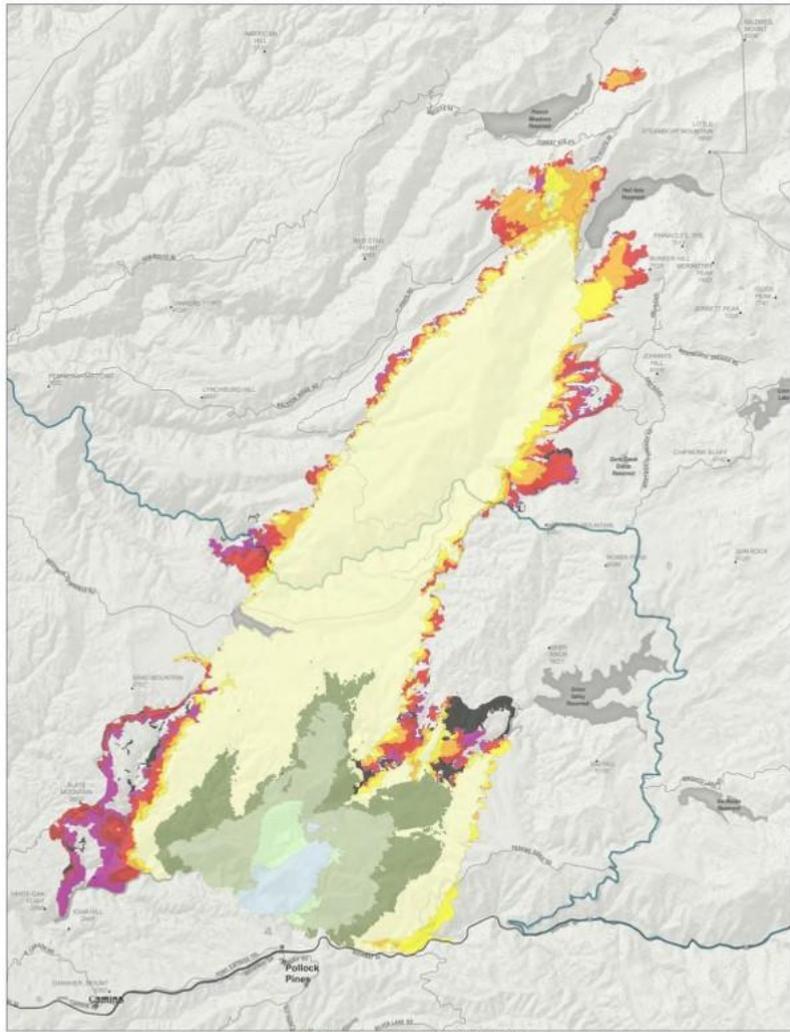


King Fire: The Reality of Fire Recovery on National Forest System Lands

