

### **WILDLAND FIRE USE AND SUPPRESSION**

Management of wildland fires prior to the completion of DO-18 (<http://fire.nifc.nps.gov/fire/fmpc/do18fin.htm>) was typified by classification requirements that all fires be either wildfires or prescribed fires. This discrete classification of fires by types precluded maximum effectiveness. Under new guidelines, consistent with the Federal Wildland Fire Management Policy (<http://www.fs.fed.us/land/wdfire.htm>), all fires not ignited by managers for specific purposes are considered as wildland fires. All wildland fires will then have the same classification and receive management actions appropriate to conditions of the fire, fuels, weather, and topography to accomplish specific objectives for the individual fire. These management actions, termed the appropriate management response, may vary from fire to fire and even along the perimeter of an individual fire. Key to this direction is that the full extent of a sliding range of management options is available.

These options range from monitoring with minimal on-the-ground actions to intense suppression actions on all or portions of the fire perimeter. The appropriate management response is developed from analysis of the local situation, values-to-be-protected, management objectives, external concerns, and land use. Appropriate management responses resulting in aggressive suppression actions on unwanted fires represent old policy actions taken to suppress wildfires. Appropriate management responses resulting in management of wildland fires for resource benefits correspond to old policy actions of prescribed natural fire management. Under the new policy, opportunities to combine these strategies on individual fires are unlimited.

This policy provides opportunities to dramatically increase fire use and accomplishment of resource management objectives. The policy advocates increases in fire use accomplishments and creates a foundation for implementing both fire use and suppression commitments concurrently. In addition, the suppression capability and accomplishments during the past decade are advancing. But, the suppression workload continues to increase as wildland vegetation and fuels are undergoing changes that facilitate greater intensities and spread rates for wildland fires. Challenges and risks associated with wildland fire management are expanding in both complexity and extent. Threats from wildland fires grow each year as long-term effects from past land use and fire management actions become visible in natural vegetation communities. In addition, escalating values to be protected associated with current land use practices are compounding protection concerns.

Wildland fire management policy and procedures must change to reflect new considerations, capabilities, and direction, while being responsive to resource management objectives. The following chapter provides reference information to facilitate wildland fire management. Detailed information is provided in the Wildland and Prescribed Fire Policy, Implementation Procedures Reference Guide.

It is important to note that wildland fire management will now be accomplished through application of the management response appropriate for each individual fire. These appropriate management responses will be developed from a spectrum of possible alternatives and may be comprised of a set of tactics to accomplish multiple objectives. But, to better provide reference information regarding wildland fire management, the following chapter is presented in two sections, representing the extremes of the spectrum of appropriate management response objectives. These are wildland fire use and wildland fire suppression.

### **WILDLAND FIRE MANAGEMENT PROGRAM REQUIREMENTS**

Before implementing a wildland fire management program all NPS units must have:

1. An approved fire management plan, including all required wildland fire use criteria as outlined in DO-18(<http://fire.nifc.nps.gov/fire/fmpc/do18fin.htm>) and Departmental Manual 620(<http://fire.r9.fws.gov/fm/policy/g20dm1.htm>) (DM-620), is required for all parks with vegetation capable of sustaining wildland fire. Until a fire management plan is approved, park areas must take an appropriate management response that is suppression-oriented on all wildland fires consistent with firefighter and public safety and resources to be protected. On all wildland fire management actions, use of minimum impact tactics is the policy of the National Park Service. Minimum impact tactics are defined as the application of those techniques which effectively accomplish wildland fire management objectives with the least cultural and environmental impact, commensurate with public and firefighter safety.
2. Preparedness plans for fire management personnel and equipment.
3. Record keeping capability for:
  - a. Daily Cost Accounting. Costs associated with wildland fire use will be relayed to the regional fire management officer on a schedule agreed upon with the park.
  - b. Final Wildland Fire Record. All wildland fire incidents must be documented by DI-1202, Individual Fire Report. The completed report must be input to the Shared Applications Computer System's fire reporting program within 10 working days after the fire has been declared out. In addition, the full record retained at the park will include the following:
    - DI-1202, Individual Fire Report
    - Narrative
    - Wildland Fire Implementation Plan
    - Daily weather forecasts and spot weather forecasts
    - Cumulative fire map showing acreage increase by day

- Total cost summary
- Monitoring data

The park Fire Management Plan will identify where these records will reside and assign responsibility for file maintenance.

