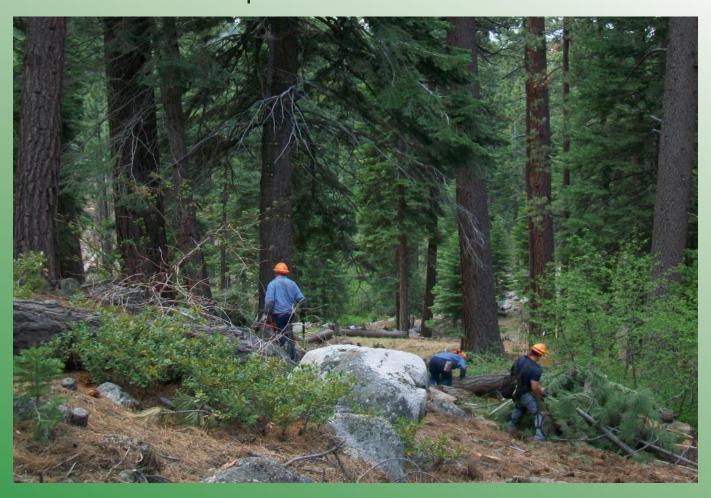


2018 Annual Report to the Nevada Legislature

In Compliance with NRS 528.150

Fire Prevention and Forest Health
in the Nevada portion of the Lake Tahoe Basin

















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Background

This update is produced in accordance with NRS 528.150, and was a recommendation of the California-Nevada Fire Commission following the 2007 Angora Wildfire. This is the eighth update, and provides a listing of activities and accomplishments of the State and Federal land management agencies and the two fire protection districts in the Nevada portion of the Lake Tahoe Basin as defined by NRS 528.150. The reader is referred to the original report, produced in 2009, and the subsequent updates for documentation of activities and accomplishments previous to this 2018 annual update. Those documents can be found at http://forestry.nv.gov/fire-program/tahoe-fire-and-fuels-team/fire-fuels-forest-restoration-activities-and-accomplishments-at-lake-tahoe-nevada/.

Forest restoration and wildfire hazard reduction/prevention activities are ongoing activities carried out by several entities at Lake Tahoe. In the Nevada portion of the Lake Tahoe Basin, those entities are Nevada Division of Forestry, Nevada Division of State Lands (NDSL), Nevada Division of State Parks, USDA Forest Service - Lake Tahoe Basin Management Unit (USFS/LTBMU), North Lake Tahoe Fire Protection District (NLTFPD), Tahoe-Douglas Fire Protection District (TDFPD), and the Tahoe Regional Planning Agency (TRPA). Following passage of the White Pine County Conservation, Recreation, and Development Act of 2006, a 10-year Multi-Jurisdictional Basin-wide plan was developed by the agencies listed above (updated in 2014), along with several California Agencies, to direct fuel reduction planning and implementation. Since then, availability of federal funds through direct Forest Service Grants, the California Grant Clearing house, the Southern Nevada Public Land Management Act (SNPLMA), and other sources has led to sustained annual accomplishments in wildfire hazard reduction/prevention by responsible agencies. Accomplishments by these agencies and non-profits include coordinated planning for wildfire hazard reduction/prevention, fuel reduction on thousands of acres since 2007, coordinated public information campaigns, electronic tracking of progress, and modifying and streamlining the regulatory environment.

2018 Accomplishments

Many agencies, organizations and individuals contributed to the communication of vital fire safety and natural resource conservation or restoration information as well as to the planning and implementation of fuels reduction and ecosystem restoration projects in 2018. The 2018 report update maintains the format provided by NRS 528.150.

NRS 528.150 Report concerning fire prevention and forest health in Lake Tahoe Basin; contents of report.1. On or before January 1 of each year, the State Forester Firewarden shall, in coordination and cooperation with the Tahoe Regional Planning Agency and the fire chiefs within the Lake Tahoe Basin, submit a report concerning fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin to:

- (a) The Legislative Committee for the Review and Oversight of the Tahoe Regional Planning Agency and Marlette Lake Water System created by <u>NRS 218E.555</u> and to the Director of the Legislative Counsel Bureau for transmittal to the Legislature;
 - (b) The Governor;
 - (c) The Tahoe Regional Planning Agency; and
 - (d) Each United States Senator and Representative in Congress who is elected to represent the State of Nevada.
- 2. The report submitted by the State Forester Firewarden pursuant to subsection 1 must address, without limitation:
 - (a) The status of:
 - (1) The implementation of plans for the prevention of fires in the Nevada portion of the Lake Tahoe Basin, including, without limitation, plans relating to the reduction of fuel for fires;
 - (2) Efforts concerning forest restoration in the Nevada portion of the Lake Tahoe Basin; and
 - (3) Efforts concerning rehabilitation of vegetation, if any, as a result of fire in the Nevada portion of the Lake Tahoe Basin.
 - (b) Compliance with:
 - (1) The goals and policies for fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin; and
 - (2) Any recommendations concerning fire prevention or public safety made by any fire department or fire protection district in the Nevada portion of the Lake Tahoe Basin.
 - (c) Any efforts to:
 - (1) Increase public awareness in the Nevada portion of the Lake Tahoe Basin regarding fire prevention and public safety; and
 - (2) Coordinate with other federal, state, local and private entities with regard to projects to reduce fire hazards in the Nevada portion of the Lake Tahoe Basin.

