



Communication Planning

NWCG Wildland Fire Education Working Team

Communications... media relations... public awareness... How do I get started? What do I want to achieve? Who am I trying to reach? What's the difference between a strategy and a tactic? How can I be sure my tactics will help me meet my objectives?

These are just some of the questions we ask ourselves when embarking on a communication venture. Communication plays an integral role in wildland fire management, and a clear plan can greatly enhance communication efforts – providing a road map to focus on the important issues and ensuring a consistent message and delivery to key audiences. There is no “right way” to develop a communication plan. Experienced communication professionals develop their own preferred method depending upon the need.

Best Practices: Communication Planning is a collection of planning concepts and examples from a variety of sources, including federal and state agencies as well as professional communications firms. This document is designed to help those responsible for wildland fire communications prepare effective communications plans that will support your wildland fire management programs. While the goal of your plan may be different in each situation, the principles of communication planning remain the same. This document addresses the following concepts:

- ❖ Situation Analysis
- ❖ Objectives
- ❖ Audiences
- ❖ Messages
- ❖ Strategies
- ❖ Tactics
- ❖ Timeline
- ❖ Evaluation
- ❖ Budget

Example plans are included in the appendix for your reference, with approval from the agencies that provided them. Additional materials and resources are available at:

<http://www.nwcg.gov/teams/wfewt/wfewt.htm>.

Situation Analysis

Before beginning development of your communication plan, take time out to consider the current situation that is driving the need for your communication initiative. In the situation analysis, record what you know about the current environment (social, economic, and related factors) in which you will be conducting outreach, and what you expect your goal to be.

Situation Analysis is often referred to as Background or Purpose Statement. Parts of this section may include Overview, Opportunities, Challenges, and/or Lessons Learned.

For example, if you're developing a plan to communicate with residents about a prescribed burn in their area, give an overview of the community and background on how residents might view the project. Has there been a large fire recently that caused heightened concern? Have residents been vocal about prescribed burns in the past? Are they educated about the need for a prescribed burn?



Objectives

The objectives outline exactly what you want your plan to accomplish by voicing the ultimate goals you are trying to reach. Objectives should be specific and measurable, as they can also help gauge the success of your outreach. For example, if one of your objectives is to increase awareness, consider a benchmark survey before you begin. This will aid in evaluation of how much awareness increased after the program.

Example objectives:

1. Increase community awareness about the long-term benefits of prescribed burns by 25 percent over a two-year period.
2. Generate support from community leaders, elected officials, and other influencers in fire management planning efforts.
3. Increase Web site traffic from 20,000 to 25,000 visitors per month by fiscal year end.

Audiences

Defining your audience is one of the most important elements of communication planning. Reaching your objectives may require that you reach several very different audiences. It is important that you address every group or organization that might be impacted by your plan so you can ensure your communications are appropriate for the audience. Be sure to consider both internal and external audiences, as well as the people who influence your audience.

Internal audience examples:

- ❖ Agency leadership and staff beyond fire management
- ❖ Fire management staff
- ❖ Partners & non-governmental organizations

You may be surprised that staff within your own agency may not understand fire management. To ensure consistent communication with external audiences, be sure to communicate with your internal audiences.

News media are not simply a vehicle for reaching your audience; they can be an audience in themselves. It is important to educate media on the issues surrounding fire management so they are able to provide context for their readers/ viewers/ listeners.

External audience examples:

- ❖ Residents and absentee landowners in the wildland/urban interface
- ❖ Visitors to public lands
- ❖ Educators
- ❖ Local, regional, state, tribal and national elected officials
- ❖ Journalists/news media

Messages

The cornerstone of any communication program is a set of consistent, compelling messages for use in all proactive and reactive communications. Messages should be actionable messages where appropriate so that, in addition to educating, they will motivate the audiences to act on what they have learned. You may be asking that audiences be informed and supportive of agencies' wildland fire efforts, or that they get involved in local activities.



Key messages are general concepts that agencies and organizations are encouraged to incorporate into their discussions, print materials, and other resources used in communication, education, information, and prevention efforts. Key messages are umbrella statements that require additional supporting points and examples for context.

Use local and regional examples to place messages into context for your audiences, connecting with them on a personal and emotional level.

Supporting points provide detail for the key messages and enable communicators to further explain the roles of: wildland fire in the ecosystem, land management agencies, tribes, and partners.

The National Wildfire Coordinating Group (NWCG) Wildland Fire Education Working Team has developed a set of core messages for agencies to use in communicating the role of wildland fire. These messages have been through an extensive interagency development and review process, and have been approved by the NWCG:

- ❖ Wildland fire is an essential, natural process.
- ❖ Society's influence has altered historic fire cycles, leading to a dangerous and difficult buildup of vegetation in our wildlands.
- ❖ Land management agencies are committed to a balanced fire program that will reduce risks and realize benefits of fire.
- ❖ Improving the health of the land and reducing risks to communities requires partnerships among federal and state agencies, tribal governments, fire departments, communities, and landowners.
- ❖ Public education is necessary to the success of fire management programs.

The complete messages, along with supporting points, are available online at: www.nwcg.gov/teams/wfewt/message/key_message.pdf.

Strategies

Strategies define the general path you are planning to take to reach your objectives. They help identify the roadmap to success, without getting into the specific directions. In the tactics section, you will get into the specifics of exactly how you are going to implement your strategies. Strategies should tie directly back to objectives.

Example strategies to support Objective 1 (on page two)
Increase Community Awareness might include:

- 1.A. Proactively communicate clear, consistent messages about the benefits and risks associated with prescribed burns through all communications.
- 1.B. Provide news media, community leaders, elected officials, and other influencers with the knowledge, tools, and motivation they need to communicate with their constituencies.
- 1.C. Facilitate grassroots support and peer-to-peer communication through targeted community outreach.

