

Social Considerations of Reducing Fuels in the Wildland-Urban Interface in the Western United States

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Abstract

The social issues sparked by wildland fire are as diverse as the needs and uses of fire in different parts of the world. Careful consideration of social norms and culture, economic needs and history of communities must be given to issues of suppression, fuel reduction, prevention, education, and other activities. What may be an acceptable practice in one location may have negative or even disastrous consequences elsewhere. What may seem a logical and practical step in one place may not be the question in another, solely due to social values. Indeed, social considerations may be as vital to the success of a prevention activity as a well-prepared shift plan or having the proper equipment available is to a suppression effort. Research indicates that community support is a direct result of a sense of community initiative and ownership, and not from a top-down, mandated approach.

The best of intentions and the best in technology are not guarantees that fuel loads will be reduced in the critical areas where homes and wildfire meet, called “the wildland urban interface.” As one publication notes, “Wildland-urban interface neighborhoods are social systems ... Failure to work with the social system will probably doom efforts to promote fire hazard mitigation.”

The challenge to fire management leaders in the United States is to address these issues, exchange ideas and techniques, involve and listen to communities, and work toward solutions in individual “neighborhoods.” It is only through the initiative and commitment of neighborhoods that prevention and education programs will make permanent the changes that are needed to reduce fire danger to people and their possessions.

Social Considerations of Reducing Fuels in the Wildland-Urban Interface in the Western United States, or Why We’re Loved and Hated, Sometimes in the Same Neighborhood

Fire season in the United States is often best represented and remembered through a series of images. In 2000, who can forget the photo of elk serenely standing in a western Montana river, with a hillside in flames as the backdrop? That photo became the icon for the fire year, described as the worst in five decades in the country.

Last year had its share of vivid images: the dark, smoky streets of Denver, as the Hayman Fire burned unchecked nearby; the towering column of smoke from the Rodeo-Chediski Fire exploding over the northern Arizona countryside; the worry etched on the faces of residents of

southern Oregon, as they prepared for evacuation in advance of the Biscuit Fire, which eventually grew to a half-million acres.

One other image stands out from the 2002 season. Ironically, it was an image that showed no flames, no grimy faces of firefighters, no long, pink plumes of retardant being dropped from a heavy airtanker. One of the most startling and memorable images of 2002 was the flagging tied by firefighters to trees in front of homes imperiled by fire.

The story behind the flagging was simple and practical. Firefighters with expertise in protecting structures had flagged, tagged or spray-painted markings in front of homes that were considered defensible or not. (*Arizona Republic, June 24, 2002*) When flames threatened the homes, it was easy for firefighters to determine whether their efforts to protect them would be worthwhile, or whether it would be fruitless, not to mention possibly putting their lives at risk.

Certainly, the flagging made decisions easier for firefighters. It was also a blunt and grim reminder to property owners that if they had not taken a few precautionary steps to make their homes defensible, firefighters would not risk their lives to atone for their lack of interest, lack of care, or lack of knowledge. The firefighting cavalry would not come storming over a ridge and spare their home at that last minute.

Wildland firefighters are unanimous in their dislike for being asked or expected to protect indefensible homes. Besides the very real increase in danger – a home with a wood shake roof, a wood deck, and brush rubbing against it is a highly dense and flammable concentration of fuel – fighting fire in the wildland-urban interface draws away valuable resources and greatly complicates the tactics and strategy of suppression.