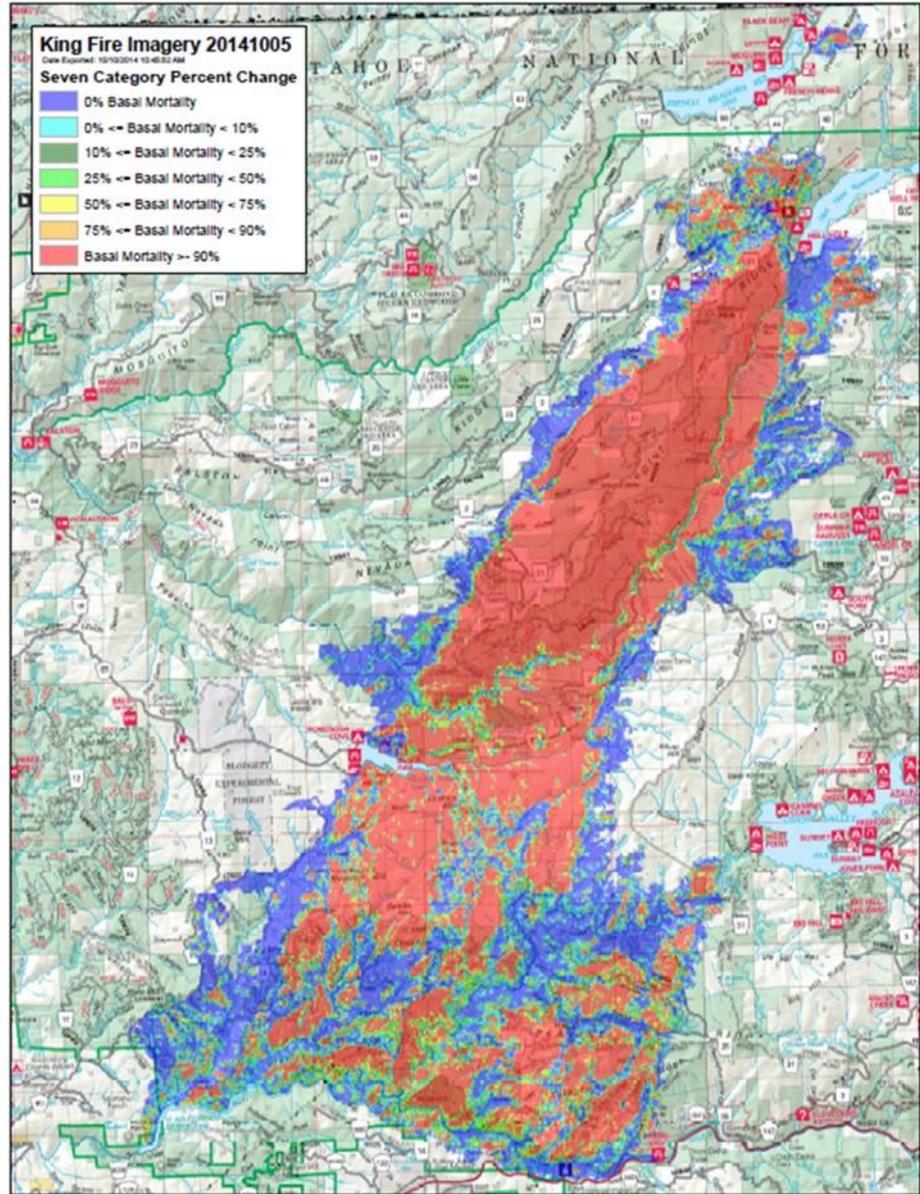
Dana Walsh, North Zone Silviculturist

Eldorado National Forest



King Fire

