

# Fire Management *today*



Volume 65 • No. 3 • Summer 2005

**PERSPECTIVES ON  
WILDLAND FIRE**



United States Department of Agriculture  
Forest Service

# PUBLIC PERSPECTIVES ON THE “WILDFIRE PROBLEM”



Colorado State University  
Knowledge to Go Places

Antony S. Cheng and Dennis R. Becker

Just as wildland fire managers must have a working knowledge of fire behavior, they must also understand the social dimensions of wildland fire in order to effectively engage the public. Social scientists are therefore gathering information about public attitudes toward wildland fire and wildfire mitigation. How do people see the “wildfire problem”? What social values are threatened? What role do community dynamics play? How can citizens be engaged in mitigating the threat? And what is the institutional context of wildland fire management?

## A Question of Perception

The way individuals perceive wildland fire influences their proposals for action. Some people see wildfire as a problem because a fire-prone forest has too many trees, whereas others see the problem as too many people living in or near the forest. Those who see too many trees as the problem will promote forest thinning, whereas those who believe that too many people and houses are the problem will focus on land use and access restrictions. Each course of action includes additional questions about the size and scope of the prescriptions or regulations to follow.

*Tony Cheng is an assistant professor in the Department of Forest, Rangeland, and Watershed Stewardship at Colorado State University, Fort Collins, CO; and Dennis Becker is a research forester for the USDA Forest Service, Pacific Northwest Research Station, on detail to Flagstaff, AZ.*

---

Wildland fire managers must have a basic understanding of the social dimensions of wildland fire to effectively work with the public.

---

Public attitudes toward wildland fire are also influenced by the reputation of those who propose a given course of action. The public frequently judges individuals based on their organizational affiliations, professional reputations, and social standing—factors that wildland fire managers should consider when working with citizens and communities to build a successful wildland fire management program.

## Social Values at Stake

The fundamental social value threatened by wildfire is human life. After human life, several values rate about equally in surveys and interviews:

- **Sense of place.** Just as “home” is more than a physical structure with rooms, “place” is more than a piece of land. People often associate landscapes with rich, multilayered experiences, memories, symbols, and meanings. Wildland fire can transform a landscape to the point where it is not the same place, with social results that range from anger to deep emotional trauma. Even wildfire mitigation strategies can affect people’s sense of place. Aggressive thinning around people’s houses can undermine the very reason that many people choose to live in a particular place — a sense of seclusion from living in the woods.

- **Sense of belonging.** People are part of a complex web of social relationships, networks, and cooperative efforts that offer a sense of identity, security, and well-being. When wildfire affects a community, whether urban or rural, it can dramatically transform these social ties. Responses might be positive (“the fire brought neighbors together”), negative (“this community will never be the same”), or neutral (“people are just going on with their lives as if nothing happened”).
- **Property.** People spend a lot of effort and money to have property in the woods—often in forest ecosystems prone to wildland fire. Losing property to a wildfire can be a devastating financial and emotional loss. On a community level, when property is destroyed, property taxes decline—taxes that are needed to fund schools, roads, and other public services.
- **Public environmental resources.** In ecosystems that are functioning within their historical fire regimes, the fires that can adversely affect water, wildlife, and recreation resources in the short term are necessary to sustain the same values in the longer term. It would be a mistake to interpret public support for minimizing wildland fire as

support for any and all means of risk reduction. The public might lack a clear, in-depth understanding of what mitigation efforts involve. The same people who approve the idea of doing something to reduce the fire threat might oppose the necessary scale of logging or prescribed burning.

Prioritizing these values is difficult, if not impossible. The social values threatened by wildfire are interconnected, giving value to each other. Although wildfire mitigation programs attempt to encompass several values, there are often tradeoffs. Engaging citizens and communities in active, ongoing dialogue is essential when it comes to tradeoffs, because managers and the public then know each other's position and can work towards sustainable improvements and outcomes.