But it is the reality facing the wildland firefighting community. While it is difficult to get a good, quantifiable figure for how much the wildland-urban interface has grown in the last 20 years, a rough estimate is a tenfold increase has occurred. (*New York Times, June 14, 2002*) And the popularity of building homes and communities in areas historically prone to fire is only going to increase in coming years, as the lure of natural settings and beautiful surroundings attract more people wanting to get away from urban areas. Further, the very existence of structures in the wildland changes the rules of firefighting. “They (people who reside in the wildland-urban interface) often fail to realize that their very presence has already changed it. The behavior of fire is greatly influenced by human impact on the forest.” (*James B. Davis, “The Wildland-Urban Interface: Paradise or Battleground?” Journal of Forestry, January 1990*)

All of which means bigger problems for wildland firefighters. Twenty years ago, wildland fire evacuations were relatively rare events. The situation has reversed itself in recent years. Pick up a daily fire report in the United States and the chances are good that evacuations and structure protection will be mentioned several times. On a recent daily fire report, (*National Incident Management Situation Report, July 30, 2003*) about one-third of all major fires burning in the United States reported either evacuations had occurred and/or structure protection was in place. The figure that day is not atypical; it’s becoming the norm for the peak of fire season in the United States.

So here is the dilemma. More fires than ever before are occurring in the wildland-urban interface, making them more difficult, costly and dangerous to fight. And the trend of building in areas prone or susceptible to fire is accelerating. Something has to give. Something has to change.

But what?

In the United States, federal, state, local and private concerns are undertaking a huge public education program to help people learn how to protect their property from the consequences of wildland fire. The educational effort has made great strides in recent years. The word is getting out. Polls show that public awareness is increasing regarding issues such as fuel overloading, prescribed fire, the need to not suppress all fires. (*"A Study of Southwesterners' Opinions on the Management of Wildland and Wilderness Fires," Patricia L. Winter and George T. Cvetkovich, June 2003*) Chances are good that if you ask people in the western United States, "Do you know what it means to 'firewise' your home?" they'll answer in the affirmative.

The prevention and education message is a good one, worthwhile, and would seem to be one of those rare situations where everyone wins. Yet the resistance to making changes in many areas remains strong.

"In some places, people were excited to meet us and eager to learn more," one volunteer canvasser from the Student Conservation Association reported. "They'd invite us in for a meal. Then in other locations, we were told that we were trespassing and if we didn't leave, the property owner would turn his dogs loose on us." (*Personal communication, June 2003*)

We wear the white hat. We're honestly there to help. Our services are free, and in some cases, we even come carrying buckets of money to help with the effort. Why isn't everyone inviting us to dinner? Why are we loved and hated, sometimes in the same neighborhood?

We have some theories about why the public, at times, is reluctant to embrace the message our prevention and education teams bear.

1. Denial

Even as dramatic video of orange flames makes an almost-nightly appearance on newscasts throughout the nation, many people have the thought, "Golly, that's too bad. But it will never happen here." It seems that too many people don't believe the danger of fire is real – until the flames top the ridge and bear down on their community. By then, it's too late. This attitude extends beyond individual property owners. One researcher noted, "Some ... leaders ... are unwilling to put a high priority on the threat of wildland fire when its occurrence is only a 'probability.'" (*R.L. Irwin, Forest Service, USDA Forest Service General Technical Report, 1987*)

2. Can't See the Fires for the Trees

People often move to rural settings because of the greenery and scenery. (*James B. Davis, Journal of Forestry, January 1990*) Cutting down trees, removing brush, altering the “natural” landscape in any way undermines, in their view, the very reason they chose to build or buy in the wildland-urban interface. A homeowner in New Mexico reportedly said that she would rather see her house burn than remove any of the beautiful trees that brushed up against it. She got her wish. A short time after she made the remark, the Cerro Grande fire swept into town and her home was among the 240 destroyed. The message we need to convey is that a defensible space doesn’t equate to detestable place.

3. The Fate Factor

Sometimes we hear, “It’s all a matter of fate. If my home is meant to burn in a forest fire, it will happen, and there’s nothing I can do about it. Some things you just can’t change.”

4. Relying on the Kindness of Strangers

At times, we may be the victims of our own success. Those living in the wildland-urban interface have come to expect that firefighters will swoop to their property just ahead of the flames, light a backfire or drop a load of water and save their home. Our firefighters are good, but remember, there was a reason for that flagging, tagging and painting in front of homes and outbuildings that weren’t defensible.

