

---

# COMMUNITY WILDFIRE PLANNING as a Tool to Enhance Trust: *Case Studies from Western Montana*

---

BY PAUL R. LACHAPELLE AND STEPHEN F. MCCOOL

**G**rowing accumulations of fuel, changing climates, and residential development in forested landscapes have accelerated the risk of wildland fire, particularly in the fire-adapted landscapes of the western United States. The magnifying level of risk from fire in the urban-wildland interface requires communities to work together with fire suppression agencies to coordinate fuel management, fire suppression, and community protection activities (McCool et al., 2006). For many communities in the American West, the preparation of Community Wildfire Protection Plans (CWPP), authorized and encouraged through the Healthy Forests Restoration Act (HFRA) of 2003, has become an important mechanism to address wildland fire risk. The act requires the CWPP to be developed through a coordinated, collaborative process that engages a diverse constituency comprised of federal, state and local fire suppression agencies, local community land use planning and emergency agencies, elected officials, and residents of the affected area.

While the CWPPs are defined by statute as “recommendations” for officials to “consider,”<sup>1</sup> the community collaboration language in the law is, at least tacitly, an attempt to address what has in the past been an environment characterized by “analysis paralysis” (Kemmis 2004, p. 112), and to increase trust, interdependence, and to reach consensus on actions to reduce risk. In this study, we briefly summarize our research exploring the key role trust plays in preparation of a CWPP.

#### **Trust in Context of Wildland Fire**

In an era of increased contentiousness, the presence or absence of trust can determine whether residents and agency officials can effectively deliberate on and agree to natural resource management plans. There is general agreement that trust is a foundational element of social relationships (Möllering 2006; Rousseau et al., 1998) and as Schusler et al. (2003, p. 317) argue, such “collaborative relationships require trust.” Trust develops from repeated interactions involving reciprocity, cycles of reliable exchange, and fulfillment

---

<sup>1</sup>HFRA, Sec. 103 (b) (1) states, “The Secretary shall consider recommendations under subsection (a) that are made by at-risk communities that have developed community wildfire protection plans.”

of expectations thereby allowing each party to act in confidence and with faith in the integrity, capacity or character of individuals, groups or organizations. Consequently, the quality and scale of trust can impede or promote the potential for a collaborative planning process and outcome (Lachapelle and McCool, 2007).

There has been a recent proliferation of studies identifying the significance of trust to wildland fire planning and management (Bright et al., 2007; Liljeblad et al., 2009; Paveglio et al., 2009; Vaske et al., 2007). Several case studies have found trust to be a strong predictor of respondents' approval of government agencies decisions about the use of various treatments, such as prescribed burning and mechanical fuel reduction (Vogt et al., 2005; Winter et al., 2004). Shindler and Toman (2003) identified waning trust levels in the US Forest Service implementation of responsible and effective fuel reductions programs. Trust has also been related to competence in terms of how an agency implements hazardous fuel reduction treatments (Vogt et al., 2005). In short, trust is increasingly reported to be a critical component of a wildland fire planning process that would ensure broad social and political acceptability, avoid costly litigation, and promote cooperative behavior in the future.

### Case Study Background and Methods

In this study, we explore the role of trust in the Community Wildfire Protection Planning process using case studies in the Bitterroot and Seeley-Swan valleys in West Central Montana (Lachapelle and McCool, 2012). Our case studies exhibit different characteristics, particularly in terms of population, total area, and land ownership. The planning process in the Bitterroot valley occurred in the winter of 2002-2003 and in the Seeley-Swan occurred in 2003-2004. Table 1 shows key demographic and geographic characteristics of the two case studies.

We selected and interviewed 50 respondents with diverse interests, backgrounds, and experiences associated with the CWPP to comment on the factors that impede or promote trust in the process and outcome of wildland fire planning in their communities. Respondents were encouraged to discuss trust related to all aspects of the process and outcome of the CWPP. Trust in this case was defined as trust in the agency, trust in the individual(s) involved in the plan, and trust in the planning process itself. Interviews were recorded and transcribed verbatim amounting to over 1,000 pages of interview data. An iterative review of transcript data allowed major categories to emerge based on specific perspectives, descriptions,

TABLE 1. KEY CHARACTERISTICS OF BITTERROOT AND SEELEY-SWAN CWPP

| Characteristic                                   | Bitterroot               | Seeley-Swan <sup>i</sup> |
|--|--------------------------|--------------------------|
| Population (permanent)                           | 36,070 <sup>ii</sup>     | 2,460                    |
| Population (seasonal)                            | unavailable              | 2,032                    |
| Area of CWPP (acres)                             | 1,534,712 <sup>iii</sup> | 568,000                  |
| Area high risk (acres)                           | 150,387                  | 30,795                   |
| Area high risk (%)                               | 9.8                      | 5.4                      |
| Area private, non-industrial land ownership (%)  | 23.9                     | 7.6                      |
| Area Plum Creek lumber company <sup>iv</sup> (%) | 0.5                      | 30.6                     |
| Area federal land ownership (%)                  | 72.9                     | 53.9                     |
| Area state land ownership (%)                    | 2.5                      | 6.4                      |
| Area misc. land ownership (%)                    | 0.3                      | 1.5                      |

<sup>i</sup>All figures taken from Seeley-Swan Fire Plan (2008)

<sup>ii</sup>Figures taken from US Census Bureau (2000), [www.census.gov](http://www.census.gov)

<sup>iii</sup>Montana Natural Resource Information System (2011)

<sup>iv</sup>The Plum Creek Lumber Company recently formed a real estate investment trust but still owns and manages a significant amount of this land.



and meanings emphasized by respondents in the text. The ultimate goal of the data analysis was to define and understand distinct themes and patterns across individuals.

