



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 is the eighth update provided in accordance with NRS 528.150, and as recommended by the California-Nevada Fire Commission following the 2007 Angora Wildfire. This update 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. To view the original report produced in 2009 and subsequent annual updates of activities and accomplishments, visit <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 and prevention activities are ongoing efforts carried out by numerous partner agencies in the Lake Tahoe Basin. Within the Nevada portion of the Lake Tahoe Basin, these agencies include the Nevada Division of Forestry (NDF), Nevada Division of State Lands (NDSL), Nevada Division of State Parks, United States Forest Service - Lake Tahoe Basin Management Unit (USFS/LTBMU), North Lake Tahoe Fire Protection District, Tahoe-Douglas Fire Protection District, 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 aforementioned partner agencies (updated in 2014), in collaboration 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 and prevention by responsible agencies. Accomplishments by these agencies and non-profits include coordinated planning for wildfire hazard reduction and 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

Numerous 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 [NRS 218E.555](#) 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.**

Nevada-Specific Accomplishments in the Lake Tahoe Basin

Status of 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

NDF implemented a forest health resilience project spanning over 300 acres at Spooner Lake within the Lake Tahoe Nevada State Park. The project was designed to increase the forest's resilience to disturbance events such as wildfires, epidemic populations of bark beetles, and drought, with a focus on the selective removal of trees too large for hand crews. NDF secured a contract with a private timber company to remove the trees by helicopter.



Spooner Landscape Resilience Project log and chip landing

The project yielded 1.1 million board-feet of timber and 2,239 tons of wood chips. The logs were hauled by big rigs to a sawmill in Quincy, California, while the wood chips were transported to a biomass plant in Loyaltan, California.

Nevada Division of State Lands

Treated 31 acres, 20 acres of which were hand thinned, and 11 acres of which were pile burned.

Tahoe Douglas Fire Protection District

Treated 187 acres.

USFS Lake Tahoe Basin Management Unit

Treated 591 acres in the Nevada portion of the Lake Tahoe Basin, 344 acres of which were part of the Spooner Hazardous Fuels Reduction and Forest Health Project, and 247 acres of which were part of the Incline Hazardous Fuels Reduction and Forest Health Project

North Lake Tahoe Fire Protection District

Treated 175 acres, 77 acres of which were hand thinned, and 98 acres of which were pile burned.

Status of efforts concerning forest restoration in the Nevada portion of the Lake Tahoe Basin

Nevada Division of Forestry

NDF, through the Lake Tahoe Environmental Improvement Program (EIP), is supporting a University of Nevada, Reno (UNR) study of the white satin moth. The study will look at 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,



Spooner Landscape Resilience Project - post treatment

severity, and potential consequences of this non-native invasive defoliator on quaking aspen in the Lake Tahoe Basin.

As part of the EIP, aspen restoration is an annual effort implemented by the Nevada Tahoe Resource Team. This year, through the Spooner Landscape Resilience Project, the Nevada Tahoe Resource Team 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 deemed necessary, consider mitigation.

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 includes pile burning and 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 seven acres were treated in 2018.

Status of 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 Lake Tahoe Basin in 2018. There were several minor incidents, but nothing triggering significant rehabilitation efforts. There were a handful of rehabilitation efforts resulting from wildfire reported by the following partners:

Nevada Tahoe Resource Team

In previous years, 2015 and 2016, there were two small human-caused fires in the Lake Tahoe Nevada State Park, burning two 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 State owned property were sprayed in the fall of 2018. Planting is likely to commence in 2020, as another herbicide treatment may be necessary. This project began in 2015, when homeowners on Chukar Drive successfully treated their properties. As a result, the entire HOA is now participating in the program.

Compliance with the goals and policies for fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin

All fuel reduction and forest restoration projects are in compliance with the rules and regulations in the Lake Tahoe Basin, and the goals and policies related to fire prevention and forest health in the Nevada portion of the Lake Tahoe Basin. Specifically, all projects are consistent with 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 a multi-agency Tahoe Fire and Fuels Team (TFFT), which was established in 2008. The TFFT agencies, including the agencies in this report, are signatories to the *Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy*, and *The Lake Tahoe Basin Community Wildfire Protection Plan*. The TFFT also collaborates on Fire Adapted Communities development, fuel reduction planning, and funding requests.

