

Oregon State Office Direction for Fire Management in Resource Management Plans

Introduction

The Federal Land Policy and Management Act implementation guidance states that resource management plans should include the following components (H-1601-1):

- Desired outcomes:
 1. Goals
 2. Objectives
- Allowable Uses and Management Actions:
 1. Allowable Uses/Suitability of Areas
 2. Guidance for Management Actions
 3. Special areas
- Monitoring and Evaluation

The overall purpose of the fire management program is to move toward, achieve, or maintain the desired outcomes detailed in the Resource Management Plan (RMP) while avoiding undesirable consequences of both fire and fire management activities. Fire management programs should be designed to protect public safety on and in close proximity to BLM-managed lands and to protect or benefit natural and cultural resources. The desired outcomes portion of the RMP lists the goals and objectives the fire management program should accomplish over the life of the plan. The allowable uses and management actions portion details the management direction intended to achieve the desired outcomes. Areas where unplanned, naturally caused fires could be managed to meet RMP management objectives are identified and then evaluated to determine what desirable and undesirable consequences may arise from fire management program activities. Management actions describe the actions needed to maintain, restore, or improve land health. Actions include guidelines or constraints on activities and designation of special management areas as needed to promote desirable outcomes and to reduce, eliminate, or otherwise mitigate undesirable consequences. A sample RMP Decision Hierarchy is depicted in the Appendix. In the RMP, the allowable uses and management actions are usually broad-scale information and guidance for project and incident decision making. In the fire management plan, finer-scale implementation guidance is developed that refines the broad-scale direction based on potential situations that may be encountered. Further refinements occur during project or incident analysis.

This document is organized into sections by these main components. Each section is organized by:

1. The content of the RMP related to each decision,
2. The process for developing that content, and
3. The tie of this content to the fire management plan.

The fire management plan is the activity level implementation document for the RMP as it relates to wildland and prescribed fire and fuels management. It does not make new decisions, but rather provides guidance for applying the RMP goals, objectives and management actions to specific landscapes within the RMP area. Project level implementation decisions are separate documents that are guided by direction in the resource management plan and use additional implementation guidance provided by the fire management plan. Figure 1 displays the relationship of the RMP to fire management plans and project plans.

