

## The Action Plan

Emergency response organizations have developed a common system and set of protocols for responding to and managing disasters. Initially, emergency responders are in a reactive mode. Their initial actions are focused on gathering information and assessing the nature of the problem – a phase that firefighters refer to as “size-up”.

The organization must quickly determine what “initial attack” actions to take, and what incoming resources (people, equipment) are available to assign to each task. This phase of the response is extremely dynamic, because disasters – especially in their early stages – are never static. As the disaster continues to unfold, and as the initial responders learn more facts, they must continue to take action. To do this they must try to identify the most urgent problems, prioritize and attack them with whatever resources they have available. As time passes, if all goes well, responders continue to acquire better information and more resources, and they can begin to move from a reactive mode to a proactive mode. Their actions evolve from *responding* to the situation to *managing* it.

A key tool in this evolution is the *Action Plan*, which is built on three key elements:

1. Prioritizing the objectives/problems.
2. Specifying resources to accomplish the objectives by priority.
3. Obtaining feedback on progress toward accomplishing the objectives so the plan can be adapted as the situation evolves.

The Governors of Nevada and California created the California-Nevada Tahoe Basin Fire Commission in response to the issues raised by the Angora Fire disaster of June, 2007. They directed the Commission to *size up* the growing wildfire threat to the Lake Tahoe Basin and to *attack* that problem by recommending “approaches for reducing identified vulnerabilities”.

The Commission used the Action Plan model to conduct its deliberations between August, 2007 and March, 2008. In step one, the Commission conducted an intensive fact-finding effort to identify and prioritize the major factors contributing to the Basin’s vulnerability to the increasing and potentially catastrophic impacts of wildfire. In the second step, the Commission developed a structure of committees and working groups that were assigned to accomplish objectives in the identified priority subject areas. And in the third step, the Commission developed a dynamic process in which all interested parties had opportunities to work through the committee and working group structure to propose “approaches for reducing identified vulnerabilities”.

The story that follows describes how this Action Plan evolved, and how it ultimately resulted in findings and recommendations that can be used to implement the Governors' intent to "reduce the Tahoe Basin's wildfire vulnerability while protecting the environment".

## IN THE AFTERMATH OF DISASTER

On June 24<sup>th</sup>, 2007, the Angora Fire started southwest of Lake Tahoe from an unattended campfire. Within three hours, the fire had spread over four miles and burned more than 250 structures on private property and eventually burned 3,100 acres. It was the largest, most devastating wildfire in the history of the Lake Tahoe Basin. In its immediate aftermath came an outpouring of emotions from the Basin community: grief for the tremendous loss of property and environmental damage; relief that the disaster, which could have been so much worse, was over quickly; and gratitude for the heroic firefighting efforts, which helped to minimize the scope of the disaster.



**Governors Gibbons and Schwarzenegger establish the Commission**

Soon, however, the dominant emotion was a mixture of anger and frustration over what one local newspaper article described as long-standing environmental and regulatory "policies that seem to conflict with the community's need to improve defensible space and wildfire protection". Within days, local elected officials, chambers of commerce, and others were calling upon the Governors of California and Nevada to create a joint blue-ribbon commission to explore ways to minimize the recurrence of catastrophic wildfires in the Lake Tahoe Basin.

In response, Governor Jim Gibbons of Nevada joined with California Governor Arnold Schwarzenegger on July 25, 2007, to announce creation of the California-Nevada Tahoe Basin Fire Commission. The two governors signed a Memorandum of Understanding to create a panel of 17 voting members that represent each State's stake in the responsible management of lands and fire fuels within the Tahoe Basin, including representatives from affected state

agencies, fire agencies and the public. They also requested the Secretary of the U.S. Department of Agriculture designate one person from the United States Forest Service to serve on the Commission. The Commission was assigned to perform a comprehensive review of the laws, policies and practices that affect the vulnerability of the Tahoe Basin to wildfires, and to submit a report and recommendations to the two Governors by March 21, 2008.



**Governors Schwarzenegger and Gibbons sign MOU**

The Commission held its first meeting on September 10, 2007, at the Lake Tahoe Community College in South Lake Tahoe, California. Over the next six months, the Commission held nine additional meetings, alternating venues between Nevada and California within the Tahoe Basin.