## Understanding Communities

Wildfire mitigation is most successful at the community level because mitigation must be sustained across ownership boundaries. If wildland fire management is about addressing a wildfire before, during, and after the event, then managers must understand several things about communities:

- **Communities are dynamic.** A community is a long-running story, and a fire is just one event in that story. Understanding the story will help wildland fire managers understand how communities function, how they respond to fire events, and what mitigation measures might best succeed.
- **Communities are diverse.** It is important to understand the cultural connections people have with the land. For example, expe-



*The Encebado Fire approaches Taos Pueblo in New Mexico as tribal members watch. Particularly where communities are threatened by wildland fire, the social dimensions of fire management are critical. Photo: Ignacio Peralta, Carson National Forest, Taos, NM, 2003.*

riences with fire and land management stretch back countless generations in American Indian communities and in Hispanic communities in the Southwestern United States. Listening to community histories and then honoring and respecting longstanding ways of knowing are essential to building effective partnerships with any community.

- **Communities have different capacities for self-governance and action.** Some communities have enough skilled people, organizations, finances, and physical infrastructure to organize around, prepare for, and respond to a wildfire. Others do not. Communities vary in the type and amount of assistance needed to cope with fire. One size does not fit all.
- **Communities have various mechanisms for innovation and**

**for adopting and diffusing solutions.** Wildfire mitigation is more successful in communities with innovative, risk-taking leaders who are willing to try something new, adapt it to their particular circumstances, and spread the message to others. Utilizing these leaders and their networks is important for wildland fire managers. For communities without them, more intensive and innovative outreach, training, and demonstration projects might be necessary.

- **Communities have unique social and political dynamics.** Communities have formal leaders—those elected to serve in public office—as well as informal leaders, such as ministers, newspaper editors, long-time residents, prominent business people, educators, and public-interest activists. Some informal lead-

---

## Engaging citizens and communities in active, ongoing dialogue is essential to successful wildfire mitigation.

---

ers have more influence on a community's politics than the formal elected leaders. Moreover, rumors, perceptions, and information circulate through various networks—mass media, organizational meetings and newsletters, Internet chat groups, coffee-shop discussions, and neighbor-to-neighbor conversations. Finally, although several organizations can operate within a community, some have stronger ties and are more respected than others.

Wildland fire managers must adapt their messages and practices to the community; they should not expect the community to adapt to them. It is not the community that gets involved in wildland fire management, but rather the wildland fire manager who gets involved with the community.

### Engaging Citizens

Fire management projects can falter if there is public opposition. How do wildland fire managers sustain public understanding, support, and participation? Several points are key:

- **People's attitudes do not always predict their behavior.** People favorably disposed to wildfire mitigation might not initiate mitigation activities, perhaps for lack of technical knowledge or financial means. Public education and financial assistance might help, but research shows that most people will not participate in mitigation efforts, even with sufficient funding and edu-

cation.

- **People perceive wildfire risk in a broader context.** People tend to worry more about their kids getting into a car accident or contracting an illness than about wildfire. When it comes to allocating personal investments of time, energy, and money, most people have many priorities ahead of wildfire.
- **Public information campaigns benefit from interpersonal communication.** Public information campaigns through mass media, mailings, or other approaches are an important first step in raising public awareness. However, the messenger is as important as the message, if not more so. Public persuasion campaigns are only effective if people trust the source. To build trust, managers must initiate one-on-one communication and public involvement programs.
- **People learn from their peers.** Research shows that communities adopt and diffuse technological information better through a neighbor-to-neighbor or peer-to-peer training approach. Cooperative extension has successfully used this approach for years by connecting people with people like them, not with outside experts. Peer relationships are also powerful motivators—when people see others doing certain things, it builds confidence.
- **Collaborative learning helps sustain productive relationships.** In a collaborative process, managers and citizens learn from each other, working together to reach solutions that are other-

wise unattainable. Collaborative learning is active and experiential, emphasizing hands-on analysis, fieldwork, and face-to-face communication to minimize misunderstanding, establish accountability, and build trust. In a collaborative process, managers are facilitators, technical advisors, and information providers rather than authority figures.

Engaging citizens and communities requires more than mere public information campaigns. To sustain wildfire mitigation efforts, managers must motivate people to take long-term actions. Raising awareness and facilitating mutual learning are necessary for sustaining motivation and action.

