfire. Those four alternatives and the no action alternative are described below. Two of the alternatives (A and B) involve

prescribed fire; two alternatives (C and D) involve alternate fuel treatment, and Alternative E 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. With the exception that these areas were elected for burning versus being selected under a random process, the burning would be conducted as described in Environmental Assessment OR014-94-09 addressing the use of prescribed burning.

Project Design Features Specific to Alternative A:

- Fire trails would be constructed by hand crews, where necessary, and bulldozer where fuels are extensive in depth and loading.
- The Upper Swan Unit with the eagle roosting site would be burned in the fall to avoid impacting the eagle nesting season.

These project design features would be in addition to those listed for all alternatives.

Alternative B - Handpile and Burn

Some areas with concentrated fuels at Little Yainax and Stukel Mountain could be handpiled. At the two burn areas on Swan Rim, brush could be cut with small mechanical devices and hand piled for burning in the fall after sufficient curing.

(Note: This alternative would have a high implementation cost due to the amount of slash concentrations at Little Yainax and the size of the Upper Swan unit.)

Alternative C - Biomass (Little Yainax)

Under this alternative, fuels would be yarded to landings for chipping (waste fuel) and shipping to the nearest co-generation facility for electricity production.

Alternative D - Mechanical Hazard Reduction (Upper Swan)

Under Alternative D, the Upper Swan areas would be treated with either a bulldozer equipped with a brush blade or a rolling drum chopper to reduce fuel loads.

Alternative E - No Treatment

Under Alternative E, the three elected burn areas would not be treated. Vegetation would be allowed to continue growing, dying, and accumulating.

PROJECT DESIGN FEATURES COMMON TO ALL ALTERNATIVES

- Best Management Practices for soils and water and other resources identified in the Klamath Falls Resource Area's RMP will be followed.

- If any additional cultural/plant surveys done prior to the proposed burns provide information to the contrary, the project would be dropped or modified and Section 7 consultation would be initiated as required.
- All landowners adjacent to proposed burn units will be notified 30 days prior to implementation of prescribed fire.
- To prevent additional noxious weeds from spreading into the Klamath Falls Resource Area, all equipment will be cleaned prior to operating on BLM-administered lands. All dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts are required to be removed; removal may be accomplished with a pressure hose.
- To minimize the potential for noxious weed seeds or plant parts to adhere to equipment, noxious weeds in the immediate area of equipment operations will be mowed to ground level prior to starting prescribed burning activities. This project design feature will be applied to activities in the Little Yainax area due to the weed infestation there.
- To prevent spread of noxious weeds from weed-infested BLM-administered lands onto other uninfested lands, all equipment and vehicles operating off main roads will be cleaned prior to leaving a job site that has noxious weed populations. All dirt, grease, and plant parts potentially carrying noxious weed seeds or vegetative parts is required to be removed; removal may be accomplished with a pressure hose. This project design feature will also be applied to activities in the Little Yainax area, which is infested with musk thistle.

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. The impacts described below take into consideration implementation of the project design features.

Alternative A: The Proposed Action (Alternative A) would reduce the residual fuels and encroaching junipers with minimal impact to the existing trees, particularly in the Stukel Mountain and Yainax Butte stands. Similar stands treated with prescribed fire after thinning operations 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 brushfields, 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 Alternatives B and D.

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

The John Springs Wildfire is a good example of expected impacts associated with the No Action (Alternative E).

Resources Not Expected to be Impacted: None of the critical resource elements listed below are expected to be impacted by any of the alternatives, primarily due to the absence of the resources on the proposed burning areas.

- Air Quality
- Area of Critical Environmental Concern
- Cultural Resources
- Prime Farmlands
- Floodplains
- Native American Religious Concerns
- Wastes (Hazardous/Solid)
- Water
- Wetlands/Riparian Zones
- Wild & Scenic Rivers
- Wilderness
- Special Status Plant Species

Residual impacts where prescribed fire is used:

- Fire trails would be visible from the air.
- Waterbars on fire trails would reduce any erosion.
- The brushfield would be preserved at a young age for a period of time.

Economic Considerations

Three alternatives (B, C and D) would have high implementation costs associated primarily with their labor intensive activities. Alternative B would have high costs associated to the amount of slash concentrations at Little Yainax and the unit size at Upper Swan.

Alternative C's high implementation costs would be due to the amount of work involved, distance to the nearest cogeneration facility, and the current unfavorable waste fuel market. This opportunity existed in the recent past, but was not elected by the timber purchaser.

Soil Impacts

Alternative D (Mechanical Hazard Reduction) could displace and compact soils.

Alternative E (No Action)

If no action were taken, 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 late-successional reserve, as well as private and national forestlands.

CONSULTATIONS

Landowners adjacent to the elected burn areas include the State of Oregon, Roseburg Resources Company, Davis, Drews, and Jeld-Wen. The Oregon Department of Forestry and the Oregon Department of Fish and Wildlife have been consulted about the proposed burning. Other landowners have been consulted as permission has been received to enter onto or cross their lands for analysis of the areas and the vegetative situation. All adjacent landowners will be notified 30 days prior to implementation of prescribed fire.

Also, the Stukel Mountain proposed burn was addressed in Environmental Assessment #OR014-94-12.

The Klamath Falls Resource Area's Interdisciplinary Team reviewed the proposal and provided input (see attached signature page).

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)

FINDING OF NO SIGNIFICANT IMPACT AND DECISION RECORD

I have reviewed this environmental assessment, including the five alternatives and their environmental impacts, and have determined 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) 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 the analysis in EA#OR014-94-9 and the project design features in this environmental assessment, including among others 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 wild fires that alter the ecosystem in ways that result in undesirable cumulative effects.

Based on these determinations, it is my decision to implement Alternative A (Proposed Action) as provided in this environmental assessment.

Larry Frazier, Acting Area Manager, Klamath Falls Resource Area

Date