5. That’s Why I Pay My Insurance Premiums

Another reaction we sometimes experience is, “That’s what I pay my insurance for. If I lose my home, I get a new house out of the deal.” That selfish attitude disregards the loss of irreplaceable items in the house, the additional hazard to firefighters, and the potential to help the fire spread to other homes. Houses and yards can carry fire quite well, especially those where no precautions have taken place and there’s a nice bed of brush, limbs and needles strewn about. Insurance companies are taking note of defensible space. In at least two states, Colorado and Utah, homeowners risk higher premiums if they fail to clear a defensible space.

6. Plain Ignorance, Part I

Yes, we’ve actually heard this, more often than you might think: “I didn’t know that wildfire can burn in this area. Nobody told me.”

7. Plain Ignorance, Part II

The corollary to Plain Ignorance, Part I, is “I don’t know what to do. Nobody has told me anything about reducing fuels and I didn’t know who to ask.”

8. Image is Everything

“If I cut down my trees, trim the brush, replace my shake roof with fire-resistant material, my house won’t look good. I don’t want to live in the middle of a clearcut.” This item is a close

cousin of #2, but different enough to warrant its own place on the hall-of-shame list of excuses. It centers on appearance more than love of nature. Whatever the case, it's still an invitation to a disaster.

9. I'm Too Busy and I'm Too Poor

People sometimes say that they're too busy and can't afford to provide a defensible space around their property. If you consider yourself too busy, think of it this way: what's a better investment of your time than to protect your property? Give up the weekend golf game and spend a day in your yard. If poverty is your excuse, then think of how much more it will cost you to recover from the devastation of a wildfire.

10. Don't Want to Take the Trash Out

This may be the weakest excuse of all: Those who say it creates too much of a mess to clear out all that debris and they don't know what to do with it.

11. Support Your Local Sheriff

More than one of our prevention and education specialists have heard this one. "Isn't it against the law to cut a tree without a permit?"

12. Smokey Has Us Confused

We're all familiar in the United States with the big, solemn bear and his sonorous message, "Only you can prevent forest fires." Several generations in the states have grown up listening to the fire icon's message. The unstated corollary is that fire is dangerous, unwanted and evil. Now, more than fifty years after Smokey first began to boom his message, the public hears that fire is needed for healthy ecosystems, and that its exclusion is one of the primary causes behind the recent devastating seasons in the United States. Which message is true? The mixed messages may further confuse the public about defensible space.

But here's an important point, and if you've made it this far into the report without dozing off, you might as well pay attention to this. It's important to remember that, flimsy as they sound, there's probably a grain of truth in these statements. Some people probably *don't* know they live in an area that can burn. Some people really *do* believe that firefighters will save their home, no matter the circumstances or state of preparedness. Others really *do* think it's against the law to cut trees down. *It's imperative that the real reason for resistance to mitigation steps be identified.* It is one of the keys to successful mitigation of the fuels problem. Even with our good intentions and big white hat, even with our checkbook in hand, if we don't address the real issues, we don't stand a chance. One researcher put it this way, "When developing strategies to promote the adoption of wildfire defenses among people in the (wildland-urban interface) zone, be sure you are addressing the real problem." (*Personal communication, Ronald Hodgson, August 2003*)

A widely circulated story in the prevention community illustrates the point. A resort community in Oregon was a classic case of a disaster waiting to happen. Overgrown trees and brush posed a hazard to the upscale community. Federal and local officials begged and pleaded with the homeowners to reduce the load of fuels, but with minimal success. The image of fire invading their community and turning much of it to ashes did not motivate the property owners. They couldn't be frightened into change.

