

# NORTHERN ROCKIES COORDINATING GROUP

## STRUCTURAL FIRE PROTECTION

August 11, 1999

### ABSTRACT

In an effort to facilitate implementation of the federal wildland fire policy as it relates to structure protection issues, the following consensus statements and recommended procedures are provided to NRCG agencies.

The question of who is responsible for structure protection in a wildfire situation and who pays for it is important. Each incident is unique. There are few "canned" answers to the structure protection questions. Incident commanders and agency administrators will have to make decisions based on the conditions of each incident. There are several criteria that have to be considered in making these decisions but only the incident managers and agency administrators can determine how these criteria apply to the specific incident circumstances.

### CONSENSUS STATEMENTS

*Life and Improved Property Protection* -- a service with the primary responsibility to protect the structure AND the people that occupy these structures from injury or death. This fire protection service is normally provided by rural and/or local government fire departments, with specially trained and equipped personnel. After life safety, the priority is to keep the fire from leaving the area of origin. It also means protecting the structure from an advancing wildland fire. Various taxing authorities fund this service. (The equipment and training required to conduct life and property protection is not normally provided to the wildland firefighter.)

*Structure Protection* -- to protect the structure from the threat of damage from an advancing wildland fire. This normally does not include an attack of fire that is inside the structure. It involves the use of fire control lines (constructed or natural) and the extinguishment of spot fires near or on the structure. This protection can be provided by both the rural and/or local government fire department firefighter and the wildland fire protection firefighter. This does not include an interior attack of fire that is in the structure. It involves the use of standard wildland protection tactics, control methods, and equipment, including fire control lines and the extinguishment of spot fires near or on the structure.

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<b>State of Montana</b>	<b>Bureau of Indian Affairs</b>	<b>USDA Forest Service</b>
<b>Montana Firewardens Association</b>	<b>Bureau of Land Management</b>	<b>State of Idaho</b>
<b>Montana Division of Disaster and</b>	<b>National Park Service</b>	<b>North Dakota Forest</b>
<b>Service Emergency Services</b>	<b>US Fish and Wildlife Service</b>	

To clarify any misconceptions, federal and state wildland agencies will engage in

structure protection activities as part of the normal suppression actions taken on wildland fire. The new fire policy has not changed what can or cannot be done. The only clear instance of not providing such protection is if it is unsafe to do so.

Who pays for structure protection activities is affected to some degree by fire policy. It is the long-term intent of the wildland fire agencies to have in place agreements and operating plans that clearly define protection responsibilities and jurisdiction related to structures. Since few such written agreements and operating plans are in place, the following guidance is provided:

- During an initial attack incident the agency with wildland fire protection responsibility should bear the costs of personnel and equipment utilized to suppress the wildland fire which includes structure protection resources ordered by that agency. If a local government entity with structure fire jurisdiction and responsibility (in Montana, a rural fire district, a municipal fire department, or a fire service area) desires to increase the level of protection, a “you order you pay” philosophy should prevail.
- Implement a unified command under the ICS system as soon as possible to assure onsite agreement as to what is ordered by whom and who pays. For mutual aid or a preplanned dispatch, the “who pays” should have been determined in advance and documented in the operating plan.
- During an extended attack incident that involves structure protection issues and/or multiple jurisdictions/boundary fires, utilize agency representatives or a unified command structure to agree on site who orders what and who pays. Consider establishment of a single ordering point and develop a written cost share agreement to document these decisions.

On project size fires, include all structure protection issues and “how to handle” in the delegation of authority. Utilize unified command or fully qualified agency representatives to assure joint decision-making is integrated into incident control objectives, strategic and tactical implementation actions, and ordering processes. A written cost share agreement will be utilized to document apportionment decisions. Order technical specialists for assistance in developing agreements and utilize local fire officials in preparing and implementing structure protection plans.

## **GUIDELINES**

In summary and to further assist agency administrators, local incident commanders and incident management teams, the following guidelines and criteria are provided for incident decisions:

1. Wildland fire agencies have primary responsibility for fire suppression within their protection area. Wildland fire agencies have a responsibility to prevent a wildfire from spreading into areas of structures and to assist the jurisdictional fire agencies in protecting structures from advancing wildfires.

