APPENDIX L

INCORPORATING THE SOCIAL DIMENSION INTO PROJECT LEVEL FIRE AND FUELS MANAGEMENT PLANNING

A DRAFT PROTOCOL FOR FIRE MANAGERS

Steven E. Daniels
Western Rural Development Center
Utah State University

Patti A. Rodgers
USDA-Forest Service
Willamette National Forest

Matthew S. Carroll
Dept. of Natural Resource Sciences
Washington State University

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INTRODUCTION

One lesson from the past 25 years of controversy over public land management has been that the social and political dimensions of decisions are as important as the biological and physical dimensions. The values that people place on the natural environment shape the acceptability of management practices. But, despite the growing recognition of the importance of including the social dimension into our land management decisions, forestland managers are still without the tools needed to do so. Surveys of agency personnel continue to reveal that their training is far more extensive in the biophysical realm than in the social. Their core competency is in the natural sciences, and therefore it is not entirely surprising when their greatest vulnerability is in the social arena.

The purpose of this protocol is to provide basic guidance for incorporating social dimensions into project-level fire and fuels management planning. The intended audience for this protocol is forest or district level personnel who are part of inter-disciplinary teams charged with designing and implementing specific fire/fuels management activities. Much of this protocol is based on the recognition that on-the-ground fire personnel will often lack either the training in social science or the data needed to generate a situation-specific strategy for incorporating the social dimension into project-level fire and fuels management plans. It is possible that the specialists who conducted the social component of the landscape-level fire strategy will be your first line of partners in conducting supplemental data gathering or public involvement activities.

PRINCIPALS FOR FIRE MANAGERS TO CONSIDER

Because of the wide variety of landscapes and fire situations that land managers face, it is impossible to prescribe for fire managers specific things that they must do in order to incorporate the human dimension into their planning. In light of that, this protocol is organized through a series of principals or considerations that project level fire planners are ***advised*** to consider as they undertake their efforts.

Principal 1

The perceptions of fire held by professional fire managers differ considerably from the perceptions of fire held by the general public.

Professional fire managers often lose sight of how much emotion fire evoke in most people. Indeed, fire managers are trained to approach fire in an intellectual/cognitive manner. That clinical detachment allows them to make sound judgments in stressful situations. The general public does not have that detachment, in fact, fire is referred to among psychologists one of the four fundamental fears (the others being water, darkness, and snakes.) But in the minds of a significant portion of the public, fire is a dangerous and unpredictable menace, and the less they have to deal with it, the better.

This asymmetry in reactions to fire can lead to significant communication breakdowns between fire professionals and the general public. Fire professionals are interested in the attributes of the fire/fuels situation that allow them to make sound decisions. While members of the public are also interested in sound decisions, they also need to have their concerns validated. Only after they are able to address their anxieties are they willing to engage the intellectual tasks at hand.

One of the most important messages that fire/fuels managers should communicate is that they are taking this situation very seriously, that they are very concerned about the lives and property of others, and that they will do everything in their power to minimize the risks from wildfire. That is a far different message than the traditional "Smokey Bear" message that wildfire can be prevented, and for some people it will be a less satisfying one.

The key is that if fire/fuels managers cannot acknowledge the legitimacy of the emotional component of the public's reaction to fire, they will have a harder time getting the public to accept the intellectual aspects of modern fire and fuels management.

Principal 2

A fire management strategy requires more trust in the agency than does a fire exclusion strategy.

Fire exclusion was the norm for forest management in the first 75 years of the century. It was also a very simple concept to communicate: when fire occurs, we will aggressively put it out. This message was very compelling because it was simple and made an implicit promise of safety and emotional comfort. It asked the public to trust the professional fire fighter, and that trust was honored and maintained throughout the years.

The change in our understanding of the natural role of fire in forest ecosystems has ended the era of fire exclusion. A strategy of managing fire as part of a natural disturbance-based ecosystem is a far more complicated message to communicate. The categorically clear and decisive "put out all fires" message is no longer adequate. But by the same token, asking the public to accept a role for fire on the landscape requires that they have more trust in the managers. They must believe that the managers are making the right decisions about allowing fires to burn and must have faith in their ability to put them out when appropriate. This new level of trust must be earned, just as the trust in agencies' ability to extinguish fire needed to be earned.

While some of that trust can be earned on the basis of the fire/fuel managers' technical abilities, it will also hinge on their ability to connect with the affected public and their very legitimate concerns and fears regard fire and fuels management.

Principal 3

There is considerable variation in attitudes toward fire and fire management in the general population and those attitudes are associated with people's fundamental views of nature.

A number of survey-based studies have identified considerable variation in attitudes toward fire/fuels management. As seems to be typical throughout natural resource management, attitudes range from complete opposition to enthusiastic support.