Remember: fire does not respect jurisdictional boundaries. Consider your neighboring agencies, tribes and related organizations and indicate where you will need to coordinate efforts - especially if your outreach could impact their goals.



Tactics

Tactics are the specific activities you will complete as you implement your plan. Each tactic should directly relate to your strategies and support your objectives. This section should be detailed and can be divided with different tactics for each audience. Be as creative as possible with tactics and consider your audiences and how they may be influenced.

Communications is more than sending press releases to the media. While media outreach is often important, you may also want to consider tactics such as advertising or direct outreach to communities, officials, businesses, and others.

Example tactics that support Strategy 1.B. (from page three) – *Provide Tools for Influencers:*

1.B.i. Community Leaders

- 1.B.i.a. Facilitate one-on-one meetings with local community leaders and/or elected officials and a member of the fire management team to educate officials about the prescribed burn.
- 1.B.i.b. Provide newsletter copy and encourage leaders/officials to include information on their Web sites and/or in constituent newsletters.
- 1.B.i.c. Provide talking points and encourage leaders/officials to communicate with the public during meetings and events.

1.B.ii. News Media

- 1.B.ii.a. Conduct briefings with news media to educate them about the prescribed burn and its benefits and risk. Provide background information and online resources.
- 1.B.ii.b. Invite local morning television talk shows and radio drive-time shows to conduct an on-air interview with a representative of the entity about the prescribed burn. Suggest the location of the planned burn to show viewers the need.
- 1.B.ii.c. When sufficient time has passed to begin to see noticeable effects from the prescribed burn, encourage media to do follow-up stories about the benefits.

Example tactics that support the above Strategy 1.C. – *Facilitate Grassroots Support:*

1.C.i. Collateral Materials

- 1.C.i.a. Develop a detailed brochure/flyer for homeowners and absentee landowners explaining exactly where and why a prescribed burn will occur. Provide background on the long-term benefit of the prescribed burn.
- 1.C.i.b. Develop “Tell-a-Friend” cards and supply four to five cards in each packet so users can share with family, friends, and colleagues. The front of each card will include the projected date, time, and location of the prescribed burn. The back of the card will include facts about the benefits this specific burn will have on the area, as well as tips for managing smoke impact and other potential adverse effects. The card also will direct readers to the Web site for more information.



1.C.ii. Community Outreach

- 1.C.ii.a.** Conduct presentations at homeowner association meetings. The fire management team will provide an overview of what will take place. Enlist a well-respected and well-informed homeowner who is supportive of the effort to speak from personal experience about the benefits of the planned burn.
- 1.C.ii.b.** Host a booth at community festivals to disseminate collateral materials.

Following is a sample list of general tactics and materials to consider as you develop your communications plan.

- ❖ Community workshops and/or presentations during meetings of resident associations, civic and social groups
- ❖ Meetings with community leaders and elected officials
- ❖ Online resources such as dedicated Web page, electronic newsletters, e-mail notification
- ❖ Editorial briefings, one-on-one media interviews
- ❖ Press conference (Limited use recommended, such as when you have hard news to report, or an award to present)
- ❖ Byline articles in magazines or news briefs for inclusion in community newsletters, church bulletins, Web sites, bill inserts and mailings by utilities, insurance, real estate, and other home-related industries
- ❖ Public service announcements
- ❖ Toll-free hotline
- ❖ Detailed press kits, including backgrounders, fact sheets, spokesperson profiles, photos/artwork
- ❖ B-roll video footage (*NOTE: Do not produce pre-packaged video news releases [VNR]. B-roll footage is more cost-efficient, and more likely to be used by news media.*)

Timeline

Timelines are a great tool to ensure the entire team stays on task and meets pre-determined deadlines. Include enough time to develop materials and allow time for the approval and printing processes. Assign a specific person who is responsible for each task.

Measurement/Evaluation

Establish a plan for measuring the success of your program. Refer back to your objectives to determine what evaluation tactics will be necessary. Also consult your agency's management team to help determine what is required. Think beyond a written report of activity to include specific outcomes of your efforts. For example, to measure performance that involves public recognition as in Objective 1, consider customer surveys, Web site hit counts, or focus groups.

Budget

Consult with your agency's management team to determine the resources you have available. You may be asked to develop your plan first and make recommendations on staff hours and out-of-pocket expenses. Be as detailed as possible, and prioritize your plan so you know where you can trim your activities if necessary.



Sample Plans

Attached are three sample plans representing various components of the concepts introduced for your reference. Their release has been approved by the contacts listed below. Remember – develop *your* plan based upon *your* specific needs.

- ❖ **Appendix A:** Fire Program Analysis System. For additional information, contact Venetia Gempler, FPA Communications Director via E-mail at: venetia_gempler@blm.gov .
- ❖ **Appendix B:** Smoke Communication Strategy - Yosemite National Park. For additional information, contact Deb Schweizer, Yosemite NP's Information Officer via E-mail at: debra_schweizer@nps.gov .
- ❖ **Appendix C:** Information Strategy: Winslow Incident, August 2003. For additional information, contact Jack deGolia, Public Affairs Officer, Beaverhead-Deerlodge National Forest and/or Bill Sweet, Region 8 Program Manager, Fire Prevention and Wildland-Urban Interface, at: jdegolia@fs.fed.us or wsweet@fs.fed.us , respectively.

