

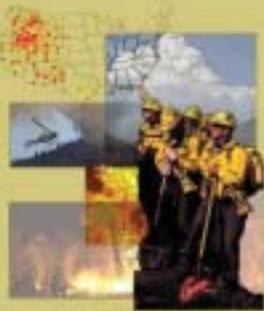
Incline Village, Nevada

Steps to Improve Community Preparedness for Wildfire

Community Preparedness Case Study Series

Case Study #16

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Incline Village, Nevada

Incline Village, Nevada, is located on the northeast shore of Lake Tahoe, a place renowned for its great beauty, clear water, and abundant recreational opportunities. A mountain resort community made up of homes, condominiums, and shopping strips interspersed throughout the forest, Incline Village is a clear example of residential wildland intermix. Although the area is unincorporated and most local government is conducted in Reno, fire responsibilities, including fire education, are administered locally by the North Lake Tahoe Fire Protection District (NLTFPD).



Incline Village, and the Lake Tahoe Basin in general, faces a very significant wildfire threat created by past management practices. Clearcutting in the late 1800s for local silver mines, and subsequent fire suppression, have shifted the forest composition from an open conifer mix dominated by fire-resistant pine species to a dense forest composed almost entirely of uniformly aged, less fire resistant, white fir that is less resilient in the face of environmental stress such as drought and bark beetle attacks. In 1994, the USDA Forest Service estimated that 25 percent of the Tahoe Basin's trees were dead or dying. Such a remarkably uniform and dense fuel load composed of weak and fire-susceptible trees creates conditions most favorable to a wildfire and highly unfavorable to the residents in the basin.

Approximately 77 percent of the Tahoe watershed is Forest Service land, 12 percent is private, and the remaining 11 percent is California or Nevada State parks. The lake's remarkable water clarity is the dominant environmental issue, one that affects most other environmental concerns. For instance, the 1980 Burton-Santini Act (PL 96-586) authorized Federal purchase of private parcels in the Tahoe Basin that were deemed too environmentally sensitive to be developed. This has led to the Forest Service being responsible for managing numerous small parcels throughout the basin—over 650 parcels exist within Incline Village—and has further complicated fire management issues in the area.



*Incline Village from Lake Tahoe
on a hazy day.*



Panoramic view of the Lake Tahoe Area. (Photo: USGS, <http://www.tahoe.usgs.gov/photos.html>)

In the late 1980s, Incline Village's fire marshal, unwilling to wait for a fire to inspire change, began to take steps to decrease the town's exposure. The first step was to increase public awareness of the hazard. As awareness grew, efforts turned toward actively engaging the public in the process, and in 1990 Neighbors for Defensible Space was created, a community forum involving resident activists and government personnel in fire education and management. Homeowners were encouraged to put in defensible space measures, and the fire district began developing an active fuels management program using thinning and prescribed fires to create a thinned "halo" around the community and reduce fuels on public parcels within the community. A significant question of many fire hazard mitigation efforts is, how to maintain fuels reduction efforts and community interest. Over a decade old, Incline Village's fire management efforts are thus of particular interest for understanding longer term dynamics of community fire mitigation efforts.



A thinned area surrounding a house in Incline Village.

Keys Factors in Wildfire Preparedness

Education

Various approaches have been used in Incline Village, including local newspaper articles, television spots, how-to brochures, portable displays, a computer-generated hypothetical wildfire scenario, presentations tailored to the specific audience, neighborhood meetings, and a comprehensive handbook, *Incline Village / Crystal Bay Defensible Space: A Volunteer's Guide to Reducing the Wildfire Threat*. Educational efforts also were aimed at firefighters who were initially reluctant or uninterested in participating in mitigation-related activities. But over time a core belief was built that created enthusiasm for maintaining the program after the initiating fire marshal retired. Continued educational efforts help ensure long-term changes in people's understanding and support for fire mitigation work.

Fuels Reduction

The fire district has minimized fire hazard on public lands in and surrounding Incline Village. A primary focus is to create a halo of thinned area surrounding the community that can be maintained through periodic prescribed burns. Various approaches have been used to accomplish these goals, from pressuring for increased funding for cleanup of Forest Service parcels to creating the Slide Mountain Crew, a program that employs individuals specifically for fuels management work for 6 to 9 months of the year depending on funding. The program has good incentives because crew members are allowed to join any regional firefighting efforts, providing valuable experience for future fire department jobs.



Prescribed burning is one method used to minimize fire hazard in and around Incline Village. (Photo: NLTFPD)

Diversified Approaches

Community preparedness for wildfire in Incline Village has used a diversified approach. Educational efforts have run the gamut of materials and methods, increasing exposure and general accessibility. Fuels management efforts have been targeted at both homeowners and public parcels within the area. Potential legal constraints to the program have been identified and addressed. In addition, work has been initiated with relevant agencies, such as the Nevada Department of Forestry (NDF) and the Tahoe Regional Planning Agency (TRPA), to minimize potential conflicts.