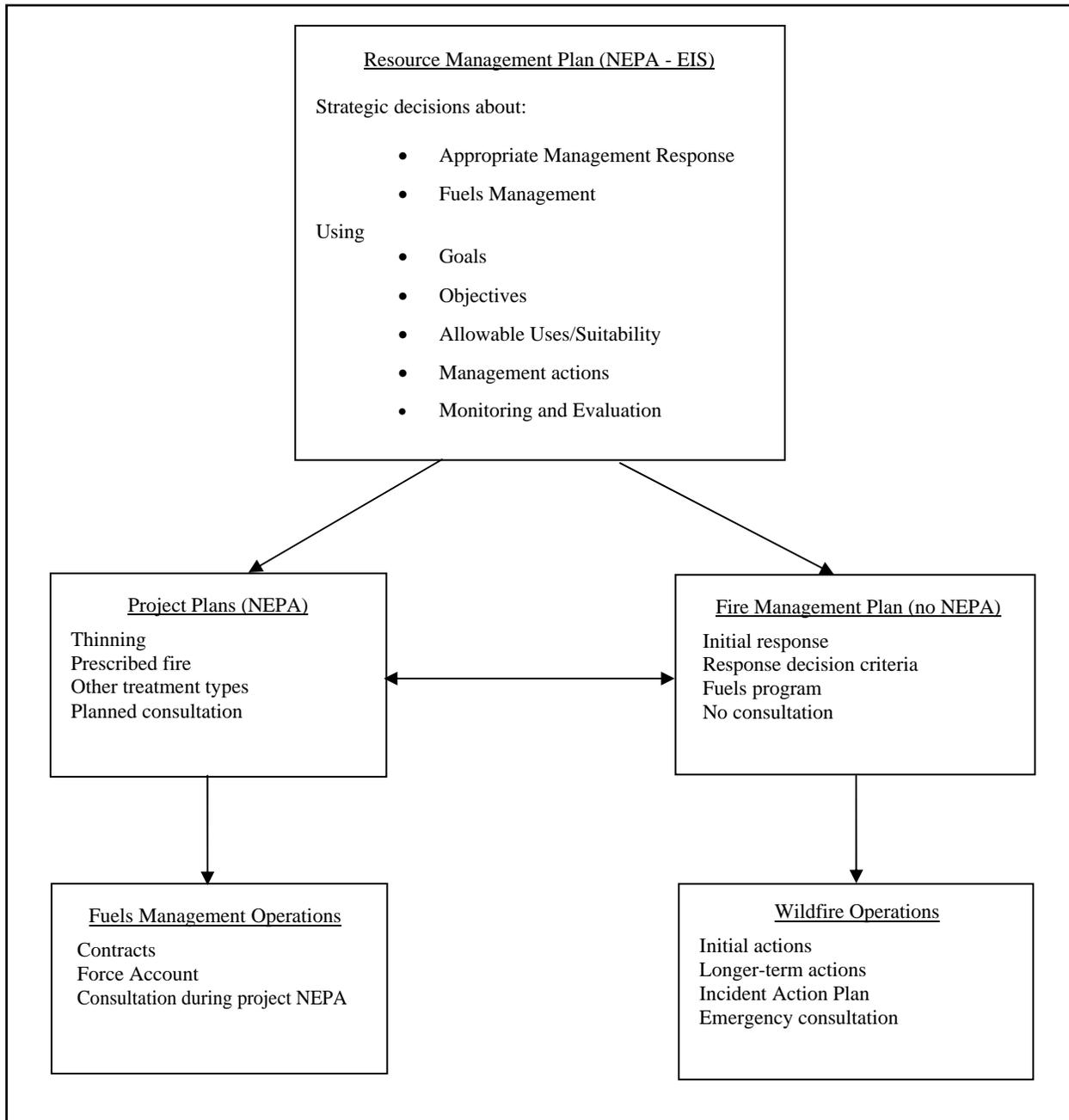


Figure 1. Resource Management Plans provide the primary direction and constraints on fire management activities on a spatial or geographic basis. Fire Management Plans provide situational criteria to aid decisions for unplanned operations while Project Plans provide site-specific direction for planned operations.

The appendix to this attachment provides additional resources for planning related to fire management, including a glossary, a list of user's guides and handbooks that may be used to develop plan content, and references used to develop this guidance. In this document, **text in bold indicates mandatory direction**. Mandatory direction is based on higher-level direction, such as legal requirements and requirements codified in policy, or items where the State Director has deemed consistency essential. *Text in italics indicates a term that is defined in the glossary.*

The level of accuracy to use in mapping or describing direction or locations should be that appropriate to the RMP scale, not the project scale. In general, this means the direction should be reasonably accurate for analyzing large landscapes. As part of the analysis process, Districts should characterize the accuracy of the data and information used. Most maps included in the RMP and generated as a part of the planning process serve to illustrate the intent of decisions proposed or made. Because these maps represent information developed at a broad scale, they are too coarse to serve as controlling documents at the project or incident scale.

In March 2008, the Wildland Fire Leadership Council (WFLC) and the National Wildfire Coordinating Group (NWCG) made changes to the implementation of the 2001 Federal Fire Policy as one effect of the 2007 fire season. To support greater use of less aggressive responses and in recognition of certain management realities, the distinction between wildland fire use and suppression was ended and the language changed. The new implementation direction refers to appropriate management response (AMR) and allows the explicit recognition that large fires tend to cause both damage and benefits. Five changes to implementation direction were authorized. The first allows for the use of multiple objectives on an individual or complex of fires, in essence recognizing that some parts of a fire or group of fires may be suppressed and other parts may be managed to attain land management objectives outlined in the applicable land or resource management plan. The second allows for those objectives to change over the duration of the fire or group of fires as they move across the landscape and fuels and burning conditions change. The third and fourth combined the previous decision documents, the Wildland Fire Situation Analysis (WFSA) and Wildland Fire Implementation Plan (WFIP), into a single decision document that describes the management objectives for a given incident or group of incidents, the associated risks of the management strategies chosen, and the types of actions to take and resources needed to protect specific values at risk of damage or loss from the fire. The fifth decision allows for escaped prescribed fires to also be managed for multiple objectives. Unplanned human-caused fires are considered to cause only resource damage. As a result, two definitions have changed: the term '*wildfire*' now refers to unplanned ignitions and '*prescribed fire*' refers to planned ignitions.

Desired Outcomes

Desired outcomes are expressed as specific goals and objectives intended to meet legal mandates, regulatory responsibilities, national policy, State Director guidance, and other resource or social needs. Goals are broad statements of desired outcomes, sometimes called desired conditions. Objectives are quantifiable and measurable outcomes for specific resources tied to the stated goals.

Goals and Objectives

RMP Content

Goals

- **Desired role of fire as an ecosystem process¹**

Objectives to Maintain or Move Toward Goals

- **Desired fire regime condition classes (FRCC)²**
 - **Description is mandatory²**
 - Map for illustrative purposes is optional.
- **Fire regimes (if discussed separately from fire regime condition class)**
 - If used, must be based on the national scheme at minimum.
 - Use of the Pacific Northwest variant is optional and encouraged.
 - Map for illustrative purposes is optional.

Process for Developing Goals and Objectives

Goals are broad statements of desired outcomes that usually are not quantifiable. Fire management goals are often distilled from laws, regulations and longstanding policies relevant to fire management and interrelated programs (e.g., the National Fire Plan, Healthy Forest Initiative, Healthy Forest Restoration Act, Clean Air and Water Acts, and national and state-specific Land Health Standards). **Objectives** are narrower statements that identify specific outcomes for resources. They are usually quantifiable and measurable and may have established timeframes for achievement. Different objectives may be written for different parts of the planning area that are intended to meet the same goal, but where environmental conditions differ.

Goals and objectives for the planning area must include fire management considerations³ and must be integrated with vegetation and other resources. Most often, these other resource considerations include wildlife and fish habitat or habitat elements, air and water quality, habitat for listed species, and some types of recreation uses.

¹ 2001 Federal Wildland Fire Management Policy, Chapter 3, page 23, policy item 3 (Response to Wildland Fire); FSM 5141.1 item 3.

² 2001 Federal Wildland Fire Management Policy, Chapter 3, page 24, policy item 9 (Science) states that scientific results must be used in the development of land management plans, alternatively known as use of the best available science. The Fire Regime Condition Class process is a part of the science available to describe ecological conditions related to fire as an ecosystem process and has been selected by the Wildland Fire Leadership Council as the primary method of analyzing and displaying ecological condition as it relates to fire. The FRCC process has undergone extensive testing and peer review.