Materials and Resources

Links to the following NWCG Wildland Fire Education Working Team materials and resources can be found online: <http://www.nwcg.gov/teams/wfewt/wfewt.htm>

Products, Publications, and Resources

- Best Practices: Communication Planning, released July – August 2005
- Brochure "Wildland Fire in the United States"
- "Did You Know?" Updates and Highlights from the Communicator's Guide to Wildland Fire, released May 2005
- Electronic Bibliography of Fire Resources
- Fire Messaging Materials, released April 2005
- Links to Wildland Fire Education Products
- Prevention-Education Teams
- Public Service Announcements (English and Spanish versions)
- Wildland Fire Key Messages – Interagency, released May 2004
 - Interagency announcement
 - Interagency Wildland Fire Key Messages
 - NWCG Transmittal Memo
 - NWCG Messaging Task Group Charter



Fire Program Analysis Communication Strategy

Version 2.3, May 31, 2005

Purpose

The purpose of this communication strategy is to facilitate consistent Fire Program Analysis (FPA) information and material distribution between USDA Forest Service, Bureau of Land Management, National Park Service, Fish & Wildlife Service and Bureau of Indian Affairs. The products developed will raise awareness of the project at various levels of land management to facilitate interagency implementation of the new analysis system. The communication strategy is a living document and will be updated as needed.

Background

Several fire analysis systems have been guiding planning efforts for decades; each meet specific agency missions. Designed individually, these systems do not promote interagency planning and budget development. A new system is needed to accommodate the interaction between wildland fire management agencies and to facilitate planning and understandable budget development.

National Guidance and Direction. The Federal Wildland Fire Policy developed in 1995 and reaffirmed in 2001, the 10-year Comprehensive Strategy, and the report titled “Developing an Interagency, Landscape-scale Fire Planning Analysis and Budget Tool”, recommends developing a common interagency budget analysis system for the federal wildland fire community. Congress and the Office of Management and Budget have provided specific direction and timelines to develop the FPA system.

Situation Analysis

FPA will provide federal land managers with a common interagency process and tools for fire management planning and budgeting to evaluate the effectiveness of alternative fire management strategies through time, to meet land management goals and objectives.

Implementing an interagency system at this scope and complexity will initiate significant management and cultural change within the five participating agencies. As a result, the system is being designed in two phases. Phase 1, the Preparedness Module (PM), addresses initial response which includes initial attack and wildland fire use. Phase 2 will build modules for large fire, extended response, prevention, fuels and rehabilitation. The final system will integrate both phases to meet the full spectrum of wildland fire planning and budgeting.

FPA-PM version 1.0 was released October 1, 2004. The system is being rolled out in stages as Fire Planning Units (FPUs) are trained. By February 2006, all FPUs should be running software developed for Phase 1. Phase 2 will be implemented as modules are completed. Full implementation and integration of the entire system is scheduled for 2008/2009.



Providing timely and accurate information is a significant and substantial workload. The project requires frequent, ongoing communication actions at multiple levels of federal, tribal, state, and local agencies. As issues emerge additional communication specialists may be brought in to assist in developing and implementing focused communication projects for specific FPA outreach. For example, FPA orientation and training for line officers and fire managers.

FPA Organization is divided into four components.

1. Steering Committee	An interagency fire management group that provides guidance and direction	
2. Project Management	Includes a Program Coordinator, Project Manager, and Senior Project Manager.	Other project personnel include a communications director and administrative staff.
3. Development Team (Includes Core Team and other team members as described)		
Core Team - Interagency application design and development team. Coordinates with subject matter experts, assists with training development, documentation and help desk.	Other team members who are responsible to develop the application in conjunction with the Core Team, i.e. Modeling Specialist, GIS Specialist, Large Fire Support, Fuels Management etc.	
4. Implementation Coordination Group (ICG)	Interagency team tasked with working closely with field personnel to implement the modules as they are developed. Develops and coordinates training, and assists with the help desk and documentation.	

Objectives

The FPA Communication Strategy principal objectives are to promote understanding, build support, and increase acceptance within agency staffs so they are prepared to implement the new analysis system and to ensure information is delivered to all audiences that realistically portray expectations and accurately reflect project status.

Specific objectives are:

- Increase interagency and stakeholder awareness of the FPA system concepts and capabilities to prepare for full implementation of: Phase 1 by February 2006, Phase 2 and an integrated system by 2008/2009.
- Keep executive leadership, line officers, and other stakeholders informed of issues and progress.
- Generate support from non-federal wildland fire management partners and other influencers in fire management planning and budget efforts.
- Deliver to the user community accurate, on-time, clarifying information and direction to help implementation, minimize confusion and increase user acceptance.
- Facilitate interagency and stakeholder input and involvement to assist in the successful development and deployment of the FPA system.



Audience

- Federal and partner agency personnel (wildland fire and natural resource personnel for participating federal, state, local, and Tribal agencies)
- Executive Branch and Congress
- Scientific/Research and Academic communities
- News distribution outlets (e.g. internal, technical, and wildland fire media)

Key Messages

Overview

- The purpose of the FPA system is to provide managers with a common interagency process for fire management planning and budget development to evaluate the effectiveness of different fire management strategies through time, to meet land management goals and objectives.
- The sponsoring agencies are:

USDA Forest Service	DOI Fish & Wildlife Service
DOI Bureau of Indian Affairs	DOI National Park Service
DOI Bureau of Land Management	National Association of State Foresters
- FPA will replace the current systems used by the five federal wildland fire management agencies.
- FPA will trigger changes in how we do business. These “fundamental changes” include:
 - Strategic interagency landscape scale analysis
 - Establishes interagency fire planning units (FPUs)
 - Accommodates shared wildland fire resources and program management staff
 - Uses interagency standards and assumptions for modeling
- Greater collaboration and cooperation between partners and the importance of partnerships will increase as planning and budgets reflect their interactions (Especially with tribes, states and local governments).
- The new FPA application will generate landscape scale, interagency analysis at the planning unit level.
- Outreach and wildland fire education is a component within the full spectrum of wildland fire management and will be incorporated into all FPA modules.
- Prototypes have been created from existing interagency collaborative groups to field test concepts and implementation of Phase 1 and 2.