Lake Tahoe Nevada-Specific Accomplishments (AB75/NRS 528.150)

NRS 528.150 Report concerning fire prevention and forest health in Lake Tahoe Basin; contents of report

(a) The Status of:

1.The implementation of plans for the prevention of fires in the Nevada portion of the Lake Tahoe Basin, including, without limitation, plans relating to the reduction of fuel for fires

Nevada Division of Forestry

300 acres treated- Spooner Landscape Resilience Project. The project focused on removing trees too large for hand crews. Trees were removed using a Bell 204 helicopter. The project was designed to increase the forest's drought and wildfire resilience. The project led to the harvest of 1.1 million board-feet of timber and 2,239 tons of chips. The logs were trucked to a sawmill in Quincy, CA and the chips were delivered to the biomass plant in Loyalton, CA.



Spooner Landscape Resilience Project log and chip landing

Nevada Division of State Lands

31 acres total (20 acres hand thinned, 11 acres pile burned)

Tahoe Douglas Fire Protection District

187 acres treated

USFS Lake Tahoe Basin Management Unit

- 591 acres treated (Total Nevada treatments)
 - o 344 acres Spooner Hazardous Fuels Reduction and Forest Health Project
 - 247 acres Incline Hazardous Fuels Reduction and Forest Health Project

North Lake Tahoe Fire Protection District

• 175 acres treated (77 acres thinning, 98 acres pile burning)

2.Efforts concerning forest restoration in the Nevada portion of the Lake Tahoe Basin

Nevada Division of Forestry

NDF, through the Tahoe Environmental Improvement Program (EIP), is supporting UNR's study of the white satin moth and the impacts of forest genetics, local environment, and stand history on quaking aspen susceptibility to the insect defoliator. The Bisbing Lab (Dr. Sarah Bisbing) at UNR will be funded by a Lake Tahoe License Plate grant to identify the extent, severity, and potential consequences of this non-native invasive defoliator on quaking aspen.

Aspen restoration is an annual activity as part of the Environmental Improvement Program being implemented by the Nevada Tahoe Resource Team. The Spooner Landscape Resilience Project treated 10 acres of aspen by removing invading conifers.

Lake Tahoe Nevada State Park has experienced some tree mortality, most noticeably on the dry west facing slope east of Sand Harbor. The mortality includes low levels of both white fir and Jeffrey pine. The present course of action is to monitor the activity level of the insects and if additional action is warranted, mitigation actions will become a priority.

Tahoe Douglas Fire Protection District

Tahoe Douglas FPD, in partnership with NDF, began restoration and fuels reduction on the meadow around Slaughterhouse Creek in Glenbrook. The project is treating dead and decadent willow and alder that is choking the creek, creating wicks of dead fuel bifurcating Glenbrook and preventing vector control from treating mosquitos. The first 7 acres were completed in 2018 including pile burning.



Spooner Landscape Resilience Project - post treatment

3.Efforts concerning rehabilitation of vegetation, if any, as a result of fire in the Nevada portion of the Lake Tahoe Basin

There were no large fires in the Tahoe Basin in 2018. There were many small incidents, but nothing requiring any rehabilitation except as reported by the following partners:

Nevada Tahoe Resource Team

Two small human caused fires that occurred in the State Park in previous years, 2015-2016, burned 2 acres of aspen. Monitoring of these burn sites has been ongoing and aspen suckering is prolific following the fires. No rehabilitation is required.

Tahoe Douglas Fire Protection District

In 2018 Tahoe Douglas FPD worked with Cave Rock HOA to treat cheatgrass throughout the community with the application of a selective herbicide. All properties including Nevada Division of State Lands property were sprayed in the fall of 2018. Planting will take place in 2020 likely as another treatment may be necessary. This project began in 2015 where property owners on Chukar Drive treated their own properties successfully. Now the entire HOA is participating.

(b) Compliance with:

1. The goals and policies for fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin

All fuel reduction/forest restoration projects comply with all rules and regulations in the Tahoe Basin and are in compliance with all goals and policies related to fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin, especially the three tenets of the National Cohesive Wildland Fire Strategy: 1. Restore and maintain resilient landscapes, 2. create Fire Adapted Communities, and 3. provide safe and effective wildfire response.

