

## **COPWRR Project-Level Ecosystem Monitoring Report Form**

Project: Park Fire	
Date: November 8, 2006	
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Other Participants in Field Evaluation: Glen Ardt, Phil Chang, Patti Gentilluomo, Jim King, Jim Larsen, Sandy Lonsdale, Robin Vora, Amy Waltz	
Unit #: 1 and 2	Acres in Unit: 88 total in 1 and 2
Other Units from Project Being Monitored: 2 and 1	

### **Background**

<p>Purpose and Need for Treatment of Unit:</p> <p>88 acres within La Pine State Park burned during the Park Fire of August 2005. The fire produced the following resource management concerns which need to be addressed:</p> <ol style="list-style-type: none"><li>1) Hazardous Fuels – The fire killed approximately 50% of the trees within its perimeter. As these trees decay and fall to the forest floor they will produce a heavy fuel load of dead and jack-strawed trees. The 5<sup>th</sup> Street Subdivision and State Park campground and Ranger’s residence will be threatened by such fuel loading.</li><li>2) Hazard Trees – Fire-killed overstory trees are a safety risk to campers, hikers and residents in some areas. Facilities such as fences, trails, garages, sheds and other structures are also at risk.</li><li>3) Ecosystem Health and Function – Most of the burn area was within a ponderosa pine forest type. Without site treatments and reforestation the area is likely to regenerate a high-density lodgepole-dominated stand. Lodgepole is more prone to insect and disease infestation, less resistant to fire, and generally has less habitat value.</li><li>4) Visuals – Recreationists and the general public prefer a young green forest to extensive areas of blackened standing dead and down trees. The La Pine State Park Master Plan and Upper Deschutes RMP specify visual and recreation objectives that are inconsistent with this current condition.</li></ol>
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<p>Management Objectives for Unit:</p> <p>Following from the needs identified above, the Park Fire project aims to:</p>
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- 1) Reduce hazardous fuel loading in the burn area, particularly around residences and the campground
- 2) Reduce hazard trees in key areas where they threaten human safety and property
- 3) Prevent regeneration of lodgepole pine stands in areas occupied by ponderosa pine before the fire
- 4) Improve the visual appeal of burned over areas

#### Treatment Summary for Unit:

Treatments consist of fuels reduction/rehabilitation by salvage logging overstory trees, cutting and treating smaller trees and slash, planting ponderosa pine seedlings and other species, fertilizing landings, temporary roads, skid trails, and rehabilitation of any remaining fire lines.

#### Selected Implementation Guidelines, Management Measures, and BMPs to Evaluate:

Larger trees with existing cavities and other characteristics suitable for perching and nesting would be left for wildlife habitat where compatible with safety objectives.

All large down logs, either pre-existing or trees felled during the suppression/mop-up operation would be left on-site to provide down woody habitat.

Cutting and skidding would be done during winter 2005-2006 over snow and frozen ground.

In-the-woods equipment would consist of rubber-tired or tracked shear and rubber-tired skidder.

A leave area containing approximately 26 acres will be left undisturbed in the center of the unit to serve as a woodpecker foraging area.

In other areas where residual fuel loading is light, the dead standing trees would also be left untreated to serve as protection for soil and vegetation and to provide a nutrient and organic matter input to the soil.

Bitterbrush, bunchgrasses, aspen, and other riparian species may be planted to accelerate the revegetation of the burn for stabilization and habitat values.

Any remaining rehabilitation of firelines, roads, trails, and other fire suppression disturbance not already completed will be incorporated into this project.

## **Unit Evaluation**

Were the treatments implemented as described in the decision document or Record of Decision? Were the treatments implemented in accordance with the Selected Implementation Guidelines, Management Measures and BMPs identified above? If not, please explain why.

The project was implemented as described in the Categorical Exclusion document and the Implementation Guidelines / Management Measures identified in the C.E. were followed.

A large number of dead trees were removed from the burned area, reducing present and future fuel loads and reducing hazard tree risks. Trees were selectively removed or retained in a way that protected important habitat and scenic qualities in the project area.

All trees over 20" in diameter and a number of large trees less than 20" were left standing in the salvage area to provide habitat and scenic values. The exception to this was in the power line corridor where any tree that might fall and impact the power lines was removed. A number of larger trees were transformed into snags – and made less prone to falling down – by removing the tops. A significant number of smaller dead trees were left in the salvage area to assist with erosion control. State Parks still plans to remove a few more hazard trees on the north side of the river in Unit 2.

The large leave patch of burned lodgepole was retained in the center of the project area to provide foraging for woodpeckers.

Harvest operations were implemented over several feet of snow which aided in minimizing soil impacts. There was some soil disturbance along skid trails and landings but far less than might have been the case if operations did not occur over snow.