### **Trust as a Critical Element of Wildfire Planning**

Four principal themes emerged: 1) transparency, 2) leadership, 3) framing of risk assessments, and 4) spatial scale. These themes map out the various dimensions of trust in these case studies but their relative importance was not measured.

#### **Transparency**

Transparency was described by respondents relating to a host of forest-related planning efforts, both past and present. In the Bitterroot case study, the lack of transparency was described as impeding trust in the Forest Service to organize the current CWPP. Several landowners and members of environmental organizations in the Bitterroot alleged the Forest Service had concealed information from past unrelated planning efforts as well as the current CWPP process. In contrast, the planning process was described by respondents associated with the Seeley-Swan CWPP as an effort where information could be freely and honestly accessed, distributed, and discussed. Trust was described to have been enhanced in the past through proactive invitations to meet and share information and this in turn positively influenced the current plan.

#### **Leadership**

The type and quality of leadership was a characteristic identified as critical toward influencing trust. Leadership in the Forest Service in the Bitterroot process was criticized because of previous management decisions including salvage logging sales, forest travel plans, and general forest planning efforts. This example and others described by respondents led many individuals to mistrust the current CWPP process and either not participate or be highly suspect in the planning effort as a result. Respondents in the Seeley-Swan described the sound leadership qualities and resulting positive interactions in the community by officials with the Forest Service and local rural fire departments. Specific individuals in the Forest Service were singled out as providing exemplary leadership, in part due to their proactive role on the local School and Chamber Boards. The leaders were described as proactive, responsive, visionary, and communicative, leading to an ability to build consensus in the wildland fire planning process.

#### **Framing of Risk Assessments**

Respondents in the Bitterroot had mixed views on

the Forest Service's framing of wildland fire risk and the necessary actions to mitigate danger both for homes in the Wildland Urban Interface (WUI) and in more remote forested locations. Many respondents thought the Forest Service risk assessment and related proposal to thin vegetation many miles from the WUI border was misplaced and actions were only being put forward to increase revenue from logging. Many felt the risk assessment of 'catastrophic' fire was exaggerated by the agency in order to exploit fear and "get out the cut." In the Seeley-Swan, many residents agreed there was a great fire risk from dense vegetation throughout the valley, particularly near the populated areas, and the limited options for emergency evacuation in the event of a large-scale fire. Since many residents agreed on framing the type and extent of risk in the Seeley-Swan Valley, there was concurrent agreement on details in the CWPP regarding the type and scale of hazardous fuel reduction treatments.

#### **Spatial Scale**

The geographic scale (1,534,712 acres in Bitterroot versus 568,000 acres in Seeley-Swan) of the wildland fire plan seemed to be a critical factor in respondents' ability to hold trust and collaborate. Many respondents in the Bitterroot Valley described the area as too large geographically and too different culturally for any plan to unite the entire population. The sense of a single community at the foundation of CWPP did not exist for these respondents. For these respondents, the large area tended to discourage significant relationship-building and ensuing trust and, instead many felt frustrated by meetings that tended to focus on the entire planning area, and not their particular drainage or neighborhood. The comparatively smaller area of the Seeley-Swan area was discussed as more conducive to successful community planning. Many respondents felt that the smaller planning area of this CWPP meant that individuals already knew each other well and had established strong relationships as a result of participation in prior planning and social events.

#### **Implications and Conclusions**

As our respondents indicated, the outcome in these communities is mixed with a number of specific factors influencing the quality of trust in both case studies; in particular, transparency, leadership, framing of risk assessments, and the scale of the plan. The case studies appear to build upon or be affected by historical precedents that influenced the current ability to have trust in the process. Our results suggest the CWPP may not by itself build trust but may serve to intensify its current manifestations. While our research identified





PICTURED: BITTERROOT MOUNTAINS MONTANA. ISTOCKPHOTO.COM.

four principal factors, it did not assess their relative importance, a gap that could be filled with future assessment.

In addition, our results suggest that CWPP will be most effective when the following conditions occur:

1. An existing foundation of trust exists. CWPP occurs within a larger social-ecological context that must be accounted for since planning processes like these cannot be taken as an isolated natural resource planning event.
2. Planning occurs at scales conducive to community participation and engagement. The results suggest that planning tackles geographical sized areas that people can understand and to which they can relate.
3. Participants acknowledge previous controversy related to local natural resource issues including issues of information sharing, transparency, and effective leadership. Acknowledging prior conflict as well as previous successes helps participants see how the present process can be strengthened.
4. Planning addresses regional issues and zoning holistically. Piecemeal and event-oriented planning (see Senge 1990) has typified many natural resource decision-making contexts. CWPP exists within a larger context of social-ecological processes.

5. Proposed actions involve a diversity of fuel reduction, treatment, training, and preparedness strategies. Correspondingly, risk management requires a variety of actions involving different jurisdictions, fire management and suppression agencies, as well as community organizations and individuals. A process that allows for and encourages multiple perspectives including social, political, and technical framing of risk will serve to increase trust in both process and outcome.

The implications of this research illustrate the significance of trust as a critical condition necessary to address complex landscape-scale issues, particularly those functioning across multiple political jurisdictions. Because the Community Wildfire Protection Plan process is collaborative by law and by necessity, trust in one's neighbors, civil servants, fire-fighters, and emergency services underlies and characterizes the relationships fundamental to working together. Planners, officials, and residents would do well to consider the promotion of trust as a fundamental objective of public engagement in similar efforts, where citizens become integral to the design and implementation of planning processes. 🙏