Institutionalization of the Process

In the mid-1990s, the departure of key players (including the fire chief and a key individual behind Neighbors for Defensible Space) removed important motivational elements for homeowner involvement and interagency cooperation. Agency fuels management work was less dramatically affected than homeowner education because within the local fire department much of the fuels management efforts had been institutionalized—in personnel

who had come to understand and believe in the program and in internal department structure. For instance, the fire district institutionalized interagency relationships by assigning responsibility for ongoing contact with a specific agency, such as the Forest Service or Nevada Department of Forestry, to a specific firefighter—thus ensuring continued working relationships with most agencies despite any personnel changes.

What's Next for Incline Village?

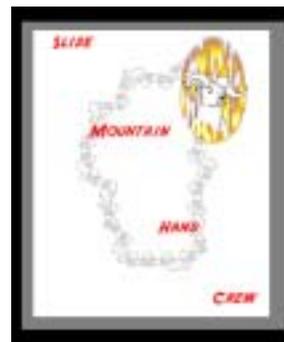
In 2001, the fire district contracted with the Forest Service to manage the fuels on the Burton-Santini parcels within Incline Village. Neighbors for Defensible Space, which had become inactive in the late 1990s, has recently reformed to promote a volunteer defensible space inspection program. In 2004, the fire district entered into a memorandum of understanding with the TRPA that allows the district to use its forester to designate and issue permits for homeowner tree removal, a practice previously reserved for the TRPA forester.



The USDA Forest Service Lake Tahoe Basin Management Unit maintains a prescribed fire information hotline to keep residents informed. (Photo: USDA Forest Service)

Lessons Learned

1. Passionate enthusiasm goes a long way. Much of the early success of the program can be attributed to several individuals with passion and vision. Much of the continued success is due to different but similarly passionate people.
2. Things will change. Ways should be found to institutionalize activities and processes. Inevitably key people will move on and community and individual priorities will change. Structures need to be created that ensure such changes do not lead to loss of fire mitigation work and momentum. One step is to spread responsibilities as the fire district did with interagency relationships.
3. Long-term relationships matter and are a work in progress. Much of the ability of external agencies, such as the Forest Service and TRPA, to relinquish authority and responsibility stems from the fire district's long-term fuels management track record, which has demonstrated the district's ability to successfully implement external agency regulations as required.
4. Environmental issues not directly related to fire issues can play an important role in shaping acceptability of fire hazard reduction efforts. Concern over Lake Tahoe's water quality has shaped both the partners involved, such as TRPA, and the most acceptable fuels management methods.



To reduce fuels, the Slide Mountain Hand Crew uses the same skills as those used on a fire such as cutting hand line, creating slash and brush burn piles, burning piles, and mop-up of those piles. (Photo: NLTFPD)

5. Opportunities need to be sought and seized. When the fire district realized that a valued firefighter's position was at risk, they looked at where the needs were. They identified both that the firefighter had a background in marketing and that efforts to educate the public had lapsed, so they created a public education position. In one creative action they both retained a valued employee and enhanced their outreach abilities.



Lake Tahoe is renown for its great beauty, clear water, and abundant recreational opportunities. (Photo: USGS)

Web Sites for More Information about Incline Village and Wildfire Preparedness

National Fire Plan: www.fireplan.gov

North Lake Tahoe Fire Protection District: <http://www.nltfpd.net>

Lake Tahoe Basin Management Unit: <http://www.fs.fed.us/r5/ltbmu>

Tahoe Regional Planning Agency: <http://www.trpa.org>

Nevada Department of Forestry: <http://www.forestry.nv.gov>

The Wildfire Preparedness Project of the National Fire Plan

Communities across the U.S. have voiced increasing concern about how they can better prepare for wildfire. Even in areas of the country not traditionally thought of as having high fire risk, storms, changing climate, and pest/disease outbreaks have increased concern about the potential for catastrophic fire. In areas where fire is viewed as a natural part of the ecosystem, the fact that more and more people choose these places to live in means that there is a potential for major fire impacts. A team of scientists funded by the National Fire Plan have been visiting communities across the country to identify the activities communities are undertaking to increase wildfire preparedness and to identify the resources necessary to support these activities. The project is led by the North Central Research Station, in cooperation with the Pacific Northwest Research Station, University of Florida, University of Minnesota, and Southern Oregon University.

This is the last in a series of summaries reflecting findings of the case studies. Hard copies of this summary can be obtained from the individuals listed below. All case study summaries currently available can be found on the Web at:

www.ncrs.fs.fed.us/4803/Highlights.htm

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