



**The Emergency California-Nevada  
Tahoe Basin Fire Commission Report:  
Accomplishments & Priorities**

JUNE 2017

*10 YEARS LATER*



The Tahoe Fire and Fuels Team (TFFT) consists of representatives of 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, conservation districts from both states, the California Tahoe Conservancy and the Lahontan Regional Water Quality Control Board.

Our mission is to protect lives, property, and the environment within the Lake Tahoe Basin from wildfire by implementing prioritized fuels reduction projects and engaging the public in becoming a fire adapted community. For more information, visit [www.tahoefft.org](http://www.tahoefft.org).

Published by the  
Tahoe Fire and Fuels Team  
June 24, 2017

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COVER PHOTO CREDIT: USFS ANGORA CREEK POST RESTORATION





NORTH LAKE TAHOE FIRE PROTECTION DISTRICT FILE PHOTO

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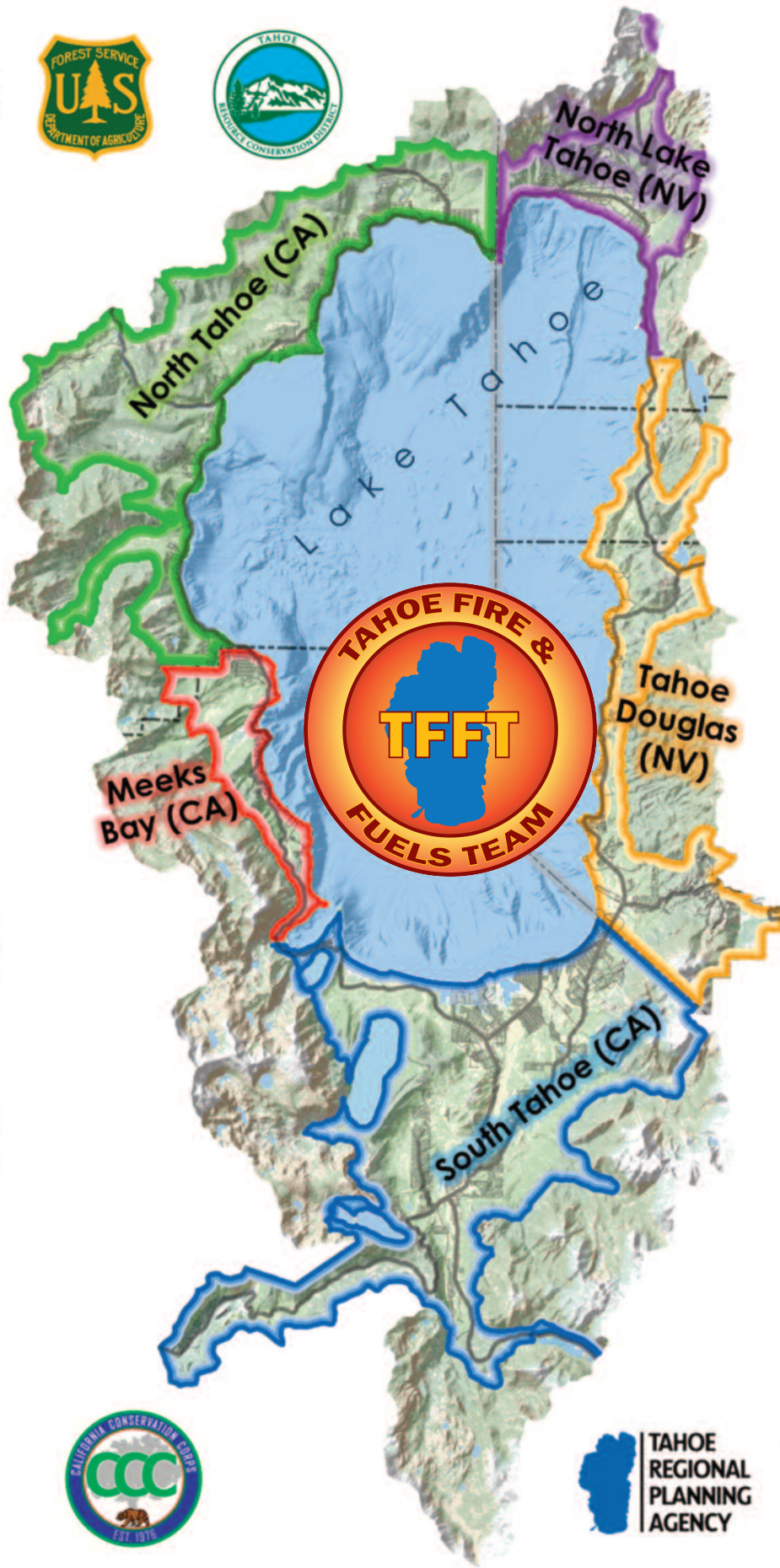
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## Introduction & Overview

COURTESY USFS - BEGINNING OF THE FIRE - TIM RAINS

### THE EMERGENCY FIRE COMMISSION, 10 YEARS LATER

The Emergency California-Nevada Tahoe Basin Fire Commission was formed by the Governors of California and Nevada in August 2007 shortly after the Angora Fire. The Commission's challenge was to take diverse communities, strongly held beliefs, the work of many agencies, and the input of a concerned public and create a set of recommendations that would reduce the risk of wildfire to Lake Tahoe. Initial meetings of the Commission were dedicated to listening to Basin residents, fire professionals, land managers, environmental regulators, scientists, and others, as they explained their problems, concerns, and hopes in the wake of the disaster.

Recommendations were submitted by a variety of experts, stakeholders, organizations, and individuals. A consensus emerged on the most pressing fire safety and environmental issues impacting the Tahoe Basin. All agreed that Lake Tahoe was at risk from catastrophic wildfire which would cause deleterious impacts to the surrounding forests, the crystal blue clarity of the Lake, the economic livelihood of the Basin, and the people that live or visit there.

During the course of the Commission hearings three primary areas of focus emerged: Wildland Fuels Management, Community Fire Safety, and Legislation and Funding Policies. The Commission's findings and recommendations were outlined into six categories that addressed both short and long-term needs, policy changes, education, funding, governmental structures, and environmental practices related to Lake Tahoe's vulnerability to wildfire.

There has been tremendous progress over the past ten years implementing the recommendations of the Commission. This report clearly illustrates the dedication and teamwork of many stakeholders and agencies who made it a priority to reduce the risk of wildfire in the Lake Tahoe Basin. Although much has been achieved, the threat of catastrophic wildfire is still real. It is imperative, therefore, that the recommendations of the Commission continue to be implemented and additional progress is achieved over the course of the next decade.





## The Angora Fire & The Blue Ribbon Commission

TAHOE DOUGLAS FIRE PROTECTION DISTRICT -- ANGORA AFTERMATH

Intense logging during the Comstock era in the late 1800s clear cut almost the entire Lake Tahoe Basin and left the forest decimated. While the forests grew back over the next 100 years, they grew in an unnaturally thick and even-aged state and by 2007, Tahoe's forests were in a state of emergency. Years of fire suppression, hazardous fuels accumulation, drought, and a warming climate have made Lake Tahoe's forests extremely vulnerable to catastrophic wildfire.

On June 24, 2007, embers from an illegal and abandoned campfire ignited one of the most destructive fires in Tahoe's history. The Angora Fire, stoked by strong winds and forests overgrown with hazardous fuels, destroyed 254 homes and structures within hours and burned 3,100 acres before being fully contained. Angora showed that wildfires can and will happen at Lake Tahoe, and with devastating impacts. The Angora Fire raised critical awareness about the need to thin and treat forested areas in the wildland urban interface (WUI) where forests and communities meet.

Following the Angora Fire, an Emergency Bi-State Fire Commission was formed by the Governors of California and Nevada. The Fire Commission developed 90 recommendations to reduce the risk of wildfire in the Lake Tahoe Basin.

Ten years later, through the diligent work of multiple agencies and the Tahoe Fire and Fuels Team (TFFT), thousands of acres of hazardous fuels adjacent to communities have been treated, fire agencies are actively conducting defensible space inspections around homes, and public education and outreach programs continue through the Tahoe Network of Fire Adapted Communities and Living With Fire programs.

Today, more than 20 agencies are working together as the Tahoe Fire and Fuels Team to reduce wildfire risk, improve the health of Tahoe's forests, and partner with residents to help them take important steps to become fire adapted communities.



COURTESY USFS - AGENCY COLLABORATION

The original Emergency California-Nevada Tahoe Basin Fire Commission Report included 48 findings and 90 recommendations organized into six categories that addressed Environmental Protection, Issues of Governance, Community and Homeowner Fire Prevention, Forest and Fuels Management, Fire Suppression, and Funding. The Commission developed an open and collaborative process that allowed anyone, including Commission members, agency staff, and members of the public to propose findings and recommendations for consideration by the Commission.

This report analyzes progress on those 90 recommendations over the past ten years. Through a multi-agency collaborative effort, that included many members of Tahoe Fire and Fuels Team, each recommendation was examined and scrutinized for level of progress and overall implementation.

As in the original report, the 90 recommendations are grouped into six categories. Within each category the text of the recommendation is provided, followed by primary implementing agency(s), current status of the recommendation, and a comments section.

Review of the report provided the Tahoe Fire and Fuels Team a unique opportunity to recognize the importance of continued implementation of the recommendations while also developing local (TFFT) and Regional Priorities (RP) for further discussion and proposed implementation. Each recommendation was categorized by four status levels as follows:

- Completed / Completed-Ongoing

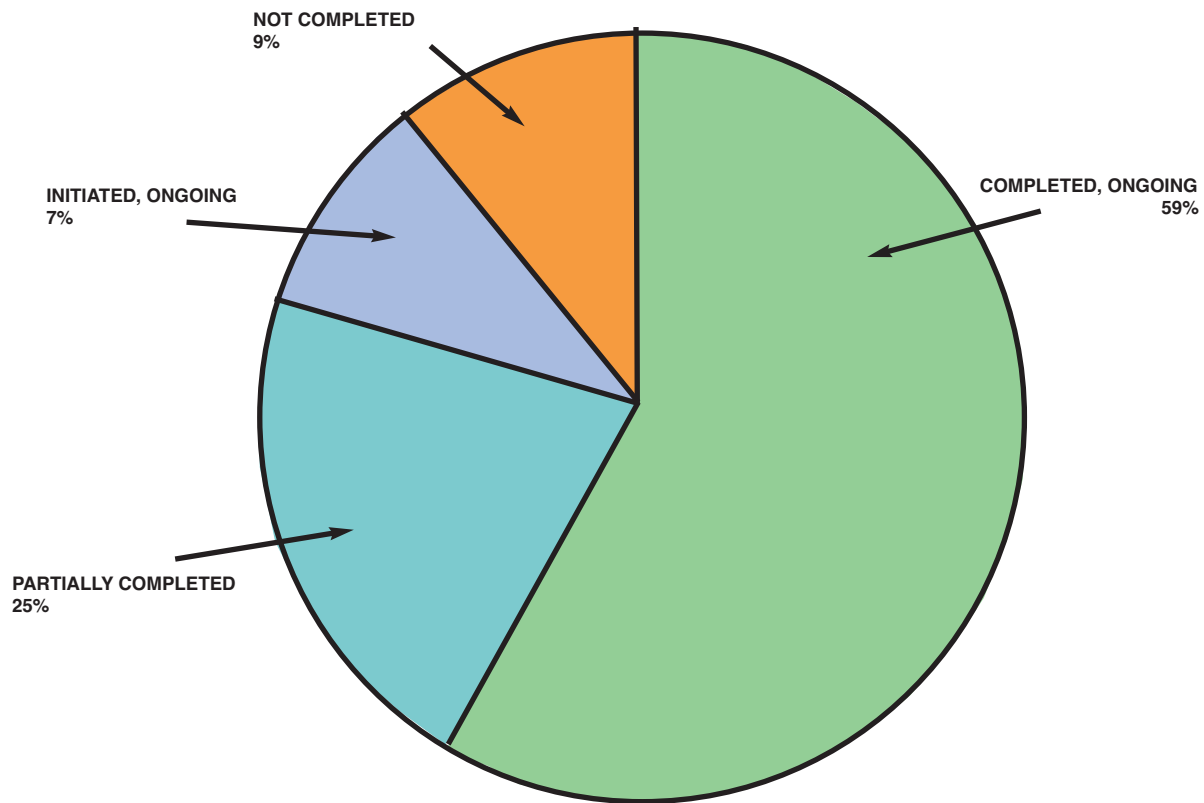
Recommendations that have been implemented, or have been implemented but require on-going actions to ensure long-term sustainability.

- Partially Completed

Recommendations where actions have been taken but only certain elements of the Recommendation are achieved to date.

- Initiated / On-Going  
Recommendations that have been initiated, however, full or partial implementation has not been attained
- Not Completed  
These Recommendations are not completed.

ANALYSIS BY THE NUMBERS: The following is a snapshot status report of the 90 recommendations detailed in this report.







## Accomplishments & Priorities

TAHOE DAILY TRIBUNE, LEONARD KAMIN

Creation of the Tahoe Fire and Fuels Team representing 20 partner agencies charged with reducing catastrophic wildfire risk and creating fire adapted communities has resulted in significant statistics since Angora. Here are highlights of some of the most important accomplishments:

- Updated the Lake Tahoe Basin Community Wildfire Protection Plan and the 10-year Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy – road maps for implementing projects that improve forest health and reduce wildfire risk.
- Completed all restoration projects in the Angora burn area, including 1,100 acres of reforestation and 2,000 feet of stream channel restoration.
- More than 48,000 acres of forest fuel treatments to reduce wildfire risk in the most dangerous wildland urban interface areas since 2007.
- Following the Angora Fire the pace and scale of treatments across all jurisdictions were increased due to the success of the US Forest Service treatments implemented prior to the fire.

Unprecedented challenges threaten progress on restoring resilient landscapes and creating fire adapted communities around Lake Tahoe. Catastrophic wildfire continues to pose a risk, and prolonged drought and bark beetles could cause massive tree die-offs. To address these challenges, the TFFT is focused on:

- Implementing a landscape-scale approach to forest restoration and watershed health
- Completing initial treatment of the WUI and maintaining effectiveness of previous treatments
- Streamlining regulations across jurisdictions to increase the pace and scale of projects that strengthen our forest's resilience to wildfire, climate change, drought, insects, and disease
- Monitoring forest conditions and developing strategies to address drought-related tree mortality
- Completing pre-attack and evacuation planning in high-risk communities
- Adopting building code standards to improve structure fire resistance and reduce flammability in the WUI
- Increasing water capacity and delivery for fire suppression activities

## Category 1: Environmental Protection

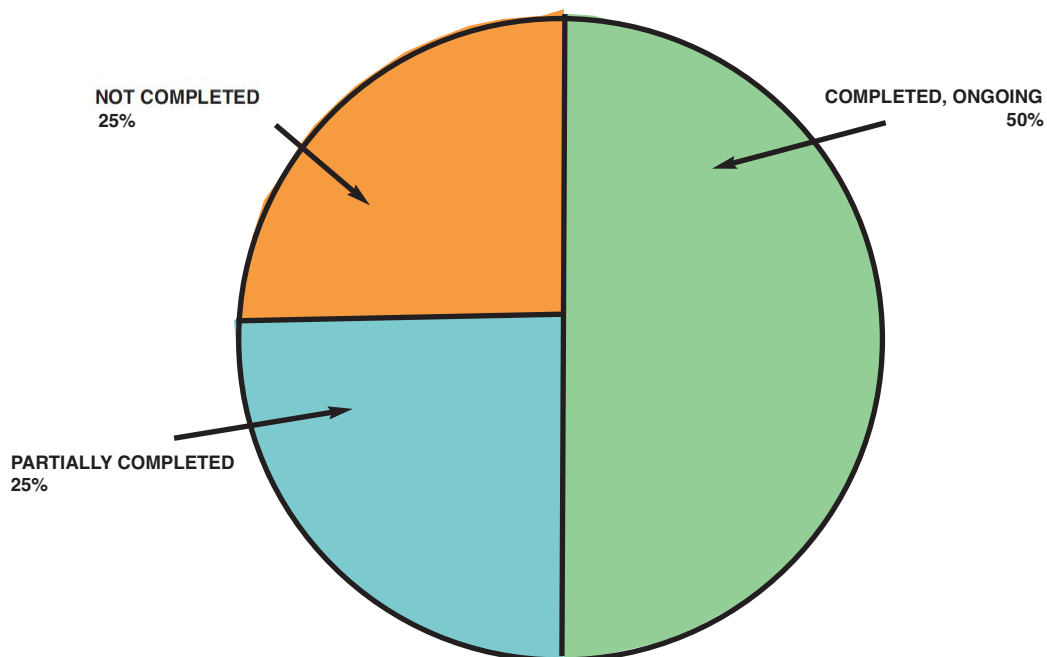
The difference between the threat of catastrophic fire to the Lake Tahoe Basin and the threat of catastrophic fire to other areas of California and Nevada is the presence of Lake Tahoe itself. This national treasure has a unique system of regulatory oversight not found in other areas of the two States. The Commission worked diligently to reconcile important protections of the Basin's natural resources with commonly accepted fire prevention and suppression practices in order to find a balance that reflected the values of life, property, and environmental protection.