³ 2001 Federal Wildland Fire Management Policy, Chapter 3, page 23, policy item 3 (Response to Wildland Fire)

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The historical fire regime is the frame for discussing desired fire regime condition classes; **use of the FRCC process or its successor is required for determining fire regime condition class**^{4,5}. The suggested analysis steps include:

- Identify and document the role of fire as an ecosystem process and the ecosystem functions it provides.
- Map or describe the historical fire regimes and existing condition class using the FRCC process or its successor or LANDFIRE data.
- Identify and document how current conditions have departed from historical and, as well as is known, the causes for the departures.
- Determine if the approximate historical conditions (i.e. condition class 1) or some other conditions are desired.
- Document the rationale for the desired conditions described.

Goals and objectives should address different temporal scales. Most often this consideration involves short-term versus long-term trade-offs. The long-term consequences or implications should be considered in developing goals and objectives related to fire. However, some short-term trade-offs may be necessary to meet legal mandates and other resource concerns.

Even though changing climate makes use of historical conditions for setting land management goals and objectives increasing untenable, we are still required to do so. Determine the *historical range of variability* to the extent possible. Incorporate major environmental and social changes, such as permanent changes in land use since the baseline timeframe used to determine the historical conditions. Estimate additional changes that may result from climate change where information is available at the appropriate scale and reasonably foreseeable permanent changes in land use to adjust the historical range (mostly these will be on lands adjacent to the BLM-managed lands rather than within the District boundaries). Use the combination of past reference conditions and best estimates of future changes in conjunction with legal mandates and social expectations to develop the desired conditions. Overriding considerations such as wildland-urban interface, critical habitat for Federally listed threatened and endangered species, or climate change effects that are reasonably known, may result in goals that differ from historical conditions. Desired conditions can be outside the historical range of variability but should be always be bounded by the *natural range of variability* as best as can be determined.

There may be species that require a mix of seral stages and structural classes that equate to condition class 3 in order to meet the needs of species that depend on that habitat. The stated

⁴ PL 108-148 Sec. 102(g)(4) requires use of the Fire Regime Condition Class process or its successor to evaluate ecological changes every five years. Although the provisions of the Act apply only to projects authorized under the Act, this requirement effectively translates to a need to use the Fire Regime Condition Class process for all projects. In order to detect change over time, a baseline is needed with the land use plan the most appropriate place to establish that baseline for prioritization of future fuels management projects.

⁵ BLM Handbook H-1601-1, Appendix C, page 11.

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goals and objectives should balance short-term need for habitat with long-term sustainability. Since the FRCC process essentially defines condition class 1 as conditions that approximate the historical conditions, the plan should clearly indicate situations or locations where something other than condition class 1 is desired and that land management activities will create, enhance, or maintain those conditions. Other analyses that may assist in developing these goals and objectives include:

- Fire history analysis including such factors as fire causes, occurrence rates, sizes, fire severity relative to historical conditions.
- Evaluation of the effects of continued attempts at fire exclusion.
- Evaluation of other fuel management methods in providing the same ecological roles and functions as fire.
- Evaluation of how projected changes in temperature and soil moisture regimes may affect which dominant species are more likely to persist following disturbances such as fire, insect outbreak, windstorm or other disturbance type that would result in stand-replacement.

LANDFIRE has provided data and map layers useful at the national, regional, and sub-regional spatial extents, including fire regimes and existing condition classes. The condition class layer was constructed on a stand basis and not a landscape basis and is not recommended for use. Districts can modify these layers with more detailed or ground-truthed local information. In the future, LANDFIRE data layers will be spot-updated on a biennial basis and comprehensively re-mapped on a decadal basis.

The condition class rating should be for the hydrologic unit in its entirety rather than for each fire regime within the hydrologic unit. The reason for using a hydrologic unit as the basis for FRCC is to allow change detection over time. Such change detection is not possible unless a stable landscape unit is used as the basis. The boundaries of management units, fire management zones, and other administrative boundaries can change over time, whereas hydrologic unit boundaries should not.

Objectives are statements of measurable, time-specific outcomes pursued through the activities of land management consistent with achieving the goals of the RMP. They may be phrased in terms of maintaining or moving toward a desired condition, or ecological state, or in terms of the level of program activities intended to achieve that ecological state. Resource management plan objectives are intended to be strategic in nature rather than project specific, or tactical. They attempt to answer one of two questions:

- How far toward the goals/desired conditions should the fire management program move the landscape over the expected life of the plan?
- What should the fire management program accomplish over the life of the plan in relation to the goals/desired conditions?

Objectives for fire regime condition class and role of fire as an ecosystem process will most likely be discussed in terms of the rate of change and locations. Objectives for activities will

most likely be discussed in terms of what specific types of activities are appropriate, general locations, priorities, and similar topic areas.

Although objectives may be described at the RMP-wide scale, they should be described at a scale that provides a meaningful foundation for their associated management actions. For most places, this foundation would be provided by discussing objectives on a scale that is at least as large as a 5th field hydrologic unit, but smaller than RMP-wide. Planning Area-wide objectives as they pertain to fire may be too vague to provide the type of direction on which the remaining RMP components are based. Given the inherent nature of fire as a landscape and ecosystem process, fire regimes will likely cross several types of real and artificial boundaries. Portions of the landscape can contain inclusions or vegetation types or management areas within a given fire regime that differ from the average type. At this broad scale, desired conditions should identify the major vegetation types and discuss their distribution across the landscape and the expected magnitude and frequency of *wildland fire*.

