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Fuels Planning: Science Synthesis and Integration

Social Issues Fact Sheet: 19

Impacts of Wildland Fire on Communities



Rocky Mountain
Research Station



Pacific Northwest
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*Synthesizing
Scientific
Information
for Fire and Fuels
Project Managers*

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Life, Property, and Community

Large fires can result in a series of disasters for individuals and communities in the wildland-urban interface. They create significant disruptions to ongoing social processes, result in large financial losses, and lead to expensive restoration activities.

The effects of these disasters manifest in several ways. First and most obvious is the loss of life and property. Second, how people value their property and place within the community changes—some residents sell their properties, many are forced to rebuild, others relocate. All are resigned to accept a highly disturbed landscape for years to come. Third, the community at large is affected by lower property values and changes in priorities in how and where local resources are spent—for example, projects related to fire prevention and protection may be undertaken rather than other community projects. Finally, large-scale wildland fires provide a source of tension among community residents—those directly affected by the fire and those who escaped damage—and in the increasingly conflicted relationships between residents and the public agencies that manage much of the land on which fires occur.

It is important for fire managers to be aware of the varied impacts of wildland fire as they work in and with affected communities, and to remember that some of the impacts may not become evident until several months after a fire is suppressed.

The following activities can have serious impacts on communities and local residents during a wildland fire.

Communication

Residents will have different information needs at different times, requiring different means of communication and types of information.

Evacuation

Evacuation of residents and businesses threatened by wildland fire, and notification of possible evacuations, can be some of the most disruptive aspects of a fire for a community. The amount of time people have to prepare for evacuation is key. Also weighing on them is whether they will be able to accommodate pets and livestock.

Access Restrictions

Access restrictions rival evacuation in direct impacts on residents. These impacts may range from inconvenience to serious disruption of business activities and livelihoods.

Hiring and Spending

Hiring, renting equipment, and securing supplies, lodging and other goods and services can positively impact the local economy. Yet at the same time, vendors in the recreation industry or other seasonal businesses may see their businesses grind to a halt. Strategic purchasing and hiring can help minimize disruption and smooth the impacts of changes in economic activity.

Rest and Recreation

In their time off, firefighters and support personnel interact with local residents. How these temporary residents behave in public will leave an important and lasting impression on the community.

Post-fire activities can ease the transition for local residents or heighten tension within the community:

To Salvage or Not to Salvage

Burned trees may still be useable, and there is often pressure to recover some value through salvage. However, timber salvage proposals can be contentious and divisive, because some groups see them as an excuse to log in areas where they feel no logging should occur.



There is often pressure after a wildland fire to recover some value through salvage of standing timber (photo credit: V. Sturtevant).

Coordinating Activities of Helping Agencies

Although helping agencies may rush into a community to help local residents, there can be overlap, gaps, and lack of coordination among them. Involvement by helping agencies can be a positive experience for all involved if there is a plan that defines roles and specifies a means of communication among agencies.

Blaming

Research shows that residents affected by wildland fires may irrationally blame firefighters and officials for their losses, tending to make oversimplified judgments about the cause of damage. Victims may blame fire officials for events beyond their control or actions they did not take. However, in some situations it can be hard to distinguish between unfair blaming and legitimate differences of opinion.

Attention to Vulnerable Populations

Studies have found that elderly people appear to suffer disproportionately more stress, anxiety, and depression from a wildland fire than others. This appears to be related to the fear that burned landscapes will not likely recover in their lifetimes, and to what seems to be the overwhelming task of cleanup. Providing assistance to the elderly can help not only those individuals, but also their families and friends.

By being aware of the impacts of wildland fire on local residents, fire managers can bring added value to them and help smooth agency-community tensions.

Source

McCool, S. F., et al. 2007. Social science to improve fuels management: a synthesis of research on the impacts of wildland fires on communities. Gen. Tech. Rep. NC-269. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station.

Other Related Fact Sheets

Other Social Issues Fact Sheets cover in more detail some of the topics introduced here. See also *Developing Personal Responsibility for Fuels Reduction: Types of Information to Encourage Proactive Behavior*, Social Issues Fact Sheet 2 (RMRS RN-21-2-WWW); *Developing Personal Responsibility for Fuels Reduction: More Ways to Catch and Hold People's Attention*, Social Issues Fact Sheet 3 (RMRS RN-21-3-WWW); and *Three Critical Topics to Cover When Talking About Hazards*, Social Issues Fact Sheet 4 (RMRS RN-21-4-WWW). Online: http://www.fs.fed.us/rm/pubs/rmrs_rn021.html

Social Science Team Fact Sheets

Look for fact sheet topics from the Social Science Team including information on developing personal responsibility for fuels reduction, communicating fire hazard, topics for community fire plans, guidelines for community education, and the “golden rule” for communicating fire hazard to people.

Fuels Planning: Science Synthesis And Integration is an inter-agency research/management partnership to support the Ten-Year Fire Plan, led by Russell T. Graham, RMRS, and Sarah M. McCaffrey, NCRS.

Fuels Planning: Synthesis and Integration

This fact sheet is one in a series being produced as part of a larger project supported by the USDA Forest Service to synthesize new knowledge and information relevant to fire and fuels management. Fact sheets address topics related to stand structure, environmental impacts, economics, and human responses to these factors. Information in the fact sheets is targeted for the dry forests of the Inland West, but is often applicable across broad regions of the country. For more information, please visit our Web site at: www.fs.fed.us/fire/tech_transfer/synthesis/synthesis_index

The Fuels Planning fact sheets are based on preliminary findings. Information from fact sheets will be synthesized in an upcoming publication.