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Dear Reader:

We would like to share with you the Pacific Northwest Research Station's plans for vegetation management and research within the Lookout Mountain unit of the Pringle Falls Experimental Forest (PFEF).

The PFEF is located about 30 miles southwest of Bend, Oregon, and was established in May 1931 as a center for silviculture, forest management, and insect and disease research in ponderosa pine forests east of the Oregon Cascade Range (see Figure 1, page 5). The 3,535-acre Lookout Mountain Unit of the Experimental Forest is proposed for silvicultural and fuel treatments because the forest and scientific studies being conducted there are threatened by wildfire and forest health problems. It also presents an opportunity to combine research and management.

Purpose of the Proposed Action

Within the Lookout Mountain Unit is a relatively large block of closed-canopy forest that has undergone little major disturbance since about 1845 when a single stand-replacement fire resulted in the establishment of dense ponderosa pine at lower elevations and Douglas-fir, grand fir, sugar pine, western white pine, and mountain hemlock at higher elevations. This important site could be lost if stand densities are not reduced.

Fire exclusion over the past 100 years at Lookout Mountain has contributed to high stand density and allowed elevated fuel accumulation. The forest there is at risk of major disturbance from multiple threats, including wildfire and insects. Because of stand density, average diameter, and host species and fuel availability, there is a high and increasing probability that ponderosa pine across the Lookout Mountain unit will support a landscape-scale western pine beetle outbreak, or a large stand-replacing event. Such disturbance would mean the end of existing high-value, long-term studies and eliminate most future research opportunities.

The proposed action is needed to reduce stand density to lower susceptibility to catastrophic loss to insects, disease, or fire, as well as to protect the long-term studies and future research opportunities represented by the residual stand and create new stand structures as a requirement for the new studies. Treatment is needed to:

- Reduce stand density and ground fuels in a buffer surrounding the Levels-of-Growing-Stock Study and surrounding the Ponderosa Pine-Grand Fir Spacing Study to prevent loss from insects and wildfire.
- Reduce stand density and ground fuels in stands belonging to ponderosa pine and mixed conifer plant associations dominated by ponderosa pine to maintain high growth rates and reduce susceptibility to insect infestation.
- Reduce stand density and ground fuels in mixed conifer stands that include mountain hemlock to reduce the risk of wildfire moving downslope into ponderosa pine stands.
- Provide operational scale research opportunities through a series of thinning and fuel



reduction treatments applied across the landscape that facilitate studies of the interaction of climate change and vegetation dynamics, fire ecology of giant chinquapin, processes for converting even-aged stands to uneven-aged stands, and the effect of stand manipulation on wind patterns and wind residual tree blowdown.

- Protect and enhance future research opportunities.

The proposed activities provide a platform for a suite of new studies that address the Pacific Northwest (PNW) Research Station's goals for climate change and vegetation dynamics research.

Research Goals: Scientists at the PNW Research Station have identified numerous research goals with this proposal including:

- Develop and demonstrate a suite of treatments that accelerate the development of large trees while reintroducing natural disturbance processes that provide greater ecosystem resiliency.
- Evaluate the influence of climate change on vegetation dynamics and forest structure.
- Develop and demonstrate a process for converting even-aged stands to uneven-aged stands.
- Protect ongoing research and provide greater opportunities for future research.
- Develop and demonstrate linkages between mid-scale (multiple watersheds) and project analyses.
- Refine and demonstrate a burn probability and fire risk analysis using a fire modeling/actuarial risk approach.
- Expand the current use of the west-wide pine beetle model to incorporate western, mountain, and engraver beetles, and develop a means to incorporate red turpentine beetle.
- Evaluate the use of biological control agents to manipulate aboveground biomass of the dominant shrub, snowbrush, and thereby encourage enhanced herbivory and defoliation to create more predictable burning conditions and potentially greater natural regeneration of ponderosa pine.
- Develop and demonstrate models of the interaction of wind with tree and stand-level disturbances.
- Create an opportunity to locate and showcase a large body of work for the Western Wildlands Environmental Threat Assessment Center.
- Refine current understanding of fire ecology for prominent plant species such as giant chinquapin.

In summary, the primary purpose of the proposed project is to reduce risk to the site by reducing stand densities to lower susceptibility to catastrophic loss to insects, disease, and fire. By integrating the need to reduce risk to the site with the research goals of the PNW Research Station, treatments would be implemented in such a way that pertinent research questions regarding long-term sustainability of ponderosa pine and mixed conifer forests in a changing climate can be answered.

Relationship to the Deschutes Forest Plan

The PFEF is administered by the PNW Research Station of the USDA Forest Service. The PNW Research Station is responsible for managing the PFEF for long-term research. Research use of

the nation’s experimental forests was reaffirmed under the Forest and Rangeland Renewable Resources Research Act of 1978. The PFEF is addressed in the Deschutes Land and Resource Management Plan (LRMP) as a single Management Area.