At finer scales, objectives can describe the mix of seral structure stages, characteristic species compositions, stand structures, snag and downed log level, or other relevant features important to fire behavior and fire effects. For fire management purposes, the mix of seral structure stages is limited to the five general types used in the national FRCC process. However, for use by other disciplines, these five general types can be divided into variations on the basic structure to allow for more complete integration and address specific resource considerations.

Plans will move public lands toward the desired condition classes and toward the desired role of fire as an ecosystem process using a mix of three general types of activities: planned fuels treatments, use of appropriate responses to wildfires, and post-fire restoration and rehabilitation. **Develop measurable, time specific objectives for those general types of activities that apply:**

- Planned fuels treatments (prescribed fire, thinning, other mechanical, biological, chemical)
- Appropriate responses to wildfires to protect specific values that may be damaged or lost and to achieve land management objectives (requires identification of):
 1. Where unplanned fires may help achieve or move toward RMP goals and objectives
 2. Where unplanned fires cannot help achieve or move toward RMP goals and objectives under any burning conditions
- Post-fire rehabilitation and restoration

Interdisciplinary planning teams must use a science-based approach in establishing objectives.⁶ Use fire modeling and current research to evaluate how the various mix of objectives move BLM-managed lands toward the RMP goals and to estimate probable extent and severity of wildland fires. Completing this task can be difficult as it includes determining, to the extent possible given limited knowledge, how to include an ecological process with all its

⁶ 2001 Federal Wildland Fire Management Policy, Chapter 3, page 24, policy item 9 (Science).

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uncertainties and unpredictability as part of the plan as opposed to just considering management activities.

The suggested analysis method includes:

1. Review the goals/desired conditions for the planning area and its landscapes. (Note – this will be a test of whether the goals are integrated or functional in nature.)
2. Deconstruct the goals to determine how the fire management program can be used to move toward or attain the RMP goals. Estimate or determine how quickly the existing conditions can be moved toward the desired conditions to establish objectives based on ecological states (i.e. FRCC and fire effects). Use realistic budget and unit capability assumptions in developing these objectives.
3. Using an iterative process, discuss and determine the mix of fire program elements and levels of activities needed to move toward the goals determined in step 2. Use realistic budget and unit capability assumptions in developing these objectives. Develop preliminary objectives and then use models to test those objectives and refine as needed. Check to be sure there is little or no conflict between fire management objectives and other program objectives. Reconcile any conflicts identified to the extent possible.
4. Select the mix of fire program objectives that moves the planning area toward the RMP goals, keeping in mind that the RMP itself does not prescribe or prohibit specific projects. Describe:
 - The types of activities,
 - The estimated amount or level and time scale, and
 - The general locations of or situations for these activities.
 - If appropriate, establish broad strategic priorities for the locations or situations.
5. Document the rationale for the identified objectives.

The following types of questions may help define objectives related to fire regime condition class and role of fire as an ecosystem process:

- What percentage or how many acres of a given landscape should move from one condition class to another condition class?
- What patterns or patch sizes of mortality in key species is desired or needed?
- What types or extents of fire-induced changes in soil properties are acceptable?
- How much downed woody fuel may be consumed, or, how much woody fuel should remain, on average, across the landscape?
- How should overstory and understory species compositions and stand densities shift as a result of fire?
- What areas are likely to be most sensitive/responsive to changes in temperature and soil moisture regimes and what areas are likely to be least sensitive/responsive?

The following types of questions may help define objectives related to the general types of activities (note – these are not necessarily objectives, but could be used as such):

- What types of fuel/vegetation treatments are appropriate?
- Are there general locations or situations where different types of fuel/vegetation treatments are preferred?
- What are the fuel/vegetation treatment priorities by hydrologic unit, fire regime, or other general location or situation?
- How many acres (may be a range) should be treated or allowed to burn?
- What are the protection priorities by land management category or general location?
- What resources or locations must be protected from all types of fire?
- What resources or locations must be protected from fire of a certain intensity?
- Under what circumstances is post-fire restoration and rehabilitation appropriate?
- What general types of post-fire restoration and rehabilitation activities are appropriate?
- Are there general locations or situations where post-fire restoration and rehabilitation are preferred?

The objectives and suitability determinations (next section) should help the fire management plan identify when (burning conditions, times of year, etc.) wildfires could be managed to move toward RMP goals and objectives. Analyses should consider effects of aggressive suppression over a wide area on movement toward RMP goals and attainment of resource objectives. These analyses are not to be aimed at suppression tactics (i.e. use of retardant, mechanical fireline, etc.), but at response objectives (resource benefits and resource protection).

Tie to Fire Management Plan

Information from the desired outcomes section and the analyses used to develop the RMP goals and fire management program objectives are used to help develop *fire management units* and the wildland fire management goals and options in Section II of the fire management plan. The RMP desired outcomes should be used to refine the strategic and measurable management objectives specific to each fire management unit. Resource management plan objectives also provide the basis for Fire Program Analysis (FPA) objectives. Some objectives may be carried directly into the section that lists and describes the management objectives for each fire management unit. Analyses used to develop the RMP goals may be included in the descriptions of historical fire occurrence, particularly as it relates to ‘natural’ fire cycles. Desired outcomes help form the basis for factors that will be considered in determining the appropriate management response in Section IV of the fire management plan.

All unplanned human-caused ignitions still must be suppressed under current implementation guidance for the Federal Wildland Fire Policy. However, the full array of potential responses remain available as outlined in the RMP objectives. The primary difference between human-caused wildfires and naturally-caused wildfires is that human-caused wildfires are considered to cause only resource damage and do not result in resource benefits. The focus of more aggressive responses should be on those fires or portions of fires that pose an *imminent threat*, rather than

probable threat, to social and resource values, such as recreation facilities, private lands, community infrastructure, and critical habitat for listed species.

