

PREVENTION AND MITIGATION

1 Introduction

Historically the goal of wildfire prevention programs was to prevent wildfires. While the end goal of preventing loss of life, property, and natural resources has remained the same, current proactive fire management programs prevent fires and reduce hazardous fuels not only to reduce unplanned fire ignitions, but also to minimize damages and personnel exposure to unsafe conditions and situations.

Public education on the natural role of fire on the landscape and the prevention of wildfire risk has become increasingly important as communities make inroads into wildland areas. While it is important to raise awareness of the risks associated with wildland fire, it is also important to promote the overall mission of the National Park Service Wildland Fire Management Program and to increase public understanding of fire as a natural part of the ecosystem and as a restoration tool.

An important component of prevention programs is collaboration with adjacent communities and property owners to achieve the goal of becoming fire adapted.

Fire prevention efforts should be addressed in a park's overall fire management plan in order to support an integrated wildland fire management program.

2 Responsibilities

2.1 National Level

The national office will:

- Establish Servicewide guidelines for wildfire prevention analysis, planning, and implementation.
- Establish Servicewide guidelines for cooperative wildfire prevention/education activities.
- Provide Servicewide technical expertise and coordination in wildfire prevention/education.
- Assess, coordinate, and facilitate wildfire prevention/education training.
- Participate as a member of national task groups and committees (e.g. National Wildfire Coordinating Group's Communication, Education, and Prevention Committee) or work closely with a selected representative.
- Participate in national wildfire prevention/education efforts or programs.

2.2 Regional Level

The regional offices will:

- Integrate wildfire prevention/education into all management operations.
- Coordinate the region-wide development of wildfire prevention/education programs.
- Coordinate activities with other land management agencies and wildfire protection organizations at the state and regional level.
- Provide technical expertise to individual park units, and assess, coordinate, and facilitate wildfire prevention/education training.

2.3 Park Level

Each park with a fire program will:

- Support and encourage employee involvement in wildfire prevention/education programs.
- Conduct wildfire prevention analysis as specified in Section 3 below.
- Develop and implement wildfire prevention plans as a component of the fire management plan.
- Review wildfire prevention plans annually and update as warranted.
- Integrate wildfire prevention/education into all management functions, including interpretation, visitor protection, maintenance, and administration.
- Develop cooperative agreements and/or memoranda of understanding with local land management agencies and wildfire protection groups to coordinate wildfire prevention/education programs.
- Assess, coordinate, and facilitate local wildfire prevention/education training.
- Develop and provide prevention/education products to the public.

3 Wildfire Prevention Analysis

As stated in the Preparedness chapter of [Interagency Standards for Fire and Fire Aviation Operations](#), National Park Service units that experience more than 26 human-caused fires per 10-year period are required to conduct a wildfire prevention analysis and prepare a wildfire prevention plan. Units that do not meet this minimum frequency are also encouraged to complete a fire prevention analysis and fire prevention plan, particularly if they have experienced problems with human-caused fires.

The scope and content of the wildfire prevention plan must be based on a wildfire prevention analysis. The analysis should include the determination of risks,

hazards, and values. The Rapid Assessment and Mitigation Strategy program, otherwise known as RAMS, can be used to assess high risk areas, develop prevention plans and implement strategies. The Wildfire Prevention Spatial Assessment Planning Strategies (WPSAPS) is under development. An example of a prevention plan can be found at https://www.usfa.fema.gov/wui_toolkit/

3.1 Determination of Risks

Risks are defined as such factors that individually, or in combination, can produce a threat to urban interface or habitat. Risks may be a number of factors such as, but not limited to: environmental conditions such as short or long term drought, ignition sources, fuel conditions or human activity that can result in wildfire ignition. Risk assessment is the most important element of the analysis and is the foundation upon which the unit's fire prevention plan is built.

All potential ignition risks should be plotted on a topographic map of the unit. Whenever possible, GIS should be utilized and appropriately documented to meet NPS metadata standards. Risks to be plotted include all areas of concentrated use and incidents of human-caused fires for the past five- to ten-year period.

3.2 Determination of Hazards

Hazards are defined as the fuels and the topography on which a wildland fire will spread.