### PRIMARY ACCOMPLISHMENTS:

- Established the Tahoe Fire and Fuels Team incorporating twenty stakeholder organizations.
- Created the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy, identifying the restoration of fire-resilient landscapes as a primary goal.
- Developed systems for compiling fuel reduction accomplishments and information through the Lake Tahoe Environmental Improvement Program Project Tracker.

### PRIMARY PRIORITIES:

- Develop sustainable solutions for biomass utilization through collaboration between public and private enterprises, legislatures, and land managers both within and outside of the Lake Tahoe Basin.
- Continue coordinated measures to reduce greenhouse gas emissions through the implementation of forest restoration, and seek research funding where necessary to guide program planning.
- Continue landscape scale restoration planning, monitoring, and assessment through initiatives such as the Lake Tahoe West Restoration Partnership.





## Category 2: Issues of Governance

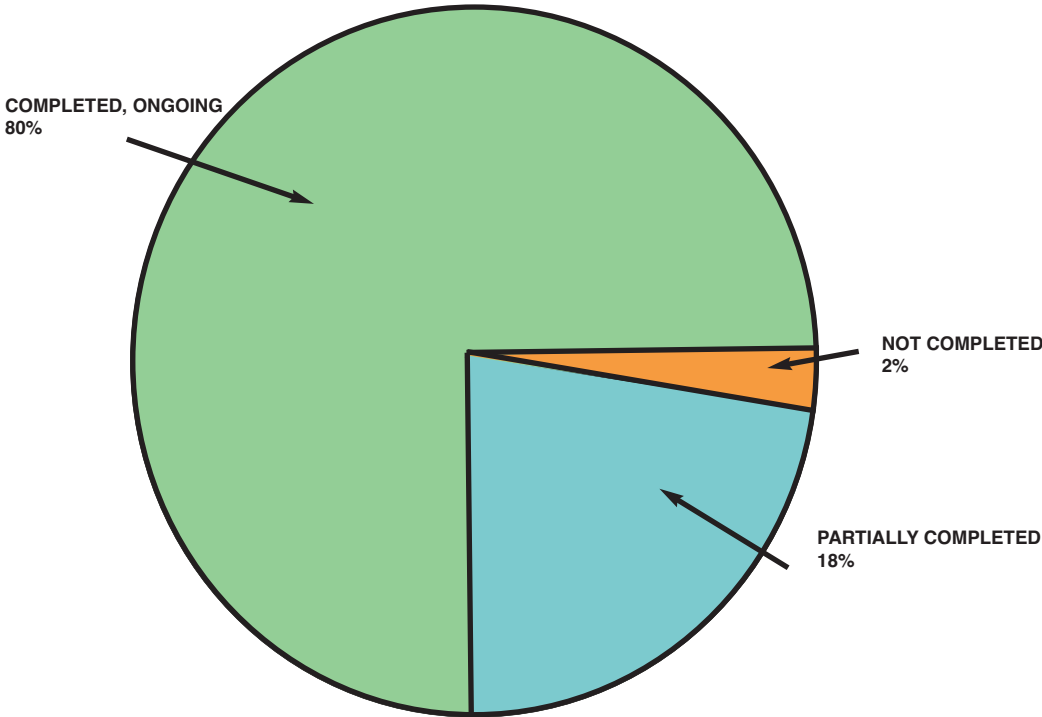
The Commission adopted a number of recommendations aimed at making regulatory agencies more responsive to concerns regarding the threat posed by catastrophic fire to residents of the Basin as well as to the Lake. Within this category, the Commission also included recommendations addressing other agencies' practices and activities relating to facilitation of fuels reduction projects in the Lake Tahoe Basin.

### PRIMARY ACCOMPLISHMENTS:

- Emergency declarations by the Governors of California and Nevada regarding the threat of wildfire in the Lake Tahoe Basin.
- Adopted and began implementing the Lake Tahoe Basin Community Wildfire Protection Plan.
- Simplified and streamlined permitting requirements for fuel reduction projects.
- Increased the ability for land managers to implement fuel reduction and restoration treatments in stream environment zones.

### PRIMARY PRIORITIES:

- Re-evaluate restrictions prohibiting mechanical equipment on steeper slopes.



### Category 3: Community & Homeowner Fire Prevention

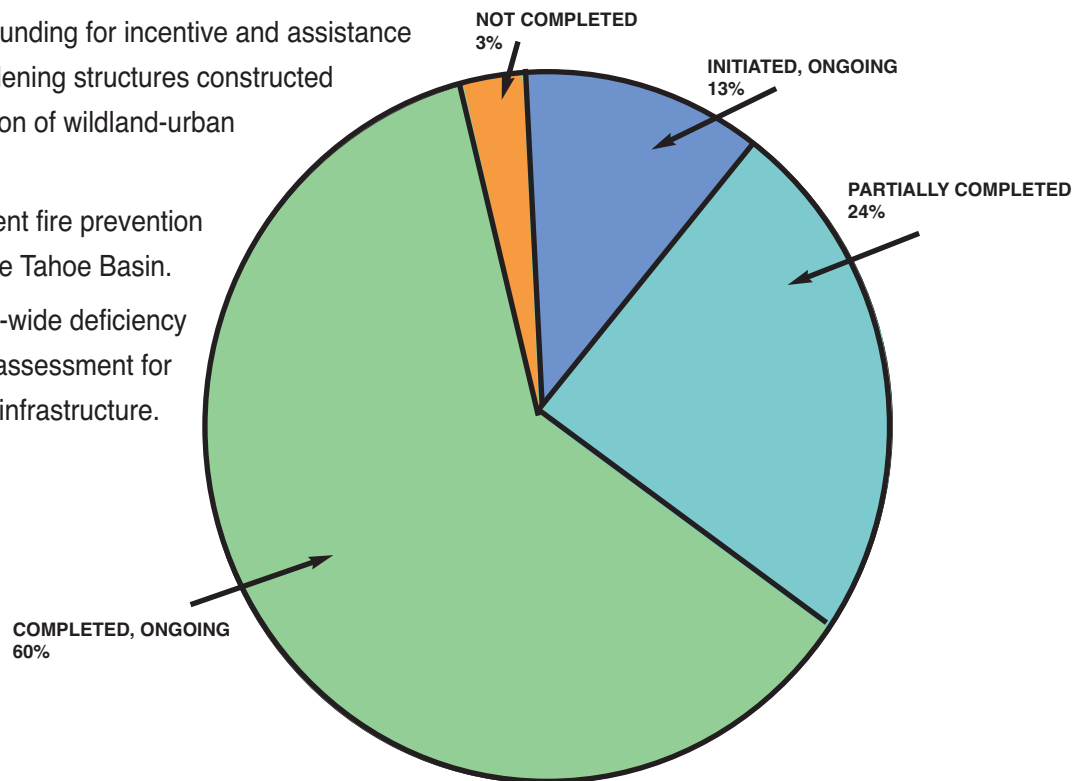
A number of the Commission’s recommendations recognize that fire prevention is also a duty of every property owner and must be aggressively addressed by private property owners within the Basin. Within this category, the Commission focused on clarification of regulatory requirements for defensible space around homes, the promotion of educational programs, and implementation of Community Wildfire Protection Plans.

#### PRIMARY ACCOMPLISHMENTS:

- Developed basin-wide standards for defensible space among fire and regulatory agencies and the Living With Fire program.
- Implemented reduced and simplified permitting requirements for residential tree removal.
- Coordinated basin-wide community outreach through the TFFT Fire Public Information Team.
- Provided defensible space inspections and assistance services through fire agencies and the Tahoe Network of Fire Adapted Communities.
- Developed a basin-wide electronic tracking system for defensible space inspections.

#### PRIMARY PRIORITIES:

- Develop permanent, stable funding sources for community outreach and education frameworks, such as the Living With Fire program.
- Continue to seek funding for incentive and assistance programs for hardening structures constructed prior to the adoption of wildland-urban interface codes.
- Increase permanent fire prevention staffing in the Lake Tahoe Basin.
- Complete a basin-wide deficiency study and needs assessment for water distribution infrastructure.





## Category 4: Forest & Fuels Management

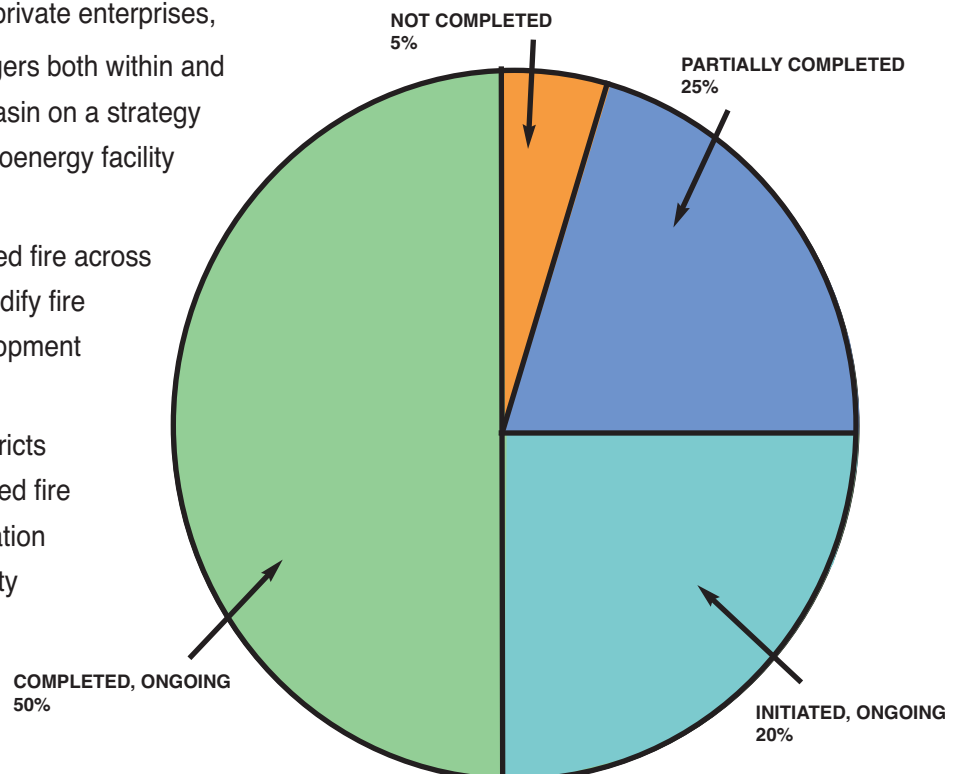
The key to addressing the buildup of fuels within the forests of the Basin is to remove the excess fuels as quickly as possible while incorporating measures to maintain the forests according to sound forest management practices. The Commission developed a number of recommendations addressing this over-arching problem.

### PRIMARY ACCOMPLISHMENTS:

- Completed 1,100 acres of reforestation, 2,000 feet of stream channel restoration, and timber salvage operations on federal, state, and privately managed land burned by the Angora Fire.
- Reduced hazardous wildland fuels throughout the Lake Tahoe Basin across 48,000 acres.
- Updated the Tahoe Regional Planning Agency Code of Ordinances and the Lahontan Regional Water Quality Control Board timber waiver to support more aggressive treatment of hazardous fuels.
- Established the TFFT Fire Public Information Team as the clearinghouse for Lake Tahoe Basin prescribed fire information.

### PRIMARY PRIORITIES:

- Develop a Program Timberland Environmental Impact Report (PTEIR) covering private and state lands on the California side of the Basin in order to more effectively implement fuels reduction projects across the landscape.
- Collaborate with public and private enterprises, legislatures, and land managers both within and outside of the Lake Tahoe Basin on a strategy for biomass utilization and bioenergy facility development.
- Increase the use of prescribed fire across the landscape in order to modify fire behavior and promote development of healthy forests.
- Coordinate with local air districts on strategies to use prescribed fire to achieve landscape restoration goals while meeting air quality objectives.



## Category 5: Fire Suppression

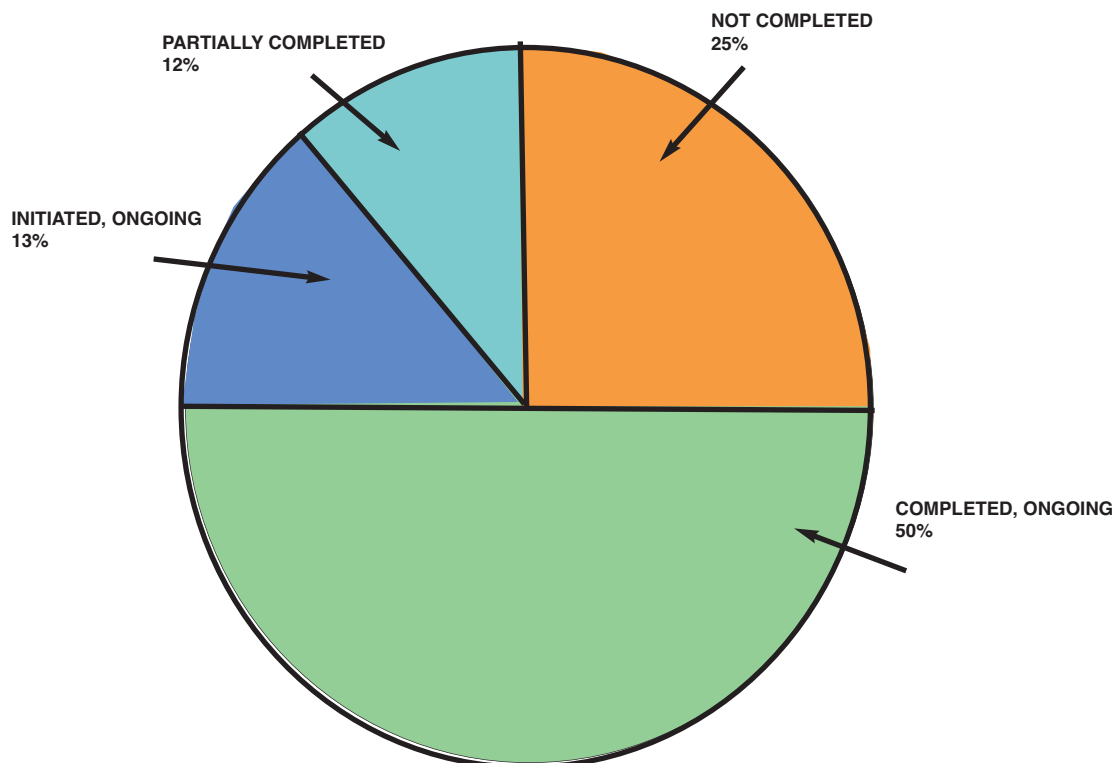
With respect to all matters within the Tahoe Basin, the Commission determined that protection of life, property, and the environment be served in that order of priority. In that regard, the Commission recommended a number of actions to increase firefighting capacity within the Lake Tahoe Basin and prioritize fuels reduction projects around communities.