The Lake Tahoe Basin has been a model of collaboration through the multi-agency Tahoe Fire and Fuels Team (TFFT). The TFFT agencies, including the agencies in this report, are signatory to the Lake Tahoe Basin Multijurisdictional Fuel Reduction and Wildfire Prevention Strategy, The Lake Tahoe Basin Community Wildfire Protection Plan, and work together on Fire Adapted Communities development, fuel reduction planning, and the Team collaborates on funding requests. The TFFT formed in 2008.

Tahoe Douglas Fire Protection District

Fuel Management – the Fire District provides a number of fuel management services with the goal of modifying wildland fire behavior in and adjacent to communities so as to prevent catastrophic wildland fires. Preventing catastrophic outcomes from wildland fire requires the reduction of wildland fuel in the Wildland Urban Interface and the creation of defensible space around homes. Fuel reduction projects limit fire intensity and defensible space prevents fire from reaching the buildings in the community.

2. Recommendations concerning fire prevention or public safety made by a fire department or fire protection district

NDF is working with Tahoe Douglas FPD and North Lake Tahoe FPD to create supplemental project agreements through the Good Neighbor Authority Agreement to treat U.S. Forest Service owned lands in the Lake Tahoe Basin. The purpose is to create seamless, landscape scale projects across ownership jurisdictions for the protection of communities, lives and property as well as overall forest health and resiliency.

(c) Any Efforts to:

1. Increase public awareness regarding fire prevention public safety

Public education is a critical component of the effort to reduce the threat of catastrophic wildfire at Lake Tahoe. Because public information is a distinct function in the incident command system, the Tahoe Fire and Fuels Team formed the Fire Public Information Team (Fire PIT) to address this important issue. The Fire PIT is comprised of public education and communications professionals who implement a comprehensive outreach strategy to raise awareness of wildfire issues at Tahoe and to increase defensible space practices on private properties. Members of the Fire PIT include Tahoe Basin fire agencies, CAL FIRE, Nevada Division of Forestry and related state agencies, University of California and Nevada Cooperative Extensions, the Tahoe Regional Planning Agency, the U.S. Forest Service Lake Tahoe Basin Management Unit, conservation districts from California and Nevada, the California Tahoe Conservancy, and the Lahontan Regional Water Quality Control Board.

The Fire PIT team remains active and member agencies meet monthly. The team regularly develops and distributes press releases and opinion columns for local and regional newspapers and advertisements in multiple publications. Community events and a host of other activities also spread key messages about fire safety and fuel reduction projects at Lake Tahoe.

Nevada Division of Forestry

A media day for the Spooner Landscape Resilience Project was held on October 4, 2018 to provide local media outlets an opportunity to get a close up look at the forestry operations in progress. All aspects of the thinning operation were explained and agency representatives were present to answer questions. Reporters were able to video a helicopter flying logs to the landing. DCNR and agency PIO's cooperated to make this a successful event.

During project implementation, agency personnel from State Lands, NDOW, State Parks and NDF were utilized to meet and greet park visitors, provide information about the project, and answer questions. This area is a popular destination for hikers, bikers and equestrians. The public information program reached a broad spectrum of visitors that included people from countries other than the U.S.

Tahoe Resource Conservation District/TFFT Fire Public Information Team (Fire PIT)

- Fire PIT press releases on prevention and preparedness
- New Tahoe Living With Fire Website, reprinting of Living With Fire publications
- Network events in Nevada or with Nevada residents this year
 - o Bi-State Evacuation Drill 111 interactions
 - Whispering Pines Neighborhood Event & Community Workday 23 interactions
 - Incline Village Farmers Market 21 Interactions
 - Apollo Neighborhood Event 63 interactions
 - Great Basin Outdoor School Event 22 interactions
 - Lake Tahoe Summit 61
 - Incline Village Farmers Market (2nd time) 24 interactions
 - TNFAC Workshop 42 attendees

Nevada Division of State Lands

Ongoing informal resident contacts responding to inspection requests, answering questions and providing defensible space literature such as *Fire Adapted Communities*.

North Lake Tahoe Fire Protection District

Two Defensible Space Block Parties were held in 2018; One in the Whispering Pines Neighborhood and the other in the Apollo Neighborhood.

Tahoe Douglas Fire Protection District

Each of the following activities is designed to create an awareness of wildland fire hazard with the Tahoe Douglas Fire District and support homeowner efforts to create defensible space.

Curbside Defensible Space Inspections

The Fire Prevention Division inspects approximately 25 percent of the single family homes in the fire district annually for compliance with the Douglas County defensible space ordinance. In April and May of 2018 approximately 650 initial curbside inspections were completed. Approximately 50 percent of the initial inspections required follow-up for compliance resulting in an additional 500 inspections.

