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## Fuels Planning: Science Synthesis and Integration

### Social Issues Fact Sheet: 6

# Important Considerations for Communicating About Hazards



Pacific Northwest  
Research Station



### Synthesizing Scientific Information for Fire and Fuels Project Managers

The information for this fact sheet was provided by Dr. Dennis Mileti and staff at the Natural Hazards Center in Boulder, Colorado.

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Fuels planning: Science synthesis and integration, an interagency research/management partnership to support the Ten-Year Fire Plan, led by Russell T. Graham, RMRS, and Sarah M. McCaffrey, NCRS.

One of the major challenges managers face in wildland fire and fuels management is explaining to homeowners and community members the degree of hazard they face. Most public hazard education and communication efforts seek to accomplish one of the following goals:

- Simply comply with a mandate to distribute public education materials
- Actually inform and educate people
- Alter people's opinion and behavior

Effective public education and communication campaigns have clear objectives, and use the right techniques to achieve these objectives. This is one of several fact sheets that address wildland fire hazard communication. Here we list important considerations for planning or implementing a hazard communication effort:

**1. Public Education and Warnings Should Not Be Confused.** Public hazard education involves communicating hazard information to the public independent of the occurrence of a specific hazardous event. Warnings communicate information about a specific disaster in the days, hours, or minutes prior to, during, or immediately after an occurrence.

**2. There Is a Known Psychology of Hazard Education.** Public hazard communication and education work best by creating uncertainty in the minds of people, causing them to wonder about their environment and their ability to manage it.

**3. Good Hazard Education Takes People Factors Into Account.** There is no such thing as "a public." Rather, the public is made up of different and diverse audiences. These *sub-publics* differ from each other in terms of their personal and social characteristics, which determine how likely they are to be influenced by public hazard education.

**4. Perceiving Risk Doesn't Mean Doing Something About It.** People do not always act in what we might think of as a rational manner. For example, a person living close to a hazardous site may understand the risk from the site but may not have taken action to enhance his or her safety.

**5. Probability Estimates Really Aren't That Important.** People do not think in probabilities. Typically, the human thought process



The Greater Laguna Coast FireSafe Council Red Flag Program alerts area residents and people traveling through the community when hazardous wildland fire conditions exist (photo credit: Greater Laguna Coast FireSafe Council).



Good public hazard education causes people to wonder about their environment and their ability to manage that environment (photo credit: Eric Toman).

about future events is binary: it will happen/it won't happen; it will affect me/it won't affect me. Information about a "65 percent probability" or an "80 percent chance" is just not very useful to the general public.

**6. People Like to Think It's Their Own Idea.** Public educators have learned through trial and error what parents of teenagers already know: people are generally not motivated by sermons on why they ought to do something or why they ought to accept the actions of others. People are more apt to follow what we or others have identified as an appropriate course of action if they work out a solution or come to a conclusion themselves, with helpful information from specialists.

**7. Effective Hazard Education is Ongoing—Not a Single Act.** Effective communication campaigns have three things going for them: (1) they raise questions (create uncertainty) in the minds of the audience, (2) they offer fairly simple answers, and (3) they have authorities available who can provide additional information and reinforce the message over time.

## 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: 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](http://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.*