The Deschutes LRMP states the goal for the PFEF: “To provide an area where field research activities are conducted while considering other resource values. Administrative coordination between the National Forest System and Research within the Forest Service will provide for long-term protection of the Forest Environment to assure future research needs are met.” (LRMP 4-152). The general objective of the Experimental Forest is to serve as a field laboratory for research. Most of the project area falls within the spotted owl range and is Administratively Withdrawn under Deschutes Forest Plan as amended by the 1994 Northwest Forest Plan decision.

Proposed Action

The Forest Service proposes to address the purpose and need and identified on the previous page by implementing activities across approximately 2,603 acres within four different treatment blocks. Treatments will reduce stand densities, mow shrubs, and underburn. The blocks delineate areas of homogenous elevation and aspect, and incorporate roads for boundaries where appropriate (see Figure 2, page 6). Four levels of treatment are proposed, in addition to control (untreated) units. These treatments are randomly assigned to one unit within each block. The treatments are:

1. Thin from below to the Upper Management Zone¹ (UMZ) specified for the dominant plant association, based on stand density index values for ponderosa pine.
2. Thin from below to 75% of the UMZ specified for the dominant plant association, based on stand density index values for ponderosa pine.
3. Thin from below to 50% of the UMZ specified for the dominant plant association, based on stand density index values for ponderosa pine.
4. Thin across the entire diameter distribution to 75% of the UMZ specified for the dominant plant association, based on stand density index values for ponderosa pine to transition to an all-aged stand structure.
5. Control or untreated – retain current structure without manipulation.

Table 1. Acres of Treatment Type Displayed in Figure 2.

Treatment Type	Acres	Units
1	714	14, 24, 32, 42
2	855	11, 22, 33, 44
3	681	12, 23, 31, 41
4	353	13, 21, 34, 43
Total acres treated	2,603	
5 – untreated control units	342	15, 25, 35, 45

¹ The Upper Management Zone is the stand density level at which a suppressed class of trees begins to develop. In pine forests, this is the level beyond which there is imminent risk of catastrophic loss of overstory trees to bark beetles. Thinning to 50% of UMZ is a heavier thin than going to 75% of the UMZ.

The interdisciplinary team will also be looking at the long-term needs for access to the area, primarily by researchers. The environmental analysis will likely include potential road closures and decommissioning in the project area.

Additional documents for this project will be placed on the Forest Service web site at <http://www.fs.fed.us/r6/centraloregon/projects/units/bendrock/index.shtml>, as they become available.

Invitation to Comment

We're telling you about this proposal so that you can provide comments to us. Your comments will be considered and used to identify issues associated with the proposal, so please keep them as specific as possible. They will also become a matter of public record. The phases of the planning process will include considering input we receive, hosting a public field trip in late spring, as well as conducting any necessary surveys for wildlife, sensitive plants, or other resources. Our current expectation is that the analysis will be documented in an environmental impact statement which should be completed later this year. There will be an opportunity to comment again at that time.

Written or verbal comments are both welcome and should be returned to us by May 7, 2008. Written comments should be addressed to Phil Cruz, District Ranger, at the address on this letterhead. We will also accept correspondence at the following email address: comments-pacificnorthwest-deschutes-bend-ftrock@fs.fed.us. Please put "EXF Scoping Comments" in the subject line of your email.

If you have any questions, additional information can be provided by Jim Schlaich, Interdisciplinary Team Leader, at 541-383-4725 or Beth Peer, Environmental Coordinator, at 541-383-4769.