2. Local government agencies (in Montana and North Dakota: rural fire districts, municipal fire departments and fire service areas; in Idaho: local fire organizations) have primary structure responsibility within their defined jurisdictional areas. Local agencies should not be reimbursed for performing their responsibilities within their jurisdiction.
3. Local agencies may be reimbursed by the wildland agencies when performing beyond their responsibilities (and within qualifications) or outside their jurisdiction, as determined by the incident commander/agency representative and guided by provisions of local operations plans.
4. Use existing agreements, operating plans and established ordering procedures to order structure protection resources.
5. Incident resources, whether reimbursed or at no cost, incur support costs (food, lodging, fuel, tools, etc.) that must be considered and documented in the development of any cost share agreement.
6. The management of any wildfire that burns or threatens the protection area of more than one fire agency (Federal, State, or local fire agency--including fire protection districts) will include these other agencies in the incident management. This is accomplished through participation as a unified incident commander or as an agency representative or a coordinated delegation of authority between affected jurisdictions.
7. One agency cannot financially commit another agency (Federal, State, County or District) without the knowledge and consent of the committed agency.
8. Agencies responding to requests for assistance need to know, at the time of dispatch, if the cost of their response will be reimbursable or free to the requesting agency. Incident commanders, as well as requesting and responding agencies (through dispatch centers) must communicate and document the basis for payment of resources requested for the incident.
9. Cost share agreements should be used to document apportioned costs.

## ***Wildland/Urban Interface***

The Wildland/Urban Interface problem has existed for hundreds of years. As early as 1793, the Governor of Upper and Lower California, “prohibited all kinds of burning, not only in the vicinity of the towns which cause some detriment....” In the last 50 years the problem has grown more complex as more development has occurred. This section of ***Fire in the West*** focuses on the common elements of the Wildland Urban Interface problem, and seeks to better define the problem in the West.

### **Definitions:**

***Life and Property Fire Protection*** — a service with the primary responsibility to protect structures AND the people who occupy these structures from injury or death. This fire protection service is normally provided by rural and/or local government fire departments, with specially trained and equipped personnel. After life safety, the priority is to keep the fire from leaving the area of origin. It also means protecting the structure from an advancing wildland fire. Local taxpayers fund this service through a variety of taxing authorities. (The equipment and training required to conduct life and property protection is not normally provided to the wildland firefighter.)

***Structure Protection*** - to protect structures from the threat of damage from an advancing wildland fire. This normally does not include an attack on fire that is inside the structure. It involves the use of fire control lines (constructed or natural) and the extinguishment of spot fires near or on the structure. This protection can be provided by both the rural and/or local government fire department firefighter and the wildland fire protection firefighter.

***Structure Fire Protection*** — is defined as interior and exterior actions take to suppress and extinguish a burning structure or improvement associated with standard structure fire protection, equipment and training. Structure fire suppression is the responsibility of local government entities, although there are some locations in the West where there is currently no structure fire agency in place.

***Wildland Fire Protection*** — a service with the primary responsibility of protecting natural resources and watersheds from damage by wildfires. State and federal forestry or ~ land management agencies normally provide wildland fire protection with specially trained and equipped personnel. Various taxing authorities and fees fund this service. (The equipment and training required to conduct wildland fire protection is not normally provided to the local government fire department firefighter. If a fire protection agency is routinely called upon to fight wildland fires, they are usually trained and equipped to do ~ so. The problem arises when personnel from an agency are called upon to fight fires for which they are NOT properly equipped or trained.)

***Wildland/Urban Interface*** — is where humans and their development meet or are intermixed with wildland fuels. There are four different wildland urban conditions:

- ***Wildland Fire Protection*** -- a service with the primary responsibility of protecting

natural resources and watersheds from damage by wildfires. State and federal forestry or land management and some local government agencies normally provide wildland fire protection with specially trained and equipped personnel. Various taxing authorities and fees fund this service. (If a fire protection agency is routinely called upon to fight wildland fires, they are usually trained and equipped to do so. The problem arises when personnel from an agency are called upon to fight fires for which they are NOT equipped or trained.)