A new local fire chief was hired. At a public meeting, he said that, should wildfire burn into the community, he recommended that the golf course water hazards be the gathering spot as refuge from the flames. Still, there was little reaction from the audience. He then said that it would not be possible to save many structures because of the dense fuel load. All of that was old news to the homeowners and it generated not much more than a yawn. Remember, these were people who didn't scare easily. Then he explained why the fire hazard was so high. He said, "I can't do my job because the forests around here are sick." With that statement, the attitude began to change. With one simple sentence, he got the community's attention. To the residents, the thick stands of conifers and overgrown brush seemed healthy and were a point of civic pride. To hear the nearby vegetation was actually in poor condition, even "sick," came as a shock. Suddenly, he had a captive audience, eager to know how the forest around them could be restored to health. You can guess the rest of the story: The community went on to become a poster child for progressive mitigation.

The point is, once the chief identified the real problem, it became easy to motivate the environmentally friendly community. The specter of burning homes didn't bother them. The specter of a dying forest did. (*Personal communication, Patrick Durland, June 2003*)

The trick then becomes identifying the "real" problem or the real needs. Too often, the federal agencies in the United States have hurried through or glossed over this critical function. Sometimes it's a case of agency personnel assuming they know the problem and how to address it. More often, it's the naïve assumption that people will embrace us because what we're doing is unquestionably right, helpful and even morally responsible.

If it were only that easy.

What we have discovered in the western United States is that working within the existing social system increases our effectiveness in helping communities to adopt, then adapt, the long-term changes that are needed to reduce their vulnerability from the devastation of wildland fire. It is much easier to identify the real problems, the real attitudes and the real needs by talking with communities, rather than guessing or assuming.

Again, a quote to illustrate the point. "... the critical challenge is how relationships to communities are established and sustained. Individual, unilateral, single entity, uncoordinated action will not be successful. Reducing the risk of catastrophic wildfire in social and ecological landscapes is a highly complex enterprise, requiring enormous teamwork and cooperation among formal and informal systems." (*People and Fire in Western Colorado, S. Burns, et. al, April 2003*)

The moral of the story is, if we try to do it alone, we're doomed to failure.

While acknowledging there is no one single method or process to rally community support and community self-determination for fuels reduction, there are, nevertheless, some considerations that seem to ensure a higher success rate than others. A few of them are highlighted below, if you can bear wading through one more list.

1. Target a Neighborhood or Community

Working with individual property owners is not very effective. You need to decide what neighborhoods or communities have a need for mitigation, weigh chances for success, and work with them as groups. A fire education publication from Colorado is blunt on this point: "Promoting hazard mitigation one house at a time to haphazardly selected property owners is pretty much a waste of time. You need to work with whole neighborhoods, or at least clusters of several neighbors, to provide any significant protection from wildfire." (*How to Work With Communities,* Larimer County Training Session for American Red Cross and Fire Department Volunteers, date unknown)

2. Find Common Ground

In every community, the likelihood is strong that there will be divergent views about wildfire, fuels, how best to make the community more defensible, the relationship with federal and local agencies, and a dozen other topics. Wildland fire and anything affiliated with it is a highly controversial topic in the western United States, but that doesn't mean common ground can't be found. It's important to find a few points of common agreement and build from there. They can, and probably should be, very basic: "Our community has a fuels problem," or "We are not well-prepared for wildfire in this area and we need to address that." A tenet of firefighting is that you find an anchor point before beginning the work of suppression. In prevention and education work, finding areas of common agreement is analogous to securing an anchor point.

3. Identify the "Initiators"

"Initiators" are the people who get things done in a community, the folks who know what is going on, what the linkages are. Sometimes, initiators come in ready-made packages, such as neighborhood associations, water districts, or social affiliations. Near Redding, California, a neighborhood targeted for fuels mitigation met once a week to eat Italian food. "The Saturday Night Pizza Club" became the vehicle for gaining valuable information and opinions about how mitigation efforts might work in the community. Be careful in the presentation of your message to such groups. If you want to write a prescription for failure, approach people with the attitude of, "We're going to tell you what is wrong and what you need to do to save your community." If you want to succeed, then a better approach is, "Is mitigation a good idea? What are your thoughts? Do your community values support it? What reasons exist that might cause people to reject fuels reduction work?" Community opinion leaders need to be informed. Nothing sinks an idea faster in the western United States than for a community opinion leader – elected or informal – to hear about an idea after many others have. They don't like to be surprised, especially about something going on in their backyard. As one researcher said, "If the opinion

leader hasn't heard about it, it's not going anywhere." (*Personal communication, Ronald Hodgson, June 2003*)