## THE COMMUNITY SPEAKS

At that first meeting in September, the newly-formed Commission began by receiving public comment. A number of concerned citizens expressed frustration about the Angora Fire, its aftermath, the general condition of the Basin's wildland fuels and urban forests, and a regulatory environment that many felt contributed to a growing wildfire threat in the Basin. As the day proceeded, and the Commission heard testimony



South Lake Tahoe Daily Tribune

**Community members attending Commission meeting**

from local fire chiefs, regulatory agencies, land managers, scientists, and others, several dominant themes emerged that largely determined the Commission's agenda for the next six months:

- The unique qualities of Lake Tahoe that make it a natural resource of global significance are increasingly threatened by an unnatural potential for catastrophic wildfires.
- The need for better interagency coordination in the Tahoe Basin among governmental entities of all types and at all levels.
- The existing firefighting response capability is not adequate for the level of risk in the Basin.
- Property owners are confused about what measures they need to take to protect their properties from wildfire, and how they can do so while remaining in compliance with numerous environmental rules, regulations, and "best management practices" (BMP).
- Similarly, there is confusion and/or disagreement among the various land management and regulatory agencies about how best to conduct fuel reduction activities, particularly in areas considered sensitive (i.e. steep slopes, stream environment zones (SEZ)).
- The need for increased biomass utilization capacity to handle the volume of vegetation fuels to be removed in an environmentally and economically efficient manner.

The Commission concluded its first meeting with a discussion of how best to fulfill its assignment to "perform a comprehensive review of the laws, policies, and practices that affect the vulnerability of the Tahoe Basin to wildfires and/or that pertain to fire prevention and fuels management in the Basin". Co-chairs Dargan and Rogich conducted a brainstorming exercise designed to identify the key issues before the Commission, and a work structure for addressing these issues, and ultimately, for developing findings and recommendations to be delivered to the Governors. At the end of the discussion a motion was adopted unanimously to create two committees initially, with the option to amend this structure as necessary in the future. In December a third committee was formed, and the structural organization of the Commission was complete. The three committees and their general areas of responsibility were:

*The Community Fire Safety Committee* was assigned to address those issues generally associated with the urban core areas of the Basin, including homeowner defensible space, community infrastructure and planning, fire protection and prevention, building standards, and education.

*The Wildland Fuels Committee* was assigned to focus on those issues generally found on the “wildland” side of the Wildland Urban Interface (WUI), including fuels treatment and disposal, forest management, permitting, and environmental monitoring.

*The Legislation and Funding Policy Committee* was originally formed to assess the feasibility of recommending Gubernatorial Emergency Declarations for the Basin. In January the Commission expanded this committee’s

assignment to address a number of additional legislative and economic issues, including long-term project funding and governance issues.



Tahowildfire.com

Angora Fire, June 2007

## THE COMMISSION RESPONDS

The first part of the Commission’s Action Plan was now in place. At its first meeting it had identified initial priorities and had assigned resources, in the form of its committees, to begin to work on those priorities. A week later the Commission reconvened in Incline Village, Nevada, to gather more information and begin to develop committee work plans.

The initial focus at the September 21, 2007 meeting was an analysis of the Angora Fire. Representatives from the U.S. Forest Service described the wildfire itself and how the various fuel treatments that had been implemented previously may have affected fire behavior. An analyst from California’s Office of the State Fire Marshal described factors that contributed to the loss of homes and other structures in the fire, and showed how some homes had survived, thanks to defensive measures that had been taken by homeowners and firefighters to reduce risk of ignition. State and local fire chiefs described how defensible space measures – or the lack thereof – affected their ability to safeguard life and property.

Following these presentations, the commissioners discussed some of the Basin-wide implications of the Angora Fire. This discussion centered around perceived restrictions on fuels management activities and on the possibility of recommending to the Governors of Nevada and California that the dire wildfire threat in the Tahoe Basin constitutes an emergency situation.