Prior to full implementation of Wildland Fire Use, NPS units must meet the following additional criteria:

1. Wildland Fire Use Program Oversight.
  - a. Regional office fire management officers are responsible for appraising and surveying all wildland fire use activities within their region. The regional office fire staff will review implementation plans for fires with a Complex Rating. Direct contact with parks may be necessary in order to stay apprised of complex situations. On rare occasions, circumstances or situations may exist which require the regional director to intervene in the wildland fire use decision process.
  - b. Review by the regional fire management officer or acting is mandatory for Wildland Fire Implementation Plans with a projected cost of greater than \$500,000. Review by the NPS National Fire Management Officer at NIFC, or Acting, is mandatory for Wildland Fire Implementation Plans with a projected cost of greater than \$1,000,000.
2. Wildland Fire Use Planning. An operational implementation management plan (Wildland Fire Implementation Plan [WFIP]) (required content and sample format provided in Implementation Reference Guide, Chapter 4, all of Section C) which outlines the management strategies, which will be used on the fire (approval by the superintendent or acting superintendent).
  - a. An approved, Go/No-Go Decision Process to validate the use of wildland fire.
  - b. A Complexity Rating completed for each fire or complex of fires (using the Complexity Rating provided in the Wildland and Prescribed Fire Policy Implementation Reference Guide, Chapter 4, Section C-2).
  - c. A periodic assessment process to affirm that adequate capability exists to manage each fire (available in Implementation Reference Guide).
3. Situation Reporting. It is important for parks to report situations as they occur to enable regional and the national FMO to represent park needs within the interagency

community. Situation reporting on the SACS(<http://fire.nifc.nps.gov/webterm/fire.asp>) may be necessary at any time of the calendar year. Parks should enter situation reports whenever:

- a. There is fire activity in the park, regardless of kind/type (including prescribed fire activity).
- b. Fire potentially threatens the boundary (either internally or from external sources).
- c. Are there sensitive issues that the regions and FMPC need to be aware of (concerns or questions by outside parties)?
- d. Fire danger in the Very High or Extreme categories, particularly if in long-term drought (threatening weather or fuel situations).

Time of report entries should take into consideration the 0730 and 1130 hour NIFC intelligence deadlines, if information is deemed necessary for FMPC staff.

## **A. WILDLAND FIRE USE**

All naturally ignited wildland fires may be managed to accomplish resource management goals once an appropriate fire management plan is approved. Human caused wildland fires will receive a suppression response commensurate with values-to-be-protected, firefighter and public safety, and cost efficiency. Management of wildland fires in the National Park System offers substantial flexibility in how land and resource management objectives can be accomplished.

The random occurrence pattern of wildland fires, combined with the possibility that the fire may last for several weeks or even months, requires more intensive planning and evaluation than for prescribed fires and wildland fire suppression actions, especially at the initial decision point when the fire is detected.

## **OPERATIONAL REQUIREMENTS**

**The complete implementation process is described, with example forms provided, in the [Wildland and Prescribed Fire Policy Implementation Procedures Reference Guide](http://fire.nifc.nps.gov/webterm/fire.asp)(<http://fire.nifc.nps.gov/webterm/fire.asp>). This process must be followed and all steps completed for a park to implement a wildland fire use program.**

There are several aspects of the wildland fire use program, which must be addressed in the Fire Management Plan or in an operational management plan prior to wildland fire use implementation. The importance of these elements warrant discussion here even though they

are described in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide. These are:

1. A **decision process** to evaluate new fire starts and assess ongoing wildland fires in the park (WFIP Stage I). This process should consider the following elements:
  - Determination of fire origin and cause.
  - Determination of affected fire management zone.
  - Immediate and projected threats to life and property.
  - Smoke and health concerns.
  - Necessary qualified personnel and fire management resources availability.
  - A qualified manager for the fire is available.
  - Immediate and potential impacts to visitors, users, and local communities.
  - Projected fire growth under normal and drought conditions.
2. Definition of a **Maximum Manageable Area (MMA)** (part of WFIP Stage III)

All wildland fires reaching Wildland Fire Implementation Plan Stage III will have a defined Maximum Manageable Area (MMA). This is to ensure that there is a clear and common understanding of the authorized size and location of the fire among the various layers of NPS managers and cooperators.

Maximum manageable area is the most suitable term (and accepted on an interagency basis) for designating the ultimate acceptable size for a given wildland fire managed for resource benefits. The MMA term has a strong management connotation, is less apt to foster inconsistent interpretation, and best represents the intent of the application for wildland fire use. It provides for a closely directed fire management application in a specific area defined by resource objectives, fire and weather prescription elements, social needs, political considerations, and management capability.

