

GLOSSARY

DEFINITIONS:

Appropriate Management Response – Specific actions taken in response to a wildland fire to implement protection and fire use objectives.

Appropriate Management Strategy – A plan or direction taken by an agency administrator to guide wildland fire management actions and meet protection and fire use objectives.

Contain – To surround a fire, and any spot fires therefrom, with control line down to mineral soil as needed, which can reasonably be expected to check a fire's spread under prevailing and predicted weather conditions.

Confine – To limit fire spread within a predetermined area principally by use of natural and pre-constructed barriers or environmental conditions. Suppression action may be minimal and limited to surveillance or monitoring under appropriate conditions.

Control – To complete a control line around a fire down to mineral soil, any spot fires therefrom, and any interior islands to be saved and cool down all hot spots that are immediate threats to the control line.

Energy Release Component – A number that expresses the rate of heat release (in BTU's/sec) per unit area (in square feet) within the flaming zone of the fire.

Expected Weather Conditions – Weather conditions indicated as common, likely, or highly probable based on current and expected trends and their comparison to historical weather records. These are the most probable weather conditions for this location and time.

Experienced Severe Weather Conditions – Weather conditions that occur infrequently, but have been experienced during the period of weather record keeping. For example, rare weather conditions that significantly influence fires may have occurred only once, but their record can be used to establish a baseline for worst case scenario.

Fire Frequency – The historic return interval of fire in a defined environment.

Fire Management Unit (FMU) – Any land management area definable by objectives, topographic features, access, values to be protected, political boundaries, fuel types, major fire regimes, etc., that sets it apart from the management characteristics of an adjacent unit. FMU's are delineated in Fire Management Plans.

Firebreaks – A fireline constructed with a bulldozer on or down a ridgeline to mineral soil, two to three blade widths wide for, use in containing an eventual wildfire.

Fuelbreaks – Usually a ridge top where the fuels have been modified to provide a break in the fuel continuity. Fuelbreaks continue to support vegetation as opposed to a completely cleared firebreak, except for a cleared fireline about the width of a vehicle. Fuelbreaks are most functional when they incorporate an access road down the middle of the fuelbreak. Fuelbreaks can easily be maintained with prescribed fire.

Fuel - Fuel is comprised of living and dead vegetation that can be ignited. It is often classified as dead or alive and as natural fuels or activity fuels (resulting from human actions, usually from logging operations). Fuel components refer to such items as downed dead woody material by various size classes, litter, duff, herbaceous vegetation, live foliage etc.

Fuel Continuity - A qualitative description of the distribution of fuel both horizontally and vertically. Continuous fuels readily support fire spread. The larger the fuel discontinuity, the greater the fire intensity required for fire spread (Brown 2000).

Fuel Loading - The weight per unit area of fuel, often expressed in tons per acre or tonnes per hectare. Dead woody fuel loadings are commonly described for small material in diameter classes of 0 to 1/4-, 1/4 to 1-, and 1 to 3-inches and for large material in one class greater than 3 inches (Brown 2000).

Fuel Moisture - Percent or fraction of oven dry weight of fuel. It is the most important fuel property controlling flammability. In living plants it is physiologically bound. Its daily fluctuations vary considerably by species but are usually above 80 to 100%. As plants mature, moisture content decreases. When herbaceous plants cure, their moisture content responds as dead fuel moisture content, which fluctuates according to changes in temperature, humidity, and precipitation (Brown 2000).

Ground Fire - Fire that burns in the organic material below the litter layer, mostly by smoldering combustion. Fires in duff, peat, dead moss and lichens, and punky wood are typically ground fires (Brown 2000).

Head Fire - A fire spreading or set to spread with the wind (National Wildfire Coordinating Group 1995).

Holding Actions – Planned actions required to achieve wildland and prescribed fire management objectives.

Initial Attack – An aggressive suppression action consistent with firefighter, public safety and values to be protected.

Invasive Species - Species that can move into an area and become dominant numerically or in terms of cover, resource use, or other ecological impacts (Randall 1987).

Ladder Fuels - Shrubs and young trees that provide continuous fine material from the forest floor into the crowns of dominant trees (Smith 2000).