In large part, the two meetings in September, 2007 determined the direction the Commission was to pursue over the remaining six months. Alternating meeting locations between California and Nevada, the Commission met eight more times. All but one of these meetings were two-day sessions, organized to allow the committees to convene on the first day and then report on their deliberations and recommend action to the full Commission on the second day. At every meeting, the committees and the Commission heard input from the public and from experts in a variety of fields, including firefighting, environmental protection, forest management, homeowner education, biomass utilization, and legislation. As this process evolved, the Commission's focus expanded outward from the specific local conditions that led to the Angora Fire of June 24, to a set of more global, Basin-wide issues that had developed over decades. A few of these were issues that the Tahoe Basin shared in common with many urbanizing communities in the Western United States, but a number of them were as unique to the Tahoe Basin as Lake Tahoe itself.

To no one's surprise, one of the richest sources of expertise on these issues were the people who live and work in the Tahoe Basin. After all, who could be more familiar with the conditions affecting the Basin's vulnerability to wildfire than the local firefighters, land managers, regulators, business owners, and citizens who not only lived with the wildfire threat from day to day, but in some cases, had seen their



Christy Daugherty

Home burned in Angora Fire, June 2007 (off Boulder Mt. Drive)

own communities threatened or burned? Long before the Angora Fire and the creation of the Commission, groups were already working in the Basin on such issues as fuel reduction project implementation, permit streamlining, and reconciling the conflicts between fire safety and environmental protection. The Commission began to collaborate with these existing groups, while also encouraging the formation of new working groups to assist its committees in

addressing some of the problematic issues that had come to light, such as biomass utilization, air quality, and science and technology. It quickly became evident that these working groups would provide a tremendous value-added benefit to the Commission's deliberations.



California-Nevada Lake Tahoe Fire Commissioners

In the meantime, the Commission developed a unique process for developing the findings and recommendations requested by the Governors. In what essentially amounted to a nomination process, the Commission adopted a 5-point *Process for Developing Findings and Recommendations* that stated "anyone...including Commission members, agency staff, and members of the public" could propose findings and recommendations for consideration by the Commission (Appendix C). A template for making such a proposal was posted on the Commission's website, and included instructions

for providing not just recommendations, but also background and supporting materials to justify a proposed finding. The proposed findings and recommendations were submitted electronically to Commission staff, who logged them in to a master tracking log and posted them on the Commission's website.

This approach was designed to be open and collaborative in fulfilling the Commission's mission and be as inclusive as possible. With only a few months to complete its work, the Commission wanted to receive and consider as many ideas as possible for reducing the Tahoe Basin's vulnerability to wildfire.

## COLLABORATIVE SOLUTIONS

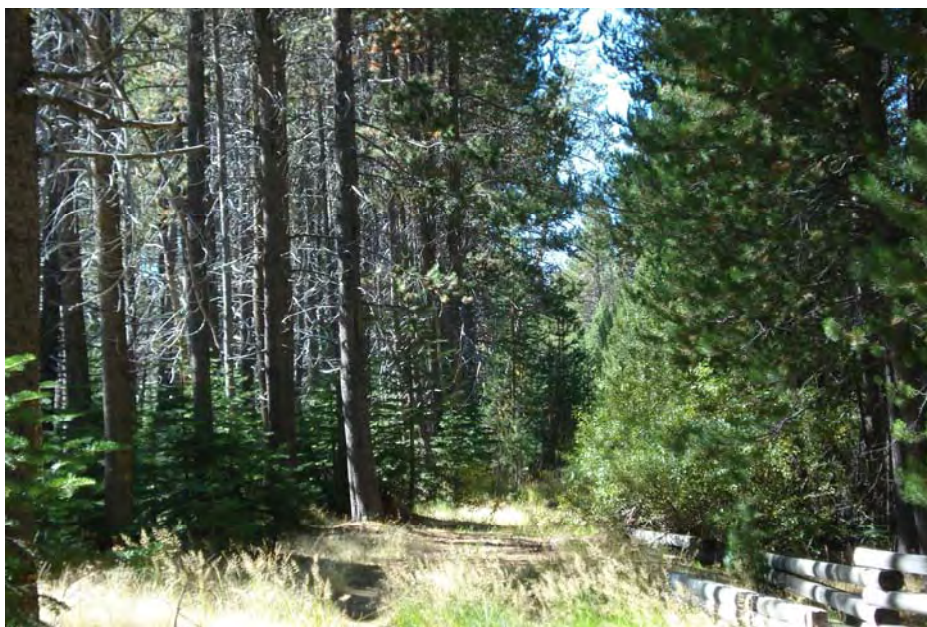
One surprising aspect of the Commission’s tenure can be illustrated by using a wildfire metaphor. Just as a major wildfire consists, in reality, of numerous simultaneous fires, each burning under its own unique combination of conditions resulting from variations in fuels, terrain, wind, time of day, etc. – so too, the Commission’s charge to “reduce the Tahoe Basin’s wildfire vulnerability while protecting the environment” consisted of many constituent parts. And just as a major wildfire is not extinguished all at once, but usually in increments, one piece of burning ground at a time – so too, the Commission began to make progress even before its work was complete.