Approach

- The FPA system will use optimization where possible, to determine the level of effectiveness associated with a range of budgets.
- Fire resource costs will be used as an input to the model.
- Many of the data elements in FPA will be based on the current fire management planning and budget systems and enhances current methods of inputting alternative staffing levels to determine associated budgets.



Budget

- The FPA analysis will support an interagency budget development and delivery.
- FPA will facilitate comparison of organizational effectiveness across planning units through an array of budget levels (National Cost Effectiveness Analysis). The comparison of outputs to objectives is an indicator of effectiveness.
- The project will re-engineer the business process so that all five federal agencies will use a common budget process, models, assumptions and displays.
- Budget alternatives will be developed and delivered across all the agencies using a common application. FPA will facilitate analysis of the preparedness budget across and between agencies.

Implementation

- To ensure a smooth conversion from current analysis systems to FPA, an interagency national transition strategy has been developed. It provides a framework to guide how Phase 1 and 2 will be implemented.
- Wildland fire management is a complex organization which requires careful consideration when shifting policy or programs. The total fire management workload and potential efficiencies cannot be fully identified until all the components of FPA's Phase 1 and 2 are completed and integrated.

FPA Phase 1, Initial Response Preparedness Module

- The Initial Response Preparedness Module is Phase 1 of FPA and addresses initial attack and wildland fire use.
 - Resource values are reflected as relative weights, not dollars (non-monetized analysis).
 - Uses optimization to maximize effectiveness.
 - Multi-unit analyses display tradeoffs between program objectives at different cost levels.
 - Four prototype areas for Phase 1 include: Central Oregon, Southern Sierra, Southern Mississippi, and Alaska

FPA Phase 2

- Phase 2 includes additional FPA modules that address extended response, large fire, fuels, rehabilitation, and prevention.
 - Prototypes for Phase 2 include Alaska, Central Oregon, Southern Sierra, Central Florida, and Color Country.



Tactics

Implementation of the FPA communication strategy will include an array of communications tools and actions to achieve specific objectives. These tactics will be itemized – along with a description, target audience, status and responsibility – in the following communications actions table. Communications tools and actions are not limited to the following:

Fire Program Analysis Communication Actions

Action Item	Description	Target Audience	Status	Responsibility
Communication Strategy	Update Comm. Strategy	All	06/01/05	-Comm. Director
Update Standard PowerPoint Template and General Presentation	Develop standard PowerPoint template and general presentation with common design elements for general use by FPA Team members.	All	Updated regularly	-Comm. Director -Proj. Management -Core/Development Team -ICG
Communication Strategy for line officer and manager training course	Develop a communication strategy that focuses on a specific audience and needs. Identify the best tactics, tools and timeline.	Line officers Fire managers	Ongoing	-Lead -Communication Detailer -Comm. Director
Executive PowerPoint Presentation and related training materials	Develop high-level PowerPoint Presentation with talking points, for Managers to use in other presentations to create a “ripple effect” in getting information out.	Executives and Managers interested in FPA	Ongoing	Lead -Communication Detailer -Comm. Director
Short DVD depicting origin of FPA	Develop script and work with videographer to coordinate all aspects of the DVD development	Line officers, Fire managers	Ongoing	Lead -Communication Detailer -Comm. Director
Key Messages	Develop key messages tiered toward target audiences	All	As needed	-Comm. Director
Briefing Materials, handouts & PowerPoint presentations	Develop briefing materials, handouts, and related presentations in sync with project timeline.	All	As needed	-Comm. Director -Proj. Management -Core Team -ICG
Posters and Display materials	Develop posters and display materials	All	Ongoing	-Comm. Director -Proj. Management -Core/Development Team -ICG
Website Redesign and Ongoing Updates	Redesign, update, and maintain the FPA informational website. (http://fpa.nifc.gov)	All	Ongoing	-Comm. Director -Proj. Management -Core/Development Team -ICG
Website Visibility	Publicize and seek opportunities to link FPA Website on stakeholder websites	National	Completed	-Comm. Director



Target Audience E-Mail List	Develop comprehensive e-mail list of target audiences, grouped by category as needed	All	Ongoing	-Comm. Director -Proj. Management -Core/Development Team -ICG
Web-Based E-Newsletter	Develop a Web-Based E-Newsletter Template for distribution of articles. Publication will include “as needed” and “special editions”	All	Ongoing	-Comm. Director -Proj. Management -Core/Development Team -ICG
Technical Newsletter	Publish a regular newsletter highlighting updating software issues and updates	Application Users	Ongoing	-Comm. Director -Core/Development Team -ICG
Feature Article Series	Define topics and write feature articles for distribution to sponsoring agencies, stakeholders and fire-related magazines and Websites.	All	As needed	Comm. Director (Lead)
Editorial Review of Principal Documents	As needed, provide editorial review of principal documents and information materials, including reports, status updates, briefing materials, White papers, etc.	Varies	Ongoing	-Comm. Director -Project Management -Core/Development Team -ICG
Tracking of Issues, Inquiries and Comments	Review and ensure consistent system for responding to issues, concerns, inquiries from both internal and external audiences	All	Ongoing	-Comm. Director -Project Management -Core/Development Team -ICG
Standardized Definitions, Language, Acronyms	Review and ensure consistent system for continuous capturing and publicizing of standard definitions, language and acronyms	All	Ongoing	-Comm. Director -Project Management -Core/Development Team -ICG
Prototype Experiences	Increase visibility of Prototype experiences through FPA Website, Web-based e-newsletter, meetings, etc.	All	Ongoing	-Comm. Director -Prototype Teams
Quarterly Reports	Draft quarterly status reports for Senior Project Manager	Congress & OMB	15 th of every quarter	-Comm. Director -Senior Project Manager
FOIA Requests	Consolidate and draft reply	Requester	Ongoing	-Comm. Director

For more Information visit: <http://fpa.nifc.gov>

(END APPENDIX A – FPA SAMPLE COMMUNICATION PLAN)



Smoke Communication Strategy

September 5, 2001

Purpose – To provide Yosemite National Park with a blueprint for how to manage future smoke events from prescribed fires, fire use projects, suppression actions, and fires occurring outside the park.