Hazard areas should be indicated on a topographic map of the unit using GIS. The areas of fuels and topography that present the greatest resistance to control, such as heavy fuels on steep slopes, should be encircled and labeled as "high hazard" areas. Areas which present moderate resistance to control, such as medium concentrations of continuous fuels in less rugged topography, should be encircled and labeled as "moderate hazard" areas. Everything remaining should be labeled as "low hazard" areas.

3.3 Determination of Values

Values are defined as areas where losses from wildland fire would be unacceptable. Since the determination of values is subjective, they must be formulated through an interdisciplinary process.

Values may include, but are not limited to:

- Cultural resources
- Developments
- Inholdings

- Sensitive habitats
- Endangered species
- Watersheds
- Nearby urban structures
- Adjacent land

Utilizing GIS encircle those areas of high and moderate value as determined by the interdisciplinary team. Label these as “high value” or “moderate value” areas, respectively. Everything remaining should be labeled “low value.”

4 Wildfire Prevention Plan

Prevention analysis enables fire managers to determine the need and focus for a wildfire prevention plan. The analysis includes determination of the risks, hazards, and values that may influence the effects of wildland fire. The plan should identify prevention actions and programs needed to reduce the likelihood of ignitions in areas where wildfire is unacceptable, and it should also identify who is responsible for each activity and when each activity will be accomplished.

Technical direction for completing a wildfire prevention plan is provided in the *National Park Service Wildfire Prevention Handbook* (note that this handbook is not available in electronic format). There are also several NWCG wildfire prevention publications available as references. See the [NWCG Publications Management System](#) web page for additional information.

Once completed, the wildfire prevention plan is included as an appendix to the unit’s fire management plan as referenced in the Fire Management Plans chapter in *Reference Manual 18*.

The wildfire prevention plan addresses the “three E’s” of the program: Education, Engineering, and Enforcement. All three activities are important for both internal and public prevention efforts. The three E’s help ensure that there is a strong understanding of the prevention message.

4.1 Education

Prevention programs utilize a variety of methods to inform the public of the need to prevent human-caused wildfires. The specific activities are intended to create and maintain public and employee awareness, understanding, and support. It should be stressed in all public education efforts that a person causing a wildfire could face criminal charges as well as be held civilly liable for the cost of suppressing the fire.

4.2 Engineering

Wildfire prevention engineering is the process of reducing risks and hazards by shielding or removing heat sources or by removing fuels. Prevention engineering includes activities such as moving fuel away from roadways, removing vegetation from around a structure, creating firebreaks around campgrounds, and using spark arresters on internal combustion engines and fireplaces. Prevention engineering through prescribed fire can also be used to reduce fuels, thereby minimizing the threat of ignition or fire spread.

Facility design and visitor management planning should include an analysis of fire regimes. Avoid clustering facilities with limited access. As in floodplains, avoid clustering visitors and facilities in areas where large scale ecological processes could be impaired because of fragmentation.

4.3 Enforcement

The objective of the enforcement aspect of wildfire prevention is to ensure effective compliance with federal fire prevention laws, regulations, codes, and standards designed to protect National Park Service lands, visitors to national parks, and private lands and improvements within and adjacent to national parks.

4.3.1 Visitor Use Regulation

Wildfire prevention enforcement should be practiced at the minimum level necessary (as defined in *Reference Manual 9, Law Enforcement*) to gain compliance with fire laws and regulations. The superintendent's compendium must include elements to implement the fire prevention plan. The sections of Title 36 CFR which concern fire prevention must be emphasized.

4.3.2 Criminal Investigations

As stated in the [Interagency Standards for Fire and Fire Aviation Operations](#), "For all unplanned human-caused fires where liability can be determined, ensure actions are initiated to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements..."

The intentional ignition of wildland fuels by humans is a crime. The inadvertent or negligent ignition of a wildland fuels by a human may result in criminal penalties and/or financial liability for the responsible party to pay for the cost of suppression, damages, and rehabilitation. All wildfires must be investigated at the earliest possible time. The investigation may range from a documented determination of cause by the initial attack fire crew to criminal investigation by a

qualified fire investigator. Costs associated with wildfire investigation are legitimate charges to the fire suppression account.