### PRIMARY ACCOMPLISHMENTS:

- Coordinated wildfire suppression resources through annual operating plans and the Lake Tahoe Regional Chiefs.
- Increased available suppression resources with CAL FIRE engines and staff located at local fire protection district facilities.

### PRIMARY PRIORITIES:

- Funding and construction of CAL FIRE Stations in strategic locations within the Tahoe Basin.
- Centralization of dispatch services where appropriate to facilitate improved command and control of fire suppression resources.





## Category 6: Funding

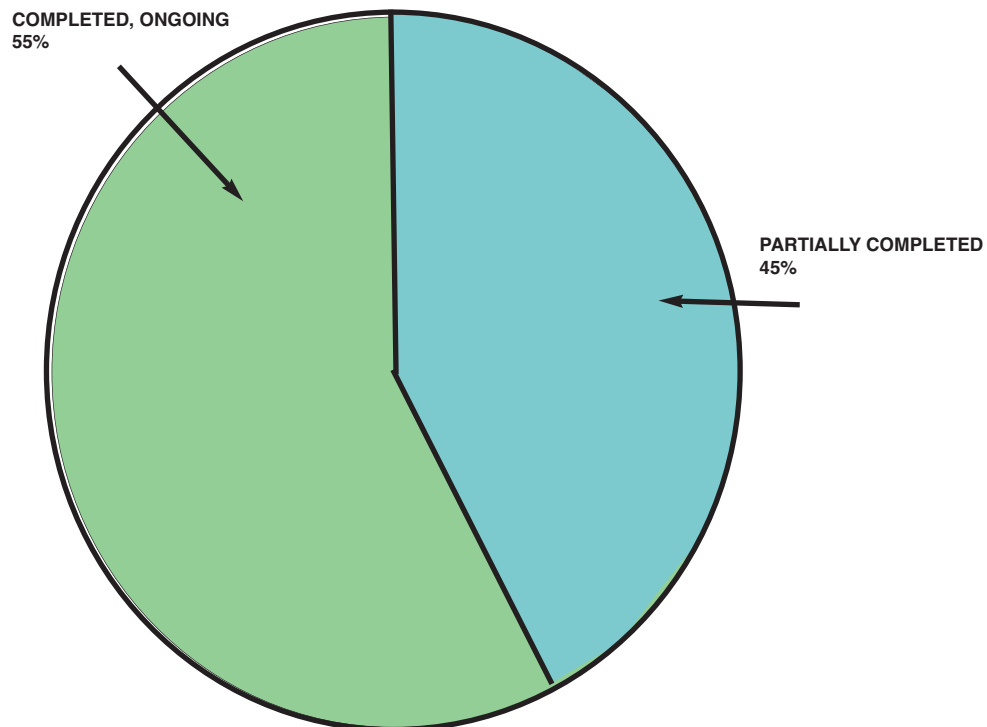
During the Commission hearings it was determined present funding levels for fire prevention, planning, and suppression activities in the Basin were inadequate and, in some cases, derived from sources that are not consistently reliable. The Commission also recognized the need for private property owners to participate in the costs of avoiding catastrophic wildfire. Consequently, the Commission quantified immediate funding needs as well as funding needed on a long-term basis from all stakeholders.

### PRIMARY ACCOMPLISHMENTS:

- Supported the reauthorization of the Lake Tahoe Restoration Act, which identifies forest health as the primary funding priority.
- Leveraged private, local, state and federal investments totaling over \$65 million for coordinated fuel reduction and forest restoration treatments.

### PRIMARY PRIORITIES:

- Establish long-term stable funding without reliance on grant cycles.





NORTH LAKE TAHOE FIRE PROTECTIONS DISTRICT - UNDERSTORY BURN

**Category 1: Environmental Protection**

**#1. Regulatory Agency Coordination**

The unique water quality and clarity that make Lake Tahoe a natural resource of global significance are dependent on protection from catastrophic wildfires in the Lake Tahoe Basin, and all public land management agencies, regulatory agencies, and private property owners must work together more effectively to implement fuel reduction projects designed and prioritized to minimize the risk of wildfires.

RESPONSIBLE AGENCY(S): All agencies

RECOMMENDATION STATUS: Complete / Ongoing

COMMENTS: The Tahoe Fire and Fuels Team (TFFT) was established in order to accomplish this recommendation and create a cohesive effort toward fuels reduction activities in the Lake Tahoe Basin. The TFFT meets regularly to prioritize fuels reduction efforts within the Lake Tahoe Basin and includes twenty stakeholder organizations representing fire districts, land management agencies, regulatory agencies, universities, implementing agencies and other key stakeholders.

**#2. Natural Fire Resiliency**

The Commission finds that catastrophic wildfire is a growing threat to life, property, and the environmental quality of the Lake Tahoe Basin, and recommends that the restoration of the Basin’s forests to a more natural and fire-resilient condition should be a common and primary management goal of all public land management agencies, regulatory agencies, and private property owners in the Basin.

RESPONSIBLE AGENCY(S): All agencies

RECOMMENDATION STATUS: Complete / Ongoing

COMMENTS: Avoidance of catastrophic wildfire continues to be a top priority of all participating agencies. The Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy (Strategy) identifies restoring fire-resilient landscapes as a primary goal. Through the work of the Multi Agency Coordination Group (MAC) and the TFFT, as well as the priorities spelled out in the Tahoe Regional Plan Update (2012),

the United States Forest Service (USFS)-Lake Tahoe Basin Management Unit (LTBMU) Forest Plan (2016), and the Lake Tahoe West Restoration Partnership, numerous collaborative efforts are underway to continue restoration and resilience activities within the Basin's Forests.

### **#3. Reduce Greenhouse Gases**

California and Nevada should prevent catastrophic fires in the Lake Tahoe Region and reduce the associated greenhouse gas emissions through appropriate fuels management.

RESPONSIBLE AGENCY(S): All agencies

RECOMMENDATION STATUS: Partially Completed

COMMENTS: One of the many recognized goals of implementing fuels reduction and forest health resilience projects at the landscape level is the sequestering of carbon and the reduction of greenhouse gas emissions that result from large and damaging wildfires. The Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Fire Prevention Strategy (page 30) provides calculations of carbon storage benefits of implementing the strategy.

### **#4. Biomass Utilization**

In California, the Forestry sub-group of the Climate Action Team should develop coordinated measures for wildfire reduction and biomass utilization, while Nevada should continue to develop effective measures for wildfire reduction and biomass utilization. Both states should seek economic incentives, including accelerated depreciation of equipment, for biomass activities.

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Not Completed

PRIORITY: TFFT / Regional Priority

COMMENTS: Utilization of forest fuels as biomass is recognized as a key component to an overall fuels reduction and landscape management strategy. Market forces continue to challenge the full implementation of biomass utilization in the Tahoe Basin. Community concerns related to air quality and the drop in alternative energy pricing make implementation difficult. Partners developed a Lake Tahoe Biomass Utilization Strategy in 2010, which identified material transportation costs to distant facilities a primary impediment to increasing utilization. Placer County continues to pursue a facility at Cabin Creek near Truckee. The State of Nevada built and brought on line a biomass facility in Carson City. However, this facility is currently not operating due to budget constraints. Successful biomass implementation will require collaboration between public and private enterprises, legislatures, and land managers both within and outside of the Lake Tahoe Basin.

### **#5. Research Funding**

California and Nevada should direct forest research funding, as available, to address issues related to fuel reduction efforts, reducing emissions from decaying material, and carbon sequestration.

RESPONSIBLE AGENCY(S): UCCE, UNCE, CAL FIRE, USFS, TERC, CARB, etc.

RECOMMENDATION STATUS: Completed / Ongoing

PRIORITY: Regional Priority



COMMENTS: The USFS Pacific Southwest Research Station (PSW) has completed research through funding provided by the Southern Nevada Public Land Management Act (SNPLMA) and other funding sources pertaining to smoke, fire behavior, forestry, Aspen stands and other fuels and forest health related projects. Since 2007, seventeen research projects focused on fuels reduction efforts have been funded, totaling almost \$4,000,000.

#### **#6. Sharing Information**

The Commission recommends developing and maintaining a single clearinghouse, such as the Tahoe Integrated Information Management System (TIIMS), for compiling information on fuel reduction projects, including project effectiveness and environmental effects. The Commission further recommends that the USDA Forest Service in collaboration with the Tahoe Science Consortium and the general science community conduct a review of the available scientific literature that may be relevant to forest management practices in the Lake Tahoe Basin. The purpose of the review is to gain a comprehensive understanding of what past research, including studies outside the Lake Tahoe Basin, can be applied to the key forest management issues that land managers face in the Lake Tahoe Basin. Key topic areas include: impact of fire on air quality, key soil properties and conditions (biomass accumulation and fire), water quality and forest biomass management practices, fire and fuels management including vegetation and wildlife response. (This work was initiated in 2007 and was anticipated to be completed in 2008).

RESPONSIBLE AGENCY(S): TRPA / USFS

RECOMMENDATION STATUS: Completed / Ongoing

COMMENT: The TIIMS database was utilized for a number of years following the commission hearings; however, it was discontinued due to budget cuts. In 2015, the Tahoe Regional Planning Agency (TRPA) launched the LT INFO site ([laketahoeinfo.org](http://laketahoeinfo.org)) as a replacement for TIIMS that is more comprehensive and user friendly. The Environmental Improvement Program (EIP) Tracker, a component of LT INFO, tracks all EIP accomplishments and expenditures. This includes the tracking of forestry and fuel reduction projects across all ownerships within the Lake Tahoe Basin. Additionally, in 2008 the USFS PSW published the *Fuels and Vegetation Management in the Lake Tahoe Basin: A Literature Review*. This was followed by a science synthesis which was compiled by the Tahoe Science Consortium in order to gain a better understanding of applicable approaches and identifying unmet needs. This report can be located online at [tahoescience.org/wp-content/uploads/2016/07/TSC-Synthesis-Report-Web.pdf](http://tahoescience.org/wp-content/uploads/2016/07/TSC-Synthesis-Report-Web.pdf).

#### **#7. Fuels Treatment Monitoring**

A Comprehensive Fuels Treatment Monitoring and Assessment Program should be created to track, assess and evaluate the extent of activities, fuel treatment effectiveness, cost effectiveness, regulatory compliance, environmental protection, and comparative risk to humans and the environment. Annual reports of these activities should be synthesized and presented to the Lake Tahoe Interagency Executive (TIE) and/or the Interagency Fuel Reduction Committee on an annual basis.

RESPONSIBLE AGENCY(S): No agency specified

RECOMMENDATION STATUS: Partially completed

PRIORITY: TFFT

COMMENTS: The TFFT has mechanisms in place to monitor costs and the spatial extent of projects

though the EIP Tracker. All agencies have been tracking the spatial extent of fuels reduction activities, maintaining records related to cost and the permitting required for project implementation. While collaboration and coordination of other monitoring activities among agencies exists, completion of a comprehensive fuels treatment monitoring and assessment program across agencies has not been realized but is underway. Regulatory compliance monitoring is completed through reporting to the appropriate agency. The TFFT reports accomplishments as well as future activities to the Tahoe Interagency Executive (TIE) Steering Committee on an annual basis.

### **#8. Third Party Monitoring**

The Commission recommends that implementation monitoring, visual monitoring, and inspections be conducted by a third party where project proponents lack research expertise and monitoring experience.

RESPONSIBLE AGENCY(S): No agency specified

RECOMMENDATION STATUS: Not completed

COMMENTS: A third party has not been utilized for this capacity. All projects have some level of monitoring as described in recommendation #7 above.



COURTESY USFS

## **Category 2: Issues of Governance**

### **#9. Emergency Declaration**

The Governors of Nevada and California should each respectively declare a state of emergency exists in the Lake Tahoe Basin, and recommend to the President of the United States that a federal state of emergency declaration of emergency also be declared.

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Completed

COMMENTS: On May 27, 2008, the Governors of the State of California and the State of Nevada each issued state-specific proclamations outlining the next steps each state would take to implement many of the Commission's recommendations.

### **#10. Emergency Declaration Components Expanded**

(12 components included in recommended Emergency Declaration)

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Completed

COMMENTS: Components of the Proclamation included increasing defensible space inspections and training, public education, defensible space enforcement, staffing of additional fire engines, support for the 10-year strategy, advancement of the Living with Fire Program, development of plans for biomass utilization, and urged TRPA, the California Air Resources Board (CARB) and the Lahontan Regional Water Quality Control Board (LRWQCB) to adopt the Commission's recommendations.

### **#11. Oversight of Governors' Recommendations**

The States' Declarations should provide that California-Nevada Tahoe Basin Fire Commission should be continued or some similar group representing the Governors of the States of California and Nevada should be established in order to monitor the implementation progress of the Commission's recommendations that are acted upon by the Governors of California and Nevada.

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Partially completed

COMMENTS: Nevada established an oversight committee to monitor implementation of the Commission's recommendations. AB75 and SB94 were passed by the Legislature in 2008 to address recommendations in the Bi-State Commission Report. AB75 required the State Forester, Executive head of the Division of Forestry, in coordination and cooperation with TRPA and the local Tahoe Basin Fire Chiefs, to report annually to the Governor, the Legislature, the Legislative Oversight Committee, the Nevada Congressional Delegation and TRPA regarding plans and activities relating to fire prevention and forest health. The State of California elected to require each individual department and agency to report accomplishments annually.

### **#12. Environmentally Friendly Declaration**

The Emergency Declarations should not waive environmental processes that ensure water quality protections within the Basin, but should clarify the need for inclusion of wildfire risk into those analyses and the importance of moving quickly and without undue delay to ameliorate the risk of catastrophic fire to the Lake



Tahoe Basin and its residents.

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Not completed

COMMENTS: Although the Emergency Proclamation did not specifically cover this recommendation, environmental processes and review for fuels reduction projects comply with existing environmental regulations prior to implementation. In addition, wildfire risk analyses were included and considered in the 2016 LTBMU Forest Plan revision, the 2010 update to the TRPA Code of Ordinances, and the LRWQCB 2014 Timber Waiver.

### **#13. Commission Report Distribution**

It is further recommended that copies of the Commission's final report be provided to all elected officials as requested, and to the members or appropriate representatives of the various administrative agencies having jurisdiction within the Lake Tahoe Basin.

RESPONSIBLE AGENCY(S): No agency specified

RECOMMENDATION STATUS: Completed

COMMENTS: Numerous copies of the Commission Report were printed and distributed to multiple stakeholders.



COURTESY USFS - ANGORA CREEK PRE-RESTORATION

### **#14. Successor Commission**

The authority of the Bi-State Fire Commission should be extended or a successor commission be established by the Governors of the States of Nevada and California to oversee the recommendations to the Governors and to insure progress is made on their implementation. This successor commission should meet periodically and report on at least a yearly basis to the public and the Governors on the status of the implementation of the Commission's recommendations and on fire pre-suppression and forest health preservation efforts within the Lake Tahoe Basin. The successor Commission should have the following composition, with its members to serve at the will and pleasure of the respective Governors:

- 2 co-chairs, with one from each state
- 2 fire professionals, with one from each state
- 2 public members, with one from each state
- 1 federal representative to be appointed by federal authorities

It is further recommended that this successor commission be authorized to review and report on the status of the implementation of the recommendations and the goals set forth in the Commission's Report including, but not limited to, the specific goals set forth in the Commission's recommendations regarding Catastrophic Fire and Emergency Declarations.