Harvest treatments / heavy equipment were kept out of the riparian corridor, except for a narrow band where the power line crosses the river.

Large down logs were left on-site to provide coarse woody debris. Slash was removed from the project area to minimize visual impact of operations.

Ponderosa pine seedlings were planted at a density of about 300 trees per acre with 12 foot spacing. The planting was well timed and the seedlings got a lot of moisture so the survival was high (95%). The BLM and State Parks hope that this successful planting with ponderosa seedlings will pre-empt the invasion of lodgepole into a large portion of the project area.

The C.E. stated that the riparian area might be planted to accelerate revegetation. The area was not planted but some participants in the field visit observed that if hydrologic conditions in the rivers floodplain were right (episodic flooding, reasonably high water table) the vegetation would come back quickly without any planting.

A weed wash station was purchased for the project. The station did not arrive in time for this project but will be used for future projects.

The Park is interested in installing interpretive signage to raise awareness about fire and fire-adapted ecosystems.

Remaining fire lines, roads, trails and other disturbance from fire suppression activities were obliterated.

For each Management Objective for this Unit please evaluate whether the objective has been achieved. If the objective has not been achieved, please comment on barriers, constraints, limitations, etc and what might be needed for future projects to achieve the objective.

The field visit participants agreed that the project had reduced hazardous fuel loads, reduced hazard trees in key areas, promoted ponderosa pine regeneration over lodgepole, and softened the blackened “burned over” appearance of the project area. The BLM was satisfied with the results. State Parks was also satisfied with the results both from a recreational/aesthetic perspective and a habitat perspective.

Monitoring of past treatments around the edges of the Park Fire suggest that those past thinnings helped to slow the fire as it approached the subdivision in the area near Unit 1 and as it approached the power lines in the area near Unit 2.

The understory vegetation seems to be recovering well from the burn and the treatment. Shrub and grass regeneration was already present after barely one year after the fire. There was also substantial natural ponderosa and lodgepole pine regeneration in the burn area, with many new seedlings coming up since the spring.

One field visit participant commented that the post-project landscape had a lot of heterogeneity in terms of forest structure and that this was good for scenic values and for other reasons too.

Some questions / thoughts were raised during the field visit that are worth noting for consideration for future projects / work:

1) When implementing tree plantings, should we consider planting at lower densities and at less-uniform spacings? If ultimately for forest health and other reasons we are hoping for a forest with broadly spaced trees, do we need to plant 300 trees per acre? Can we space trees in a pattern that is more “clumpy, patchy, gappy” and less uniform? One suggestion was to not try to plant trees in a heterogeneous pattern, but instead to achieve the heterogeneous patterns we desire through cutting later.

2) How do we restore the riparian corridor? If the key factor to regenerating appropriate riparian vegetation is the flow regime and water/water table levels, what can BLM and State Parks do?

3) How will this site be managed to address fuel loads in the long-term? Will State Parks be able to do the mowing or prescribed burning to manage the fuel loading as it builds back up in coming decades?

What will happen to the leave patch in the middle of the project area when all the dead lodgepoles fall down in 10 years and many new young lodgepoles regenerate?

One key challenge in planning and implementing this project was the rapid timeline. The project was on an accelerated schedule because of seasonal considerations (planting) and because emergency funds with short expenditure time lines were used. Moving quickly did also help to get to the salvaged material to market before it decomposed very much. The accelerated time line made it more challenging to meet with all of the relevant stakeholders and to conduct planning for the project.

Having two agencies working on the project, BLM and State Parks, added complexity to the planning process. The resulting project needed to meet two agencies objectives.

### **Project Evaluation**

Were the results of this project what was anticipated and intended? Have treatments addressed the Purposes and Needs for this Unit? If not, why not?

The results of this project were what the BLM and the State Parks anticipated and intended. The project has addressed hazardous fuel loads, hazard trees, forest health, and scenic values.

Field visit participants expressed concern about the portions of the state park that were not burned in the Park Fire and then treated as part of this project. These areas are still characterized by un-naturally high fuel loads. There are fewer large trees in the park overall now so it is important to protect the ones that are in the part of the park that was not burned and treated.

Please share any observations or comments about the project planning, implementation, or results that are important to understanding management of this unit or important for improving future management in similar projects.

Salvage is currently a very politically charged issue. One of the participants in the field tour suggested that field visits such as this one to salvage projects such as the Park Fire project presented good opportunities for dialogue, improving understanding among stakeholders, and refining management practices. Bringing a broad group of stakeholders, including key environmental/ conservation groups from around Oregon, to a project site like the Park Fire project would allow all the parties to think about how salvage can be done well and to discuss the consequences of no action.