The primary purpose of an investigation is to obtain all the information and evidence possible to identify the responsible party. The initial actions by the fire crew on the fire will affect the investigation's chance for success. Every initial attack firefighter needs to receive at least minimal training in finding the point of origin of any fire. They must also understand how to protect the point of origin and any possible evidence. Much of this is covered in the [Guide to Wildland Fire Origin and Cause Determination](#) publication of the NWCG. [FI-110 Wildland Fire Observations and Origin Scene Protection for First Responders](#) is also a good source of basic training.

Where the cause of a fire can be traced to the act, or failure to act, of an individual or individuals, the National Park Service must take appropriate civil and criminal action against the responsible person(s). The Service will work with the U.S. Attorney's Office to recover the costs of suppression and rehabilitation from the responsible person(s).

If necessary, rewards for information leading to the arrest and conviction of persons responsible for starting wildfires may be offered. These rewards may be funded from the suppression account for the fire. The request for approval for offering any rewards must be initiated by the Superintendent and must be coordinated with the regional fire management officer and the park unit's chief ranger, and then with the U.S. Attorney's Office having jurisdiction for the area. The approval to use suppression funds must be submitted by the Regional Director to the Branch Chief, NPS Branch of Wildland Fire and approved by the Division Chief, Division of Fire and Aviation Management. Any reward must be commensurate with the rewards offered by the surrounding jurisdictions and applied in a similar manner.

4.3.3 Public Use Restrictions

The superintendent has the authority to impose public use and access restrictions in times of high fire danger. See the [Electronic Code of Federal Regulations \(CFR\), Title 36: Parks, Forests and Public Property](#) for additional information.

Public use restrictions could include, but are not limited to:

- Restricted fire use, e.g., no fires outside developed sites, no fires in the backcountry.
- Restriction of public use activities, e.g., off-road vehicles, backcountry access.

- Restriction of park operations or contract activities, e.g., construction blasting, chain saw use.
- Total or partial closure of unit.

Exhibit 1 contains a sample fire closure order.

5 Wildfire Prevention and Education Teams

Prevention and education teams are available to support any geographic area preceding and during periods of high fire danger or fire activity. A federal unit may use severity dollars in support of a prevention education team. States and other agencies will have appropriate funding systems. Federal and state agencies should be encouraged to form local interagency fire prevention and education teams. This can be an effective way to coordinate with neighboring agencies and other partners.

Additional information on the purpose, standard configuration, and ordering procedures for National Fire Prevention and Education Teams is contained in the [National Interagency Mobilization Guide](#) under [Overhead and Teams](#).

6 Cooperative Forest Fire Prevention Program (CFFP)

The Cooperative Forest Fire Prevention Program (CFFP) is a joint effort of the Advertising Council, the National Association of State Foresters, and the USDA Forest Service. The objective of the CFFP Program is to create and maintain public awareness about wildfire prevention. The CFFP Program manages Smokey Bear and related programs.

The CFFP Program provides a framework that can be expanded upon by regional, state, and local efforts. State and local programs can identify specific problem areas and plan solutions. Using Smokey Bear as the vehicle for wildfire prevention messages and using a variety of techniques to spread the message can stimulate active support and cooperation with other public agencies, educators, businesses, industry, and people interested in working to prevent human-caused wildfires.

The official Forest Service program policy and guidelines can be found in *Forest Service Manual 3100*, chapter 3110, [Cooperative Forest Fire Prevention](#) and *FSH 5109.18*, chapter 20, [Cooperative Forest Fire Prevention Program](#).

6.1 CFFP Program Components

There are five major components to the CFFP Program:

1. *Public Service Advertising* - The production and distribution of advertisements for use in donated media time and space on commercial radio, television, and print media.
2. *Educational Activities* - The development and presentation of educational fire prevention programs. Activities and materials are targeted at children age 10 or younger to reinforce the key message of the need to prevent unplanned, human-caused fires.
3. *Commercial Licensing* - The use of the Smokey Bear image on commercial products and materials to further promote the fire prevention message, in accordance with the enabling legislation.
4. *Image and Appearance* - The protection and perpetuation of the established image and use of the Smokey Bear character, including trademark, artwork, slogan, and costume, for the sole purpose of promoting wildfire prevention.
5. *Awards and Recognition* - Awards criteria, presentation, and availability for national, state, and local level programs.