PART ONE: CASE STUDY – HOOVER COMPLEX

- A. Basic Incident Facts
- B. Comments and Questions During the Hoover Complex
- C. Lessons Learned

PART TWO: FUTURE STRATEGY

- A. Audiences
- B. Methods
- C. Smoke Talking Points
 - Year-round
 - Early Fire Season
 - Beginning of Incident
 - AQI Exceeds 50 for PM10
 - AQI Exceeds 100 for PM10
- D. Talking Points At-a-Glance
- E. Comments and Questions During Hoover Complex

Postscript for Best Practices: Communication Planning readers - this document was originally written by Jody Lyle, Fire Information and Education Specialist, Sequoia and Kings Canyon National Parks. For information about Sequoia's Public Information and Education efforts, see "Tool #6" found within their Fire Management Plan, located at: http://www.nps.gov/seki/fire/ffmp/pdf/seki_ffmp_fmp_v0504.pdf chapter 3 page 22-26. For information about Yosemite National Park's Fire Management Program, the web address is: <http://www.nps.gov/yose/planning/fire/pdf/> Or, contact Deb Schweizer, Yosemite's Fire Information Officer via E-mail at: debra_schweizer@nps.gov .



Part One

Case Study - Hoover Complex

The recommendations contained in this *Smoke Communication Strategy* are based on the experiences from the Hoover Complex of 2001.

BASIC INCIDENT FACTS

- The Hoover Fire began with a lightning strike on July 4, 2001. As of September 4, 2001, the fire is 7,883 acres. Four small fires (Cold Creek, Kuna, Lyell, and Clark) are part of the larger Hoover Complex and total an additional 100 acres (approximately).
- At the same time as the Hoover Complex, other large fires were burning in the region near Coulterville and Oakhurst which contributed to the smoke problem.
- The presence of smoke in Yosemite Valley, El Portal, and Tuolumne Meadows for 14+ days became a major concern during this incident, especially for park employees and residents.
- Since fires in the Illilouette drainage are particularly troublesome for smoke in Yosemite Valley, the Interagency Fire Use Management Team implemented a plan which included the construction of fire line on the northwest section of the fire to prevent spread into that drainage.

COMMENTS AND QUESTIONS DURING HOOVER COMPLEX

In general, the comments and questions can be categorized into six groups:

- immediate and long-term health concerns,
- the need for tips to reduce exposure,
- work schedule/administrative issues for employees,
- the desire for park management to show concern,
- impacts on recreational activities, and
- visibility.

LESSONS LEARNED FROM HOOVER COMPLEX

- The park needs to anticipate smoke events and distribute information before conditions deteriorate.
- Involvement from park managers is crucial to communicating smoke messages.
- Park supervisors need clear instructions about how to accommodate employees who are affected by smoke (alternative work schedules and locations, etc.).
- Park employees, unlike visitors, worry about the effects of long term exposure to smoke since they are not a transient population.
- Monitoring of air quality, particularly PM, is imperative and needs to begin early in the fire incident.
- Smoke management is complicated when there is more than one large fire in the area.
- While it is impossible to immediately extinguish a wildland fire when smoke exposure becomes a health risk, it is helpful for people to know that there are fire management techniques available that can reduce smoke in these situations (i.e. water drops, fire line construction).
- It is reassuring for people to know that park management cares about their welfare.
- Neighboring communities must be included when distributing smoke information.
- Most people understand and support the general concept of fire use; actions to promote understanding are still necessary during smoke events.



Part Two Future Strategy

The key to a successful strategy is targeting the right people (audiences) in the right ways (methods) with the right messages (talking points). During a fire incident, there are specific smoke messages that can be integrated into the general fire information effort.

AUDIENCES

- Superintendent, Assistant, and Deputy
- Division Chiefs
- All employees and their families
- Safety Committee Members
- Concessionaires and their employees
- Park Visitors
- Media
- Park Communities – Yosemite Valley, El Portal, Foresta, Wawona, Hodgdon, White Wolf, and Tuolumne Meadows.
- Neighboring Communities (including eastside) – Yosemite West, Fish Camp, Oakhurst, Mariposa, Midpines, Coulterville, Groveland, Sonora, Lee Vining, June Lake, Mammoth Lakes.
- County Health Departments and Air Districts for Mariposa, Tuolumne, Madera, and Mono

METHODS

During a Fire Incident

- Clearly outline the authority given to park supervisors to minimize smoke impacts to their employees. Employees can notify supervisors if they are having adverse impacts from smoke. Alternative work schedules and locations will be arranged where appropriate.
- Hold Open House/Town Meeting for employees and residents in smoke affected areas.
- Operate particulate monitors in affected areas. Be prepared to move or add monitors. Start monitoring early in the incident.
- Provide daily air quality information, which interprets the particulate monitor data.
- Set up a smoke hotline (phone) to handle smoke complaints.
- Leave flyers on employee doorsteps with tips to decrease exposure.
- Post on bulletin boards.
- Put information in the “Daily” (hard copies and email)
- Use the park webpage as a vehicle for dispersing daily air quality information.
- Give air quality conditions during the daily weather report on park radio.

Year-round Actions

- Incorporate air quality messages into year-round public outreach: interpretive programs, public meetings, press releases, etc.
- Offer special air quality seminars or trainings to help locals understand regional air issues.