All wildland fire use actions will:

- Be based on pre-determined MMA's identified in the Fire Management Plan or include the MMA as part of the fire use implementation process,

- Identify all actions to check, direct, or delay fire spread inside the MMA or to confine the fire spread to the MMA boundaries as annotated Holding Lines displayed in the approved planning document,
- Utilize the MMA as a definition of firm limits of management capability to accommodate the social, political, and resource impacts for all unplanned ignition wildland fire managed for environmental benefits.
- Establish a fixed MMA not subject to change once designated through the Interagency Wildland Fire Implementation Plan Stage III and approved by the Superintendent (**see following exceptions**).
  - **Exceptions: The complex nature of fires and land management precludes the ability of managers to write a set of guidelines or directions that cover all potential situations.** Management requirements must be flexible enough to permit continued management of fires when unique scenarios are encountered or when common sense dictates some relaxation of standard procedures. However, it is imperative that this flexibility to continue management not be interpreted as a lowering of standards for MMA determination or as an alternative to sound, thorough, initial planning.
  - Specific standards for MMA establishment must remain high to increase probabilities of successful outcomes. The planning process for initial decisions must be sufficiently comprehensive to produce the best alternative and MMA location possible given the current level of knowledge and current situation. If this is done, there should be few reasons to need to relocate the MMA. Past experiences and recognition of future potential situations require the following consideration regarding the rigid nature of drawing lines on a map. Situations will develop where restricting a fire or multiple fires to an established MMA is not reasonable, prudent, or cost-effective. In these cases, a definitive justification for re-locating the MMA is necessary, as is an explanation of why the original decision did not result in the final MMA location. Two situations are discussed in the following section, reducing the size of the MMA, and enlarging the MMA.
    - **Reducing MMA Boundaries:** Reductions in the size of the MMA can be considered at any time, based on new information, developments, etc. In reality, it is not necessary to formally alter the MMA, but rather to restrict the fire to new boundary, fuel breaks, natural barrier, etc., at the desired points within the established MMA.
    - **Enlarging MMA Boundaries:** Enlarging the MMA can be considered only in rare situations.

- 1) **At no time can an MMA be enlarged in response to the spread of a single fire closer to the boundary.** Enlarging an MMA to accommodate this situation indicates a weakness in the original planning process and MMA establishment.
  - 2) Consideration of changes in the MMA is closely related to both the current number of fires within the MMA and the number at the time of establishment.
  - 3) There may be isolated cases where formal implementation of the WFSA process because of a single wildland fire exceeding an established MMA is not prudent or logical. In these situations, experiences from past actions and anticipated in the future may indicate that the planned fire size should be exceeded by the specific wildland fire on a very small or non-threatening scale. Management options in this situation include:
    - Constraining the fire spread to the small or non-threatening exceedance of the original acceptable area using available holding forces currently in use, and identified in the Wildland Fire Implementation Plan. This constraint of fire spread must be accomplished within a reasonable amount of time (generally considered to be two operational burning periods but may be longer depending upon specific circumstances surrounding the situation).
    - In the case of relatively long range spotting, treat an isolated spot generated by this natural process as a separate fire and determine appropriate management action for this new ignition separately from the original wildland fire and based on criteria as they apply to this fire.
  - 4) If multiple fires are threatening to exceed the MMA simultaneously, then the original planning may not adequately address the situation and a WFSA is warranted to select a new strategy.
- **Multiple Wildland Fires Managed Under a Single MMA:** In the case of multiple fires or when a pre-planned MMA is utilized, the MMA may represent a consolidated area. The MMA should adequately address the ultimate acceptable area for the original ignitions. However, if new ignitions occur during the management of the original fires, it may be prudent to re-evaluate the MMA and even re-construct it. This does not necessarily imply that the original MMA was inadequate, but that a larger MMA to accommodate additional fires should be considered. New ignitions that occur near the original MMA boundary need to be accommodated by a different or larger MMA and new analysis should be completed resulting in a new WFIP.
  - **Periodic Re-Assessment and Analysis:** In instances where one or more wildland fires being managed for resource benefits are projected to persist for long durations (30 - 100+ days), it will be prudent and necessary to periodically re-evaluate the Wildland Fire Implementation Plan and accompanying documentation. Specific needs to be addressed include:
    - 1) Fire Behavior Predictions and Risk assessment (WFIP Stage II)
    - 2) Complexity Rating Worksheet (WFIP Stage II)