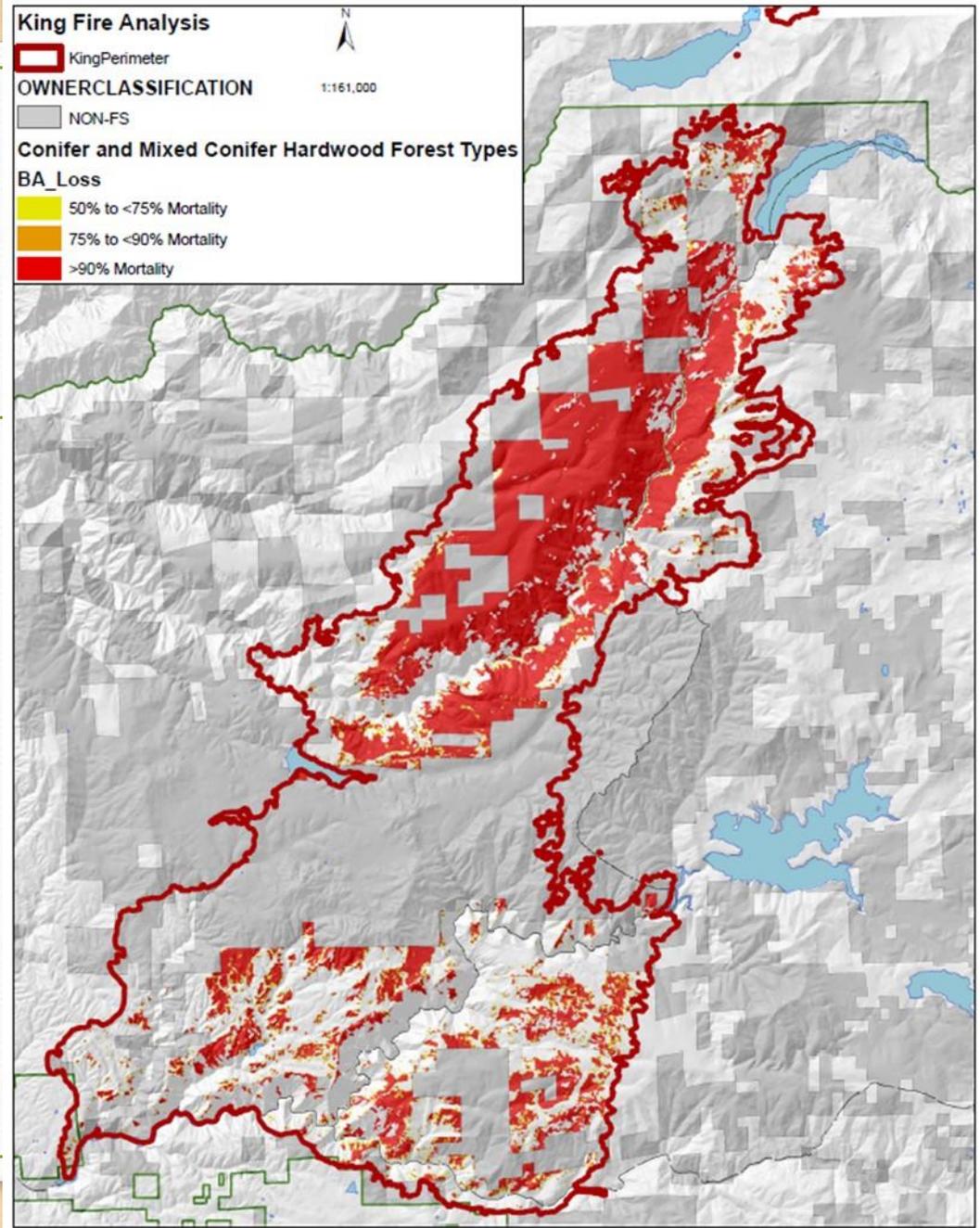
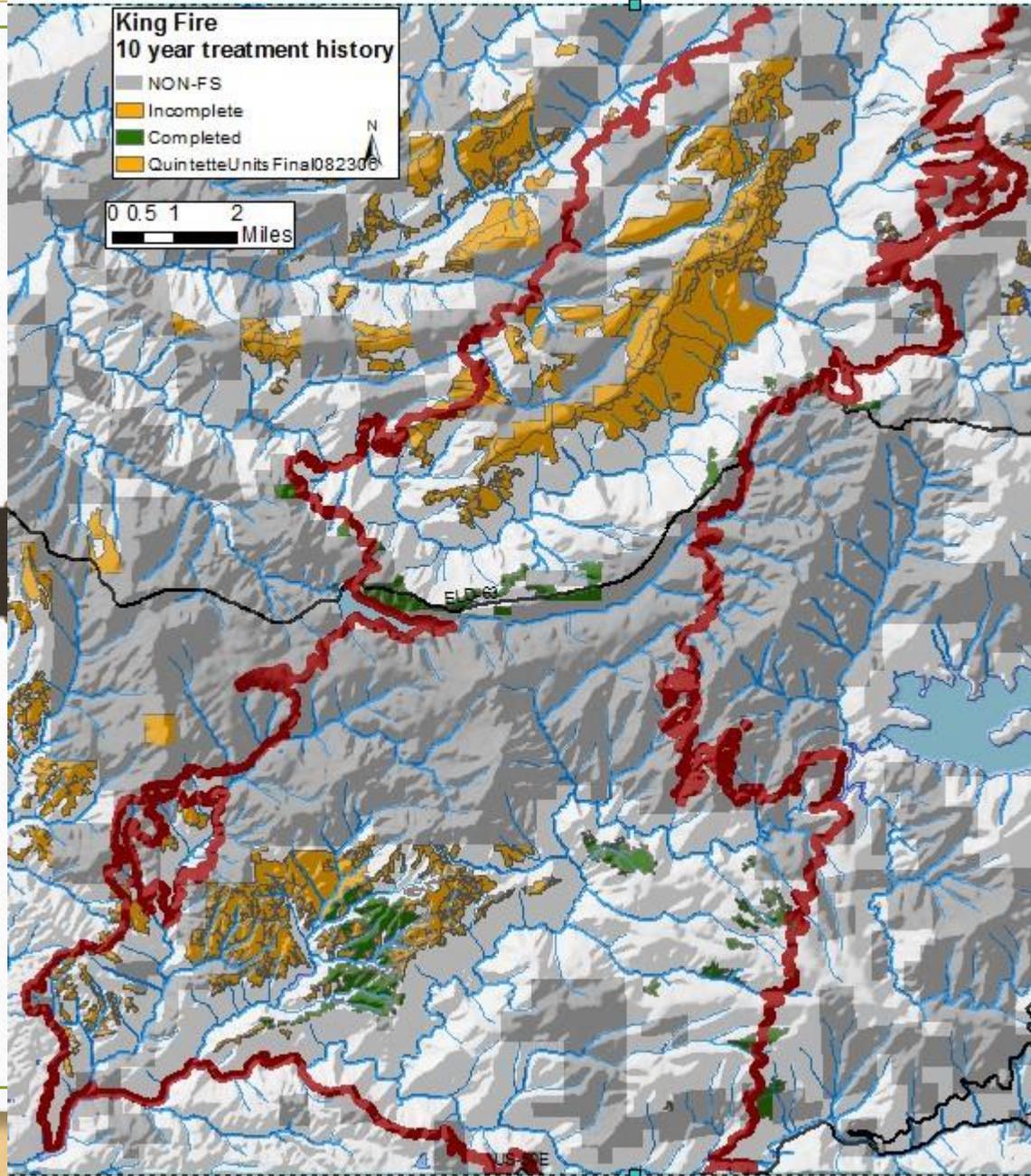
CA-ENF-023461
Friday, September 26, 2014