Defensible Space Consultations

The Fuels Management Division consults with property owners about defensible space through requested evaluations. The Fire District's forester, Zephyr Crew supervisor, Zephyr Crew foreman, fire marshal and fire inspector meet with property owners about their defensible space and these inspectors are authorized to issue TRPA Tree Removal Permits should one be necessary to mitigate the fire hazard on the property.

Community Chipping Services

The Zephyr Fire Crew chips slash created when property owners remove vegetation necessary to create defensible space. The Zephyr Crew completed approximately 100 chipping requests in 2018.

Community Pile Burning

The Zephyr Crew helped homeowners with steep or difficult to access properties create defensible space by burning any slash that may be generated from the vegetation management treatment. The Zephyr Crew burned piles on approximately 20 residential parcels in 2018.

Compost your Combustibles

The fire district partners with Heavenly Ski Resort, South Tahoe Refuse and F&B Services to allow homeowners to dump pine needles and slash at Heavenly's Boulder Lodge parking lot from Memorial Day through the July 4th weekend. Compost your Combustibles typically results in the removal and disposal of 500 tons of slash and pine needles from defensible space activities.

Community Work Days

The Zephyr Crew visited the eight regions composing the fire district on consecutive weekends and assisted homeowners creating defensible space. On each of the eight weekends, the Zephyr Crew canvased the neighborhoods and stopped for any homeowner requesting help. The Zephyr Crew chipped any slash piles left by the roadside. The project

provides a single weekend for every resident where the Zephyr Fire crewmembers will cut brush, small trees or assist homeowners with lifting materials up steep slopes where the slash can be disposed of. In 2018 each of the eight regions in the fire district were allocated a two-day weekend for Community Work Day assistance.

Fire Adapted Communities Development

The fire district worked with the Tahoe Resource Conservation District on the development of the Tahoe Network of Fire Adapted Communities. The Network became operational in 2018 and is creating an active neighbor-to-neighbor education element about wildland fire mitigation.



Tahoe Douglas Fire Protection District community work day

Inspections for defensible space compliance is an ongoing activity in Tahoe Douglas and North Lake Tahoe Fire Protection Districts. The defensible space inspection program for the Fire Districts provides a valued service to Lake Tahoe communities and plays an important role in educating homeowners about wildfire safety and mitigation actions to reduce their risk to wildfire.

2. Coordinate with other federal, state, local and private entities with regard to projects to reduce fire hazards in the Nevada portion of the Lake Tahoe Basin.

Nevada Division of State Lands

Prescribed pile burning conducted by NLTFPD. Hand thinning and fuel reduction conducted by TDFPD and NDF hand crews.

Tahoe Douglas Fire Protection District

Tahoe Douglas FPD continued to work closely with federal, state and local agencies in 2018. In 2018 Tahoe Douglas FPD and NDF were successful in obtaining grant funds to treat "Lot X" in Glenbrook using NDF's cable yarder and Tahoe Doulgas' Zephyr Fire Crew to pile burn areas after NDF completes logging.



Tahoe Douglas FPD pile burning at Cave Rock

Summary of Treatment Acres

Table 1 shows the cumulative effort of all major jurisdictions in the Tahoe Basin in addressing reduction of wildfire fuels.

Table 1. Acres of Fuel Reduction Completed Since 2000

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YEAR(S)	Nevada Division of Forestry on State Parks	NV State Lands	North Lake Tahoe Fire Protection District	Tahoe Douglas Fire Protection District	USFS-Lake Tahoe Basin Management Unit	TOTAL
2000		26		Unk.	677*	904
2001	55	24	215**	Unk.	691*	985
2002	100	23	240**	Unk.	1,260*	1,623
2003	270	32	145**	Unk.	1,254*	1,701
2004	253	12	178**	Unk.	1,918*	2,361
2005	101	17	377**	Unk.	1,913*	2,408
2006	171	20	Unk.	Unk.	2,160*	2,351
2007-09	1,362	149	591	432	3,031	5,565
2010	210	108	305	164	108	895
2011	247	77	367	97	1,572	2,360
2012-13	894	91	207	287	1,714	3,193
2014	407	26	136	204	594	1,367
2015	131	42	90	157	565	985
2016	375	38	59	101	1,273	1,846
2017	52	32	34	183	598	1,099
2018	300	31	175	187	591	1,284
TOTAL	4,978	748	3,270	1,812	19,919	30,927

^{*}Includes lands in Nevada and California

^{**}NLTFPD includes projects on federal lands, which were also reported by the USFS/LTBMU; therefore, the NLTFPD accomplishments were reduced by 42%, the amount of federal land in the fire district. Source: TRPA Fuel Reduction Plan prepared by Steve Holl Consulting (2007), NDSL, USFS/LTBMU.