Tahoe Douglas Fire Protection District

Tahoe Douglas FPD provides a number of fuel management services focused on modifying wildland fire behavior in and adjacent to communities to help prevent catastrophic wildland fires. Preventing catastrophic outcomes from wildland fire requires (1) the reduction of wildland fuel in the Wildland Urban Interface, and (2) the creation of defensible space around homes. Fuel reduction projects limit fire intensity, while defensible space prevents fire from reaching buildings in the community.

Compliance with 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 goal is to create seamless, landscape scale projects across ownership jurisdictions for the protection of communities, lives, property, and overall forest health and resiliency.

Efforts to increase public awareness regarding fire prevention public safety

Public education is a critical component of the effort to reduce the threat of catastrophic wildfire in the Lake Tahoe Basin. Public information is a critical function of the incident command system, and as such, the TFFT formed the Fire Public Information Team (Fire PIT) to address this key issue. The Fire PIT is comprised of public education and communication professionals tasked with implementing a comprehensive outreach strategy to raise awareness of wildfire issues and increase defensible space practices on private properties in the Lake Tahoe Basin. Members of the Fire PIT include Lake Tahoe Basin fire agencies, CAL FIRE, NDF 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 distributes press releases and opinion columns for local and regional newspapers, and produces advertisements

featured in multiple publications. Key messages about fire safety and fuel reduction projects in the Lake Tahoe Basin are also provided through numerous community events and outreach activities.

Nevada Division of Forestry

A media day for the Spooner Landscape Resilience Project was held on October 4, 2018, providing local media the opportunity to receive an in-depth understanding of 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 film a helicopter flying logs to the landing. NDCNR and agency PIOs cooperated to make this a successful event.

During project implementation, agency personnel from NDSL, NDOW, NDSP, and NDF welcomed park visitors, provided information about the project, and answered questions. The area is a popular destination for hikers, bikers, and equestrians. The public information program reached a broad spectrum of demographics, including international visitors.

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

Fire PIT produced numerous press releases related to fire prevention and preparedness. Additionally, a new website was launched titled “Tahoe Living with Fire.” The website provides information and tools on how to live more safely with the threat of wildfire.

There were numerous network events hosted in Nevada this year, including:

- 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

NDSL responded to several informal resident inquiries, including 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. During these block parties, homeowners can request a defensible space evaluation or chipping services from their local fire department.

Tahoe Douglas Fire Protection District

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

Curbside Defensible Space Inspections

Each year, the Fire Prevention Division inspects approximately 25 percent of the single family homes within the fire district 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 regarding their defensible space, and the inspectors are authorized to issue TRPA Tree Removal Permits as necessary to mitigate the fire hazard on the property.

Community Chipping Services

The Zephyr Fire Crew chips the slash (waste woody material) 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 Fire Crew assisted homeowners with steep or difficult-to-access properties to create defensible space by burning any slash that may have been generated from the vegetation management treatment. The Zephyr Fire Crew burned piles on approximately 20 residential parcels in 2018.

Compost your Combustibles

From Memorial Day through the 4th of July, 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. 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

Over the course of eight consecutive weekends, the Zephyr Fire Crew visited the fire district's eight regions to assist homeowners in creating defensible space. During each weekend, the crew canvassed the neighborhoods and assisted homeowners requesting help. The crew chipped slash piles left by the roadside. The project provides a single weekend for every resident where the Zephyr Fire crewmembers cut brush or small trees, and/or assist homeowners with lifting materials up steep slopes to dispose of slash. In 2018, each of the eight regions in the fire district were allocated a two-day weekend for Community Work Day assistance.



Tahoe Douglas Fire Protection District community work day

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 working to establish a proactive neighbor-to-neighbor education component related to wildland fire mitigation.

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 a vital role in educating homeowners about wildfire safety and mitigation actions to reduce threats posed by wildfire.

Efforts to 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

NDSL coordinated prescribed pile burning with the North Lake Tahoe FPD. Tahoe Douglas FPD and NDF hand crews assisted with hand thinning and fuel reduction.

Tahoe Douglas Fire Protection District

Tahoe Douglas FPD continued to work closely with federal, state and local agencies. In 2018, Tahoe Douglas FPD and NDF were successful in securing grant funding to treat “Lot X” in Glenbrook using NDF’s cable yarder and Tahoe Douglas’s Zephyr Fire Crew to pile burn areas after NDF’s completion of logging.



Tahoe Douglas Fire Protection District pile burning at Cave Rock

Summary of Treatment Acres

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

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	50	26	151**	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.*