RESPONSIBLE AGENCY(S): CA / NV

RECOMMENDATION STATUS: Partially completed

COMMENTS: Nevada established an oversight committee to monitor implementation of the Commission's recommendations. AB75 and SB94 were passed by the Legislature in 2008 to address recommendations in the Bi-State Commission Report. AB75 required the State Forester, Executive head of the Division of Forestry, in coordination and cooperation with TRPA and the local Tahoe Basin Fire Chiefs, to report annually to the Governor, the Legislature, the Legislative Oversight Committee, the Nevada Congressional Delegation and TRPA regarding plans and activities relating to fire prevention and forest health. The State of California elected to require each individual department and agency to report accomplishments annually.

#### **#15. 10-Year Plan**

It is recommended that the Multi-Jurisdictional Fuel Reduction and Fire Prevention Strategy 10-Year Plan be adopted and implemented by all appropriate governmental authorities and entities within the Lake Tahoe Basin in collaboration with all land owners and land managers within the Basin.

RESPONSIBLE AGENCY(S): All agencies

RECOMMENDATION STATUS: Completed

COMMENTS: The Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Fire Prevention Strategy has been adopted by all appropriate governmental authorities in the Basin and continues to be updated to meet fuels reduction and landscape level forest health and resiliency goals. The Strategy was updated in 2014 and amended in 2017.

#### **#16. Water Board/TRPA Policy Revision**

The Governors should require that the plans and policies of the Lahontan Regional Water Quality Control Board (LRWQCB) and the Tahoe Regional Planning Agency (TRPA) be updated to emphasize the importance of fuel reduction activities in the Tahoe Basin. Revisions of policies shall be focused on facilitating implementation of these projects, with the priority given to protection of life, property, and the environment, in that order.

RESPONSIBLE AGENCY(S): LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: In 2008 the goals of Lake Tahoe's Environmental Improvement Program (EIP) were updated to include the following goals: 1) Advance Forest Ecosystem Health and Reduce Forest Fuels and 2) Utilize Biomass from Forest Fuels Reduction. Also in 2008, the LRWQCB and TRPA entered into a Memorandum of Understanding (MOU) to streamline the review and approval process for fuels reduction projects by designating TRPA as the sole fuel reduction and timber management permitting agency in the Tahoe Basin. In 2010, this MOU was successfully challenged in court based on CEQA conformance requirements. As a result, LRWQCB and TRPA retained their individual permitting authority for fuel reduction and timber management projects in the Tahoe Basin. The LRWQCB adopted timber waivers in 2009 and 2014 in order to facilitate streamlined permitting and implementation of fuel reduction projects. Engagement with Tahoe Basin fuels project implementers influenced the final versions of both timber waivers. Additionally, the LRWQCB Basin Plan was amended to allow consideration of wildfire related public health concerns in the granting of Basin Plan prohibition exemptions. In 2012, the TRPA Regional Plan was updated and with goals and polices focusing on reducing the risk of catastrophic wildfire.

## #17. Simplifying Regulations

The Governors should direct regulatory and implementing agencies in the Lake Tahoe Basin to simplify the existing system for permitting fuel reduction projects. Steps that should be taken to reduce or eliminate complexity, confusion, and redundancy shall include (see items A -L):

RESPONSIBLE AGENCY(S): No agency specified

COMMENTS: Simplifying regulations turns out to be not so simple. This Recommendation has been divided into 12 tasks. See Items 17A-L that follow.

### #17A

The regulatory restrictions and limitations presently existing, even as presently modified by the TRPA and the LRWQCB, should be further modified, if not waived, on an expeditious basis and no later than the beginning of the 2008 fire season, to allow the use of readily available mechanized equipment and vehicles within Stream Environment Zones (SEZs) to allow for the effective, efficient, and economical removal of hazardous materials. Restrictions regarding the use of mechanized equipment in such areas should be greatly and substantially reduced to make such cleaning and clearing activities within SEZs feasible over the period of time reasonably necessary to complete the Community Wildfire Protection Projects relating to the various communities located within the Lake Tahoe Basin.

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA Code of Ordinances and the Lake Tahoe 208 Water Quality Management Plan (208 Plan) have been updated to allow the use of mechanized equipment in Stream Environment Zones (SEZs) for fuel reduction purposes. The TFFT and the USFS have implemented a number of mechanized SEZ fuel reduction projects since 2008 including: the USFS Heavenly SEZ Demonstration Project, Third Creek SEZ Project, Lake Christopher SEZ Project, Gold Coast Fuels Project, Washoe Meadows State Park Fuels Project, the USFS Spooner Fuels Reduction Project, Carnelian Fuels Reduction Project and the South Shore Fuels Reduction Project. Fuels reduction projects utilizing mechanized equipment in SEZs are being implemented in compliance with applicable TRPA Code. The NEPA process for the LTBMU was streamlined with a categorical exclusion through the Lake Tahoe Basin Fuels Reduction Categorical Exclusion Exemption. It is important to note that there are other Federal and State regulations protecting streams and water quality (California Forest Practice Rules, Nevada State Law, and the Federal Clean Water Act). By the 2008 operating season LRWQCB had a MOU in place to implement this recommendation. In 2009 LRWQCB adopted a revised timber waiver that allowed for low ground pressure mechanized equipment use in SEZs.

### #17B

The commission recommends that Lahontan and TRPA in cooperation with land management agencies develop



COURTESY USFS - TREEPLANTING



a common list of accepted BMPs for mechanical work in SEZs that will be used beginning in the 2008 season to qualify as exempt and qualified exempt projects. In addition to the BMPs used in 2008, a reference guide defining equipment use in SEZs shall be developed by March 2009 and reviewed and updated as new information is collected. This guide will be completed through a cooperative inter-agency effort. TRPA and Lahontan MOUs shall rely on this adaptive process to allow SEZ disturbance as new BMPs are developed and implemented.

RECOMMENDATION STATUS: Completed

COMMENTS: The LRWQCB's 2009 and 2014 timber waiver allow for mechanized equipment use within SEZs provided that BMPs spelled out in the permit are adhered to. These BMPs are prescribed during permitting based on project specific conditions. BMPs include stream course buffers, pressure levels for low ground pressure mechanized equipment, soil moisture considerations, rutting standards, and snow cover. TFFT staff participated on a technical advisory committee that published *A Forestry Management Guidebook for the Tahoe Basin* which was completed in 2015.

### **#17C**

The Governors of the States of California and Nevada should request the TRPA Governing Board to expeditiously establish within its ordinances a clear definition, in plain English, setting forth standards as to what constitutes a stream environment zone for the purposes of clearing such areas of hazardous fuels. The standard should be adopted for the purposes of providing a standard that can be uniformly applied by all agencies having environmental regulatory authority in the Basin, eliminating subjective determinations as to such matters, and encouraging the removal of fuels materials from SEZs within populated areas of the Basin and the surrounding WUI. The definition should define SEZ areas in appropriate gradients of sensitivity to equipment use and should be applied uniformly on a Basin-wide basis. The Commission further recommends TRPA: (1) update criteria for delineating SEZs on the ground; (2) incorporate the new natural Resources Conservation Service Soil Survey; and (3) clarify secondary criteria for delineating SEZs related to vegetation types, soil characteristics, and floodplain identification. A crosswalk will be developed to reference SEZs to watercourse and lake protection zones (WLPZs) in the California Forest Practice Rules. It is also recommended that the LRWQCB and all other state agencies having jurisdiction over environmental matters within the Basin should be directed by the respective Governors to apply the same uniform definition and standards in determining what constitutes a stream environment zone for their own regulatory purposes within the Tahoe Basin.

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA has developed a rapid assessment method (RAM) for delineating SEZs for fuels reduction projects and TRPA staff are available to delineate SEZs for project implementers as needed. Additionally, the USFS has developed a sensitivity rating to classify SEZs for fuels reduction projects. The application of these methods has proven to be efficient and effective in getting projects implemented in a streamlined process. The LRWQCB defers to the TRPA for delineation of SEZs for fuel reduction projects.

### **#17D**

In the interim, and not to exceed October 2008, in the event the TRPA does not establish such a uniform definition of SEZ, the Governor of the State of California should direct, within the framework of his authority,

all California agencies having jurisdiction over environmental matters within the Tahoe Basin, including the LRWQCB, to apply the provisions of the California Forest Practices Act relating to watercourse protection with regard to SEZs in the Basin. The standard practices prescribed by said Act are understood by potential contractors, and their use will eliminate an impediment to bidders for such fuels reduction projects in the Basin. Further, the Governor should require any deviation from the use of such standard forest practices that results in the imposition of stricter standards to be reported by the agency requiring such deviation with an explanation of the environmental and efficiency tradeoffs considered by such agency when requiring stricter standards to be applied.

RECOMMENDATION STATUS: Partially completed

COMMENTS: This recommendation, if implemented directly, would have in many cases resulted in larger stream buffers than required under current TRPA code, while not affording protection to sensitive meadow and wetland areas. The TFFT has been proceeding under the current SEZ regulations which allow for use of mechanized equipment in SEZs, and the inclusion of the Rapid Assessment Methodology which was developed to streamline projects and provide contractors with a clearer understanding of SEZ delineation.

#### **#17E**

The Commission recommends TRPA and Lahontan grant exceptions for disturbance within SEZs for the purposes of completing fuel reduction projects (with equipment) necessary to protect public health and safety as identified in the community wildfire protection plans. The Commission recommends both regulatory boards grant blanket exemptions to a group of fuel reduction prescriptions when the tools or operating procedures described in the Reference Guide (see “B” above) are developed and implemented.

RECOMMENDATION STATUS: Partially completed

COMMENTS: The streamlined SEZ permitting process as described above has been proven effective. This recommendation would have required attempting to change laws at both State and Federal levels (Forest Practice Rules, CEQA, 208 Plan, and Nevada Law) and the process being used today has not been an impediment to getting projects on the ground (See #17A above for SEZ project list). Although a blanket exemption policy was not created, the Lahontan Basin Plan was modified to allow a project specific exemption from Basin Plan prohibitions that allow for public health and safety driven fuels reduction activities.

#### **#17F**

The Commission recommends for fuel treatment projects with potentially significant environmental impacts, all affected regulatory agencies rely on a single or joint environmental analysis and review process (e.g. EIS/EIR) to reach agreement on project specifications, permit conditions, (if applicable), and monitoring.

RECOMMENDATION STATUS: Partially completed

COMMENTS: Through the inclusion of inter-disciplinary teams and TFFT-facilitated implementation approaches, project implementers are designing projects that allow for streamlined permitting that fit within the current regulatory framework without causing significant impacts to land managers implementing fuels reduction projects.

#### **#17G**

The Commission recommends raising the minimum diameter limit of live trees requiring a TRPA Tree

Removal Permit from 6 inches diameter at breast height (dbh) to 14 inches dbh on all properties throughout the Lake Tahoe Basin.

RECOMMENDATION STATUS: Completed

COMMENTS: This recommendation was fully implemented on January 28, 2008.

### #17H

The Commission recommends allowing winter operations with heavy equipment for fuels reduction over snow or over frozen ground shall be allowed (not in SEZ) through the LRWQCB Waiver Category 1b or 1c Eligibility Criteria.

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA Code allows over the snow/frozen ground winter operations. The 2009 and 2014 LRWQCB timber waivers allow for over the snow/frozen ground equipment operations, including in SEZs.

### #17I

The Commission recommends TRPA and Lahontan Regional Water Quality Control Board make changes to existing waivers, memoranda of understanding, plans and ordinances such that forest treatment projects involving hand crews are no longer required to submit permit or waiver applications under any circumstances. Projects involving hand crews may be included in an annual spreadsheet submitted by April 1st and amended as needed by the project proponent each year to the Multi-Agency Coordination (MAC) Group or the Tahoe Fire and Fuels Team (TFFT) with project identification, project contact, acres to be treated, and location for all proposed hand thinning treatments.

Project proponents may amend the spreadsheet as needed. All agencies and interested public shall have access to this information.

RECOMMENDATION STATUS: Completed

COMMENTS: The TFFT collaborates annually on project prioritization, planning and implementation and reports to the MAC on a regular basis. The LRWQCB 2009 and 2014 timber waivers have a 'no notification' category for projects that are conducted by hand crews. TRPA updated the USFS MOU in 2009 to streamline project implementation for hand crew projects. All agencies and interested members of the public have access to project information through LT INFO ([laketahoeinfo.org](http://laketahoeinfo.org)) and the EIP Tracker ([EIP.laketahoeinfo.org](http://EIP.laketahoeinfo.org)).



TAHOE DAILY TRIBUNE, TREVOR

### #17J

The Commission recommends TRPA, Lahontan, USDA Forest Service, and other affected agencies amend their plan and ordinances to allow equipment use on slopes greater than 30% based on current and future technology, and current forest practices to ensure resource protection.

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: As the Lake Tahoe Basin engages in landscape level planning, the restrictions associated with steeper slopes is being re-evaluated based on advances in equipment technology and feasible best management practices. This process was begun by the removal of these restrictions from the Lahontan Basin Plan and the USFS LTBMU Forest Plan. Mechanical equipment on lands steeper than 30% is still prohibited by the California Forest Practice Rules (Tahoe area), Nevada rules governing forestry activities, and TRPA Code of Ordinances. TRPA and partner agencies have discussed making changes to increase the allowable slope for mechanized equipment. These steeper areas are currently being treated by hand crews in areas of high risk.

#### **#17K**

The Commission recommends as part of forest fuels reduction projects in SEZs, regulatory agencies allow spreading of chipped material to acceptable depths where appropriate.

RECOMMENDATION STATUS: Completed

COMMENTS: Chipping in some areas of SEZs is allowed in certain circumstances. Chipping near active streams is not appropriate as chipped materials can be easily mobilized and transported into a stream. The Army Corps of Engineers prohibits chipping in Jurisdictional Wetlands (some SEZs fall into this category) and considers chipping in these areas as a discharge. The LRWQCB 2009 and 2014 timber waivers allow for the spreading of chipped material to acceptable depths within SEZs provided the material does not have the potential to enter surface waters.

#### **#17L**

The Commission recommends incorporating “lessons learned” from research and monitoring efforts into future fuel reduction project designs, eliminating the need to continue the same level of monitoring into all projects.

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: SNPLMA has provided funding for forest health and forest fuels project monitoring and science through the SNPLMA Science category. Each year at the Tahoe Science Consortium’s Science Conference, the results of these studies are presented (the Tahoe Science Consortium has been replaced by the Tahoe Bi-State Science Council). This information provides implementers and regulators with ‘lessons learned’ and the scientific justification to move forward on projects. The TFFT also has a yearly ‘lessons learned’ check in to discuss techniques that are working and techniques that may need adjustments. For example, the LRWQCB’s 2014 timber waiver allows for pile burning in SEZs with a performance specification related to vegetative recovery of burn scars. This update to the timber waiver was influenced and justified by ‘lessons learned’ from SNMPLA funded research projects that were implemented in the Tahoe Basin.

#### **#18. Fire Officials Input to TRPA**

The Governors should direct that all the TRPA ordinances and procedures (whether presently existing or proposed in the future) that affect forest health issues and public safety from catastrophic fire be reviewed in a cooperative manner by the TRPA and qualified professionals with experience in fire prevention and fight-



ing catastrophic fires. The purpose of this review should be to assure that said ordinances and procedures do not pose undue risks of catastrophic fire or create conditions that may increase the risk of such fires to communities within the Basin, or otherwise endanger public safety. Following this review said ordinances and procedures should be amended or modified by the TRPA if necessary to facilitate the mitigation of undue fire hazards.

RESPONSIBLE AGENCY(S): Fire agencies, TRPA

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: Following the Angora Fire, the Tahoe Basin Fire agencies worked more closely with TRPA in engaging in policy discussions affecting forest health issues and wildland fire public safety concerns. The TRPA Governing Board took action in 2007 to amend Chapter 61-Vegetation and Forest Health to increase the tree diameter limit requiring a permit from 6 inches diameter at breast height (dbh) to 14 inches dbh and added the Defensible Space Assessor definition to enable fire professionals to mark trees for defensible space purposes.