### Institutional Issues

Many institutional issues affect how wildland fire managers engage the public. Being aware of the issues helps managers identify potential barriers and focus on progress. Institutional issues include:

- **Organizational culture.** Wildland fire management programs often have a hierarchical organizational structure composed of technical experts. Although these programs effectively address the technical side of fire management, they are not always user-friendly from the public's perspective. It is important for technically trained professionals in these programs to encourage public involvement and accountability, regardless of perceived delays.
- **Organizational capacity.** Attention to community assistance and collaborative planning in wildland fire management is a recent phenomenon. Although land management agencies such

---

It is not the community that gets involved in wildland fire management; it is the wildland fire manager who gets involved in the community.

---

as the USDA Forest Service have a long history of seeking public input, the responsibility to do so is assigned to only a few—typically, public affairs officers, district rangers, and interdisciplinary planning teams. Many technical staffs in public resource agencies lack the training and experience necessary to address public concerns.

- **Agency specialization.** Federal, State, and local agencies vary in their roles and responsibilities in wildfire mitigation. During a wildland fire, citizens eager for information are often frustrated because they do not know who to go to for updates. When a new group of specialists arrive for postfire recovery, the level of frustration and confusion can increase. Local fire officials might also experience a degree of frustration with their assigned responsibilities.
- **Interagency and intergovernmental relations.** These relationships are affected by agency culture, budgets, and legal authorities. A memorandum of understanding formalizes relationships but does not always lead to cooperation and coordinated actions. Although the National Fire Plan improved such relationships, an analysis by the National Association of Public Administration suggests that

more work is needed (Fairbanks and others 2002).

- **Laws, policies, and administrative rules.** Myriad mandates and procedures can slow down implementation of wildfire mitigation strategies on Federal lands. Studies by the General Accounting Office and researchers at Northern Arizona University suggest that administrative appeals and litigation might not have as large an overall effect on fuels treatments as sometimes claimed (GAO 2003; Cortner and others 2003), but appeals and litigation have in some cases resulted in smaller projects than planned, with adverse consequences (see, for example, Keller 2004). The ongoing debates about multiple mandates contribute to the politicization of wildland fire.

Asking critical questions about the institutional dimensions of wildland fire management can challenge conventional wisdom and the historical way of doing things. The ultimate purpose of institutional analysis is to improve how institutions are able to address a problem as complex, controversial, and dynamic as wildland fire. It is important for wildland fire managers to engage in dialogue about institutional issues to ensure sustainable outcomes.

---

## Social Dimensions Are Critical

The growing publicity surrounding wildfire mitigation has better engaged citizens and communities in planning and implementing fuels treatments. Budgets, interagency coordination, and public awareness have all increased. However, the complexity and controversy associated with wildfire mitigation still put many wildland fire managers in challenging social situations.

It is just as crucial for wildland fire managers to understand the social dimensions of wildland fire as to understand fire regimes and fire behavior. How a wildland fire manager addresses the social side of wildland fire will determine the sustainability of future wildfire mitigation programs.

## References

- Cortner, H.J.; Teich, G.M.R.; Vaughn, J. 2003. Analyzing USDA Forest Service appeals: Phase 1, the database. Website <<http://www.eri.nau.edu/forms/files/FS-appeals-database-web.pdf>>. Flagstaff, AZ: Ecological Restoration Institute.
- Fairbanks, F.; Hill, E.; Kelly, P.; Laverty, L.; Mulrooney, K.F.; Philpot, C.; Wise, C. 2002. Wildfire suppression: Strategies for containing costs. A report by a panel of the National Academy of Public Administration for the U.S. Congress and the U.S. Departments of Agriculture and the Interior. Washington, DC: National Academy of Public Administration.
- GAO (General Accounting Office). 2003. Information on appeals and litigation involving fuel reduction activities. GAO-04-52. Website <<http://www.gao.gov/new.items/d0452.pdf>>. Washington, DC: GAO.
- Keller, P. 2004. What comes from doing nothing? *Fire Management Today*. 64(4): 9. ■