

Cooperative Efforts in Fuels Management¹

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Abstract: Our forests have been neglected or protected to death, creating an extreme wildfire risk in wildland urban intermix communities. We as agencies and organizations are just now beginning to understand that the fuel problems we have across the western states are not a single agency problem, but “our problem.” Wildfires do not respect boundaries, be they political, jurisdictional, or private. Our fuels problem must be dealt with from a cooperative effort by all individuals who reside and work in the wildland urban intermix communities.

Forests in Nevada have suffered the same decline in health that many forests in the western states are now experiencing. According to Fire Ecologist Professor Bob Sweeney: “we have built structures and now live in the forest. Additionally, we have not allowed nature to manage itself, primarily through normal fire cycles.”

If we as Europeans had not intervened, would natural events have produced a healthier forest than we now reside in? Have we mismanaged or “overprotected” our natural resources, and, in doing so, placed our communities at extreme fire risk? I believe so.

Through decades of aggressive fire suppression, the normal fire regime has been altered, stands of trees and understories have become overgrown, drought has stressed the current stands, and now epidemic levels of insects and diseases have come together to produce extensive forest mortality. To the wildland urban intermix, or interface communities, this poses an extreme fire risk.

Because wildfires do not respect political, jurisdictional, or private boundaries, the fire issue becomes “our problem.” No one agency or organization can effectively deal with the magnitude of the problem, pre- or post-fire.

For this reason, we in the North Lake Tahoe Fire Protection District, at the beginning of the 7-year drought, began laying the groundwork for an intensive Defensible Space vegetation management project.

In the major fires in recent history, we as incident commanders were waiting for either the weather to change, or the fire to run out of fuel. How successful are we at suppressing fires in these unmanaged fuel accumulations? If recent history is an indication, we are failing miserably, in lives lost, property damaged, and extreme natural resource losses.

Our fire problem is multidimensional, including the components of responsibility, accountability, economics, and the environmental consequences of doing something, or in most cases, nothing. There are major problems in attempting to deal with the primary issues of reducing the fire risk. These are the very issues that I believe we must work on the hardest, to bring about a solution to “our fuel problems.” It will take a cooperative effort from many agencies and organizations to finally provide solutions that are drastically needed, in our wildland urban intermix communities.

We as fire suppression agencies have learned to develop excellent “Mutual Aid” pacts. We can gather virtual armies and air forces to attack these notable wildland urban intermix fires, which we have been dealing with since the early 1970’s, and so which aptly have been called “the Fires of the Future.”

The question must be asked: “Why have we not been able to develop a financial commitment to fuels management, similar to that we have in fire suppression?”

Thomas Watson, the founder of IBM, said, “The way to succeed is to double the failure rate.” Have we doubled the failure rate on our wildland urban intermix fires in the past decade? Must we experience more failures before we begin to manage our fuels to a level that will allow us to effectively deal with the wildfire issue? What will it ultimately take to get us on track?

The Beginnings of a Cooperative Effort

When our fire district began recognizing the reality of the fuels problem our community faced, my office began a multi-year project of bringing about a fuels reduction program, or “risk reduction on the ground” program, called Defensible Space. No one within my fire agency had the benefit of an education or background in forestry, biology, or ecology. We did have a “firefighter’s” knowledge that our community was at serious risk from any uncontrolled wildfire, and that our daily resources to deal with the problem would be extremely limited.

For many decades we had successfully combated all fires within our community, and had begun to recognize that our many successes would some day cause our most devastating failures. We had been excluding the forest’s natural management process, fire, and had not taken the responsibility of managing the fuels any other way, such as reduction or removal.

Our “cooperative effort in fuels management” was based on the following premise. On a daily basis my fire prevention office operates in the area of “responsibility”: individual

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property owners have an obligation to maintain their property at a reasonably safe level.

We make sure that when you as the general public meet in a building, and an emergency occurs, your expectation to “get out alive” is met. When your next-door neighbor exposes your home to an unreasonable risk, there is an expectation that we can reduce that risk through some action on the fire prevention office’s part. That’s the premise of “individual responsibility.”

When we looked at the fuels problem, we addressed it from the same standpoint. Each individual property owner had a shared responsibility to the community as a whole.

We looked at the problem from a worst-case fire behavior standpoint and recognized that even if all 12,000+ (parcels) property owners bought into the Defensible Space program, they would still be at serious risk from larger property owners like the USDA Forest Service and the Incline Village General Improvement District (I.V.G.I.D.). The General Improvement District owned the most hazardous drainages that intersected our community, and the Forest Service owned steep sensitive lands (Burton Santini lots) within and surrounding the community.

We additionally have an environmental regulatory agency called the Tahoe Regional Planning Agency (T.R.P.A.) that, when we began our program, had a reputation for “not touching anything green.”

As we began to meet with all the political and regulatory agencies and the regional fire and forestry agencies, we all found a common ground of concern, which was wildfire.

It was observed by all concerned that uncontrolled wildfires could, and most likely would, impact all of the differing agencies and organizations in some way. For example, T.R.P.A.’s main concern would be the possible impact to “water quality” following a high intensity wildfire, and the associated erosion potential from damage to the forest floor.

From my fire district’s standpoint, the potential losses to lives and property within the community are the main concern.

The individual property owners are concerned about the losses of homes and the long-term impact on today’s scenic beauty, which would not return within their lifetime.