SMOKE TALKING POINTS

In addition to general fire messages/information, the following talking points on smoke should be included in public information. Each talking point includes an example of language that might be used in updates, press releases, articles, presentations, etc. The talking points are organized in groups according to trigger points (i.e. specific time periods in an incident): Year-round, Early Fire Season, Beginning of Incident, Air Quality Index (AQI) exceeds 50 for PM10, and AQI exceeds 100 for PM10.

Year-round

1. Wildland fire smoke fits into a larger regional air quality situation.

Example: “The scenic vistas in the parks, especially in the summer, are highly obscured by regional haze. Haze is caused when sunlight encounters tiny particles in the air. These particles may be the result of either natural events or human activities. According to the local Air District, over 95% of the particulate pollution in our area originates from Central Valley sources (i.e. motor vehicles, industrial fuel burning, manufacturing, and agriculture). Less than 5% comes from wildland fire in the Sierra Nevada.”

2. Smoke, like fire, is a natural ecosystem component.

Example: “A Breath of Fresh Air: Is there a bright side to all this talk about smoke? While it is a health concern for humans, plants have adapted to live with smoke just as they have many other natural elements of the environment. Scientists are discovering that some plants might even depend on smoke for their survival. A recent study looked specifically at the low elevation chapparral plant communities. In the laboratory, scientists exposed various seeds to heat and charring, as in a fire, and certain species remained dormant. When the same seeds were exposed to smoke, germination occurred. While some plants, like the giant sequoia, use heat from fires for seed dispersal, it now appears that other plants rely on smoke for germination.” (From SEKI’s “*Story of Fire*” newspaper)

Example: “Research has shown that smoke reduces the growth of mistletoe, which can damage black oaks.”

Early Fire Season

Use general fire messages and:

3. Park managers are sensitive to smoke impacts for visitors and employees.

Example: “The Yosemite fire program is committed to balancing the needs of park resources and people. While fire has always been a natural part of this ecosystem, our current society presents unique conditions. Today, there are more people than ever living in or visiting Yosemite National Park. Every fire management action considers this fact when determining incident objectives.”

Beginning of Incident

Use the talking points above and:

4. The park has the ability to monitor particulate levels in Yosemite National Park during smoke events.

Example: “As soon as the park anticipates a smoke event with the ability to affect people, air quality technicians begin operating a Smoke and Weather Monitoring Module. This mobile unit measures particulate levels in the air. Particulates are solid particles produced by things like vehicle emissions, agricultural activities, and fires. The module records levels every hour and then computes a 24-hour average which correlates to the National Ambient Air Quality Standards (NAAQS) established by



the Environmental Protection Agency (EPA). During extreme smoke conditions, technicians retrieve data from the module daily.”

5. Some characteristics of smoke accumulation are predictable because they are based on daytime and nighttime winds.

Example: “Up-slope or up-canyon breezes occur during the day which will often take smoke into higher elevations. At night, these winds change direction and bring smoke down-slope to the lower elevations.”

6. Some characteristics of smoke accumulation are not predictable since they are dependent on atmospheric conditions.

Example: “With unstable atmospheric conditions, smoke from wildland fires is mostly lofted up to very high elevations where it disperses. When atmospheric conditions are stable, perhaps with an inversion layer, smoke can be trapped at lower elevations.

For prescribed fires include:

7. Due to the deliberate nature of prescribed fire, audiences can be notified prior to the smoke event about what to expect.

Example: “During the week of ignition, visitors traveling through the area will smell and possibly see smoke. Smoke will likely be visible from [specific location]. The smoke will most likely settle in lower elevations during the early morning.”

8. During prescribed burns, fire managers utilize smoke management techniques.

Example: “The entire burn segment is 925 acres, but is split into two sections for smoke management reasons. A fire line has been constructed inside the segment where the fire can be held if smoke production is a problem. The burn boss plans to ignite 30-40 acres per day to minimize smoke output. This will increase the duration of the smoke event but will decrease the ambient level of smoke at any one time.”

For Fire Use include:

9. Small natural fires have the potential to become large fires.

Example: “Burning in heavy mixed conifer fuels, the newly discovered [Name] Fire has the potential to expand across hundreds of acres over the next several months. This fire was naturally-caused and will be naturally-extinguished with rain or snow. A “season-ending event” bringing more than ½-inch of rain over a 3-day period usually occurs in October.”

10. There are ways of minimizing smoke output in a fire use project without suppressing the fire.

Example: “While the park hopes to maximize resource benefits by allowing this fire to spread naturally, managers have at least two ways of reducing smoke in special situations. Hand crews can install fire line in strategic locations to contain certain areas of the fire. For example, keeping fire out of the lower Illilouette drainage would reduce smoke in Yosemite Valley. In extreme smoke situations, fire managers can drop water on hotspots. Unlike water drops in suppression actions, these drops are not meant to halt fire movement, but slow it down and reduce smoke.”



When AQI Exceeds 50 for PM10

Use the talking points above and:

11. There are ways for park residents and neighbors to reduce their exposure to smoke.

Example: “Smoke concentrations can be avoided by planning morning activities away from Yosemite Valley and afternoon activities away from higher elevation areas, such as Tuolumne Meadows. Close windows, doors, and outside vents when it is smoky to prevent accumulations indoors. Run your air conditioner, if you have one. Keep the fresh air intake closed and keep the filter clean. Ventilate your home and work place during periods of little smoke. Avoid physical activities while smoke is dense. Paper masks are designed to trap large dust particles, not the tiny particles found in smoke. These masks generally will not protect your lungs from wildland fire smoke.”