4. We're Usually Not Among the "Trusted Others"

News will get out about the community fire mitigation possibilities. In most tightly knit rural communities, if you talk with one person, the whole neighborhood will soon know about what you said. How well the mitigation word is accepted is partially based on who is spreading it. If the message is coming from an agency or outside official, it could be dead on arrival. The contrary is also true. If a friend or neighbor delivers the message, the chances of it being accepted are much better. That's human nature. We all like to hear about changes or new information or developments from friends, not strangers. Since widespread support is critical to a sustained fuels reduction effort, the conclusion is clear: The most effective communication about mitigation is neighbor to neighbor, not stranger to neighbor. And in most instances, federal or state agency representatives are not considered neighbors. "Very few individuals make important choices by themselves. People seek information and opinions from trusted others. Change agents and outside experts are not usually on the list of trusted others." (*"How to Work With Communities," Larimer County Training Session for American Red Cross and Fire Department Volunteers, date unknown.*)

5. Their Idea, Not Ours

Maybe all of this is best summarized by one short statement. If a community has ownership in the mitigation effort, if the people who live there feel it is their idea, and in their best interests to sustain it, then the chances are excellent that you'll have a success story in the making. We cannot separate fire science from social science in community work. We can't expect to be successful if we rely on the adage, "Hello, I'm from the government and I'm here to help you." No matter how "right" we may be, mitigation work will come up short if we fail to involve the community in every step of the way. Make sure that you give full credit to the community for mitigation efforts in the news media and other forums. It is, after all, their community, their work, their homes and livelihoods hanging in the balance. They deserve the acknowledgement!

6. Success Is ...

It is important to understand what qualifies as a success. One veteran of community work said that agency prevention and education personnel are often disappointed when "only" 60 or 70 percent of a community are involved in fuels reduction and hazard mitigation efforts. "You'll never get 100 percent involvement. Sometimes, 60 percent is all you can possibly achieve." Establish a demonstration project, so that community members can see what prevention and mitigation work is all about, and, witness for themselves that reducing the hazard to their property doesn't equate with unsightly landscaping.

7. Stay Flexible

What has been suggested in this paper should not come across as the one and only template for community mitigation success. Beyond the firm belief that there is a direct correlation between

community involvement and mitigation success, everything else mentioned in this paper should be viewed as guidelines, starting points or suggestions. Probably no two approaches will ever be the same because no two communities or neighborhoods will ever be the same. “There is no single solution to the wildland-urban interface fire problem. Because so many hazards, risks, and related factors are involved, a combination of remedies must be used to achieve any reasonable degree of fire safety for structures in or near wildland areas.” (*James B. Davis, “The Wildland-Urban Interface: Paradise or Battleground?” Journal of Forestry, January 1990*) Our firefighters are trained to have “situational awareness.” It’s good advice for prevention and education teams, too. You’ll find that the ability to observe, then tinker, adjust, create and revise is an essential skill. Every mitigation opportunity is unique!

In the United States, the community fuels mitigation problem is huge, almost beyond the point of comprehension. Certainly, the agencies alone do not have the time, funding and human resources to correct the problem. The solution will come when motivated communities make the issue “their own” and provide for themselves the knowledge and commitment to make a difference, not for months or even years, but for lifetimes.

The images of fire will always be with us. We hope, though, that one less image will not appear in the near future.

No flagging, no tagging, no spray painting of homes that are considered indefensible, because the truth is, communities everywhere have taken the steps to keep fire out, permanently.