### **#19. Basin Chiefs' Recommendations**

That with regard to the issues raised by the Tahoe Basin Fire Chiefs in their letter to the Commission dated September 18, 2007, the Governors of California and Nevada should request the Governing Board of the TRPA to take the following actions no later than June 1, 2008: (see items A - C in Report)

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: Through the TRPA Regional Plan update process, and in coordination with the Tahoe Basin Fire Chiefs, BMP requirements have been reconciled with the requirements of PRC 4291. The ingress/egress issues have been solved without any changes to the Code, three-hundred feet of defensible space is allowed under the current fire agency MOUs, and the BMP/defensible space integration is being implemented through the Living with Fire program.

### **#20. TRPA Governing Board Changes**

The Commission recommends that the Governors of the States of California and Nevada take the following actions in order to bring the perspectives of experienced fire professionals and experts in forest health to the TRPA: (see items A - E in Report)

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Partially completed

COMMENTS: The Bi-State Compact (PL-96-551) specifies the composition of the TRPA Governing Board, making this recommendation only feasible through changes to federal and state law. The TRPA Governing Board receives regular briefings from fire professionals regarding fuel reduction projects and



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - ROADSIDE CHIPPING

issues occurring in the Basin. The TRPA has added one fire professional to the Advisory Planning Commission. Two Registered Professional Foresters are presently on staff with TRPA. Additionally, TRPA is an active member of TFFT which includes all the fire agencies around the Basin.

### **#21. TRPA Reporting**

The Commission recommends that the Governors of the States of California and Nevada request their respective Legislatures to impose duties upon the TRPA to report to the Governors and Legislatures of each State, and to the Congressional delegations of each State, no less than annually regarding: (see items A - G in Report)

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Partially completed

COMMENTS: The TRPA Governing Board and Executive Director have voluntarily and regularly reported to the Nevada Legislative Oversight Committee and to the Congressional delegation on an annual basis.

### **#22. TRPA Oversight**

The Commission recommends that until the Legislatures of the States of California and Nevada collectively adopt legislation imposing the duties on the TRPA described in the preceding recommendation, the Governors of the States of California and Nevada continue the duties and responsibilities of the California-Nevada Tahoe Basin Fire Commission for the purpose of providing such oversight, and request the TRPA Governing Board to voluntarily undertake such reporting duties to provide to the Governors and their designated representatives with the information identified in the preceding recommendation.

RESPONSIBLE AGENCY(S): TRPA, CA, NV

RECOMMENDATION STATUS: Partially completed

COMMENTS: The TRPA Governing Board and Executive Director have voluntarily and regularly reported to the Nevada Legislative Oversight Committee and to the Congressional delegation on an annual basis. Neither state imposed legislative change to the TRPA resulting in duties assigned in coordination with the fire commission recommendations. (see Recommendation 21)

### **#23. TRPA Budget Changes**

The Commission recommends that the Governors of the States of California and Nevada request their respective State Legislatures to utilize their budget review processes of the respective States relating to the TRPA to exercise active and aggressive oversight of the TRPA's activities with regard to the implementation of the recommendations of the California-Nevada Tahoe Basin Fire Commission, fuel reductions programs within the Tahoe Basin, forest health and restoration efforts within the Basin, and fire safety recommendations made by the fire departments and fire protection districts located within the Basin.

RESPONSIBLE AGENCY(S): TRPA, CA, NV

RECOMMENDATION STATUS: Partially completed

COMMENTS: Through TRPA's legislative affairs program, the agency routinely informs the two state legislatures on the implementation of recommendations. TRPA's legislative hearings in both states have included updates on the forest health program activities.

#### **#24. USFS / TRPA MOU**

The Commission recommends that the USDA Forest Service and the Tahoe Regional Planning Agency work cooperatively to revise their MOU with focus on exempting fuel reduction projects and associated supporting activities from the TRPA review and permit.

RESPONSIBLE AGENCY(S): USFS, TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: The USFS/TRPA MOU was updated January 14, 2009 in response to this recommendation.

#### **#25. USFS / LRWQCB MOU**

The Commission recommends that the USDA Forest Service and the LRWQCB review their MOU and revise any stipulations that impede project planning and implementation related to fuels projects and associated supporting activities.

RESPONSIBLE AGENCY(S): LRWQCB, USFS

RECOMMENDATION STATUS: Completed

COMMENTS: The LRWQCB adopted Timber Waivers in 2009 and 2014 to facilitate streamlined permitting and implementation of fuels reduction and timber management projects. There was extensive engagement with USFS staff to ensure that the adopted waivers would allow fuels reduction activities to proceed in a streamlined manner. The USFS and LRWQCB worked closely on the development of the 2009 Timber Waiver and subsequent 2014 Timber Waiver process

#### **#26. TRPA / LRWQCB MOU**

It is recommended that the Governor of the State of California direct, within the framework of his legal authority, the Lahontan Regional Water Quality Control Board (LRWQCB) to transfer to the TRPA no later than October 1, 2008, by a suitable MOU, all responsibility of the LRWQCB relating to fuel reduction projects performed within the Tahoe Basin. The intent is to have an expedited single permitting process, eliminating the need for the LRWQCB to issue a second permit, and to achieve consistency in the application of environmental laws as relates to these kinds of projects in the Tahoe Basin. In addition, pursue the execution of a Management Agency Agreement (MAA) between the State Water Resources Control Board (SWRCB) and the TRPA in accordance with SWRCB existing policy for non-point discharge. Consideration of an MAA while not expected for several months is not intended to be, nor shall it be considered a basis for, delay in execution of the MOU between the LRWQCB and the Tahoe Regional Planning Agency.

RESPONSIBLE AGENCY(S): LRWQCB, TRPA, SWRCB

RECOMMENDATION STATUS: Completed

COMMENTS: In 2008, the LRWQCB and TRPA entered into a Memorandum of Understanding (MOU) to streamline the review and approval process for fuels reduction projects by designating the TRPA as the sole fuel reduction and timber management permitting agency in the Tahoe Basin. In 2010, this MOU was successfully challenged in court based on CEQA conformance requirements. As a result, LRWQCB and TRPA retained their individual permitting authority for fuel reduction and timber management projects in the Tahoe Basin. The LRWQCB adopted a revised Timber Waiver in 2009 that was available for implementing agencies to enroll under in a manner that did not unduly interrupt active projects and has proven effective ever since.

#### **#27. TRPA Comment on LRWQCB Policies**

It is recommended that the Governor of the State of California, within the framework of his legal authority, direct the LRWQCB to request comments from the TRPA Governing Board prior to enacting any new regulations and/or revised interpretations of existing regulations relating to or otherwise affecting removal or mitigation of fire hazards.

RESPONSIBLE AGENCY(S): TRPA, CA, LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA input was provided and incorporated into the development of the 2009 and 2014 Timber Waivers.

#### **#28. TRPA Decision Appeals**

It is recommended that the Governing Board of the TRPA adopt suitable procedures allowing interested persons affected by approvals or denials of fuel reduction projects that are subject to the TRPA's revised MOU with the LRWQCB with regard to such matters to appeal such decisions to the TRPA Governing Board provided that good cause is shown for such appeals, that such reviews are conducted in open meetings, and such reviews are conducted in an expeditious manner that does not unreasonably delay the implementation of the subject fuel reduction project.

RESPONSIBLE AGENCY(S): TRPA, LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: Any interested person or member of the public affected by approvals or denials of fuels reduction projects may bring their concerns forward to the TRPA Governing Board for consideration. The LRWQCB and TRPA Memorandum of Understanding (MOU) was put in place to streamline the review and approval process for fuel reduction projects but was invalidated by the courts. Currently LRWQCB and TRPA retain their individual permitting authority for fuel reduction and timber management projects in the Tahoe Basin.

#### **#29. CAL FIRE Monitor TRPA / LRWQCB MOU**

It is recommended that the Director of CAL FIRE be empowered by the Governor of the state of California to monitor, and report to the Governor the progress on, the development of the MOU between the LRWQCB and the TRPA with regard to reduction of fire hazards. It is further recommended that the final MOU be submitted to, and be subject to the prior review and comment by the Director of CAL FIRE

RESPONSIBLE AGENCY(S): CAL FIRE

RECOMMENDATION STATUS: Completed

COMMENTS: Through collaboration between CAL FIRE and the local fire districts, fire agencies were directly engaged in the development of the MOU. This MOU was successfully challenged in court based on CEQA requirements. As a result, LRWQCB and TRPA retained their individual permitting authority for fuel reduction and timber management projects.

#### **#30. Fire Chiefs Monitor Permit Streamlining**

The agencies represented on the permit streamlining group have submitted a substantial list of planned actions to the Commission. The implementation of these actions is urgent, their details need direction from fire



professionals, and an important goal is to achieve Basin-wide permitting consistency for fuel reduction projects. It is therefore recommended that the Governors of Nevada and California appoint their respective State Directors of fire fighting activities (the Nevada State Forester / Fire Warden and Chief and CAL FIRE, respectively) to monitor the implementation and report to the Governors the progress of permit streamlining actions.

RESPONSIBLE AGENCY(S): CAL FIRE, NDF

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: CAL FIRE and NDF remain active participants on the MAC and TFFT. Both agencies continue to provide input to the permit streamlining process.

### **#31. Quantitative Standards for Soil Productivity**

It is recommended that quantitative standards for soil productivity and hydrologic function as developed by the U.S. Forest Service Pacific Southwest Region be utilized throughout the Lake Tahoe Basin, and that Region 5 of the U.S. Forest Service, with guidance from the Pacific Southwest Research Station, develop implementation and effectiveness monitoring protocols to ensure that the quantitative standards for soil productivity and hydrologic function are met.

RESPONSIBLE AGENCY(S): USFS, PSW

RECOMMENDATION STATUS: Partially completed

COMMENTS: In 2009, the WO Forest Service Handbook (which also included quantitative soil quality standards) was replaced by a new Forest Service

Manual. At that time, efforts to revise the Region 5 standards began, and the revised Region 5 Forest Service Handbook-2550 was completed in 2012. The new Forest Service Handbook does not include quantitative standards. However, between 2006 and 2012, the LTBMU conducted soil quality monitoring to determine the impacts of heavy equipment operations on soil and water quality. The results of those monitoring efforts were used to develop criteria for determining operable conditions for various mechanical treatment operations to avoid detrimental soil disturbance.

Since the development of these criterion, implementation monitoring and BMP evaluations have and will continue in vegetation management units to evaluate BMP effectiveness with regards to soil and water quality. The reports for USFS monitoring efforts include: 2006 Ward Unit 5 Soil Monitoring Report, June 2007; Heavenly Creek SEZ Demonstration Project 2007 Soil Monitoring Report, March 2008; Roundhill Fuels Reduction Project Soil Quality Monitoring Report, November 2011; and Slaughterhouse Fuels Reduction Project Soil Quality Monitoring Report, January 2012.



TAHOE DOUGLAS FIRE PROTECTION DISTRICT - ANGORA CHIPPING PILES

### **#32. No LRWQCB Permit for Home Construction**

The Commission recommends that the Lahontan Regional Water Quality Control Board Executive Officer issue a letter clarifying that its existing MOU with the TRPA for residential construction constitutes a waiver of waste discharge requirements for new residential construction, including tree and vegetation removal, therefore eliminating the need for a permit from the Lahontan Regional Water Quality Control Board.

RESPONSIBLE AGENCY(S): LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: The LRWQCB defers to the TRPA for permitting and regulatory oversight for tree and vegetation removal associated with new residential construction in the Tahoe Basin.

### **#33. Changes to CA Forest Practice Act**

The Commission recommends that the California Legislature take action to amend PRC 4527 Timber Operations or/and PRC 4526 Timberland, so as to eliminate the need for CAL FIRE to require a notice of exemption within the Lake Tahoe Basin to remove trees for new construction on non-Federal parcels less than three acres in size (14 CCR 1104.1), and instead defer to the TRPA ordinance.

RESPONSIBLE AGENCY(S): CAL FIRE

RECOMMENDATION STATUS: Not completed

COMMENTS: No action has been taken on this recommendation. This would require a Legislative change in the law.

### **#34. No LRWQCB Fee for Urban Lots**

The Commission recommends that the Lahontan Regional Water Quality Control Board expand Category 1A of its timber waiver to include urban lots, including lots containing SEZs, managed by Federal, California State or local governments within the Lake Tahoe Basin. This will eliminate the need for these land management agencies to notify or pay a fee to the LRWQCB to reduce fuel loads on such lots.

RESPONSIBLE AGENCY(S): LRWQCB, USFS, CTC

RECOMMENDATION STATUS: Completed

COMMENTS: The LRWQCB created regulatory coverage (Category 1) for tree and vegetation removal associated with defensible space, defense zone, and forest fire prevention projects in the 2009 and 2014 Timber Waivers. There are no notification, application, or monitoring requirements or associated fees for these Category 1 projects.

### **#35. Expansion of TRPA MOU**

The Commission recommends that the TRPA expand or adopt MOUs with public land management agencies to exempt tree and vegetation removal from publicly managed urban lots.

RESPONSIBLE AGENCY(S): TRPA, USFS, CTC

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA has MOUs with the USFS, California Tahoe Conservancy (CTC), California Department of Parks and Recreation, Nevada State Parks, and Nevada Division of State Lands that exempts or qualified exempts this activity on publicly managed urban lots.

### #36. No Need for Exemption

The Commission recommends that the California legislature take actions, relative to the Lake Tahoe Basin, such as amending Public Resources Code (PRC) 4527 Timber operations or/and or California PRC 4526 Timberland, so as to no longer require projects on parcels less than 3 acres in size that would require a Notice of Exemption for Harvesting Christmas Trees, (14 CCR 1038 (a), Less than 10% Average Volume of Dead Dying or Diseased Trees (14 CCR 1038 (b)), compliance with PRC 4290 and 4291 (14 CCR 1038 (c)) and the Tahoe Exemption (14 CCR 1038 (f)) from Forest Practice Act filing requirements within the Lake Tahoe Basin, and instead refer to the TRPA ordinance.

RESPONSIBLE AGENCY(S): CAL FIRE, TRPA

RECOMMENDATION STATUS: Not completed

COMMENTS: No action has been taken on this recommendation. This would require a Legislative change in the law.



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - CHIPPING

### **Category 3: Community & Homeowner Fire Prevention**

#### **#37. Defensible Space Guidelines**

The Governors should direct regulatory and implementing agencies in the Lake Tahoe Basin to come to agreement on a single, clear and consistent set of guidelines and practices to make it easier for property owners to attain defensible space around their properties without violating erosion control “best management practices” (BMPs). These should include: (see items A-B in Report)

RESPONSIBLE AGENCY(S): Fire Districts, CAL FIRE, UNCE Living With Fire, TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: Defensible space guideline consistency has been achieved through the work of the MAC, TFFT, Tahoe Network of Fire Adapted Communities and the Living With Fire education program. Additionally, starting 2017, all fire agencies in the Basin will be collecting defensible space data through the ESRI Collector App for further consistency throughout the Basin. In 2009, TRPA took a leadership role in working with fire agencies to develop and execute an award-winning defensible space public education campaign.

#### **#38. “Living With Fire” Educational Program**

The Governors should support and enhance the existing fire prevention education program, “Living With Fire,” which is coordinated by the University of Nevada Cooperative Extension. This comprehensive wild-fire protection education framework must be provided with permanent and stable funding sources for continued program services. ([livingwithfire.info/](http://livingwithfire.info/))

RESPONSIBLE AGENCY(S): UNCE Living With Fire

PRIORITY: TFFT, Regional Priority

RECOMMENDATION STATUS: Not completed

COMMENTS: The Living With Fire Educational Program continues to be a fully-grant funded program with an uncertain future. Federal and State Grants are shifting their focus towards fuels reduction projects and away from critical educational programs. No stable funding source has been identified in the 10 years since the Angora Fire.