Solutions began to emerge for problems that had previously seemed intractable. Whether this was due to the heightened urgency brought about by the Angora Fire, or the public airing of issues in the unique forum provided by the Governors’ Commission – suddenly there seemed to be a critical mass of sentiment determined to look at some of the old problems in new ways.

Collaborative solutions began to evolve in at least three major areas: *regulatory reform, consolidation of project planning efforts, and interagency working groups.*

### **Regulatory Reform**

The Angora Fire demonstrated that some houses had burned due to a lack of defensible space and/or continuous fuelbeds, such as pine needles, that lay adjacent to burnable parts of the homes. Conversely, many homes were protected or had spot fires extinguished by firefighters who were able to take “close-in” suppression actions because defensible space and other fuels treatments provided safety zones in which they could safely work. Yet in the fire’s aftermath, there was general recognition that a majority of properties throughout the Basin had inadequate defensible space. Among many property owners and fire agencies,



**Heavy fuels on residential property within stream environment zone**

Christy Daugherty

there was a perception that the system of environmental rules and regulations designed to protect Lake Tahoe made it especially difficult in the Basin to remove flammable vegetation and groundcover for fire defense purposes.

At the Commission's second meeting, the chiefs of the Basin's seven local fire districts presented a unanimous proposal for addressing the critical issue of "defensible space". The chiefs appealed to the Commission to recommend regulatory changes to the Tahoe Regional Planning Agency's Code of Ordinances, so that property owners could clear flammable vegetation and ground cover from around their homes without running afoul of the numerous environmental rules, regulations, and "best management practices" designed to protect the water quality of Lake Tahoe.

The TRPA was receptive to these suggestions. The fire chiefs and the TRPA regulators came together to change longstanding practices. Through a series of meetings over the next several months, they came to agreements on changing a number of the TRPA's ordinances to make it easier for homeowners to implement defensible space measures without having to obtain inspections or permits. The Commission's recommendations seek to bolster these changes and encourage further improvement. Other collaborative efforts included:

- Fire agencies were given new authority to recommend the removal of trees that they deemed to pose fire threats.
- Property owners were given new leeway to remove shrubs and trees in order to meet defensible space standards.
- The TRPA agreed to relax requirements for property owners to maintain combustible groundcover around structures.
- Mutual acknowledgement that all enforcement of building standards and defensible space requirements would be the responsibility of the local fire agency.
- Mutual agreement that "best management practices" required by the TRPA code that are in conflict with legislated defensible space standards would be changed or repealed.

Through these collaborative efforts, the TRPA and the fire agencies succeeded in clearing up much of the confusion in the Basin about what measures property owners could take to protect their properties from wildfire while remaining in compliance with environmental rules and regulations. This empowers property

owners to take personal responsibility for implementing defensible space measures without being overly burdened by permits or inspections, while fire agencies are relieved of having to use hundreds of crew-hours per year doing work that property owners can now do themselves.

### Consolidation of Project Planning Efforts

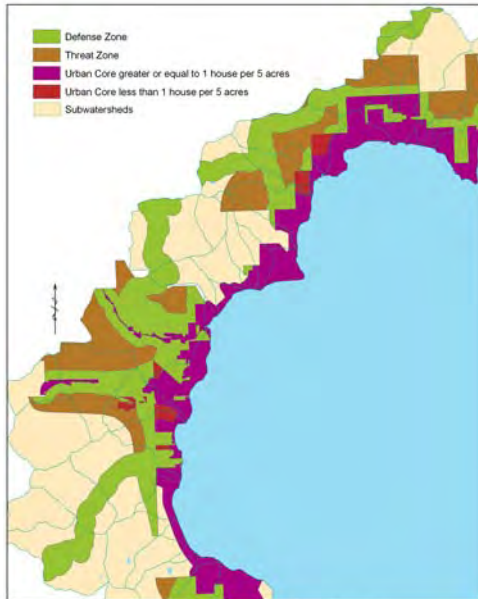
Another collaborative solution that evolved recently was the completion of a Basin-wide *Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy 10-Year Plan*. This document, also known as the “10-Year Plan,” was developed under the direction of the U.S. Forest Service’s Lake Tahoe Basin Management Unit in cooperation with 17 other fire and land management agencies in the Basin. The purpose of this “10-Year Plan” is to comprehensively combine in a single document all of the existing wildfire protection plans that have been developed within the Basin. It provides a single framework for these agencies to identify priority areas and a strategy to collaborate on implementing fuel reduction projects to accomplish those priorities.