Example: “Residents of communities affected by smoke from wildland fires and prescribed fires are encouraged to practice the recommended health habits. A healthy immune system is the best protection against the effects of smoke. Immune function is enhanced with regular moderate physical activity, good nutrition, hydration, and adequate rest.” (From USDA Forest Service publication *Health Hazards of Smoke: Spring 2001*)

12. Breathing smoke is not healthy for anyone, but some people are at greater risk.

Example: “People with heart or lung disease, such as congestive heart disease, chronic obstructive pulmonary disease, emphysema or asthma are at greater risk. Children and the elderly are also more susceptible to smoke. These people are advised to use caution and avoid physical activity while heavy smoke is present.”

Example: “The risks of occasional exposure to fine particulate and other components of vegetative smoke are minimal for healthy individuals. However, elevated levels of smoke that persist for months or years increase the risk of heart and respiratory disease, especially among the elderly and individuals with pre-existing respiratory or cardiovascular illness.” (From USDA Forest Service publication *Health Hazards of Smoke: Spring 2001*)

13. The Air Quality Index (AQI) is one tool that helps the park, visitors, and employees quantify daily air quality conditions.

Example: “Established by the Environmental Protection Agency and adopted by the States, the Air Quality Index (AQI) is a tool for reporting daily air quality conditions. Using numeric information from sensors like particulate monitors, the AQI tells you how clean or polluted your air is, and what associated health concerns you should be aware of. The AQI focuses on health effects that can happen within a few hours or days after breathing polluted air. You can think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health danger. The Index identifies six conditions: good (0 to 50), moderate (51 to 100), unhealthy for sensitive groups (101 to 150), unhealthy (151 to 200), very unhealthy (201 to 300), and hazardous (over 300).”

AQI exceeds 100 for PM10

Use all of the talking points above and hold an open house/meeting to respond to community, public, and employee needs.



TALKING POINTS AT-A-GLANCE

The detailed talking points outlined earlier are indicated below with their corresponding numbers. When incorporating these messages into materials, refer back to the text examples.

Year-round	Early Fire Season	Beginning of Incident	AQI exceeds 50 for PM10	AQI exceeds 100 for PM10
1. Wildland fire smoke fits into a larger regional air quality situation.	3. Park managers are sensitive to smoke impacts for visitors and employees.	4. The park has the ability to monitor particulate levels in Yosemite National Park during smoke events.	11. There are ways for park residents and neighbors to reduce their exposure to smoke.	Use all of the talking points hold an open house/meeting to respond to community, public, and employee needs.
2. Smoke, like fire, is a natural ecosystem component.		5. Some characteristics of smoke accumulation are predictable because they are based on daytime and nighttime winds.	12. Breathing smoke is not healthy for anyone, but some people are at greater risk.	
		6. Some characteristics of smoke accumulation are not predictable since they are dependent on atmospheric conditions.	13. The <i>Air Quality Index (AQI)</i> is one tool that helps the park, visitors, and employees quantify daily air quality conditions.	
		PRESCRIBED FIRE 7. Due to the deliberate nature of prescribed fire, audiences can be notified prior to the smoke event about what to expect.		
		8. During prescribed burns, fire managers utilize smoke management techniques.		
		FIRE USE 9. Small natural fires have the potential to become large fires.		
		10. There are ways of minimizing smoke output in a fire use project without suppressing the fire.		



COMMENTS AND QUESTIONS DURING HOOVER COMPLEX

During the Hoover Fire Complex, the park and the Incident Management Team received numerous comments and questions from employees and the public.

Employees

1. Health Impacts - Symptoms include: headaches, sore throat, sinus stuffiness, head congestion, heavy or labored breathing, increased asthmatic complications, watery and or red eyes, blurry vision, tiredness, burning sensation, irritated eyes, and loss of appetite.
2. “Are there any additional health hazards from short-term exposure to the higher levels of particulate matter in the air during portions of the work day?”
3. “Can employees use the CA-1 to report smoke related problems?”
4. “Can employees work alternative work schedules?”
5. “If unable to work outside of the valley, or Tuolumne Meadows, what precautions can we take to minimize the continued impact of the smoke exposure?”
6. “Can employees go to the clinic during work hours?”
7. “Can air quality information be posted daily for employees?”
8. “Acknowledgement and concern for the situation from park leaders [would] certainly ease many of our minds.”
9. “Fire is an important and necessary part of Yosemite and I support it whole heartedly, in fact we need more. The health of all employees and families here are also important and I would like very much to help, to learn how we can make this situation more user friendly or endurable for our park family.”

Public

1. “The smoke from these fires has affected the Mammoth area and parts of Inyo National Forest. As a result, the air is polluted in these areas and has created respiratory and allergy problems for those of us that like to golf, fish, and hike.”
2. “I know fire can be good for the forest at times...it can also cause many problems. I live in Mono County and have been enduring smoke, much of which is coming from your park. It has become difficult to breathe, our eyes are watering, and...many people are complaining of being sleepy all of the time due to the smoke. I would appreciate it if you would do the right thing by putting the fires out.”
3. “The smoke over here on the east side is really bad. I have a small motel and people are leaving early. I notice that you are controlling one side of the fire so that the smoke in the valley doesn’t get too bad. What about us over here? Is there any way to balance natural fire practices with some smoke suppression?”

(END APPENDIX B – SMOKE COMMUNICATION STRATEGY)



Information Strategy

Winslow Incident

August 19, 2003

Background:

The Winslow Fire started August 12, 2003 from lightning on land administered by the Dillon Field Office of the Bureau of Land Management 5 miles southwest of Lakeview, Mont. Initial attack was conducted by the Montana Department of Natural Resources and Conservation. Fire Information came from Jack de Golia; Public Affairs Officer for the Beaverhead-Deerlodge National Forest and support for the fire came from the Dillon Interagency Dispatch Center. The fire is burning in heavy spruce fir and lodgepole and ponderosa pine on the Montana and Idaho sides of the Continental Divide. Rocky Mountain's Incident Management Team Bravo led by Pete Blume, Incident Commander, took over the fire August 15, 2003 at 8:00 p.m.