#### **#39. Homeowner Education**

Education, inspections and enforcement of defensible space measures must emphasize the importance of removing hazardous vegetative fuels on the property and actively educate the homeowner about building envelope ignition resistance. Homeowners must address both defensible space and building ignition resistance.

RESPONSIBLE AGENCY(S): CAL FIRE, UNCE, Fire Districts, TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: Through the coordinated effort of the TFFT, Living With Fire, Tahoe Resource Conservation District (TRCD), and the Tahoe Network of Fire Adapted Communities, homeowner education, inspections and enforcement are coordinated among all fire agencies in the Basin. Homeowner outreach occurs through public information arm of the TFFT (the Fire Public Information Team- Fire PIT), fire agencies, and the Tahoe Network of Fire Adapted Communities.



#### **#40. Defensible Space Performance Standards**

The non-federal fire agencies and districts within the Lake Tahoe Basin should develop performance standards for initial and follow-up (enforcement) inspections relating to defensible space and other fire safety programs in order to improve the provision of such services and the effectiveness of such programs.

RESPONSIBLE AGENCY(S): CAL FIRE, Fire Districts, NDF

RECOMMENDATION STATUS: Completed

COMMENTS: Through partnerships between CAL FIRE and the local fire districts, defensible space standards across the Basin have been standardized while also recognizing unique attributes of each fire district. Follow up inspections, pre-inspection letters, individual homeowner contact, financial incentives and development of community leaders is part of the overall defensible space program in the Basin.

#### **#41. Single Point of Contact for Information**

The Commission recommends that a single point of contact, such as a "1-800-number," be developed for property owners to call for information on defensible space guidelines and permit requirements. This should be a collaborative effort between the Tahoe Regional Planning Agency (TRPA), the Nevada Fire Safe Council, the University of Nevada Cooperative Extension, and the Tahoe Basin fire agencies.

RESPONSIBLE AGENCY(S): TRPA, NV FSC, UNCE, Fire Districts

RECOMMENDATION STATUS: Completed

COMMENTS: Initially a single call-in line was established; however, it was discovered that constituents tended to contact their local fire district for assistance. Based on discussions within the TFFT, a single call line was abandoned. However, the TFFT website [tahoe.livingwithfire.info/tahoe-fire-fuels-team/](http://tahoe.livingwithfire.info/tahoe-fire-fuels-team/), provides contact information for every fire district in the Basin.

#### **#42. Tree Marking Program**

The Commission recommends that CAL FIRE, Nevada Division of Forestry (NDF), the TRPA, and the Tahoe Basin fire agencies work together to create a defensible space based tree marking program for non-federal lands, and that CAL FIRE and NDF include this program in their annual PRC 4291 training to all non-federal fire agencies in the Tahoe Basin to ensure that tree marking for defensible space purposes is conducted consistently throughout the Basin.

RESPONSIBLE AGENCY(S): CAL FIRE, NDF, Fire Districts, TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: A MOU was established between the fire agencies and TRPA to allow for marking of trees pursuant to defensible space guidelines. TRPA Code was changed to create a "Defensible Space Assessor" and a joint training sponsored by CAL FIRE and TRPA now occurs on an annual basis for fire districts.

#### **#43. Change in Foresters (RPF) Law**

The Commission recommends the following changes to California Public Resources Code (PRC) regarding the role of Registered Professional Foresters in the implementation of defensible space measures: (see items A - B in Report)

RESPONSIBLE AGENCY(S): CAL FIRE

RECOMMENDATION STATUS: Partially completed

COMMENTS: Although there was no specific change in the law, fire district personnel are not required to be RPF's in order to make defensible space recommendations pursuant PRC 4291 (Item A). PRC 4527 and 4526 (requiring a Notice of Exemption to remove trees for commercial purposes) was not amended for removal of trees for defensible space purposes.

#### **#44. Enforcement of Defensible Space**

The Commission recommends vigorous enforcement of defensible space provisions, and the imposition of consequences for noncompliance, which may include fines provided for under PRC 4291, additional fines imposed by the TRPA, and/or billing a homeowner (or placing a lien on properties until the bill is paid) after some number of notices of violations have been ignored.

RESPONSIBLE AGENCY(S): CAL FIRE, Fire Districts, TRPA

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: Basin wide enforcement has been occurring for the most egregious properties and fines can be imposed under PRC 4291. While enforcement is a key component of a defensible space inspection program, fire agencies across the Basin successfully work with homeowners and residents to achieve compliance through a re-inspection program, community outreach, local fire district chipping programs, Fire Adapted Community Development, and education.

#### **#45. Fire Resistant Building Materials**

The Commission recommends a Basin-wide effort to encourage the use of fire resistant building materials, including the following elements: (see items A - C in Report)

RESPONSIBLE AGENCY(S): CAL FIRE - OSFM, NDF, NV SFM

RECOMMENDATION STATUS: Completed

COMMENTS: The CAL FIRE Office of State Fire Marshal has adopted minimum standards for materials and material assemblies that provide a reasonable level of exterior wildfire exposure protection for buildings in Wildland-Urban Interface Fire Areas. Fire jurisdictions in Nevada provide for similar standards through adoption of the International Wildland Urban Interface Code.

#### **#46. Fire Safe Building Ordinances**

The Commission recommends that all local governmental authorities in the Tahoe Basin having jurisdiction and control over buildings and structures, including the various fire agencies located within the Tahoe Basin, adopt suitable ordinances requiring the retrofitting of existing structures within the Tahoe Basin to meet modern fire standards suitable for use in wildland urban interface areas. In particular, it is recommended that all buildings presently existing in the Tahoe Basin that have wood shake or shingle roofs be required to replace existing roofs with roofing materials that are ignition resistant and suitable for use within



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - LOGGING

wildland urban interface areas.

RESPONSIBLE AGENCY(S): TRPA, Counties, Fire Districts, CAL FIRE - OSFM, NV SFM

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: All Lake Tahoe Basin jurisdictions have adopted similar codes regarding ignition resistance for any new construction - California Wildland Urban Interface Code in CA and International Wildland Urban Interface Code in NV. A grant funded shake shingle replacement program was implemented in some fire districts around the Lake Tahoe Basin; however, funding for that program is no longer available.

#### **#47. Grants**

The Commission recommends that the local governments, with the assistance of the Tahoe Basin Fire Chiefs and any Basin-wide Fire Safe Council or other organization formed to address fire safety matters in the Basin, pursue any grant or loan programs that may be available to assist property owners in retrofitting their residences to meet these requirements.

RESPONSIBLE AGENCY(S): Fire Districts, NV SFM

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: A grant funded shake shingle roof replacement program was implemented in some fire districts around the Lake Tahoe Basin; however, funding for that program is no longer available.



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - UNDERSTORY BURN

#### **#48. Staffing for Fire Prevention**

The Commission recommends a minimum of two CAL FIRE fire prevention positions should be permanently stationed in the Basin.

RESPONSIBLE AGENCY(S): CAL FIRE

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: CAL FIRE funded one additional Fire Captain Specialist-Fire Prevention position on the Placer County portion of the Lake. A second position on the South end of the Lake has not been funded. CAL FIRE Defensible Space Inspectors routinely conduct PRC 4291 inspections within the Tahoe Basin.

#### **#49. Study of Existing Fire Code**

The Commission recommends that a Basin-wide deficiency study and needs assessment based on existing conditions and current fire codes should be completed to make recommendations in determining the cost associated with replacing and updating undersized water distribution infrastructure. This study and assessment should be completed by the utility district and private water purveyors throughout the Lake



Tahoe Basin. An annexation study of private water systems into public utility districts must be evaluated and considered. Based on the assessment, the utility district should pursue loans, grants and rate increases as necessary and appropriate.

RESPONSIBLE AGENCY(S): Utility Districts, Private water purveyors

PRIORITY: TFFT

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: Work on this recommendation began almost immediately but remains relatively limited in scope and accomplishment due to resource constraints and the lack of a single agency named in charge of coordination. A comprehensive “Basin-wide deficiency study and needs assessments based on existing conditions and existing fire codes” was never funded, rather the responsible parties were identified as “utility districts and private water purveyors.” To the extent resources are available at the local level, public and private water purveyors continue to fund water system evaluations within their respective service areas. Deficiencies area identified and capital improvements planned and implemented. One outcome of this recommendation was the formation of the Lake Tahoe Fire Prevention Partnership (LTFPP) in 2008. This bi-state group of water suppliers performed individual water infrastructure deficiency studies and needs assessments. These are ongoing. The LTFPP sought federal funding to implement as many of the recommended infrastructure improvements as could be addressed with available revenues. Grant funding was secured through the USFS and managed through the South Tahoe Public Utility District. Each participating water purveyor was required to match the federal funds received on a one-to-one basis. Many exceeded the minimum match. Through this USFS grant program, approximately \$48 million in federal and local funds has been expended (since 2008). The Lake Tahoe Restoration Act (LTRA) was passed in December 2016 as part of the Water Infrastructure Improvements for the Nation Act. It authorizes up to \$50 million for “municipal water infrastructure that significantly improves the firefighting capability of local government within the Lake Tahoe Basin.” TFFT is facilitating a partnership involving local fire districts and water suppliers to identify the highest priority water infrastructure projects for funding consideration through the LTRA. Simultaneously, efforts continue to secure state, local and other sources for these vital water infrastructure improvements.



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - UNDERSTORY BURN



## **Category 4: Forest & Fuels Management**

### **#50. USFS Timber Salvage**

The Governors should request the USDA Forest Service and all other landowners within the Angora Fire burn area to immediately undertake steps to facilitate the removal from the area of burned trees that are salvageable for commercial purposes. Steps should include: (see items A - E in Report)

RESPONSIBLE AGENCY(S): USFS, CTC

RECOMMENDATION STATUS: Completed

COMMENTS: Three separate USFS projects occurred which removed burned trees for commercial purposes within the Angora Fire burn area. These projects included 1) A hazard tree salvage timber sale within and adjacent to the built zone to allow for the safe rebuilding of lost homes, 2) Road and trail hazard tree salvage along forest system roads and trails, and 3) an Angora Fire Restoration Project which removed fuel loads from burned trees within the wildland urban interface. Other land management agencies such as the California Tahoe Conservancy (CTC) also took steps to remove dead salvageable timber.

### **#51. Promote USFS Fuels Treatment Projects**

The Governors should support fuels treatment prescriptions that proved effective in the Angora Fire on USDA Forest Service urban intermix parcels and encourage their continued use. In addition, the Governors should request: (see items A - D in Report)

RESPONSIBLE AGENCY(S): USFS, CTC

RECOMMENDATION STATUS: Completed

COMMENTS: USFS fuels treatments have been on going in the Lake Tahoe Basin within the WUI including the wildland urban intermix and on urban parcels. Environmental planning has been completed for fuels reduction treatments covering all acres of National Forest System lands within the WUI. The USFS has analyzed for use of yarding equipment on steeper slopes on several fuels reduction projects and will implementing a demonstration yarding project in 2017. The USFS has also updated the LTBMU Forest Plan to allow for ground based mechanical equipment to operate on slopes >30%. Additionally, all USFS urban parcels have received an initial treatment and projects continue to implement second entry treatments to designed to bring older treatments to current fuels reduction standards and maintain adequate fuels condition in support of defensible space treatments occurring on adjoining non-federal lands. The USFS is also beginning a new environmental analysis to allow for second entry and maintenance treatments throughout the defense zone (which incorporates all NFS lands and urban lots within the urban core and defense zone). The creation of the TFFT has led to collaboration of all land managers to implement these projects across the landscape regardless of jurisdiction. The USFS also works with local fire protection districts as well as the public to create stewardship agreements intended to hasten the creation of fuel reduction activities. Continued maintenance of urban intermix parcels for fuels treatment is recognized as a necessary activity moving forward in order to maintain community safety.

### **#52. "Priority One" for TRPA**

The Commission recommends that the TRPA continue to make the avoidance of catastrophic fire its number one priority. The TRPA should be aggressive in facilitating, approving, and permitting projects by the

Tahoe Basin's land managers and property owners to remove fuels from the forests and to implement forest restoration plans for the purpose of creating more fire-resilient forests within the Basin.

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: The Governing Board passed numerous resolutions declaring Avoidance of Catastrophic Wildfire as it's top priority and it remains a top priority for TRPA every year. TRPA has expeditiously approved and permitted fuels reduction projects proposed by land managers since the Angora Fire. TRPA is currently a partner agency in planning and facilitating the Lake Tahoe West project that will implement fuels reduction and ecosystem restoration at a landscape-scale on Tahoe's west shore and will serve as a model for future land-scape scale projects.

### **#53. Aggressive TRPA Vegetation Treatments**

Article V, Section (c)(3) of the Compact requires the TRPA to adopt a conservation plan for the preservation, development, utilization, and management of the scenic and other natural resources within the Tahoe Basin. The TRPA reports that it has adopted such a plan. The TRPA Governing Board should take aggressive steps to facilitate cost effective vegetation treatments and fuel removal projects including, where necessary and appropriate, access roads and other means of access, in order to complete such projects and to provide emergency access by the fire agencies.

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA leads and administers the Basin-wide Environmental Improvement Program, of which Forest Health is a major focus area. The EIP serves as the implementation program for the Regional Plan, encouraging vegetation treatment projects to reduce forest fuels and avoid catastrophic wildfire. Since 2008, more than 46,000 acres of treatments have occurred in the Lake Tahoe Basin. TRPA has also updated and reviewed applicable ordinances to allow land management agencies to aggressively treat hazardous fuels. TRPA Code allows for temporary roads and encourages their use. TRPA does not manage land, but encourages and supports land managers to implement cost-effective fuel reduction projects.



TAHOE DOUGLAS FIRE PROTECTION DISTRICT - ANGORA AFTERMATH

### **#54. 10-Year Plan and Interagency Coordination**

The Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy 10-Year Plan and its annual updating process should be used as the mechanism to achieve interagency coordination, increased economic and operational efficiency, and public awareness of fuel treatment priorities within the Basin for the next ten years.

RESPONSIBLE AGENCY(S): 10-year strategy signatory agencies

RECOMMENDATION STATUS: Completed

COMMENTS: Federal, state, and local leadership recognize and support the mutual benefits of working collaboratively to reduce fuels in order to restore resilient forest landscapes and create fire adapted communities throughout the Lake Tahoe Basin. The 2014 Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy continues to provide the mechanism for a comprehensive strategy towards fuels reduction.

#### **#55. Fuels Treatment Projects Collaboration**

The 17 agencies covered by the Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy 10 Year Plan should annually develop one or more fuel treatment projects that integrate fuels treatment across jurisdictional boundaries with one decision document, combined funding, and one implementation contract to the extent feasible under their legal authorities. This recommendation should be applied to Round 9 and all subsequent Southern Nevada Public Lands Management Act (SNPLMA) funding cycles.

RESPONSIBLE AGENCY(S): 10-year strategy signatory agencies

RECOMMENDATION STATUS: Completed

COMMENTS: The TFFT annually strategizes to develop fuels reduction projects that cross multiple jurisdictional boundaries and provide connectivity to completed projects. The work of the TFFT is approved by the MAC on an annual basis. Environmental analysis is based on ownership and one decision document has not been achieved. However, the TFFT is working to develop a Program Timber Environmental Impact Report (PTEIR) that would satisfy CEQA requirements on private and state lands for fuels reduction projects on the California side of the Basin. The USFS has completed environmental analysis on all National Forest System lands within the WUI.

#### **#56. Forest Thinning and Biomass Use**

The Governors should encourage forest thinning and woody biomass-to-energy processing in the Tahoe Basin as essential components of restoring healthy forest conditions, reducing the severity and intensity of future wildfires, lowering air and water pollution, and reducing local production of greenhouse gases.