King Fire Imagery 20141005
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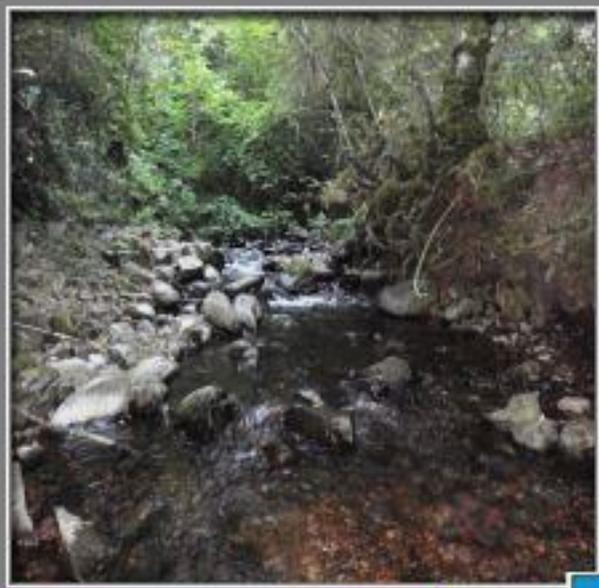
Seven Category Percent Change

- 0% Basal Mortality
- 0% ↔ Basal Mortality < 10%
- 10% ↔ Basal Mortality < 25%
- 25% ↔ Basal Mortality < 50%
- 50% ↔ Basal Mortality < 75%
- 75% ↔ Basal Mortality < 90%
- Basal Mortality >= 90%





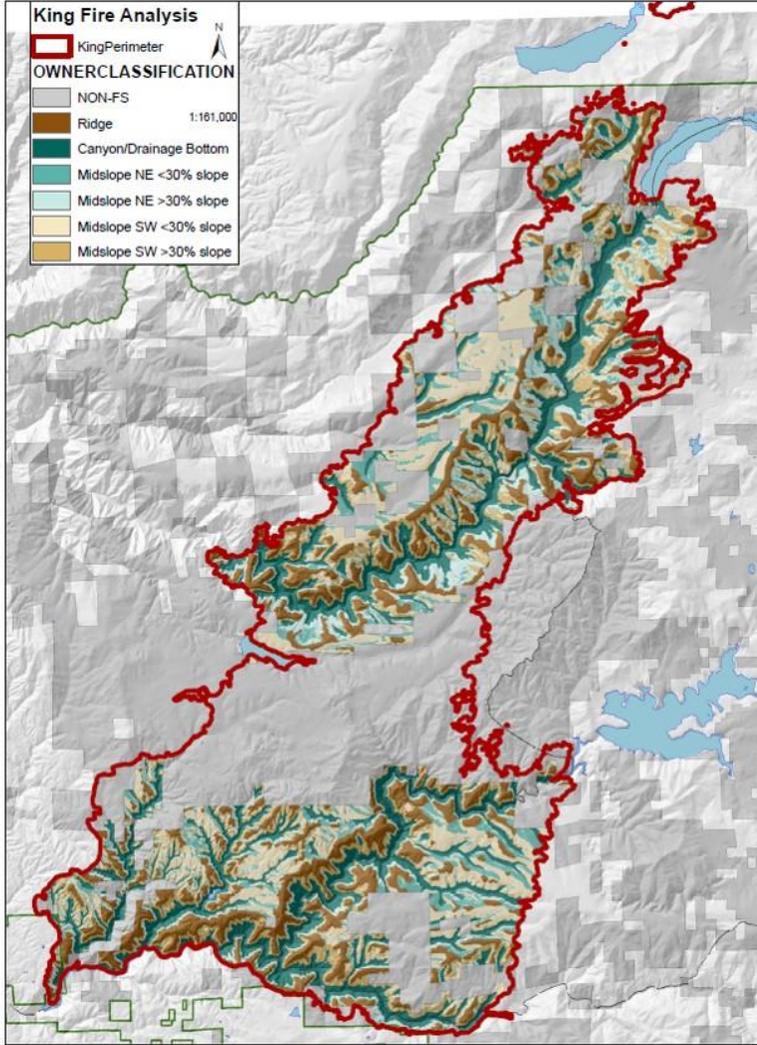
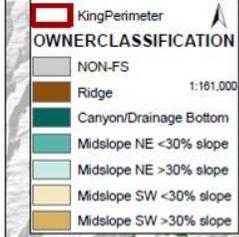
Management for Multiple Uses