This is of critical importance because the vulnerability to wildfire is Basin-wide and not confined to individual properties or jurisdictions. The “10-Year Plan” addresses this vulnerability holistically by identifying pathways to implement projects across multiple ownerships while minimizing economic, regulatory, and administrative constraints. For the first time there is a single plan that meets the intent of all previously existing Implementation Plans, including all Community Wildfire Protection Plans in the Basin. The “10-Year Plan” calls for all federal, state, and local land managers, as well as the Lake Tahoe Basin fire agencies and the Nevada Fire Safe Council, to meet annually to review the results of the prior year’s fuel reduction efforts and identify project priorities for the upcoming year. Where projects cross jurisdictional boundaries, the group will collaborate on implementing the project with the goal of reducing operational constraints and costs associated with environmental compliance and permitting.

## Interagency Working Groups

Because of the unique values at risk in the Lake Tahoe Basin and complex land ownership patterns, there are numerous layers of regulations governing all



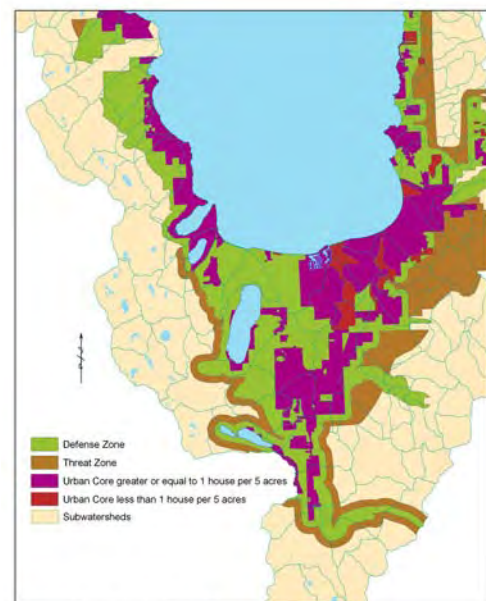
Wildland Urban Interface - Lake Tahoe Basin - Placer County

activities in the Basin. In fact, few places in the world are subject to such a complex governance structure. In addition to federal, state, regional, and local laws and regulations, the bi-state TRPA, created by a Compact approved by the States and the U.S. Congress, has a comprehensive Code of Ordinances that affects all agencies, organizations and individuals in the Basin. The TRPA is the only agency with Basin-wide jurisdiction.

In the wake of the Angora Fire, this complex governance structure came under severe criticism for a perceived lack of coordination among its constituent parts. The Commission's first meeting acted as a community forum for airing this criticism. In subsequent meetings, as the Commission heard from these various agencies and began to develop its work plan, these agencies came to recognize that the Commission offered a framework and incentive to pursue more collaborative relationships than in the

past. The most obvious manifestation of this was the formation (or in some cases, the reactivation) of working groups designed to address particular aspects of interagency coordination. The result was an unprecedented level of dialogue among agencies to identify new pathways for collaboration on issues such as air quality, biomass utilization, permit streamlining, defensible space, fuels project implementation, and science and technology. These working groups did much of the hard labor of developing findings and recommendations for consideration by the Commission.