Specific actions should include: (see items A - I in Report)

RESPONSIBLE AGENCY(S): CA, NV

PRIORITY: TFFT, Regional priority

RECOMMENDATION STATUS: Not completed

COMMENTS: Utilization of forest fuels as biomass is recognized as a key component to an overall fuels reduction and landscape management strategy. Market forces continue to challenge the full implementation of biomass utilization in the Tahoe Basin. Community concerns related to air quality and the drop in alternative energy pricing make implementation difficult. Placer County continues to pursue a facility at Cabin Creek near Truckee. In addition, the State of Nevada built and brought on line a biomass facility in Carson City. However, this facility is currently not operating due to budget constraints. Successful biomass implementation will require collaboration between public and private enterprises, legislatures, and land managers both within and outside of the Lake Tahoe Basin.

### **#57. Firewood for Recreation**

Where biomass-to-energy processing is not practical, excess forest fuels that must be removed to achieve forest health and fire protection purposes should be utilized for firewood and recreational experiences, especially in campgrounds and recreational areas, while people selling firewood should be encouraged to use vendors that acquire their wood from the Tahoe Basin.

RESPONSIBLE AGENCY(S): USFS, State Parks, CTC

RECOMMENDATION STATUS: Partially completed

COMMENTS: The USFS sells firewood permits on an annual basis, firewood gathering is open on most USFS lands within the Lake Tahoe Basin. Other land management agencies provide a free firewood permit system on urban intermix parcels. Not all land management agencies have a firewood permit process in place.

### **#58. Prescribed Fire & Forest Thinning**

Prescribed fire and thinning should be promoted as an effective means of managing for a fire-resilient forest. More intensive treatments should be considered for treating fuels on steeper slopes, and current regulatory constraints should be reviewed to ensure implementation of this recommendation.

RESPONSIBLE AGENCY(S): Land managements agencies, Fire Districts

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: Fuels reduction treatments include forest thinning for both modification of fire behavior and for promoting healthy forests. In addition, prescribed fire, including managed wildfire and criteria for treating fuels on steeper slopes have been incorporated in the 2016 USFS LTBMU Land Management Plan. All the other land management agencies recognize prescribed fire and forest thinning as effective land management strategies and seek opportunities to implement prescribed fire in the Lake Tahoe Basin. NDF purchased a Koller yarder so that thinning could be accomplished on steep slopes where access exists.

### **#59. Prescribed Fire Educational Material**

Practitioners of prescribed fire should develop educational materials outlining the benefits of prescribed fire and fuel treatments to better inform regulators and the public.

RESPONSIBLE AGENCY(S): Land managements agencies, Fire Districts

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: The TFFT, through the Fire PIT, maintains a website ([tahoe.livingwithfire.info/tahoe-fire-fuels-team/](http://tahoe.livingwithfire.info/tahoe-fire-fuels-team/)) that provides information on the benefits of prescribed fire. The website depicts a map of where burn projects will occur, responsible agency and contact information. This information is also submitted to the media on a weekly basis in order to reach visitors and residents of the Lake Tahoe Basin. Fire PIT, through Media Releases and Publications, works to message the benefits of prescribed fire to the public.

### **#60. Technology to Increase Burn Days**

In order to optimize burn windows for prescribed fire activities within the Lake Tahoe Basin while minimizing negative air quality impacts, a more comprehensive air quality and meteorological information should



be implemented. Among the technologies that should be implemented or further analyzed for implementation in the Basin are: real time smoke/PM2.5 monitoring, use of web Cams, smoke modeling, the Prescribed Fire Information Reporting System (PFIRS), meteorological tools, and a common website for dissemination of information

RESPONSIBLE AGENCY(S): USFS, State Parks, CTC, NDF, Fire Districts

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: Web cameras have been placed in strategic locations around the lake to monitor smoke. Smoke modeling and reporting is completed in the PFIRS system. The continued use of PFIRS has front-loaded information needed for appropriate air quality managers to make educated decisions. TFFT hosts a common website for information dissemination for all agencies engaged in prescribed fire. It is unknown whether these advancements have increased the number of burn days. The TFFT engages with local air districts on strategies to expand the use of prescribed fire.

### **#61. CARB Burn Day Test Program**

The California Air Resources Board (CARB) will develop and implement a test program, by March 1, 2008, to evaluate alternate burn day criteria, to see if additional burn days can be added in the Lake Tahoe Air Basin without adverse effects on the region's air quality. A subgroup of the Lake Tahoe Area Air Quality Working Group will work with CARB to assist in identifying and/or developing the test criteria.

RESPONSIBLE AGENCY(S): CARB

PRIORITY: TFFT

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: The TFFT, implementing agencies and local air pollution control districts coordinate on options to increase the use of prescribed fire for fuels reduction activities and to meet other ecological goals.

Burning on marginal burn days may be allowed on a case-by-case basis. The use of managed fire will be an important component of achieving landscape restoration activities in the Lake Tahoe Basin. This will require further engagement with air districts.

### **#62. Burn Day Status — "Information Only"**

The California Air Resources Board will conduct a feasibility study as part of their test program to allow implementing agencies in the Lake Tahoe Basin to consider the daily burn day status as "information only", and to also use other available information on conditions to decide when to burn, consistent with air quality objectives, which has proven successful on the Nevada side of the Basin. If the CARB finds this approach to be feasible, a change in CARB regulations may be required.

RESPONSIBLE AGENCY(S): CARB



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - HARVESTER EQUIPMENT

PRIORITY: TFFT

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: Development of test criteria and a feasibility study will require participation from multiple agencies. Implementation agencies support working closely with local air pollution control districts on factors associated with burn day status in order to meet the ecological benefits of managed fire while also meeting air quality objectives.

### **#63. Smoke Management Education**

A sub-committee of the Lake Tahoe Area Air Quality Working Group should develop suitable public information products (accounting for different values, expectations, and level of local knowledge between visitors and residents) to be used by all land managers and air quality agencies in the Basin to educate the public on fuels treatment, prescribed burning, smoke management, and public health

RESPONSIBLE AGENCY(S): Air quality working group

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: The TFFT, through the Fire PIT, maintains a website ([tahoe.livingwithfire.info/tahoe-fire-fuels-team/](http://tahoe.livingwithfire.info/tahoe-fire-fuels-team/)) that provides information on the benefits of prescribed fire. The website depicts a map of where burn projects will occur, responsible agency and contact information. This information is also submitted to the media on a weekly basis in order to reach visitors and residents of the Lake Tahoe Basin. Fire PIT, through Media Releases and Publications, works to message the benefits of prescribed fire to the public. These articles include the benefits of fuels treatments, prescribed burning, smoke management and public health issues related to prescribed fire in the Lake Tahoe Basin.

### **#64. Open Burning Alternative**

Where practical, air curtain burners should be used as an alternative to open pile burning as one of the options for disposal of thinned forest fuels.

RESPONSIBLE AGENCY(S): Land managements agencies, Fire Districts

PRIORITY: Regional priority

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: Currently one contract is in place to utilize an air curtain burner on USFS lands.

### **#65. Improve Opportunity for Burning**

The California Air Resources Board and local Air Pollution Control Districts should consider permitting more prescribed burning ahead of good dispersal conditions by declaring and permitting more “marginal burn days with improving conditions” the day before the arrival of a weather system.

RESPONSIBLE AGENCY(S): CARB, APCDs

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially, completed

COMMENTS: The TFFT, implementing agencies and local air pollution control districts coordinate on options to increase the use of prescribed fire for fuels reduction activities and to meet other ecological goals. Burning on marginal burn days may be allowed on a case-by-case basis.

#### **#66. Status Quo for Nevada**

The air quality agencies and land managers in Nevada should continue to follow the same prescribed burning practices that are currently in place; and in the application of their Smoke Management Programs should consider all available sources of information in order to make better- informed decisions. The Washoe County Air Quality Management District and Nevada Division of Environmental Protection should continue to participate in Basin-wide efforts to better understand air quality and meteorological conditions, which will lead to the development of more useful technology to assist prescribed fire decision makers.

RESPONSIBLE AGENCY(S): NDF, AQMD, NDEP

RECOMMENDATION STATUS: Completed

COMMENTS: The Washoe County Air Quality Management District and Nevada Division of Environmental Protection continue to participate in Basin-wide efforts to better understand air quality and meteorological conditions.

#### **#67. Policies to Improve Road Access**

The Governors should direct the TRPA, the Lahontan Regional Water Quality Control Board, and other Lake Tahoe Basin regulatory agencies to review and revise current policies, as appropriate, to fully implement the use of temporary access roads and mechanized equipment to expedite forest health and fuel reduction projects for the purpose of reducing the risk of catastrophic wildfire. In an effort to minimize soil erosion and potential impacts to water quality, a project specific plan shall be developed to include the design, construction, operation and ultimate reclamation of temporary access roads. Appropriate best management practices, (BMPs), shall be included in the project plan consistent with Nevada and California Forest Practices Acts, revised statutes, TRPA Codes, and applicable federal land management guidance documents.

RESPONSIBLE AGENCY(S): TRPA, LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA Code allows for temporary roads and encourages their use. The LRWQCB has incorporated performance standards into the 2009 and 2014 Timber Waivers for the use and maintenance of temporary access roads.

#### **#68. Mechanized Equipment in SEZs**

The Commission recommends that the Governors of the States of Nevada and California direct the TRPA to take the action necessary to allow the use of mechanized equipment to remove fuels in stream environment zones (SEZs), which should include, if necessary, revising their Lake Tahoe 208 Water Quality Plan's section for mechanical work within SEZs.

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: TRPA Code of Ordinances and the Lake Tahoe 208 Water Quality Management Plan (208 Plan) have been updated to allow the use of mechanized equipment in Stream Environment Zones (SEZs) for fuel reduction purposes. The TFFT and the USFS have implemented a number of mechanized

SEZ fuel reduction projects since 2008 including: the USFS Heavenly SEZ Demonstration Project, Third Creek SEZ Project, Lake Christopher SEZ Project, Gold Coast Fuels Project, Washoe Meadows State Park Fuels Project, the USFS Spooner Fuels Reduction Project, Carnelian Fuels Reduction Project and the South Shore Fuels Reduction Project. Fuels reduction projects utilizing mechanized equipment in SEZs are being implemented in compliance with applicable TRPA Code. The NEPA process for the LTBMU was streamlined with a categorical exclusion through the Lake Tahoe Basin Fuels Reduction Categorical Exclusion Exemption. It is important to note that there are other Federal and State regulations protecting streams and water quality (California Forest Practice Rules, Nevada State Law, and the Federal Clean Water Act). By the 2008 operating season LRWQCB had a MOU in place to implement this recommendation. In 2009 LRWQCB adopted a revised timber waiver that allowed for low ground pressure mechanized equipment use in SEZs.(See responses to Recommendation #17)

#### **#69. Prioritize Fire Hazard Reduction**

Until the risk of catastrophic fire is significantly reduced or eliminated in the Tahoe Basin, the Governors should direct their respective state agencies having jurisdiction in the Basin to consider fire hazard reduction an overriding priority when considering applications for use of mechanized equipment for hazardous fuel reduction projects.

RESPONSIBLE AGENCY(S): CA, NV agencies

RECOMMENDATION STATUS: Completed

COMMENTS: Through the collaborative work of the TFFT, all fuels reduction work in the WUI is prioritized on an annual basis concurrent with the available funding sources to implement the project work. Mechanized equipment is used in areas best suited to the terrain. Lahontan's 2009 and 2014 Timber Waivers allow for mechanized equipment use for fuel reduction projects. Both waivers allow for low ground pressure equipment use in SEZs.

#### **#70. More Work in SEZs**

The Commission recommends that the Lahontan Regional Water Quality Control Board change the interpretation of their regulations to allow pile burning and the spreading of chipped material in SEZs.

RESPONSIBLE AGENCY(S): LRWQCB

RECOMMENDATION STATUS: Completed

COMMENTS: The LRWQCB has incorporated performance and monitoring standards into the 2014 Timber Waiver to allow for pile burning in SEZs. (See responses to Recommendation #17)

#### **#71. Forestry Handbook**

The Commission recommends land managers and regulatory personnel develop a Handbook of Forestry Practices for the Lake Tahoe Basin. This effort shall be based on finding common solutions through a collaborative process, using a science-based approach, following adaptive management, and using a broad range of field plots and direct measurements to test specific hypotheses.

RESPONSIBLE AGENCY(S): Land management and regulatory agencies

RECOMMENDATION STATUS: Completed

COMMENTS: This Forestry Handbook was completed in 2015. A copy of the handbook, *A Forest Management Guidebook - An Outcome-Based Approach to Water Quality Protection*, can be located at



## #72. Simplify Monitoring

The Governors should direct regulatory and implementing agencies in the Lake Tahoe Basin to simplify the existing system for monitoring the impacts of fuel reduction projects. Steps that should be taken to reduce or eliminate complexity, confusion, and redundancy include: (see items A - C in Report)

RESPONSIBLE AGENCY(S): Land management and implementing agencies

RECOMMENDATION STATUS: Completed

COMMENTS: The TFFT and the TRPA have implemented simplified monitoring requirements. TRPA implements site inspections (monitoring) before, during and after projects. The USFS conducts implementation monitoring during project implementation, as well as monitoring required by permitting agencies. The Lahontan Timber Waiver monitoring forms spell out specific, easily understood monitoring requirements based on the type of activity.

## #73. No Need for RPFs on Urban Lots

To ensure compliance with California Public Resources Code and the Professional Foresters Law, the Commission recommends that the TRPA identify the privately owned “small undeveloped urban lots devoted to urban uses” in the California portion of the Lake Tahoe Basin as those lots that are 1) undeveloped, 2) within a community, and 3) do not constitute a “forested landscape”.

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Partially completed

COMMENTS: The California Forest Practice Rules define forested landscapes and rules related to RPF's. Through the development of a Defensible Space Assessor training program by TRPA and CAL FIRE, fire districts have been given the authority under a TRPA MOU to mark trees for defensible space purposes. These actions do not constitute practicing forestry under the FPR's and allow implementation of defensible space measures around homes in compliance with PRC 4291. TRPA has a RPF on staff to evaluate and mark trees around residences that need to be removed for other than defensible space purposes.



TAHOE DOUGLAS FIRE PROTECTION DISTRICT - HARVESTED LOGS

## **Category 5: Fire Suppression**

### **#74. Life, Property, & the Environment**

The Governors of California and Nevada should adopt the priorities of life, property, and the environment, in that order, with respect to fire safety, fire prevention, and related matters within the Lake Tahoe Basin.

RESPONSIBLE AGENCY(S): CA, NV

RECOMMENDATION STATUS: Completed

COMMENTS: All agencies that are part of the Multi-Agency Coordinating Group and the Tahoe Fire and Fuels Team have prioritized life, property and the environment in respect to fire safety within the Basin.

### **#75. 24/7 Fire Protection**

The State of California should review the level of fire protection service provided to California "state responsibility areas" in the Tahoe Basin to determine if adjustments need to be made to achieve a level of protection that is comparable to similar lands elsewhere in the state. If it is determined that adjustments need to be made, consideration should be given to placing fire engines on the north and south ends of Lake Tahoe 24/7 during declared fire season, and instructing those engine companies (and potential forester positions) to participate in California PRC 4291 inspections in cooperation with local government agencies.

RESPONSIBLE AGENCY(S): CA

RECOMMENDATION STATUS: Completed

COMMENTS: Following the Angora Fire, CAL FIRE staffed two Type III Engines in the Lake Tahoe Basin. This enhanced level of fire protection, in coordination with federal and local fire agencies, was fully funded and implemented on July 1, 2013. There is one CAL FIRE Engine on the north shore and one on the south shore. CAL FIRE currently leases local government fire stations from North Tahoe Fire and Lake Valley Fire. CAL FIRE Engine Companies inspect target hazard areas for compliance with PRC 4291.