- ***Structure fire suppression*** is defined as interior or exterior actions taken to suppress and extinguish a burning structure or improvement associated with standard structure fire protection, equipment, and training.
- Structure fire suppression is the responsibility of local government entities, although there are some locations in the Northern Rockies Geographic Area where there is currently no structural fire agency in place.
- Federal and state fire agencies, as a general rule, do not have the authority, training nor equipment to engage in structure fire suppression actions. Two agencies (NPS and BIA) have limited capability and authority to conduct structure suppression operations related primarily to buildings owned or protected upon lands administered by those agencies. Certain tribal entities may have additional capability and authority on tribal lands.
- Federal and state fire agencies with wildland fire protection authority and capability can and will support structure fire suppression operations within their jurisdictional areas of wildland protection. Support is defined as applying water, foam or retardant in an exterior attack only (ground or aerial delivery) on a burning structure or other actions such as hauling water or pumping operations. No interior attack can be conducted (NPS/BIA tribal exceptions).
- Federal and state agencies with wildland fire protection authority and capability can and will provide structure fire protection on wildland fires both on or off of lands administered or protected through agreements by those agencies. The distinctions made here recognize a closest forces concept on all wildland fires, a resource ordering system that dispatches fire personnel and equipment to other jurisdictions and agreements that exchange fire protection responsibilities among cooperators. Included are mutual aid provisions to support one another and pre-planned dispatch protocols that move agencies resources between jurisdictions. In that regard, all participating agencies will take safe and appropriate tactical suppression actions to keep a wildland fire from igniting structures or improvements. Suppression actions include both direct and indirect methods of perimeter control and spot fire extinguishment. Conversely, a structure or vehicle fire that has potential to escape to wildland fuels can and will be attacked in a safe and appropriate manner consistent with the capabilities of the agencies personnel and equipment.

*Interface Condition* - is **a situation where structures abut wildland. There is a clear line of**

*demarcation between the structures and the wildland fuels along roads or backfences (Figure-5)*

**5). Wildland fuels do not continue** into the developed area. The development density for an interface condition is usually 3+ structures per acre. Fire protection is normally provided by a local government fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire (unless the line of demarcation is also a jurisdictional boundary).

**Intermix Condition - is a condition where structures are scattered throughout a wildland area (Figure 6).** There is no clear line of demarcation; the wildland fuels are continuous outside of and within the developed area. The development density in the intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection, and may also have wildland fire protection responsibilities.

**Occluded Condition — is a situation, normally within a city, where structures abut an island of wildland fuels (park or open space).** There is a clear line of demarcation between the structures and the wildland fuels along roads or backfences. The development density for an occluded condition is usually similar to those found in the interface condition and the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by a local government fire department. The trend is for local government to require developers to include open space in their plans, but not include a long-term mechanism for their maintenance; thus the hazardous fire condition increases over time.

**Rural Condition — is a situation where scattered small clusters of structures (ranches, farms, resorts, or summer cabins) are exposed to wildland fuels (Figure 7).** There may be miles between these clusters. Structural fire protection service may not be available. These types of developments often exceed the capabilities of both the structural and wildland fire protection systems. Wildland fire protection agencies have little or no control over such development and may be unable to provide protection due to statutory barriers.

**Hazard —** the degree of flammability of the fuels once a fire starts. This includes the fuel (type, arrangement, volume, condition, etc.), **topography** and **weather**.

**Risk —** the chance of a fire starting from any cause.

**Wildfire Causes —** there are three general causes of wildland fires, **natural** (lightning), **accidental** (debris burning, children with matches, etc.) and **intentional** (arson).

**Wildfire Fire Suppression Strategies —** There are two general wildfire management strategies:

***Suppression***-taking specific actions to control and extinguish an unwanted wildland fire.

***Manage for resource benefit***-allowing a fire to burn in specific areas, under specified weather conditions to achieve specific resource management and/or protection objectives. The fire may be an unwanted or a prescribed fire from a natural or planned ignition source.

## ***Prescribed Fire Programs***

Fire has been used by man for centuries to accomplish many different tasks. Some of the more common reasons for which fire is used are: to reduce the buildup of wildland fuels to reduce fire danger, eliminate logging residue (slash), seed bed preparation, to convert fuels range improvement, to eliminate unwanted weeds or other woody plants, etc. Traditionally, federal land management agencies have allowed lightning caused fires to burn, under certain conditions in certain areas. More recently, wildland fire protection agencies are allowing some fires to burn in specific areas, under specified weather conditions **to achieve specific resource management and/or protection objectives**. Several states have specific programs to reduce hazardous fuel conditions and logging slash. Figure 8 includes the best information available for each of the western states for the last five years.