6.2 Smokey Bear

Smokey Bear has been a symbol of fire prevention for more than 70 years, and the core message to the public continues to be that accidental wildfires can and should be prevented. Although messages from land management agencies are more complex than ever regarding fire and ecosystem management, the wildland urban interface, and the integrity of our national parks and other public lands, Smokey's fire prevention message is still relevant. Nevertheless, Smokey's message must be understood and communicated in the context of other more comprehensive messages that focus on the beneficial ecological role of fire in the ecosystem. Smokey's message should not be altered, but it should be explained in the broader ecological context when appropriate.

Additional information regarding Smokey Bear can be found online at the [Smokey Bear](#) and [National Symbols Program](#) websites.

7 Wildland Urban Interface Mitigation

Refer to *RM 18, Chapter 7, Fuels Management* for NPS policy on facilities, construction, and defensible space and NPS requirements to follow the International Code Council's International Wildland-Urban Interface Code.

The [NWCG Wildland Urban Interface Mitigation Committee](#) has multiple resources available to assist in mitigating risks to firefighters and communities.

Exhibit 1

SAMPLE STAGE 2 FIRE RESTRICTIONS



United States Department of the Interior
NATIONAL PARK SERVICE
Glacier National Park
Box 128
West Glacier, MT 59936



Y14

STAGE II FIRE RESTRICTIONS

Effective Friday, July 28, 2017 pursuant to Title 36 of the Code of Federal Regulations, sections 1.5(a)(1), 1.5(a), 2.13(c), and 2.21(a) the following acts are prohibited in Glacier National Park.

PROHIBITIONS:

- 1. Building, maintaining, attending, or using a fire or campfire, charcoal, or wood stove fire, including within a developed recreation site or improved site-36 CFR 2.13(c)**

Exception: Persons using a device fueled solely by liquid petroleum or LPG fuels that can be turned on and off. Such devices can only be used in an area that is barren or cleared of all overhead and surrounding flammable materials within 3 feet of the device.

Exception: This prohibition does not apply to firefighters engaged in fire management activities.

- 2. Smoking, except within an enclosed vehicle or building, a developed recreation site or while stopped in an area at least three feet in diameter that is barren or cleared of all flammable materials- 36 CFR 2.21(a)**

Note: Smokers cannot clear an area in which to smoke.

- 3. The following acts are prohibited from 1:00 p.m. to 1:00 a.m.- CFR 1.5(a)(1):**

- a) Operating any internal combustion engine.
 - b) Welding, or operating acetylene or other torch with open flame.
 - c) Using and explosive.
- A patrol is required for one hour following cessation of all work described above.

Note: Generators within a RV can operate during hours allowed in the campgrounds regulations. Generators outside a RV must be in an area with no less than a 3 foot diameter area clear of combustibles. Visitors are not allowed to clear an area to operate their generator.

Exception: This prohibition does not apply to firefighters engaged in fire management activities.

Exemptions: Persons with a written permit that specifically authorizes the otherwise prohibited act.

- 4. Operating motorized vehicles off designated roads and trails.**

AREA DESCRIBED:

All lands within Glacier National Park are covered by this restriction.

Exhibit 1

PURPOSE:

To reduce the risk of human caused fire in order to protect public and employee health and safety, and to protect National Park Service lands, resources, and facilities during the current period of increased fire danger and reduced availability of wildland fire fighting resources.

IMPLEMENTATION:

- 1) These restrictions become effective at 0001 a.m. Mountain Daylight Time on Friday July 28th and will remain in effect until rescinded.
- 2) This Order supersedes, rescinds, and replaces any previous Orders prohibiting the same acts covered by this order.
- 3) Any violation of these prohibitions is punishable by a fine of not more than \$5,000.00, or imprisonment for no more than six months, or both.

Signed this 27th day of July, 2017



Jeff Mow
Superintendent