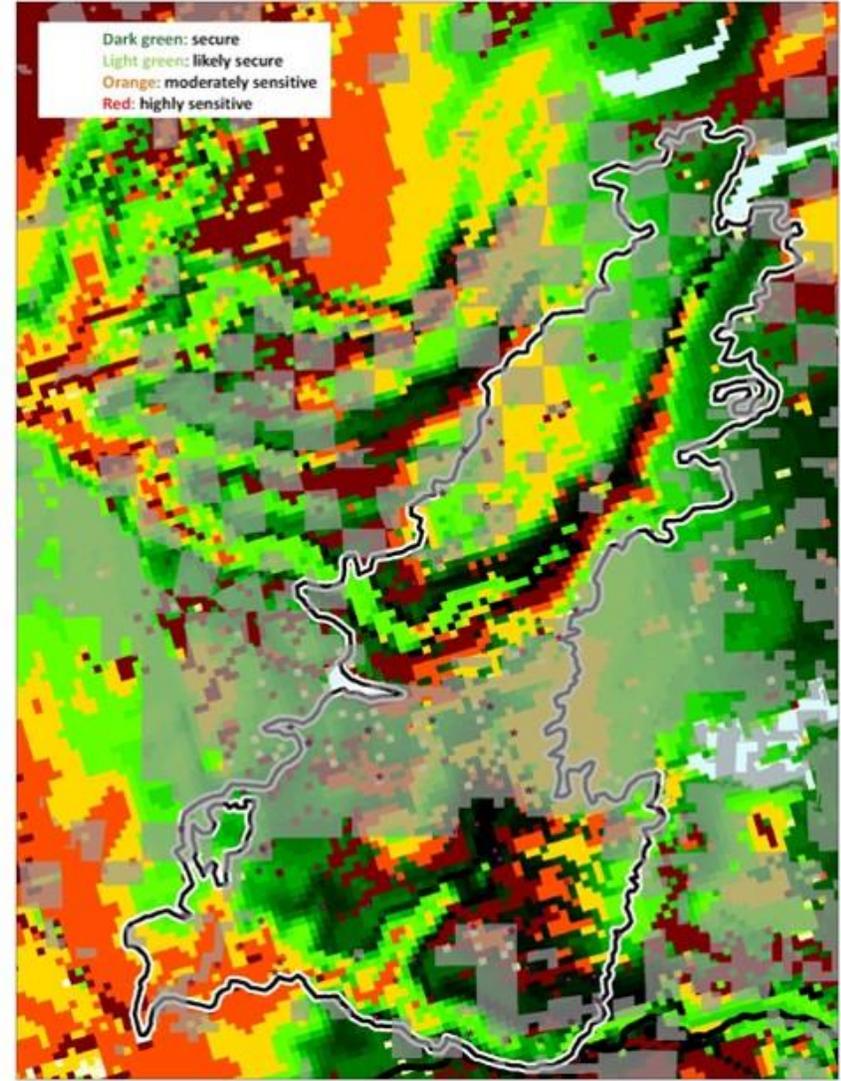
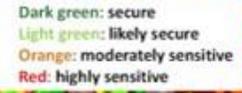
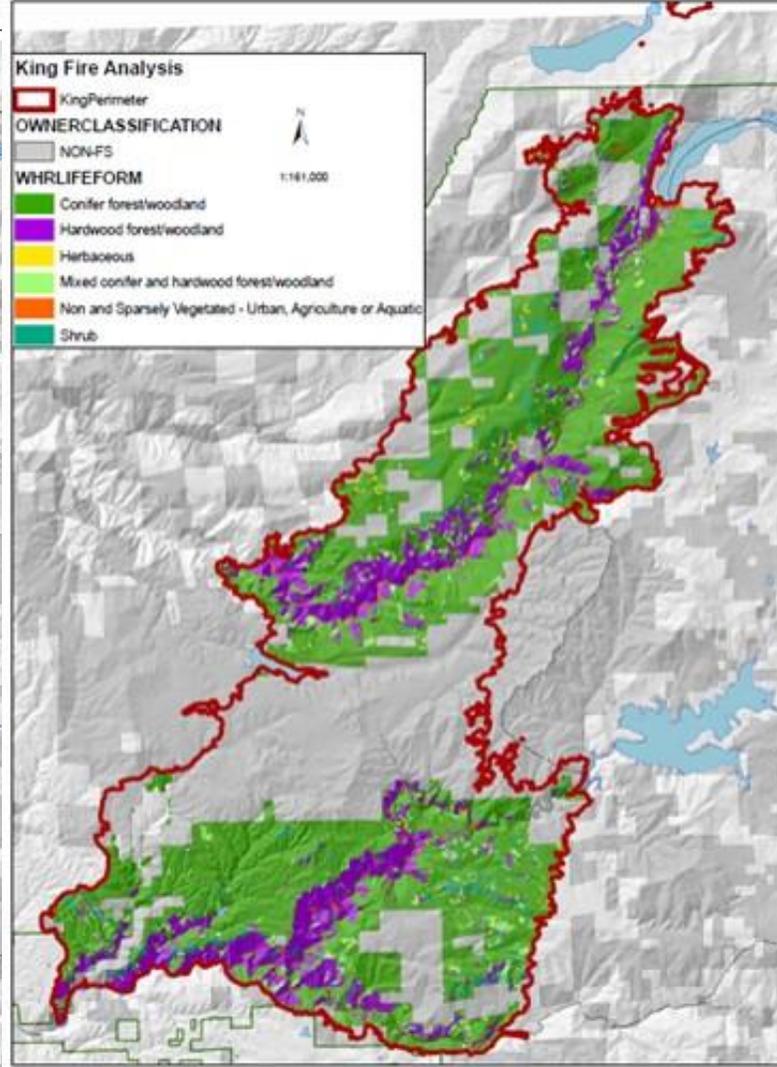




King Fire Analysis



King Fire Analysis



Documentation



The Purpose and Need for Action leading to the decision in the King Fire Restoration Project Were To:

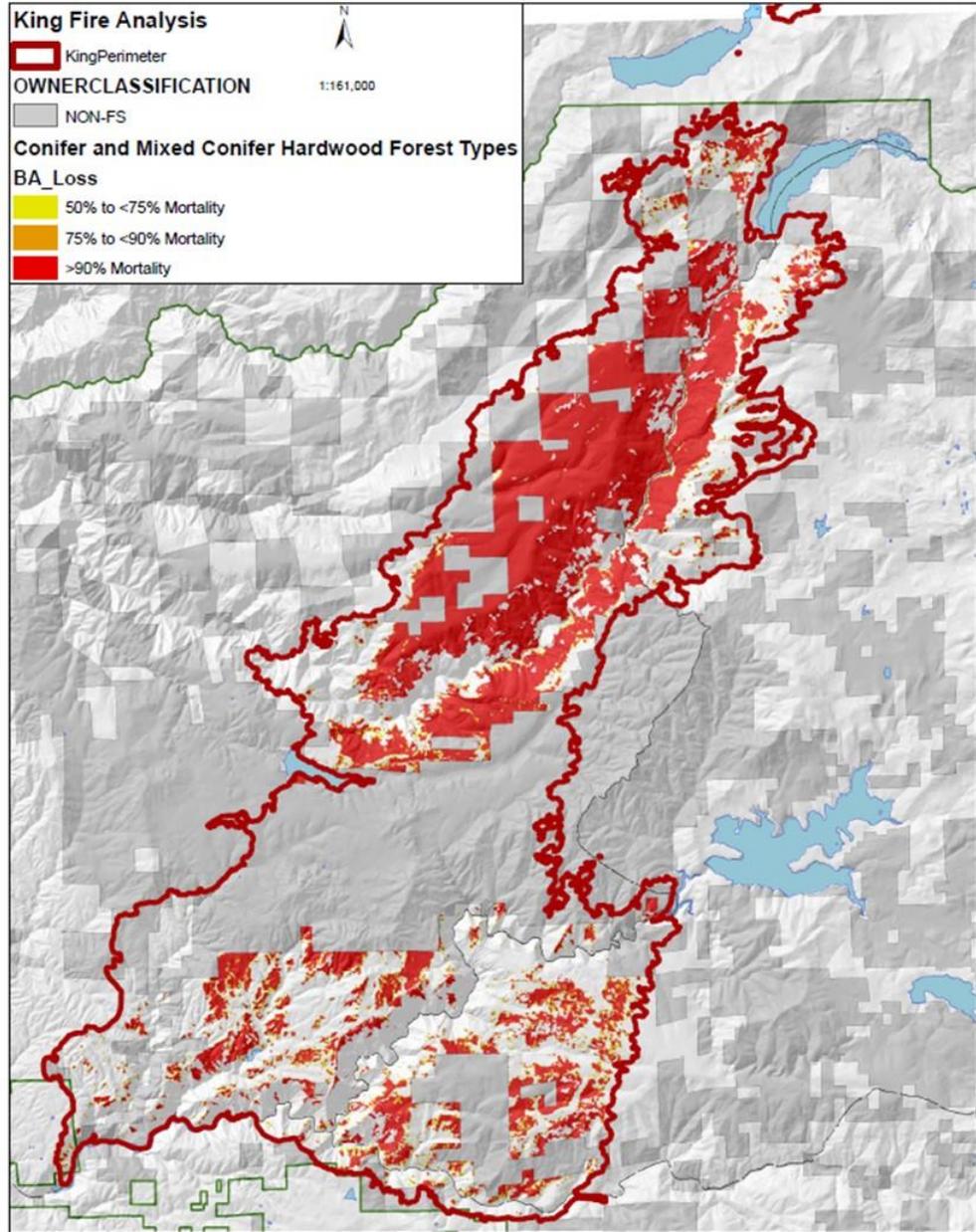
- Reduce the risk from falling dead, dying, and damaged trees that pose a significant safety concern to forest visitors and workers, and create a hazard to private property, infrastructure, and resources.
- Remove dead trees in strategic fire management areas to improve the agency's ability to manage and control future fires.
- Actively manage severely burned areas to facilitate restoration and resilience.
- Expeditiously recover timber killed by the fire commensurate with available markets for the purpose of generating funds to offset the cost of restoration activities and contribute to societal needs for wood products.
- Balance active management with the retention of important attributes of post-fire habitat at the landscape scale and within treatment areas to support the diversity and abundance of species.
- Promote scientific research to increase knowledge regarding the effects of large fires on the environment, how to reduce the risk of future fires, and how to restore resilient forests after fires.

Actions

- **Early – CE Decisions** for Recreation sites and some planting
- **EIS- A decision was signed September 3, 2015 to treat 16,688 acres or 26% of the National Forest System lands that burned in the King Fire.** These treatments include:
 - Removal of fire-killed trees on 15,739 acres including timber salvage sales and fuel reduction in strategic fire management zones.
 - Roadside hazard tree removal along 198 miles of roads.
 - Erosion control and rehabilitation treatments on 227 acres of watershed sensitive areas.
 - Reforestation on 10,609 acres.
 - Prescribed burning on 2,100 acres in the Rubicon Canyon.