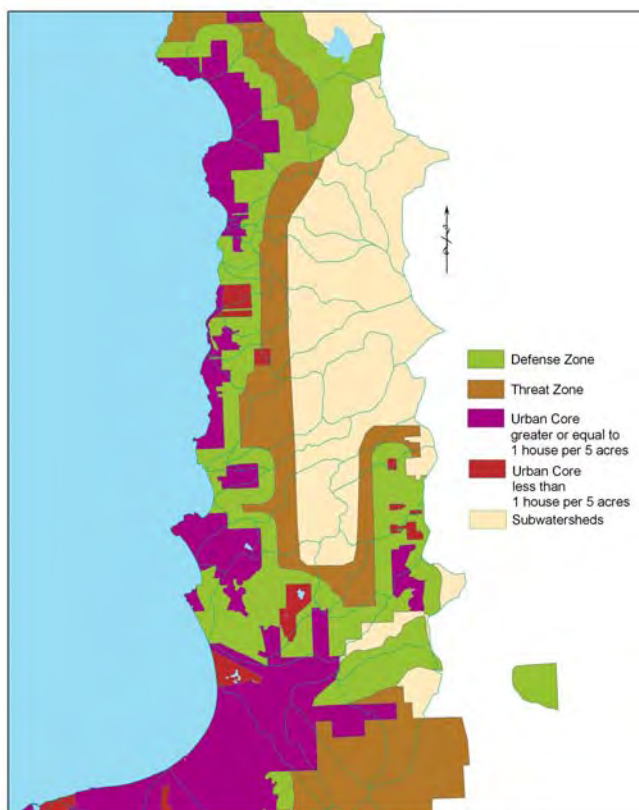
But the working groups were more than just the research and development arm of the Commission. They also began to tackle some of the thorniest aspects of the Basin's wildfire vulnerability.



Wildland Urban Interface - Lake Tahoe Basin - El Dorado County

**GIS data helps define  
on-the-ground conditions**

One example is the Tahoe Fire and Fuels Team (TFFT), which consists of representatives from the Basin’s local, state, and federal fire agencies, the TRPA, the Army Corps of Engineers, the Cooperative Extensions from both states, and others. The TFFT serves as the forum where project implementers and project regulators can come together and develop mutually beneficial processes for reducing wildfire vulnerability while protecting the environment. In just a few months, the TFFT has developed protocols for prioritizing fuel reduction projects and funding under the auspices of the “10-Year Plan”. It has begun to develop an integrated educational outreach program designed to deliver a single, consistent message throughout the Basin on implementing defensible space in compliance with water quality “best management practices” – something that was sorely missing in the past.



Wildland Urban Interface - Lake Tahoe Basin - Douglas County

GIS products created with data from the TRPA

The TFFT is also paving the way for new collaborative efforts to enhance the TRPA’s existing Basin-wide Tahoe Integrated Information Management System (TIIMS) data network. As a result of TFFT discussions, the Army Corps of Engineers has provided seed funding to build onto the TRPA’s Geographical Information Systems (GIS) platform a web-based application that will allow fire agencies to input defensible space inspection data for every parcel in the Tahoe Basin. This will allow anyone with Internet access to assess the defensible space status of their property and community, including the change over time as fuel reduction projects are implemented. This new tool will have far-reaching implications for community fire hazard and risk modeling, and may even provide a tool for first responders to use in emergency situations. In the not-too-distant future, for example, an engine company responding to a fire may be able to use the database to determine whether or not it is safe to enter a neighborhood obscured by smoke, based on mapped defensibility factors.

In summary, before the Angora Fire, the relationship between the Basin’s implementers and its regulators was largely characterized by conflict and misunderstanding. Today, thanks in some measure to the forum provided by the Commission’s deliberative process, there is growing recognition of the value of collaboration. Perhaps the best evidence of this is the success stories written by Basin residents themselves, even before the Commission had written its last chapter.

## **KEY ISSUES AND NEXT STEPS**

Despite all the progress that might be considered short-term tactical wins in addressing fire risk in the Tahoe Basin, a number of issues remain that will continue to require attention long after the Commission delivers this final report to the Governors. Interestingly, although it took months of research and discussion to develop the specific findings and recommendations included in this report, the key underlying issues were identified at the Commission’s first meeting.

First and foremost among these is the overarching need to protect the unique qualities that make Lake Tahoe a global treasure. The other issues are subsets of this, but taken together, they encompass the spectrum of “laws, policies, and practices” that the Governors directed the Commission to review for the purpose of reducing the Lake’s vulnerability to perhaps its greatest threat: catastrophic wildfire.



Christy Daugherty

Angora Fire, Lake Tahoe, June 2007