Sincerely,

/s/ Phil Cruz

PHIL CRUZ
District Ranger

Figure 1: Project Area Vicinity

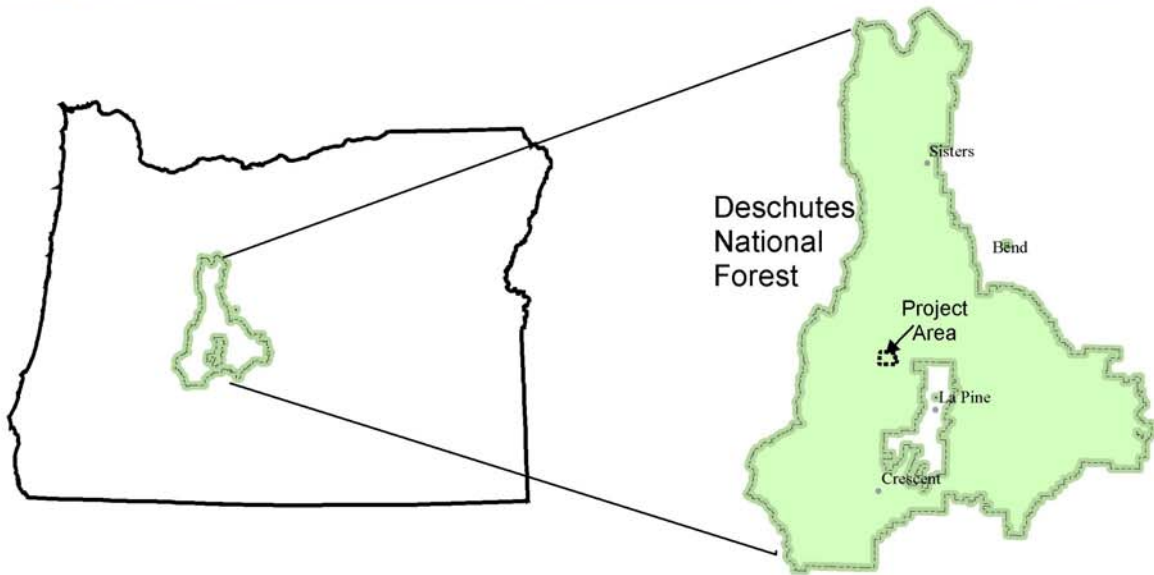
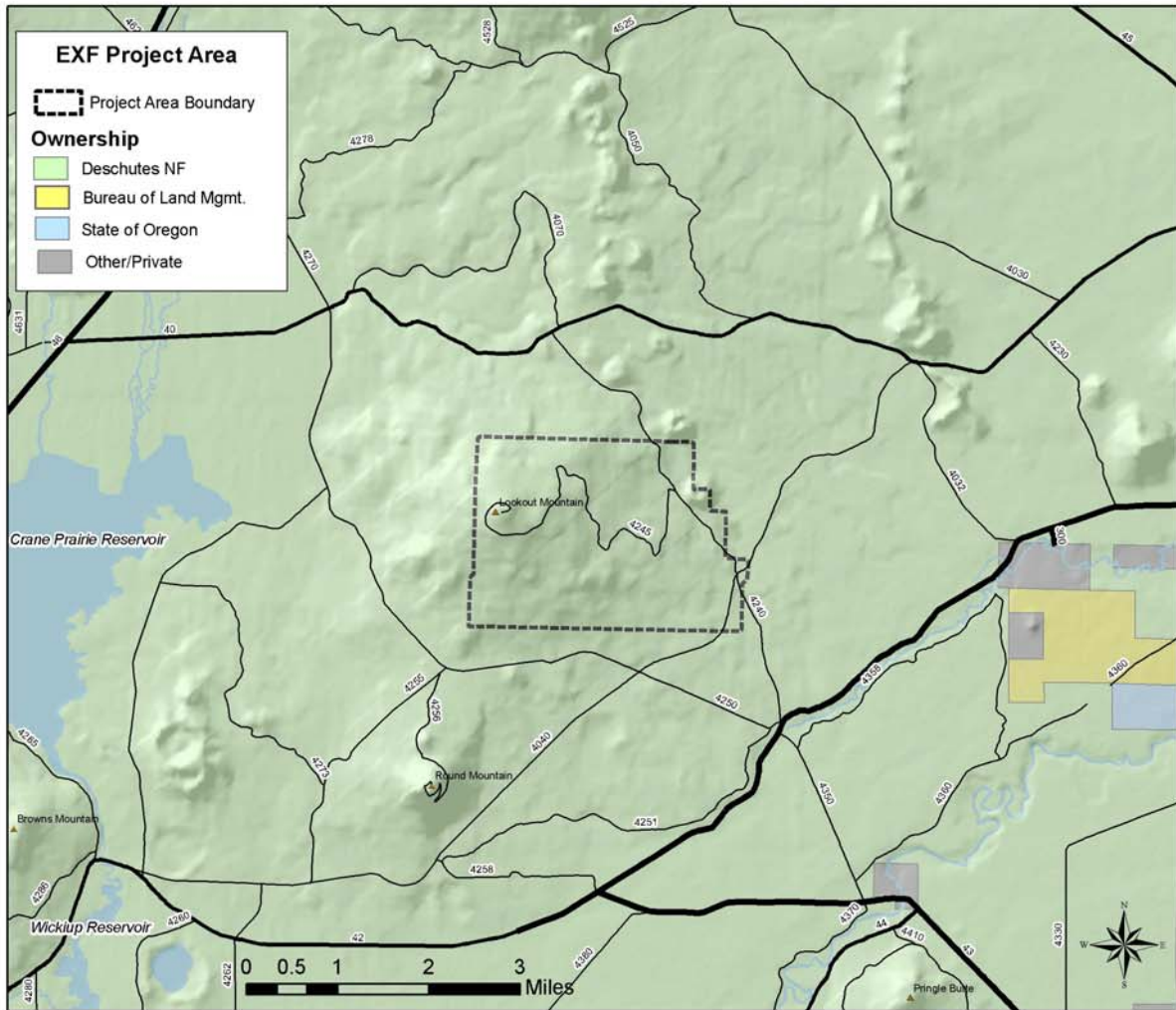


Figure 2: EXF Project Area with Treatment Blocks and Units