The fire management plan will need to interpret other RMP objectives to develop fire management objectives for use in FPA and fire operations. For example, objectives related to the role of fire as an ecosystem process will need to be further analyzed and disaggregated into guidance on which burning conditions will provide opportunities to meet RMP objectives and which will not, often by examining the fire behavior that produces the effects. The analyses used to develop the objectives can become the detailed descriptions of the fire management situation and support development of the factors that will be considered in determining the appropriate management response to unplanned ignitions in Section IV of the fire management plan.

Rationale

The rationale section often included in an RMP serves as a bridge between the desired outcomes and management direction. It aids users in understanding the source and intent of the goals and specific objectives and how they were translated into management direction.

Allowable Uses and Management Actions

The allowable uses and management actions are expressed as management direction in the RMP. The allowable uses, or suitability, decisions determine which lands are open or closed to the specified actions or activities. The management actions consist of elements such as guidelines or constraints on certain types of activities or actions and administrative land use designations, or special management areas. Collectively, these provide the specific management direction in the RMP designed to achieve desired conditions (goals and objectives).

Allowable Uses (Suitability)

RMP Content

- **Describe which lands are suitable for managing wildfires to meet RMP goals and objectives.**^{7,8}
- **Describe the lands where managing wildfires to meet RMP goals and objectives is not possible under any burning conditions**⁸.

Suitability determinations concerning where wildfires could be managed to attain resource benefits and where they cannot should aid in containing the costs of large fires and should aid in the achievement of RMP goals and objectives.

Process for Fire Use Suitability and Unsuitability Determinations

Federal Fire Policy requires that land use plans identify which areas are suitable for wildland fire use. The process described below is intended to identify the areas that are tentatively suitable or

⁷ 2001 Federal Wildland Fire Management Policy

⁸ BLM Handbook H-1601-1, Appendix C, page 11

unsuitable. Ideally, wildfires could be managed on all acres at some time during the year to move toward RMP goals and objectives. However, there may be situations, locations or plant communities where fire either never played a substantial ecological role or where we simply cannot use unplanned ignitions to attain resource benefits. Begin with the assumption that wildfires can provide some resource benefits on all acres and then determine where that assumption does not hold. The suggested analysis steps include:

- 1. Identify where managing for resource benefits from wildfires is specifically prohibited by law, regulation or policy (as of 2008, no such prohibitions exist).**
- 2. Identify where public use levels are high enough over a large enough area that public safety concerns cannot be dealt with on an individual incident/project basis.⁹**
 - a. Identify the area of concentrated public use; this criterion is not meant to apply to single or dispersed sites but to concentrated sites, such as recreation use complexes.
 - b. Analyze the use levels through the main wildfire season; this criterion is meant to match periods of high use with periods of high fire danger.
 - c. Estimate evacuation times and compare to expected rates-of-spread (surface and crown fire), flame lengths, and spotting potential. Consider the probability of plume dominated fire behavior based on fuel types, terrain, and fire weather.
3. Identify where expected fire effects would retard movement toward desired conditions or attainment of resource objectives OR where wildfires always pose an unacceptable risk of loss to other ownerships.
 - a. Evaluate expected fire effects and fire movement using critical weather parameters associated with large fire growth events and general descriptions of fuels and topography.
 - b. If possible, establish critical thresholds in fire effects or fire behavior that would result in resource damage and then determine the percentage of the fire season where these effects or damages are more likely to occur. If the percentage of the fire season where resource benefits could occur is considered too small, then management for resource benefits may not be appropriate.
 - c. Discuss results with potentially affected owners of large landholdings and responsible protection agencies to determine if resource benefits might accrue from wildfires and if they are willing to allow such fires to burn across all or part of their property. If they are not willing to accept at least some fires and their associated effects, the 'resource benefit' boundary should not lie adjacent to these ownerships.

⁹ 2001 Federal Wildland Fire Management Policy, chapter 3, page 22, policy item 1 (Safety).

4. Identify areas where other resource objectives or allocations tied to legal protection mandates, such as provided for by the Endangered Species Act, Clean Water Act or other laws and regulations, and areas of high public use, would render resource benefits from wildfires either minimal or non-existent under any burning conditions.
 - a. Fire behavior or fire effects pose an unacceptable risk of loss to designated critical habitat for listed species that occupies habitat where fire is not an ecologically significant factor.
 - b. Fire behavior or fire effects usually pose an unacceptable risk of loss or damage to developed recreation sites and leased recreational areas.
 - c. Fire behavior or fire effects may conflict with legal mandates. For potential concerns related to legal mandates, Districts should work with associated regulatory agencies to define levels of acceptable loss or damage. Ensure that short-term losses are evaluated against long-term benefits (i.e. short-term risks to individual animals or plants may be outweighed by long-term reductions in unwanted fire behavior, unacceptable fire sizes, or broad-scale adverse fire effects).
- Describe and preferably map the area(s) where wildfires cannot provide resource benefits under any circumstances.
 - Describe and preferably map the area(s) where wildfires may provide resource benefits under some conditions.
 - Document the rationale for the determinations.