Layering - A form of vegetative reproduction in which an intact branch develops roots as the result of contact with soil or other media (Helms 1998).

Lignotuber - A woody storage structure forming a swelling, more or less at ground level, from which dormant buds can develop (Helms 1998).

Litter - The top layer of the forest floor (O1 soil horizon); includes freshly fallen leaves, needles, fine twigs, bark flakes, fruits, matted dead grass and other vegetative parts that are little altered by decomposition. Litter also accumulates beneath rangeland shrubs. Some surface feather moss and lichens are considered to be litter because their moisture response is similar to that of dead fine fuel.

Management Action Points – (also called “Trigger Points”) – Either geographic points on the ground or specific points in time when escalation or alteration of management actions is necessitated. These points are defined and the management actions taken are clearly described in an approved Wildland Fire Plan or Prescribed Fire Plan. Timely implementation of plans when the fire reaches the action point is generally critical to successful accomplishment of the objectives.

Mesic - Pertaining to conditions of moderate moisture or water supply (Smith 2000).

Mitigation Actions – On the ground actions that check, direct or delay the spread of fire, and minimize threats to life, property and resources. This can include mechanical and physical non-fire tasks, specific fire applications and limited suppression actions.

These actions will be used to construct firelines, reduce excessive fuel concentrations, reduce vertical fuel continuity, create fuelbreaks or barriers around critical or sensitive sites or resources, create “blacklines” through controlled burnouts, and to limit fire spread and behavior.

Non-native Species - An introduced species evolved elsewhere that has been transported and purposefully or accidentally disseminated by humans (for our purposes, in North America) (Li 1995).

Prescribed Fire – Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist and NEPA requirements must be met prior to ignition.

Prescribed Fire Plan – A plan required for each fire ignited by managers. It must be prepared by qualified personnel and approved by the appropriate agency Administrator prior to implementation.

Prescription – Measurable criteria, which guide the selection of, appropriate management responses and actions. Prescription criteria may include safety, economic, public health, and environmental, geographic, administrative, social or legal considerations.

Presettlement Fire Regime - The time from about 1500 to the mid- to late-1800s, a period when Native American populations had already been heavily impacted by European presence and before extensive settlement by European Americans in most parts of North America, before extensive conversion of wildlands for agricultural and other purposes, and before fires were effectively suppressed in many areas (Smith 2000).

Sere - A succession of plant communities leading to a particular plant association (Smith 2000).

Smoke Management – Any situation which creates a significant public response, such as smoke in a metropolitan area or visual pollution in high-use scenic areas.

Stand-Replacement Fire Regime - Fire regime in which fires kill or top-kill aboveground parts of the dominant vegetation, changing the aboveground structure substantially. Approximately 80% or more of the aboveground, dominant vegetation is either consumed or dies as a result of fires. Applies to forests, shrublands, and grasslands (Smith 2000).

Succession - The gradual, somewhat predictable process of community change and replacement leading toward a climax community; the process of continuous colonization and extinction of populations at a particular site (Smith 2000).

Surface Fire - Fire that burns in litter and other live and dead fuels at or near the surface of the ground, mostly by flaming combustion (Brown 2000).

Threatened and Endangered Species – Threat to habitat of such species, or in the case of flora, a threat to the species itself.

Tiller - An erect or ascending stem that branches from the base of another at or below the ground surface; especially in Poaceae and other monocotyledons (Hunt Institute for Botanical Documentation).

Top-Kill - Kills aboveground tissues of plant without killing underground parts from which the plant can produce new stems and leaves (Smith 2000).

Total Heat Release - The heat released by combustion during burnout of all fuels, expressed in BTU per square foot or kilocalories per square meter (Brown 2000).

Underburn - Understory fire.

Understory Fire Regime - Fire regime in which fires are generally not lethal to the dominant vegetation and do not substantially change the structure of the dominant vegetation. Approximately 80% or more of the aboveground dominant vegetation survives fires. Applies to forest and woodland vegetation types (Smith 2000).

Wildfire – An unwanted wildland fire.

Xeric - Having very little moisture; tolerating or adapted to dry conditions (Smith 2000).