To say that all the agencies and organizations immediately jumped into a cooperative effort in fuels management would be an overstatement. We had disagreements, we struggled, we built bridges and relationships over a long period of time. We worked through “turf” battles, funding problems, general apathy, and denial that we did not even have a fuels problem. Eventually we developed a respect and trust for each other’s points of view.

What got us to the present was the belief that the fuels problem was “our problem” and that one agency could not effectively deal with it alone. Other factors were my personal commitment and determination to provide a better level of fire protection to my community. I have been accused of using a “bull dog approach” to reach that objective.

The cooperative effort began with my office joining together with the University of Nevada, Reno Cooperative Extension, in Incline Village. Ed Smith and I recognized a

need for a multi-agency approach. With fuels reduction as a goal, one concern was how or why could or would the agencies and organizations keep us from “reducing the fire risk to our community?”

We had to inform, sell, and educate each agency and organization that the common fire problem would affect us all. We eventually were able to accomplish that objective.

Cooperators

Who were the key agencies, organizations, groups, and individuals that have made our community-based program a success?

Organizations and Agencies

- University of Nevada, Reno, Cooperative Extension.
- Sierra Front Wildfire Cooperators, Fire Prevention Committee.
- Lake Tahoe Regional Fire Chiefs’ Association.
- Nevada Division of Forestry.
- USDA Forest Service Lake Tahoe Basin Management Unit.
- Tahoe Regional Planning Agency (T.R.P.A.).
- Incline Village General Improvement District.

Groups

- Neighbors for Defensible Space, Our Grass Roots Community Group.
- Incline Village, Crystal Bay Chamber of Commerce.
- Incline Village Board of Realtors.
- Nevada Forest Stewardship Program.
- South Lake Tahoe Kiwanis (Dick Thomas).

Individuals

- Doug Clifford, and the Neighbors for a Defensible Space Executive Board.
- Ann Johnson, Executive Director, Chamber of Commerce, Incline Village.
- Nevada State Legislative Representatives.
- Nevada U.S. Congressional Representatives.
- Many Concerned and Involved Private Property Owners in the Community.
- And many others, too numerous to mention.

Legal Issues

Cooperative efforts have resulted in adoption of two important legislative acts that will allow the State of Nevada to move forward in the area of fuels management. These submittals were generated by my office, but would not have been adopted without the cooperation and support of many individuals and different agencies.

In the 1991 legislative session, the adoption of a “Hazard Reduction” statute, N.R.S. 474.160, allowed my office to require private property owners to remove hazards in a

timely manner, or we could remove the hazards and lien the property. My primary problem was that under currently adopted fire codes, I could not issue citations across state lines. The major problem was that our community has many out-of-state, absentee property owners.

In the 1993 legislative session, we were successful in getting “Prescribed Burning” legislation passed. Prior to this legislation, prescribed burning was not even mentioned in the State of Nevada fire and forestry laws.

Summary

Cooperative efforts are what have made our community’s Defensible Space program a regional role model. We would not have accomplished what we have, to date (and we are not finished yet), without cooperation from many agencies, organizations, and individuals.

We at this conference all know and understand the dangers that we face in the future for having tinkered with the ecological system that poses the wildfire risk to our forests and communities.

Each of the guest speakers and all of us at this conference seem to be like the “preacher, preaching to the choir.” The main goal of these conferences is to share ideas and methods in fuels management and the latest technology to manage them, but in order to do so, we all need to accomplish more results in the fuels problem area. Each year improvements are made in the fuels management area in our agencies and organizations, but they seem very slow when contrasted with the accumulating losses in lives, property, and natural resources each heavy fire season.

We as organizations need to make use of all the tremendous amount of individual knowledge and brilliant people that I meet at these conferences each year and join forces to “educate the budgetary, policy and decision makers” that fuels management is the more cost- efficient way to deal with the mounting wildfire problem.

Let me close with an example of “recorded total losses” in the Cleveland Fire, Eldorado National Forest, September 1992. High winds, low humidity, steep terrain, and heavy concentrations of forest fuels with extremely low fuel moisture content, contributed to problems with long-range spotting. The fire’s final size was 24,500 acres.

In 1992, the Cleveland fire caused the nation’s largest wildland fire loss (Sullivan 1993).The recorded loss totaled at \$245,325,000, which does not include the \$16.5 million in suppression costs and the loss of two lives (air tanker pilots).

The breakdown is as follows:

41 homes and structures	\$3,500,000
Private/timber stand losses	230,000,000
Marketable bio-mass	1,000,000
Revegetation/slope stabilization	2,000,000
Pacific Gas & Electric, utilities	7,000,000
Sacramento Municipal Utilities Dist. (SMUD)	175,000
Caltrans, roads, signs, infrastructure	250,000
D.C. Air Tanker	1,000,000
(missing item)	400,000
	Total: \$245,325,000

Additionally there were 72 injuries with no recorded costs associated to them. These losses plus the suppression costs average out to approximately \$10,683 per acre.

In these days of cutbacks, budget reductions, and doing more for less, can we afford these “fires of the future”? Should we not be reviewing the past to learn and better define a strategy for the future, looking for the best approach for the protection of lives, reducing the escalating costs in property damage, and attempting to reduce the wildfire impacts to our natural resources?

References

Sullivan, Michael J. 1993. **Large loss wildland fires in 1992 by listed \$ loss: wildland fires.** In: The National Fire Protection Association (N.F.P.A.) Journal, Nov./Dec. 1993: 88.

