

## Fuel treatment effectiveness surveys, Caldor Fire

<b>Project Number</b>	04.01.01.0167		
<b>Action Priority</b>	Conduct Applied Scientific Research		
<b>Implementers</b>	Tahoe Science Advisory Council		
<b>Supporting Agencies</b>	League to Save Lake Tahoe, Tahoe Fund, U.S. Bureau of Land Management		
<b>Primary Contact</b>	Robert Larsen (robert.larsen@resources.ca.gov)		

<b>Stage</b>	Post-Implementation	<b>Duration</b>	2021 - 2025
<b>Total Project Cost</b>	\$85,000	<b>Funding Request</b>	\$0

### Science Program > Conduct Applied Scientific Research

The project surveyed fuel treatment areas impacted by the Caldor fire to measure fire effects to vegetation using standard measures of fire severity and tree mortality. This work compliments studies being carried out by other teams of fuel treatment influences on fire-fighting effectiveness and structure protection. A link to the report and more information in the project details below. The study found: Across all treatment types, trees were 3x more likely to survive fire in treated areas. Fire severity measures were significantly lower in treated versus untreated areas. The most effective fuel treatment was multiple entry mechanical and hand thinning followed by mastication.

#### Targeted Performance Measures

*No Expected Accomplishments provided*

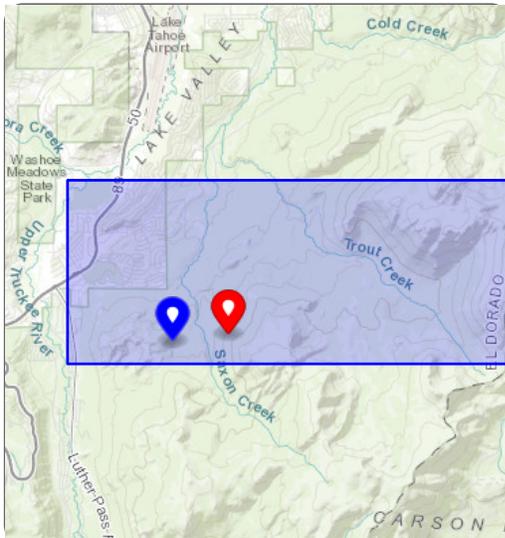
#### Threshold Categories

- Soil Conservation
- Vegetation Preservation



The UC Davis field crew collecting data for the Caldor fuel treatment effectiveness project on the Lake Tahoe Basin Management Unit.

#### Location

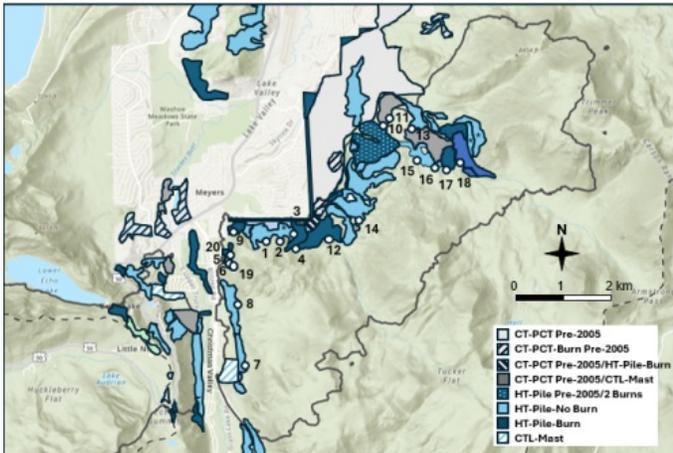


#### Targeted Funding

- Secured Funding: League to Save Lake Tahoe (League), \$20,000
- Secured Funding: Southern Nevada Public Land Ma... (BLM), \$74,216
- Secured Funding: Tahoe Fund (Tahoe Fund), \$10,000

## Photos

### Before



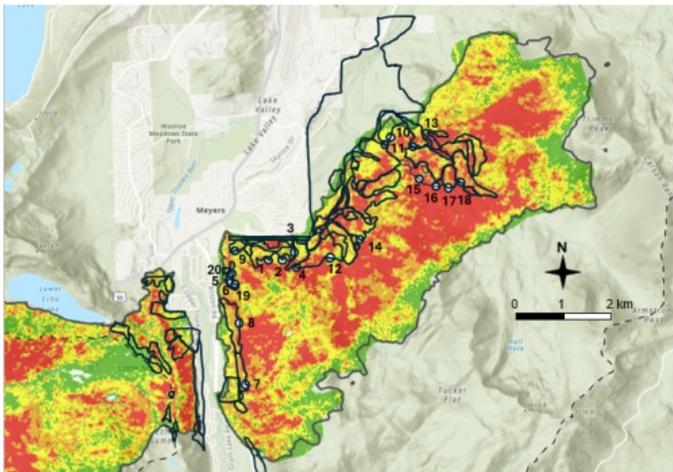
Fuel treatments in the Caldor Fire area and locations of transects. CT = commercial thinning; PCT = precommercial thinning; HT = hand thinning; CTL = cut to length operations; Mast = mastication.

### During

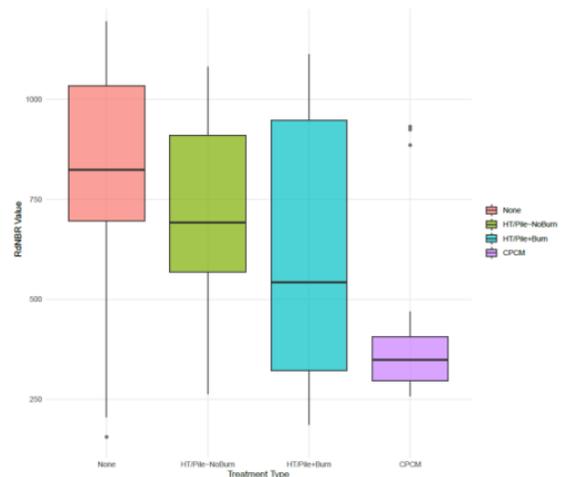


The UC Davis field crew collecting data for the Caldor fuel treatment effectiveness project. The field crew is recording data along a transect that crosses through the fuel treatment.

### After



Fire severity map of the Caldor Fire. Transect centers identified by their number. Green = unburned and very low severity; yellow = low severity; orange = moderate severity; red=high severity.



Box plots comparing the RdNBR remotely sensed fire severity among untreated forests ("none") and three treatment types. Horizontal lines=median, and the boxes delineate the 25th and 75th percentiles.