Criterion 1 is grounded in potential legal mandates. While no such mandate currently exists, it is not outside the realm of possibility that one might exist in the future. Criterion 2 is grounded in Federal Fire Policy. The last two criteria are optional and are grounded in past experiences and priorities in the 10-Year Comprehensive Strategy. A map of the suitable and unsuitable areas is optional and for illustrative purposes only, but recommended for public and decision-maker understanding. The plan documentation should describe the areas that are unsuitable and the reasons for the unsuitability determination. The remaining lands would be deemed suitable pending subsequent finer-scale information to the contrary.

Note that this suitability determination applies at the landscape scale. The suitability determination needs to recognize that there are finer resolution areas that need to be protected from fire. The determination should describe the characteristics, values and uses associated with a smaller area that should be protected from fire. Examples of areas that may need to be protected from fire include, but are not limited to:

- Administrative sites,
- Developed recreation sites,
- Home sites,
- Designated communication sites,
- Oil and gas facilities,
- Mining facilities,

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- Above-ground utility corridors,
- High-use travel corridors, and
- Wildland-urban interface/designated communities at risk.

Districts should examine these types of areas or similar areas to determine whether potential fire effects would result in undesirable types or levels of damage.

Protection could be provided by several approaches. One approach could be full suppression of the fire either during the initial response phase or as it approaches the site. A second approach could be modified suppression, or holding actions, taken to steer the fire away or around the site. Another approach could be actions taken to keep the site from burning as the fire passes through. There could be additional approaches that would also be successful. The fire management plan would describe the situations or criteria to use in determining the needed approach to protect a specific site.

Tie to Fire Management Plan

The RMP essentially makes the suitability determination on a coarse-scale geographic basis. The fire management plan refines that determination using situational criteria to aid in determining which response is most appropriate for a given ignition and where the particular “lines in the sand” occur for a given strategy based on burning conditions. The fire management plan also lays out the situational criteria to use in deciding the appropriate response needed to protect fine-grained features within areas where wildfires may be managed to move toward RMP goals and objectives.

Areas may be managed to attain resource benefits, but more aggressive responses may be warranted in a given year due to certain existing conditions. For example, large-scale mortality from an insect outbreak may change the risks posed to public safety, to RMP goals and objectives, or to private property in part of the area deemed suitable for managing for resource benefits from wildfires. The fire management plan should indicate what part of the suitable area is available for use of unplanned fires in any given time period. The basic hierarchy is:

- Resource management plan designates areas where wildfires may be managed to move toward RMP goals and objectives for the life of the plan.
- Fire Management Plan designates which of these areas are available for use of unplanned fire as a part of annual reviews.
- Actual response to an unplanned ignition is determined by the situation that exists at the time of ignition.

Management Actions (Guidelines and Special Areas)

RMP Content for Guidelines

Identify needed limitations on management practices associated with:

- General classes of fuel treatment methods (i.e. prescribed fire, mechanical, biological, and chemical)

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- Appropriate management responses to unplanned ignitions
- Post fire restoration and rehabilitation

Process for Developing Fire Related Guidelines

Guidelines are a form of management action that describes the constraints on the use of fire management activities or actions to protect values potentially at risk from those activities. At the RMP level, these guidelines are intended to deal with multiple-use trade-offs and are tied to the consequences to avoid. In some respects guidelines identify the values at risk from a given activity type and serve as technical resource specifications intended to protect those values. These specifications are subject to change as new science findings and technology become available. When dealing with responses to wildfire, guidelines may be considered as geographic refinements to the allowable use determination (see Allowable Uses discussion).

Guidelines are not:

- Goals, desired conditions or objectives.
- Detailed compliance procedures for legal mandates such as those associated with the Endangered Species Act, Clean Air Act, Clean Water Act, State Smoke Management Plan, etc.
- Process, organizational structure, or analysis requirements.

Working with other resource specialists is critical in identifying fire program specific guidelines. Use realistic budget and unit capability assumptions in developing these guidelines.

Identify the resource values to be protected from fire or fire management activities. Describe the processes and procedures associated with the fire program activities. Determine which processes and procedures place the identified values at risk of unacceptable damage, degradation, or loss. Develop technical specifications for use by the various fire program activities to protect the identified values.

The analysis can be approached in either of two directions – the resource values to be protected or the fire management activities used. Regardless of which approach is used, Districts must make sure the guidelines cross walk with the other approach. The interaction of the two (values versus activities) can be thought of as a matrix:

Fire Program Activities	Resource Values				
	TE Habitat	S Habitat	Water Quality	Cultural Resources	...
Planned fuels treatment	1. Guideline 2. Guideline 3. ...		1. ... 2. ...		
Response to unplanned fires	1. ... 2. ...	1. ... 2. ...	1. Guideline 2. Guideline 3. ...	1. ... 2. ...	
Post-fire restoration and rehabilitation					

A statement to the effect that those guidelines associated with responses to wildfire apply except where human life and safety are imminently threatened is required.¹⁰

Tie to Fire Management Plan

Guidelines will carry over directly into Chapters 3 and 4 of the fire management plan as restrictions or special concerns in the responses to unplanned ignition for initial responses, extended responses and large/long duration fire management, and post-fire restoration rehabilitation. The fire management plan should establish the criteria or analysis process to use during incidents to determine when or where the guidelines will not apply or must be altered to address imminent threats to human life and safety. Guidelines for planned fuels treatment tend to feed into project-level analysis rather than as direction into the fire management plan.

The fire management plan also takes the geographically based allowable use decisions and guideline refinements and develops situational guidelines for response to unplanned ignitions. For example, the RMP guideline may identify developed campgrounds as a value at risk from unplanned ignitions, while the fire management plan guidelines may identify where the “line in the sand” may lie around a specific developed campground based on different burning conditions or expected fire behavior.