Other research has linked the differences in attitudes toward fire/fuels management to variation in people's underlying views of nature and the degree to which it can be controlled by human actions. If the underlying belief is that nature is both predictable and manageable, then fire and fuels management is an acceptable practice. If the underlying belief is that nature is too complex to be reliably managed, then fire and fuels management is likely to be seen as less acceptable. These fundamental beliefs about how nature functions have been shown to be deep-seated, and resistant to change. As a result, attitudes toward the acceptability of different fire/fuels treatments are also likely to be fairly strongly held. Assuming that you can somehow convince people that their views are somehow "wrong" is therefore problematic.

Principal 4

Develop multi-landowner and multi-agency partnership when they can enhance the effectiveness of fire/fuels management and reduce the risks.

There is a huge push toward collaborative management in public land management, and for good reason. There is a growing body of evidence that it is possible to accomplish more, do it more efficiently, and with a higher level of public support when collaborative approaches are employed. But the potential that collaboration brings is not a guarantee that collaborative approaches are preferable in all cases. Like any other decision making approach, collaboration should be used when it is a good fit to the situation at hand.

There is much about fire and fuels management that lends itself to a collaborative approach. A significant portion of the public lands are intermingled either with private lands or lands that other agencies manage. This implies that the behavior of any one land manager is likely to affect others. It also means that landscape-level fuel strategies will need to be multi-landowner efforts. In addition, large projects can require more expertise, equipment, or personnel that any one agency or landowner commands. The ability to work in partnership to achieve joint goals should be a priority.

There is a long tradition of collaborative efforts in suppression and management of fire and fuels. This tradition can be continued and expanded. The benefits from such efforts run the gamut from reduced cost, to increased safety, to improved on-the-ground results, to an increased level of trust in the land management agencies.

Principal 5

Air quality may be a significant constraint on the amount and manner of fuel treatment that can be undertaken.

Healthy air is a key indicator of quality of life. Smoke generated by burning, whether prescribed or wildland fire, can be seen, can be smelled and can be trapped by an inversion, causing a variety of unpleasant, unhealthy and sometimes unsafe conditions. It can also travel miles from the site of origin to become a problem for populations far removed from the source.

Typically, large wildfires burn more forest fuels; burn longer and the large volume of smoke produced will drift wherever topography and climatic conditions take it. Prescribed fires, limited in size and duration, burn under conditions that limit the amount of smoke produced and the direction of drift to the greatest extent humanly possible.

Since regulations to protect air quality were promulgated in the mid-80s, the amount of air pollution attributed to fires has been greatly reduced. The Clean Air Act, Oregon Smoke Management Plan and Oregon Visibility State Implementation Plan place limits on when, how and under what conditions prescribed fires may occur.

However, prescribed fire is still viewed suspiciously by much of the public. Awareness of prescribed fire usually follows those operations that have exceeded the prescription, causing unintended consequences such as smoke pollution (Martin, 1997).

Current National Wildland Fire Policy and congressional support for an increased program of prescribed fire on federal lands could greatly increase the level of smoke and, consequently, public concerns over air quality. However, by using prescribed fire to reduce the probability of wildfire, impacts over the long-term will be reduced.

Public support is attainable if prescribed fire is used to reduce the risk of catastrophic wildfire, or to manage ecological conditions by simulating historic fire regimes (Zwolinksi, *et.al.*1983; Gardner, *et.al.* 1985; Taylor and Daniel 1985). However, public support is less likely if people perceive a potential health or visibility problem (Shelby and Speaker, 1990).

It will be crucial to work with potentially affected parties to gain an understanding of the short-term impacts of prescribed burning and how they relate to the long-term objective of wildfire hazard reduction.

Principal 6

All public involvement activities should conform to the following core values to the degree practicable:

1. People should have a say in decisions about actions that affect their lives.
2. Public participation includes the promise that the public's contribution will influence the decision.
3. The public participation process communicates the interests and meets the process needs of all participants.

4. The public participation process seeks out and facilitates the involvement of those potentially affected.
5. The public participation process involves participants in defining how they participate.
6. The public participation process communicates to participants how their input was, or was not, used.
7. The public participation process provides participants with the information they need to participate in a meaningful way

These core values were drawn from a survey of participation practitioners by the International Association of Public Participation (see www.pin.org). In short, they require that public participation be meaningful, respectful, and efficient.

Principal 7

All public involvement activities must involve significant decision space and the bounds of that decision space must be clearly and consistently communicated to the participants.

Decision space refers to the amount of latitude the decision makers have in their decisions. One of the recurring criticisms of NEPA-based public participation is that it occurs when the decision has largely been made, even though alternatives are presented in a document that is entitled "Draft." Such 'done deal' public participation has been shown to be extremely frustrating to people who become involved in the process because they regard it as a disingenuous waste of their time and effort.

Fire managers should involve the public when there is meaningful opportunity for their input to be reflected in the final outcome. In addition the bounds of the decision space—what is possible, or legal, or safe, etc.—should be clearly and consistently communicated.

OPERATING RULES

There is also a set of operating rules that fire managers should bear in mind. These are derived from the principles discussed above.