- 3) WFIP Stage III: Long-Term Assessment and Implementation Actions
  - Objectives and Risk Assessment Considerations
  - Natural and Cultural resource objectives and constraints/considerations
  - MMA Definition and Maps
  - Fire Projections and Maps
  - Weather season/drought discussion and prognosis
  - Long-Term Risk Assessment (describe techniques and outputs, include maps as appropriate)
  - Probability of Success
  - Threats
  - Threats to MMA
  - Threats to Public Use and Firefighter Safety
  - Smoke dispersion and effects
  - Other
  - Monitoring Actions (actions, frequency, and duration)
  - Holding Actions (describe holding actions, management action points that initiate these actions, and key to map if necessary)
  - Resources needed to manage the fire
  - Estimated costs of long-term implementation actions
  - Contingency Actions (describe contingency actions, management action points that initiate them, and resources needed)
  - Information Plan
  - Post-burn evaluation
  - Signatures and Date

This re-assessment and analysis will be necessary because over long time periods, fire situations, weather, and other developments can occur and drastically affect the original implementation plan. In many cases, fire growth of multiple fires alone will be sufficient cause to warrant preparation of a new WFIP Stage III. Since the MMA definition is part of the WFIP Stage III, it can be re-assessed along with other components of this Stage. If conditions and developments strongly support re-definition of the MMA, **this is the only other situation where an MMA can be altered or moved.**

**A determination of the need to re-assess and analyze documented implementation plans must be completed for all long duration fires no less than every 30 days. Parks can choose to complete this determination more frequently as desired or as needs dictate.**

If the fire management officer determines that managing a fire within its original approved boundary is not feasible, a WFSA will be used to select a new strategic alternative and receive the appropriate management action.

### 3. Documentation of **Fire Use Decision**

**Initial Validation:** For each wildland fire managed for resource benefits, the decision to proceed with implementation must be validated to ensure adequate and timely management. This process will use the decision process and checklist defined in the Fire Management Plan.

The fire management officer will determine that the new start meets criteria for continued management (as opposed to initiating suppression actions), based upon onsite information, fire location, and management objectives. Once the fire use decision has been validated, development of appropriate management response will commence. A Wildland Fire Implementation Plan will be prepared to the extent necessary for each fire or complexes of fires.

Many wildland fires occur in high elevations, remote areas, or areas surrounded by sparse fuels, and have little or no chance of ever requiring any management action other than monitoring. They are often single tree fires, or may be larger but surrounded by strong natural barriers. These fires will require a WFIP Stage I: Initial Fire Assessment and Periodic Fire Assessment.

If the fire management officer or designee determines that this is the case, the decision process, analysis of alternatives, and daily revalidation checklist will be the record of decision. If at a later date it develops that additional management actions will be needed, such as firing, holding, or trail closures, additional stages of the Wildland Fire Implementation Plan detailing the management strategy and planned implementation actions for the fire will be submitted to the superintendent or acting superintendent for review and approval.

Wildland fires, which begin outside of the park, will receive the same consideration as new starts when they enter the park unless the park and adjacent land owner collaborated on a plan before the fire enters the park. The Superintendent will approve a new Wildland Fire Implementation Plan as directed by the re-validation and consultation with cooperators. It is advisable for NPS units to interact and communicate with their neighbors about all wildland fires that have the potential to leave or enter park lands. Joint decision-making and planning processes should be used involving all affected agencies. **A single interagency wildland Fire Implementation Plan prepared with all agencies' inputs during the initial decision-making phase of the fire is strongly recommended.**

**Re-Validation:** For each wildland fire, the superintendent (or delegated individual) is required to periodically affirm that adequate capability exists to continue management of the fire. This periodic assessment, as described in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide, Chapter 4, Section C-4 satisfies the certification requirement identified in DO-18. A checklist of information must be completed periodically. Frequency of completion of the checklist will be determined in the WFIP process and may be adjusted as the complexity of the fire

changes. The checklist will accomplish two purposes. First, it affirms the unit's capability to continue management of the fire for resource benefits. Second, it provides the criteria for the decision concerning the need to develop the Wildland Fire Implementation Plan Stage III. So long as all criteria on this checklist remain negative, WFIP Stage III preparation can continue to be deferred (sample checklist is available in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).

The Superintendent must validate the decision either directly or through a written delegation of authority to a senior park staff member or Fire Use Manager. When fire conditions or complexity levels escalate, revalidation authority will automatically and immediately revert to the Superintendent originally responsible for approval of the Wildland Fire Implementation Plan.