Fire management plan guidelines can focus appropriate use of certain fire response tactics and strategies to meet RMP desired conditions and objectives. Districts should identify risk thresholds for large/long duration wildfires and for prescribed fires, using analyses of historical weather and fires. One result may be a restriction on fire use. For example, fire use may be

¹⁰ 2001 Federal Wildland Fire Management Policy, Chapter 3, page 21, Guiding Principle 1.

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restricted when the energy release component for fuel model G exceeds the 95th percentile. Other program thresholds may be identified related to legal mandates. For example, resource benefits may stop or decline to below acceptable levels if more than 5,000 acres of northern spotted owl habitat has been lost or degraded from planned and unplanned events in any 5th-field watershed.

RMP Content for Special Areas

Do not establish special areas specifically for fire management considerations. Where wildland-urban interface, as defined under the authorities of the Healthy Forests Restoration Act (PL 108-148), include BLM-managed lands, Districts should consider adjusting goals, objectives, and management direction to incorporate fire management considerations.

Process

Describe those locations or situations where the need to protect public safety and other ownerships takes priority over other resource considerations. As much as possible, these locations or situations should be tied to information and risk assessments contained in community wildland fire protection plans and fire regimes I, II, and III, condition classes 2 and 3, in keeping with priorities established in the 10-year Comprehensive Strategy, Healthy Forests Restoration Act, and other direction related to the National Fire Plan.

Designation of a special area to cover wildland-urban interface areas as defined under the authorities of the Healthy Forests Restoration Act is not required and may not be the best approach. The preference would be to adjust desired conditions, objectives, and guidelines in those parts of the RMP that overlap wildland-urban interface as appropriate. Community wildfire protection plans should be considered in developing RMP direction, but they do NOT make decisions for BLM-managed lands. Recommendations in community protection plans may carry greater weight in close proximity to structures, but less weight as the distance increases from structures. Thus, adjustments to the RMP management direction may be of greater magnitude close to structures and lesser magnitude far from structures within the wildland-urban interface zone. Consider such factors as topography of the area involved, the fuels complex, probable direction of fire spread during large fire growth events, and legal mandates. As the wildland-urban interface itself or the risks to the wildland-urban interface change, use the plan maintenance procedures to resolve conflicts between new, amended, or revised community wildfire protection plans and the RMP.

Tie to Fire Management Plan

Wildland-urban interface areas may become fire planning units within the fire management plan. Desired conditions, objectives, and guidelines within these areas should influence operational guidance in the fire management plan.

Monitoring and Evaluation

Identify key desired outcomes related to the fire management program and develop monitoring criteria:

- **Change in fire regime condition class**¹¹
 - **Scope of change** (geographic distribution)
 - **Magnitude of change** (percent change)
 - **Cause of change** (succession or wildland fire, fuel treatments, other vegetation management, insects, disease, windthrow, other disturbance events, etc.)
- **Resource benefits from wildfires**
 - **At minimum, monitor and evaluate the number of wildfires where resource benefits were a part of the management objectives for the fire.** This information will be compiled at the State Office to determine if there are consistent reasons that require action at the regional or national level rather than the District level.

The mandatory monitoring requirement specific to resource benefits from wildfires has both an RMP and an operational basis. In essence, the RMP determines which areas are suitable for managing for resource benefits and the desired outcomes individual fire management responses are intended to work toward. The fire management plan translates these determinations into operational prescriptions, which are then applied to each ignition. Resource benefit objectives for an individual fire serve as a test of both the suitability determination and the decision parameters. The decision not to manage for resource benefits as a management objective for a given wildfire may be reached when the decision criteria are too tight. Decision criteria that cannot be “loosened” to allow more frequent inclusion of resource benefit objectives indicate the area may not be suitable for this purpose and changing the suitability determination should be considered. Tracking the number of wildfires where recognition of resource benefits resulted in the use of less expensive management responses also supports cost containment analyses related to the overall response to unplanned ignitions.

In addition to tracking the number and reasons for not including resource benefits as a wildfire management objective, a District may want to track the number of fires where management objectives changed over the duration of the fire. A high number of objective changes also tests the decision criteria and the allowable use decision. Decision criteria may be too loose, resulting in management for resource *benefit* objectives when managing for *protection* objectives over more of the fire or the entire fire is more appropriate. More decisions where resource benefits are not included as an objective may also indicate the area is not suitable for managing for resource benefits.

In general, the monitoring program is to be aimed at the program level and RMP components, not project level, and based on the desired outcomes. As such, there is a feedback loop between developing the desired outcomes and developing the monitoring program. Operational monitoring and project effectiveness monitoring are not necessarily part of RMP monitoring. Districts may elect to include such monitoring in the monitoring program. However, since the main purpose of the fire management program is to work toward the attainment of desired

¹¹ PL 108-148 Sec. 102(g)(4). See also footnote 4.

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conditions, and since the primary desired condition is expressed as fire regime condition class, this area is the primary focus of the fire program monitoring.

Use realistic budget and unit capability assumptions in developing the monitoring program and integrate fire management monitoring with other resource monitoring programs whenever possible or feasible. Declining levels of funding and personnel will likely result in more reliance on remote sensing and modeling approaches to monitoring. The more costly, on-the-ground monitoring may be focused more on a few key objectives rather than a broad brush approach. The monitoring program may need to use broader scales to triage areas and identify those requiring more intensive monitoring. In all cases, the monitoring questions are key to monitoring program design. **These questions must be approved by the responsible official.**

Tie to Fire Management Plan

Monitoring program elements should be carried directly into Section VI of the fire management plan.