### **#76. CAL FIRE Presence**

The State of California should study the feasibility of locating a new CAL FIRE station on State Park property or on alternative properties in the Lake Tahoe Basin. If warranted by the feasibility study, the state should provide funding for the construction of a new CAL FIRE station in the Basin.

RESPONSIBLE AGENCY(S): CAL FIRE

PRIORITY: TFFT, Regional priority

RECOMMENDATION STATUS: Not completed

COMMENTS: Although CAL FIRE facilities have been incorporated into CAL FIRE's long range capitol outlay plans, no State Fire Stations have been constructed. Discussions are on-going with State Parks; however, funding has not been secured.

### **#77. Co-locate USFS / FPD Engines**

The Governors should request that the U.S. Forest Service Lake Tahoe Basin Management Unit explore

opportunities regarding the joint location of the Fire Protection District and Forest Service engines to improve wildland fire response times on the north shore areas of the Lake Tahoe Basin.

RESPONSIBLE AGENCY(S): USFS, NTFPD

RECOMMENDATION STATUS: Not completed

COMMENTS: A feasibility review was conducted to assess the opportunities of a joint facility on the North Shore of Lake Tahoe. Due to lack of available land, unavailable funds and extended time lines for construction, it was determined not to be effective or efficient. The LTBMU has stationed a prevention patrol unit in Incline Village at the North Shore USFS office.

#### **#78. MAFFS Fire Fighting Air Support**

The Governors should support equipping the C-130s of the Nevada Air National Guard with the Modular Airborne Fire Fighting System and appropriate equipment.

RESPONSIBLE AGENCY(S): NV

PRIORITY: Regional priority

RECOMMENDATION STATUS: Initiated, Ongoing

COMMENTS: Equipping C-130's of the Nevada Air National Guard with MAFFS is on-going and may be in place in 2019-2020.

#### **#79. Use of Closest Forces**

In an effort to improve the initial attack of wildfires in the Lake Tahoe Basin, the Governors should direct that a permanent interagency (federal, state & local) resolution be developed and implemented prior to the 2008 wildfire season that ensures that all available wildfire suppression resources are identified and deployed to reported wildfires in the Lake Tahoe Basin based on the "closest forces" doctrine.

RESPONSIBLE AGENCY(S): CA, NV, USFS, Fire agencies

PRIORITY: TFFT

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: The use of the most appropriate closest resources concept is reinforced each year through annual operating plans, a sub-geographical operating plan, and the Regional Chiefs Mutual Aid agreement. There is no single dispatch entity for the entire Lake Tahoe Basin; however, there is a recognized need to coordinate among agencies in order to achieve closest resource response.

#### **#80. Single Dispatching Center**

To avoid continued confusion regarding interagency communications during wildland fire occurrences, all dispatch centers and responding resources in the Tahoe Basin will adhere to the existing agreements,



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including:

- Immediately notifying the Camino Interagency Dispatch Center of a wildland fire call/dispatch.
- Camino will serve as the single (and only) point of ordering resources for the wildland fire response.
- The local “White” fire radio frequency will be used for all multi-agency wildland fire response.

RESPONSIBLE AGENCY(S): CA, NV, USFS, Fire agencies

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: Through training, coordination, response plans, and agreements, Camino Emergency Command Center (ECC) and Grass Valley ECC are recognized as the single point of contact and ordering point for SRA and Federal (TMU) wildland fires in the Basin depending on the location of the fire. Standardized tactical frequencies have been established as part of the response plan. When a wildfire ignites on Nevada State Lands, Minden Dispatch and Camino ECC coordinate a response under the sub-geographic operating plan. Local fire agencies in South Lake Tahoe are dispatched to wildland fires by their dispatch center and are required to switch over to Camino ECC or Grass Valley ECC depending on the location of the fire.

### **#81. Fire Fighting Resource Coordination**

Through the process of the development of an Annual Operating Plan, all cooperating agencies and fire protection districts/departments will continue to develop and utilize agreements for keeping status of fire-fighting resources moving into or through different dispatch areas for the purposes of notification of location and availability for response to an incident.

RESPONSIBLE AGENCY(S): CA, NV, USFS, Fire agencies

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: Annual operating plans are in place among agencies. System status management of equipment is implemented at the respective agencies dispatch center. Resources travelling through the area are required to appropriately status themselves with their dispatch center in order to be tracked for emergency response. The XTB Operational Area continues to seek innovative solutions to improve response capabilities.



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - PILE BURNING



## **Category 6: Funding**

### **#82. Annual Funding for Forest Health**

It is recommended the Governors of the States of Nevada and California work with their respective Congressional delegations to establish an annual sustainable fund for forest health for the Lake Tahoe Basin. A potential funding source is through the Southern Nevada Public Lands Management Act (SNPLMA).

RESPONSIBLE AGENCY(S): CA, NV

PRIORITY: TFFT, Regional priority

RECOMMENDATION STATUS: Partially completed

COMMENTS: Both before and after the commission hearings, both states have allocated funding for key priority fuels reduction projects. In addition, federal funding through SNPLMA has contributed to completion of high priority projects on both sides of the Basin and is a critical source of funding for project planning and implementation, research, and development of fire adapted communities. Other sources of grant funds have been utilized to implement projects and develop educational campaigns through USFS and CAL FIRE grants.

### **#83. Appropriation of Emergency Funds**

The Commission recommends to the Governors of the States of Nevada and California that they join with congressional representatives and the Executive Branch to amend the Lake Tahoe Restoration Act to provide a line item annual funding source appropriation for emergency fuel reduction/forest restoration efforts in the Lake Tahoe Basin. The funding request should be, at a minimum, the amount required to implement the federal share, including work on federal lands, and grants to states and local agencies with appropriate cost share provisions, of the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy 10-Year Plan. These funds will be supplemented by state and local and private sector shares of funds to implement the entire "10-Year Plan". The funding needs as set forth in the "10-Year Plan" are recommended as being correct for the projects identified therein, and are set forth in the "Estimated Hazardous Fuels Reduction Costs for the Lake Tahoe Basin".

RESPONSIBLE AGENCY(S): CA, NV

COMMENTS: Congress fully funded the Lake Tahoe Restoration Act of 2000 (Public Law 106-506) through SNPLMA with forest health being one of the highest funded programs of the EIP. Federal funding continues to support hazardous fuels reduction through the SNPLMA White Pine bill. In addition, the 2016 reauthorization of LTRA made forest health the highest funding priority for the Act. As noted below, under recommendation 85/Report page 109, multiple agencies have sponsored grants and appropriations led by, or in coordination with, the TFFT. Sources include: funds authorized through the Lake Tahoe Restoration Act (LTRA), Southern Nevada Public Lands Management Act (SNPLMA), the California State Responsibility Area Fire Prevention Fee Program (SRA), California Proposition 1 grant program (Prop 1), Federal Emergency Management Agency (FEMA) funds, dedicated local sources, and others. Funding and other Forest Management project details are posted and available on the Lake Tahoe EIP Project Tracker maintained by TRPA at [laketahoeinfo.org](http://laketahoeinfo.org). Projects funded are consistent with the adopted Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy.

#### #84. Five Year Funding

There is an immediate pressing need for fuel reduction on state, municipal and private properties totaling over 15,000 acres adjacent to the communities located within the Lake Tahoe Basin as set forth in the 10-Year Plan. Defensible space needs to be created on a substantial number of the approximately 40,000 privately owned parcels within the Basin, and there is a need to dispose of the woody debris that will result from forest fuel reduction and defensible space projects. In order to complete this emergency level of fire and fuel reduction work, it is recommended that the following funding will be necessary over the next 5 years and must be provided by state and/or local sources including private owners, if not otherwise available from FEMA or other government sources. The funding proposed in this recommendation is intended to be additional and not re-directed from current allocated funds in to the Tahoe Basin. However, the Commission recognizes that it may be necessary to expand existing priorities in order to accommodate the emergency need of reducing the risk of catastrophic fire. (see page 108 of Report for detailed Budget)

RESPONSIBLE AGENCY(S): TRPA

RECOMMENDATION STATUS: Completed

COMMENTS: The Commission report recommended approximately \$6.8 million dollars be allocated to forest fuels reduction per year over 5 years to address the immediate need. Through the Lake Tahoe Restoration Act, federal funding (SNPLMA) and state, local and private funding this was achieved. Approximately \$66.5 million dollars has been expended on forest health since 2010, and approximately \$25 million was awarded from the SNPLMA White Pine Bill in 2016 for future forest health projects. Fuels reduction efforts and defensible space inspections continue to be a focus of the TFFT and are on-going.

#### #85. Establish JPA for Funding

It is recommended that the Lake Tahoe Basin Fire Chiefs form a Joint Powers Authority to coordinate the stop gap funding provided by the State of California and the State of Nevada, and to coordinate long term maintenance of fuel reduction project areas and community defensible space.

RESPONSIBLE AGENCY(S): Fire districts

RECOMMENDATION STATUS: Partially completed

COMMENTS: Although there is no JPA established to coordinate funding for fuels reduction projects and defensible space, multiple agencies have sponsored grants and appropriations (LTRA, SNPLMA, SRA, Prop 1, FEMA, etc.) in coordination with the TFFT. The sponsoring agencies have the necessary financial staffing and experience to adequately manage large grants.

#### #86. TRPA Database Management

It is recommended that the TRPA manage the database and GIS components of the fire management



NORTH LAKE TAHOE FIRE PROTECTIONS DISTRICT - GREENING UP

system and that the non-federal Lake Tahoe fire agencies would perform management oversight of this work through the Joint Powers Authority.

RESPONSIBLE AGENCY(S): TRPA, Fire districts, CAL FIRE, NDF

RECOMMENDATION STATUS: Completed

COMMENTS: Initially TRPA developed a Defensible Space database for each fire protection district to track defensible space inspections. In 2017, the TFFT partnered with CAL FIRE to begin capturing all defensible space inspections using the ESRI Collector App-Defensible Space Inspection Database. This project was managed by the TRCD through a SNPLMA grant. The ESRI Collector App Defensible Space Database is a GIS based inspection process that allows for much better tracking of inspections across all fire districts in two states. Numbers of completed inspections are reported in the EIP Tracker on an annual basis. Additionally, a GIS database is maintained by the TFFT that captures all fuels reduction projects across all jurisdictions as well as planned projects. This database is critical to prioritizing projects across the landscape. TRPA tracks all fuels reduction accomplishments through the EIP Tracker database.

### **#87. Parcel Fee for Long Term Funding**

It is recommended that the Lake Tahoe Fire Chiefs find more stable, long-term funding to replace the stop gap funding provided by the States, likely through the collection of a parcel fee or similar special assessments on property owners.

RESPONSIBLE AGENCY(S): Fire districts

PRIORITY: TFFT

RECOMMENDATION STATUS: Partially completed

COMMENTS: The State of California has implemented the SRA Fee in the unincorporated areas of the State. SRA Fees provide grant funding for fuels reduction, defensible space inspections, evacuation planning, development of fire adapted communities, and public education. Some fire districts have special assessments in place to support fire prevention and fuels reduction efforts.

### **#88. Legislate Special Assessment Districts**

The Commission recommends that the States of Nevada and California review their statutes to assure that adequate statutory authority exists to permit the imposition of such special assessment districts for the collection of funds for fire safety and fire prevention and, if necessary, adopt such legislation as may be reasonably necessary to authorize such local funding mechanisms in the Tahoe Basin. If such authority exists, all local governmental entities within the Tahoe Basin, including all of the counties and city governments in the Basin, should consider the implementation of special assessment districts or similar funding mechanisms, for the collection of funds for fire safety and fire prevention activities in the wildland urban interface (WUI) areas within and surrounding the communities in the Tahoe Basin.

RESPONSIBLE AGENCY(S): CA, NV, Local jurisdictions

RECOMMENDATION STATUS: Partially completed

COMMENTS: Local agencies have the ability to obtain special assessments through voter approved initiatives to fund fire prevention activities, hand crews and chipping crews. However, funding mechanisms through SNPLMA, the SRA Fire Prevention Fund, LTRA, USFS Grants, etc., have proven critical to the

implementation of fire safety and fire prevention activities in the WUI within and surrounding the communities in the Tahoe Basin.

### **#89. Fuels Treatment Prioritization**

The Commission recommends that all permitting agencies within the Tahoe Basin, all entities providing funding for fuel treatment projects within the Basin, and all land managers within the Tahoe Basin should assign, as their respective first priority for action, fuel treatment projects most likely to protect life, property, and the environment in that order. To the extent this may require regulatory procedures to be expedited, they should be to the maximum extent possible.

RESPONSIBLE AGENCY(S): ALL AGENCIES

RECOMMENDATION STATUS: Completed

COMMENTS: The TFFT prioritizes fuels reduction projects around the Basin on an annual basis (See Recommendation #52). The priorities set by the TFFT are projects within and adjacent to the WUI for the protection of life and property. All projects are approved by the MAC and are consistent with the 10 year strategy and the Lake Tahoe Basin CWPP.

### **#90. TRPA's Budget**

The Commission recommends that the Governors of the States of California and Nevada request the TRPA to submit a supplemental budget request to the two States addressing the additional costs, if any, anticipated to be incurred by the TRPA in meeting any additional duties imposed upon it by the two States pursuant to the Commission's recommendations, and that the Governors request the Legislatures of their respective States to fund reasonable supplemental budget requests for such purposes.

RESPONSIBLE AGENCY(S): CA, NV, TRPA

RECOMMENDATION STATUS: Completed, Ongoing

COMMENTS: California continues to fund 2/3 of TRPA's general fund which supports two positions within the forestry program. Nevada appropriated special funds to establish the initial defensible space database to facilitate information sharing and tracking among the Basin's fire districts.



NORTH LAKE TAHOE FIRE PROTECTION DISTRICT - KIDS' EVENT





TAHOE DOUGLAS FIRE PROTECTION DISTRICT - FIRE CREW

AEU	Amador-El Dorado Unit of CAL FIRE
CAL FIRE	California Department of Forestry and Fire Protection
CAL PARKS	California Department of Parks and Recreation
CCC	California Conservation Corps
CFSC	California Fire Safe Council
CSLT	City of South Lake Tahoe
CTC	California Tahoe Conservancy
CWPP	Community Wildfire Protection Plan
FAC	Fire adapted community
FAC Net	Fire Adapted Communities Learning Network
FEMA	Federal Emergency Management Agency
Fire PIT	Fire Public Information Team of the TFFT
FLFD	Fallen Leaf Lake Fire Department
GBI	Great Basin Institute
GHG	Greenhouse Gas
HFR	Hazardous fuel reduction
LRWQCB	Lahontan Regional Water Quality Control Board
LTBMU	Lake Tahoe Basin Management Unit of the USFS
LVFPD	Lake Valley Fire Protection District
MAC	Multi-Agency Coordinating Group
MBFPD	Meeks Bay Fire Protection District
NDF	Nevada Division of Forestry
NDSL	Nevada Division of State Lands
NEU	Nevada-Yuba-Placer Unit of CAL FIRE
NLTFFPD	North Lake Tahoe Fire Protection District

NTPFD	North Tahoe Fire Protection District
SFA	State Fire Assistance grants
SLTFD	South Lake Tahoe Fire Department
SNPLMA	Southern Nevada Public Lands Management Act
SRA	State Responsibility Area; also refers to a grant source
Tahoe RCD	Tahoe Resource Conservation District
TDFPD	Tahoe Douglas Fire Protection District
TFFT	Tahoe Fire and Fuels Team
TNFAC	Tahoe Network of Fire Adapted Communities
TRPA	Tahoe Regional Planning Agency
UCCE	University of California Cooperative Extension
UNCE	University of Nevada Cooperative Extension
USFS	United States Forest Service



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