Operating Rule 1

An escaped fire that begins as a fuels management treatment will have devastating impacts on local perceptions of agency competence.

Operating Rule 2

Projects that occur after a large or devastating fire need to address the impact that the fire has had on local trust in agency personnel and their competence.

Operating Rule 3

Fuels managers should use innovative techniques to communicate the purpose of fire management strategies if the treatments they are considering have negative aesthetic impacts.

Operating Rule 4

Fuels management strategies should be framed in terms of the risks of this activity versus the risks of inactivity.

Operating Rule 5

Public involvement activities relating to fire and fuels management should use innovative technologies to portray the visual impacts of fuels management as accurately and as richly as possible.

Operating Rule 6

Air quality should be assumed to be an important constraint on the timing and amount of burning unless it is convincingly shown not to be.

Operating Rule 7

Develop fire and fuels strategies to protect values that are important to the public, even if you do not share those values.

Operating Rule 8

Communication with the public should be clear, consistent, and continual. Minimize the use of jargon and acronyms.

Operating Rule 9

Understand the *social* fire history of the area, and the ways in which past fires may be shaping current attitudes.

Appendix L: Attachment

LESSONS FROM THE WENATCHEE SOCIAL ASSESSMENT

On July 24, 1994 a lightning storm swept through the eastern slope of the Cascade Mountains in Washington State setting off a series of wildfires that would in two days be augmented by a human-caused fire resulting in one of the most dramatic fire events the Wenatchee National Forest has experienced since its inception. The resulting Tyee Creek, Hatchery Creek, Rat Creek and Round Mountain Fires burned 181,000 acres and destroyed 37 homes. The suppression efforts involved more than 9,600 fire fighters and more than $69 million was spent fighting the fire. For a three-week period, local residents' day-to-day lives revolved around hourly fire reports and suppression tactics.

In the wake of the fires, the Wenatchee National Forest was faced with the formidable task of developing a fire recovery effort that was both short term and long term. In the short run, the threat of flooding and mudslides and decisions about salvaging burned timber had to be considered. In the longer term, landscape level land management decisions needed to be made in light of the lessons to be drawn from the fire itself and questions about long-term forest ecosystem health.

As part of a facilitated public involvement effort concerning these short and long-term issues, a social assessment was undertaken:

> To prepare facilitators for the situation they would encounter…a purposive social assessment was designed to explore reactions of local residents to wildfires on the WNF. Unlike typical social impact assessments, which often describe the material impacts (e.g. poverty, crime rates, community infrastructure) of an event on a community, this research concentrated on understanding the diversity of fundamental beliefs and values that local residents held about wildfire and forestry. Its particular emphasis investigated the general social structure and potential conflict dynamics surrounding fire recovery. (Carroll et al, 2000:3).

A complete description of the results of this assessment would require far more space than is available here. However there are some lessons to be drawn from this work that are relevant to our purposes in this document.

One lesson is that the Wenatchee fires were a social as well as a natural event. Local people's reactions to the fires was based partly on the magnitude and intensity of their individual personal experience with the fire, partly on their previously held values and beliefs concerning forest management and the environment and partly on the preexisting trust or lack thereof they held toward the primary land/fire management agency involved (in this case the Forest Service). While the rural communities affected by the fires might seem relatively homogeneous to the casual observer, the assessment uncovered striking differences in the above-described characteristics between the geographic communities involved and among groups within each community. It is easy to imagine that a similar fire in another geographic area could have

evoked a very different mix of the responses than those encountered on the Wenatchee.

Another lesson was that forest/fire managers were, in general, far better equipped to deal with the technical dimensions of the fire than with the social ones. Although there were some very notable exceptions to this, during the crisis itself, fire managers had difficulty in communicating with affected residents in terms of the kind of information the residents were most concerned about. In part, this was the result of a very human tendency for people to desire more predictability than exists in a natural disaster situation. However, it is also partly due to the technical background of most resource managers. Resource professionals are taught to see fire in its technical dimensions. Thus what they talk about in detached scientific/technical terms is of significant immediate and emotional significance to local residents. This creates a significant communications gap in times of crisis. Managers talked of fire dynamics, fuel loadings and acres burned while many locals wanted to know when they could safely return to their homes and whether their favorite places would ever look the same again.

Another tendency the assessment pointed to was that of people most directly and emotionally affected by the fire to be most likely to feel a need to blame human failings rather than natural processes for their anxiety and/or their misery. Thus in simple terms, it is easier to see fire as a result of nature when it is someone else's house or community that is threatened than is the case when it is one's own. There is a substantial technical literature in social psychology to explain this tendency. In practical terms it helps to explain why agencies with fire management responsibilities encounter so much recrimination when fires threaten structures and places that people value. Some ongoing research suggests that the tendency to blame agencies and other human entities may be related in part to prior involvement with the agency in question and prior education and knowledge about fire. What does appear clear is that those not positively involved or knowledgeable about agency efforts are among the more likely to blame agencies for fire related problems.