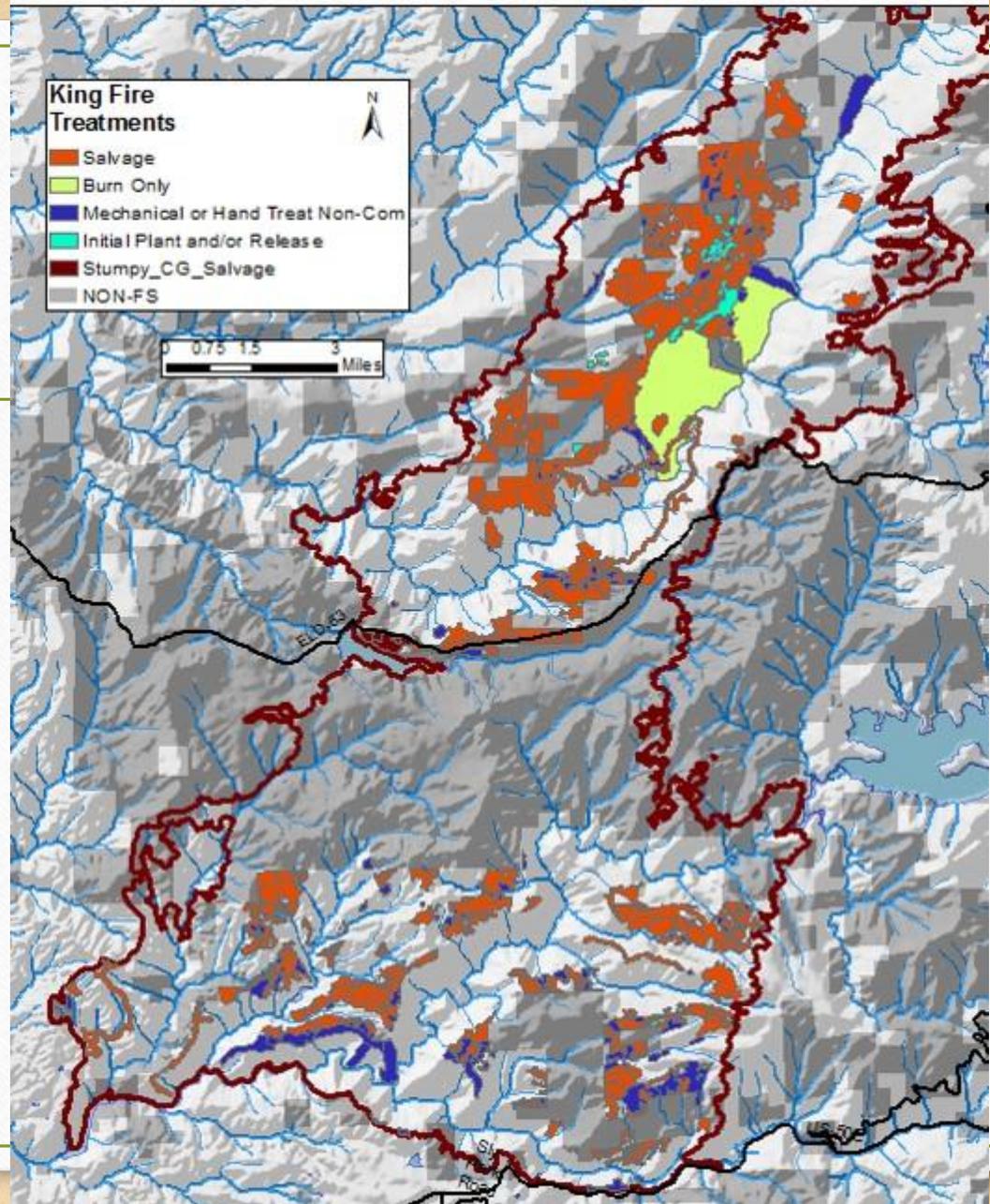
King Fire Analysis

- KingPerimeter
- OWNERCLASSIFICATION
- NON-FS
- Conifer and Mixed Conifer Hardwood Forest Types
- BA_Loss
- 50% to <75% Mortality
- 75% to <90% Mortality
- >90% Mortality