Other Plan Documents

Environmental Impact Statement – Effects Analysis

For the overall fire management program decisions and determinations identified for each RMP alternative, the environmental impact statement should describe:

- The impacts (both positive and negative) of desired conditions, objectives, guidelines, and suitability determinations on firefighter and public safety¹²,
- The ability of the landscape to operate sustainably with fire as a disturbance agent¹³.

Overall Management Strategies

It may be useful to compile all fire management direction from an RMP into a single document. The District would consolidate direction from all parts of the plan by functional area reducing the need to hunt direction out and possibly missing some. Consequently, this document is one of the last prepared and not the first. This document may be a synthesis or a summary.

Compile, rearrange, display, and integrate all parts of the plan that include fire management direction. The resulting RMP-wide fire management strategy will include the fire-related aspects of:

- Desired outcomes

¹² 2001 Federal Wildland Fire Management Policy, chapter 3, page 22, policy item 1 (Safety)

¹³ 2001 Federal Wildland Fire Management Policy, chapter 3, page 23, policy item 2 (Sustainability)

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1. Goals
2. Objectives
- Allowable Uses and Management Actions
 1. Suitability
 2. Guidelines
 3. Special areas

Appendix

Introduction

This appendix includes a list of relevant handbooks and guides that can be used to develop RMP contents, a glossary, and references used to develop this direction. This material is expected to change over time, particularly as new science comes to light or new processes are developed.

Handbooks and User's Guides

BLM Land Use Planning Handbook H-1601-1. Available at http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.38665.File.dat/h1601-1.pdf

Interagency Fire Regime Condition Class Guidebook. Available at <http://www.frcc.gov/>.

Interagency Burned Area Emergency Rehabilitation Handbook. Available at <http://web.blm.gov/internal/wo-200/wo-220/ESR/>

The Healthy Forests Initiative and Healthy Forests Restoration Interim Field Guide. FS-799. Available at <http://www.fs.fed.us/projects/hfi/field-guide/>

Glossary

Community wildfire protection plan – a multi-party strategic plan that defines the wildland-urban interface boundary and lays out needed treatments, treatment locations, and priorities to protect a community from wildland fire.

Characteristic fire size – the average and range of sizes expected for an ecologically significant fire within a given fire regime, expected fuel complex under historical conditions, topographic setting, and average worst weather conditions under which fires could be expected to spread, but not the most extreme weather conditions.

Ecologically significant fire – generally a large fire that has a clear and definite impact on the mix of seral structure stages, species composition, or relative abundance of selected habitat elements over an area at least 100 acres in size.

Fire management plan – the document containing implementation direction for the fire management program as defined in the RMP. Contents of the fire management plan are detailed in attachment 1 of IM-OF&A-2008-062 (available at <http://web.blm.gov/internal/wo-500/directives/dir-08/im2008-062.html>).

Fire management program – the collection of activities designed to deal with the management of unplanned fires and their effects and hazardous fuels. Elements of the fire management program specifically included in the RMP consist of responses to unplanned fire (both fire use and fire suppression), post-fire emergency stabilization and rehabilitation, and fuels management. Elements of the fire management program not specifically included in the RMP consist of prevention education, community assistance, detection, aviation management, budgeting, search

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and rescue, and similar activities that do not involve federal lands or that are strictly implementation procedures.

Fire management unit – any land management area definable by objectives, management constraints, topographic features, access, values to be protected, political boundaries, fuel types, major fire regimes, or other factors that set it apart from the management characteristics of an adjacent unit.

Historical range of variability – the mix of seral structure stages and species that were present on a given landscape within a given ecological unit under past climate conditions, typical disturbance regimes, and the impacts from aboriginal humans.

Imminent threat – conditions or situations that pose a risk of loss or damage to specified resource or social values are present throughout the summer in most years. For example, fuel model 10 can pose a significant threat to private property in dry forests throughout the summer every 8 years out of 10.

Natural range of variability – the mix of seral structures stages and species that could be expected to occur on a given landscape within a given ecological unit under present climate conditions and typical disturbance regimes and in the absence of current technological and cultural impacts from humans.

Prescribed fire – a planned ignition

Probable threat – conditions or situations that pose a risk of loss or damage to specified resource or social values are present for a short period in the fire season and in only a few years. For example, fuel model 10 can pose a significant threat to private property in cool forests for about a 2-3 week period every 8 years out of 10.

Suppression effectiveness – a general measure or indication of the mix of suppression tactics available and the probability that application of those tactics will slow or halt fire spread.

Wildfire – an unplanned ignition

Wildland fire – a non-structural fire burning in natural vegetation; two types of fire are recognized based on whether the ignition was planned or unplanned.

References

Public Law 108-148. December 3, 2003. Healthy Forests Restoration Act of 2003.

USDA Forest Service and Department of the Interior. 2001. Review and Update of the 1995 Federal Wildland Fire Management Policy. Online at http://www.nifc.gov/fire_policy/index.htm.

USDA Forest Service, Department of the Interior, and Western Governors' Association. 2001. A collaborative approach for reducing wildland fire risks to communities and the

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Environment: 10-year comprehensive strategy. Online at
<http://www.forestsandrangelands.gov/plan/documents/7-19-en.pdf>. 21 p.

USDA Forest Service and Department of the Interior. 2003. Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy. Online at http://www.nifc.gov/fire_policy/index.htm. 57 p. NOTE: An updated version of this document is expected in the latter part of 2008.