

## Waldo Canyon Fire

### BAER SPECIALIST REPORT - Forestry

Resource Specialty: Forestry  
Fire Name: Waldo  
Month and Year: June/July 2012  
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## Report

### I. Resource Condition Assessment

- A. Resource Setting - The Waldo Fire burn area covers approximately 18,250 acres. The burn area is within management area 2B, 2A, 4B, and 5B as designated in the PSICC Forest Management Plan. There are no management areas within the burn area that emphasize timber management. Forest tree species that are present across the burn area are predominantly mixed conifer which include: Ponderosa Pine (*Pinus ponderosa*), Douglas Fir (*Pseudotsuga menziesii*), Limber Pine (*Pinus flexilis*). On drier sites, shrub species include Pinyon pine (*Pinus edulis*), Juniper (*Juniperus scopulorum*), and Gambel Oak (*Quercus gambelii*). Scattered across the burn area are pockets of Aspen (*Populus tremuloides*) and Blue Spruce (*Picea pungens*).
- B. Findings of the On-The-Ground Survey
1. Values At Risk – The potential values at risk are roads, utility lines, and structures (campgrounds) that could be directly damaged or impacted by falling trees. These values at risk are delineated within two categories; the Primary category (1-3 yrs post fire) includes hazard trees, snags, trees with weakened root systems, and widow makers. The Secondary category (4-7 yrs post fire) include rapid deterioration of the fire killed ponderosa pine, and fire killed aspen.
  2. Condition of Values At Risk – Values at risk in this assessment include the possible loss of life and damage to property. This natural hazard exists in all forest environments, but the Waldo Canyon fire has amplified the hazards from the trees that are burned. These hazards cannot be eliminated from the burn area. Along roadways, trees have been killed and many hazards exist. Many of the obvious hazard trees have been felled or otherwise mitigated during the fire suppression efforts. This risk will continue to pose a problem for many years as trees continue to deteriorate and fall due to high winds and other naturally occurring weather events.

Within each of the developed campgrounds within the Rampart Range Recreation Area, many trees have also been killed as a result of the fire. This will present hazards to forest users once these facilities re-open and continue to pose a significant risk as the burned trees deteriorate. (See Appendix A, Photo A1, A2).

Several electrical power transmission lines pass through the burn area. There is evidence that maintenance to the utility line corridor has occurred in the past. The fire has killed many trees that now pose a potential threat to these power lines. This will create an interruption in the delivery of electrical power to the municipal water treatment plant as well as creating a potential risk of future wildfire starts. (See Appendix A, Photo A3, A4)

II. Emergency Determination

The existing condition does not appear to present an emergency in itself. The newly burned trees have increased the risk to forest users. This will continue over time as stated above.

III. Treatments to Mitigate the Emergency

The treatments identified to mitigate the emergency have already been enacted by the Type III incident. Hazard trees that posed an imminent threat along the road corridor and within the campground facilities were identified with flagging and mitigated using available fire crew members still attached to the incident. The remaining hazards associated with the road, trail and utility line corridors as well as the campground facilities and dispersed camp sites will be mitigated over a long term restoration effort. These hazards are now safely beyond the scope of the BAER assessment and are included in the recommendations below to be assessed and dealt with appropriately by the home unit.

IV. Discussion/Summary/Recommendations

The Waldo Canyon fire, encompasses 18,250 acres, has created an environment of increased risk for forest users. Forest users are now exposed to increased risk and potential injury due to hazard trees falling in and along road and trail corridors as well as campground facilities and dispersed camp sites.

Recommendations

Prior to re-opening the campground facilities within the burn area, a thorough walk through to identify hazard trees must be accomplished to assess the following actions needed to mitigate the risks associated with falling trees. This will be an ongoing, long term restoration effort to ensure that forest user safety isn't compromised.

Appropriate signage indicating the potential risk associated with falling trees within the campground and burn area need to be put in place for the forest users to view.

Due to the constant deterioration of trees within the burn area, diligent monitoring of tree hazards along road and trail corridors will need to be done. Removal of hazard trees will be required as needed. Fall trees within 1 ½ trees length on either side of road and trail corridors. Fall trees perpendicular to the slope if possible to facilitate any erosion control efforts. Hazard trees within the utility line corridor will need to be mitigated by the utility line company to ensure that safety standards of the power line right-of-way are met.

Hazard tree assessment and mitigation will need to be accomplished to facilitate any project work within the burn area.

The home unit will need to develop a Job Hazard Analysis (JHA) that addresses any and all work within the burn area specifically detailing the risks associated with hazard trees.

V. References

PSICC Forest Plan

VI. Appendices

Appendix A – Photos