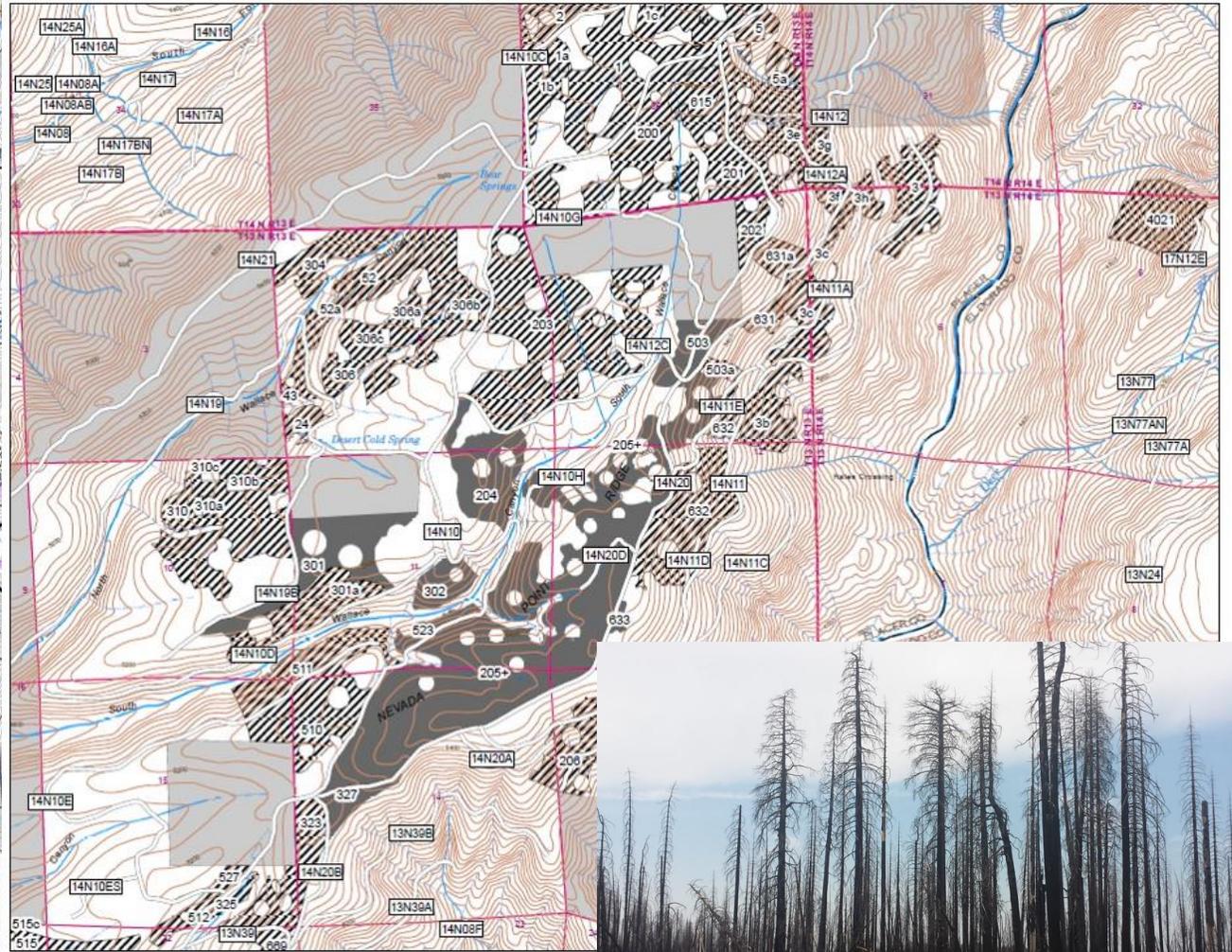
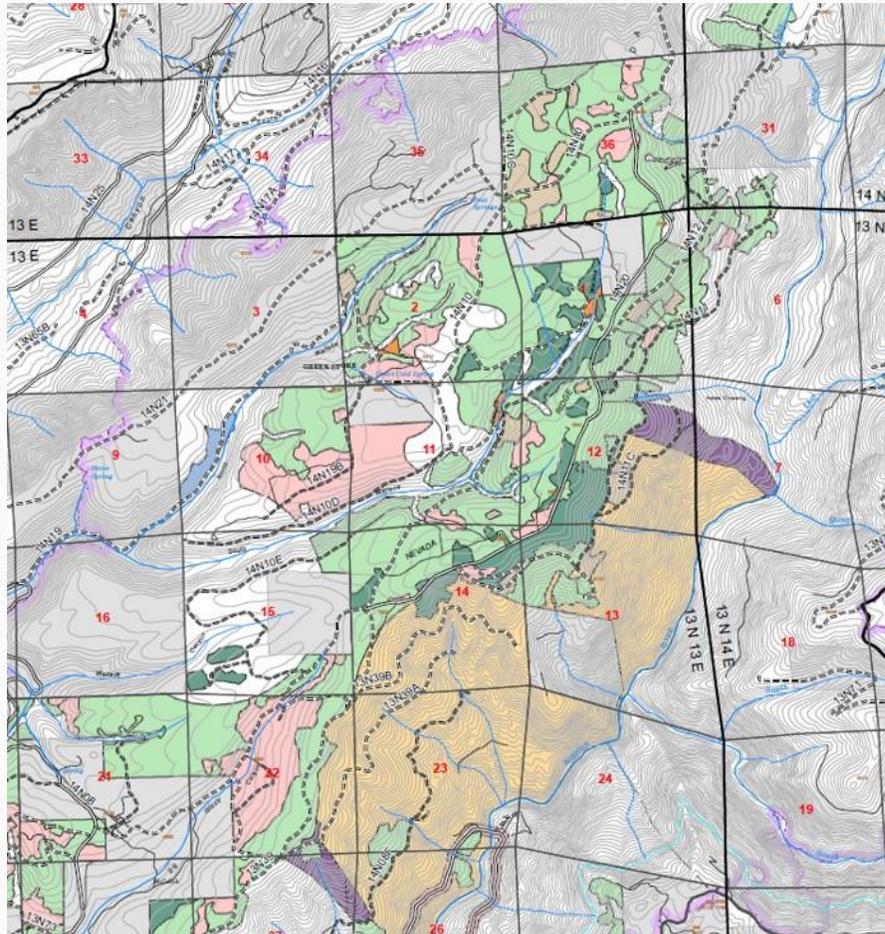
King Fire Treatments

- Salvage
- Burn Only
- Mechanical or Hand Treat Non-Com
- Initial Plant and/or Release
- Stumpy_CG_Salvage
- NON-FS



Salvage





Reforestation



Site Prep and Release





Moving Forward



Research

- Effect of varying salvage and replanting intensities on the fuel complex and native/non-native species abundance over time.
- Forest resilience after high-severity wildfire: the effect of snag density and distribution on the retention of forest ecosystem functions.
- Carryover effect of organic matter removal and compaction treatments on growth of a pine plantation following a wildfire in the Sierra Nevada, California. The
- Test of survival and growth of differing seed sources.
- Utilizing the ongoing CSO demography study to compare owl survival, reproduction, and occupancy between burned and unburned sites.
- Utilizing the predictive ecological model for black-backed woodpecker and testing the model through comparison of its predictions with observed occupancy patterns across the King Fire.
- Effects of climate variation on plant community recovery after disturbance

QUESTIONS/DISCUSSION?