Cooperating Agencies:

Bureau of Land Management, Beaverhead County Sheriff's Department, Montana Department of Natural Resources, USDA Agricultural Research Service, Caribou-Targhee National Forest, USFWS Red Rocks National Wildlife Refuge, Beaverhead County Volunteer Fire Department, Beaverhead-Deerlodge National Forest.

Significant Issues/ Concerns:



The Centennial Valley is sparsely populated area, with the Red Rock Lakes National Refuge and its wilderness occupying the southeast corner of the valley. The valley is bordered on the north and east by the Beaverhead-Deerlodge National Forest, on the south by the Centennial Mountains (BLM and Agricultural Research Service's Sheep Experiment Station), and on the west by low hills near interstate 15. South of the valley is Idaho and the Caribou-Targhee National Forest. The Multi jurisdictional component and the fact that the fire is burning in Idaho and Montana in two Geographical Area Coordination Center's has challenge the ability of the Team to get resources to contain the fire.



Communication Goals and Objectives:

Use a variety of communication tools and techniques to provide accurate and timely information needs of local residents, landowners, visitors, media, stakeholders, and incident personnel:

Specifically,

- Inform the local commercial Elk Lodge of the status of the fire and monitor the closure order that is preventing access for lodge customers.
- Inform the local and agency administrators through Team E-Mail and website.
- Provide information to the media via website and email. Use the Public Affairs Officers' on the Caribou-Targhee and Beaverhead-Deerlodge National Forests to assist information in getting timely news updates to the media daily.
- Provide current information to Incident personnel at ICP and spike camp on the Idaho side of the fire.

Key Messages:

- Public and Firefighter safety is the number one priority of the agency administrator and incident management team Bravo. Nothing is more important than public and firefighter safety.
- We have extremely dry fuels inside and outside the perimeter of the fire that concern us. We are working hard to keep the fire within the current fire perimeter.
- The fire is active in very steep terrain on both sides of the Continental Divide, we are being cautious for firefighter safety.
- We will fight the fire safely and aggressively while protecting valued fisheries and wilderness values. Nothing, however, is more important than public and firefighter safety.

Desired Outcomes:

- E-mail and the website would be used by the local citizens and the media as the preferred mediums to help get the word out about the fire on both sides of the Continental Divide.
- The public and media were informed about the incident
- The information function of the Team would use local talent where possible to offer training opportunities to future information officers.
- Commercial recreation establishments affected by road closures would be able to gain customer access and would feel informed and supportive of the final suppression operation.





Audience	Date	Remarks	Person/ position Responsible
Media	August 15 to the present	Media interest was very light. Jack de Golia of the Beaverhead put out the daily news release and fielded phone calls with the media.	de Golia, Rice
Website	August 15 to the present	A website was established and routinely updated in the evening.	Rice
Jack de Golia, PAO Beaverhead-Deerlodge National Forest Lynn Ballard, PAO on the Caribou Targhee NF, Idaho Falls	August 15 to the present	Since the incident was in two state jurisdictions and multi agency, these two individuals were contacted daily to tie the Montana and Idaho sides together.	Rice
Agency Administrator	August 15 to the present	IAP's were hand delivered to each Agency Administrator daily.	Rice and Till
Public Meeting	August 15 to the present	No Public meetings were held. Information was provided through email, the website, and personal contacts.	Rice
Support to IMT	August 15 to the present	Till and Rice shared lead responsibilities and both conducted morning briefings. Later in the incident information determined that there was a need to have a presence in the Targhee Spike on the Idaho side. Till moved to that location two days into the incident.	Rice and Till

Key Contact List for the Incident:

CONTACT	POSITION	PHONE	EMAIL
Bill Sweet	Central Area Command IOF		N/A
Jack de Golia	Zone IOF Dillon MT		jdegolia@fs.fed.us
Lynn Ballard	PAO Caribou-Targhee NF		lb Ballard@fs.fed.us
Shawna	Dubois Ranger District		N/A
Larry Bush	DNRC		N/A
Bart Howells	BLM Resource Advisor		N/A
Robert Mickelsen	District Ranger, Dubois RD		N/A
Dan Gomez	USFWS Red Lakes Refuge Manager		N/A
Shane Kluesner	Fire Chief Lakeview VFD		N/A

(END APPENDIX C – INFORMATION STRATEGY WINSLOW INCIDENT)



Best Practices: Communication Planning is one of the tools developed by the National Wildfire Coordinating Group's (NWCG) Wildland Fire Education Working Team (WFEWT), as part of the team's Fire Messaging Project. This project is ongoing, but a critical piece developed by the team and approved by the National Wildfire Coordinating Group for distribution throughout the partnering agencies is the Interagency National Wildland Fire Messages (April 13, 2005 approval memo & complete messages available on the NWCG website). The key messages are a compilation of many important themes that are contained in fundamental wildland fire interagency policy documents and products. The messages were developed with the assistance of a reference group comprised of knowledgeable and experienced fire management personnel from all levels of the NWCG organizations.

As defined in the WFEWT's Strategic Plan, one of the team's goals is to increase public awareness of the role of fire in ecosystems. In order to do this, the team continues to produce products and materials for use at the local level, regardless of agency affiliation. *Best Practices: Communication Planning* along with additional materials and resources can be found at: <http://www.nwcg.gov/teams/wfewt/wfewt.htm>.

For more information about the Wildland Fire Education Working Team contact your agency representative listed on the web site at: <http://www.nwcg.gov/teams/wfewt/roster.htm>.