Changes in an approved Implementation Plan will require the plan to be approved by the superintendent or acting superintendent. If he or she will not do this, then a Wildland Fire Situation Analysis must be completed to select a new strategic alternative.

#### 4. Development of a **Wildland Fire Implementation Plan** (operational management plan)

The standard for a Wildland Fire Implementation Plan is identified in Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide, Chapter 4, Section C-4. The use of the Wildland Fire Implementation Plan (WFIP) involves three specific stages: Stage I, II, and III. The WFIP is constructed to permit progressive development. Not all fires will warrant and receive intensive on-the-ground management actions. Mandatory, immediate complete plan preparation for every ignition is strongly recommended but during periods of multiple ignitions that could present a significant workload. The progressive developmental nature of the WFIP allows prioritization of immediate needs and reduces the workload by minimizing unnecessary planning. As part of the periodic assessment process, plan preparation requirements will be validated by completion of the Periodic Assessment, Part I (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).

All WFIP Stage III efforts will include a thorough risk assessment for the wildland fire. All units using wildland fires for resource benefits will complete an analysis of both documented and/or potential fire behavior and weather scenarios through the best available technology during development of WFIP Stage III. In addition, a quantitative analysis describing the probability of the fire breaching the MMA will also be completed.

The Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide, Table 6, Decision Support Tools, provides a list of the best available technology designed to support fire management decisions. As new technology becomes available for application in management situations, it should be used to facilitate management actions to the

greatest degree possible. However, newly emerging technology cannot be made mandatory before all potential users have had the opportunity to become fully functional in its use through training and experience.

The Prescribed Fire Behavior Analyst (RXFA) is significantly important in predicting the potential of fire growth, assessing risk, and validating the maximum manageable area (MMA). This position is prerequisite to successful preparation of the Wildland Fire Implementation Plan. Consultation with an RXFA is recommended to provide a complete review of MMAs and Wildland Fire Implementation, provide input regarding the potential of the fire, assess potential risk, and make extended fire behavior predictions for comparisons of documented and/or potential fire behavior.

The Prescribed Fire Behavior Analyst position is a mandatory component of all teams preparing Wildland Fire Implementation Plans. An RXFA does not have to remain continually involved with the wildland fire after completion of the Implementation Plan. The Fire Use Manager (FUMA) will determine the necessary level of involvement of the RXFA during the implementation of the approved plan (see NWCG 310-1 (<http://fire.r9.fws.gov/fm/pms/docs/docs.htm>) for position description and qualifications).

#### 5. Selection of New Strategies - Wildland Fire Situation Analysis (WFSA)

When any of the following conditions occur, the WFSA process will be completed:

- Fire does not meet every element of the Decision Criteria Checklist, or is exceeding management capability to implement the Wildland Fire Implementation Plan.
- Fire is projected to leave NPS jurisdiction, and the adjoining jurisdiction will not/cannot accept management of the fire.
- The superintendent or acting superintendent will not approve a WFIP for the wildland fire.
- Regional fire management officer, with the concurrence of the responsible superintendent, determines that regional and/or national conditions outweigh potential benefits of the fire and appropriate suppression action is warranted.

Those acres burned after the strategic alternative is changed due to use of the WFSA process will be recorded as acreage from a suppression action. Acres burned before the change in strategy will be counted as wildland fire use acreage. If the new alternative involves continued management for resource benefits inside the original MMA while initiating suppression action outside the MMA concurrently, area burned will be documented as: acreage inside MMA - wildland fire use acreage; acreage outside MMA - suppression acreage.

If a change in strategy occurs, fully qualified suppression personnel will be assigned and suppression action initiated, following the selected alternative defined in the Wildland Fire

Situation Analysis and within the guidance and restraints contained in the limited delegation of authority issued for that fire.

#### 6. Monitoring.

All wildland fire use actions will be monitored. Qualified Prescribed Fire Monitors (RXFM) should be used, and ordered to staff fires as needed. Information gathered during fire monitoring is needed to:

- Provide management with information essential for decision making.
- Determine if fire management program objectives are being met.
- Ensure protection of human life, property, and natural/cultural resources.
- Determine the effectiveness of the planned strategy of trigger points, holding actions and MMA.
- Assist with contingency planning by identifying barriers to spread, problem areas, locations for holding actions, and required forces.
- Increase knowledge of fire behavior and effects on park ecosystems. The uncertain location of wildland fires complicates establishment of pre-fire, fire monitoring plot network.
- Provide quality long-term documentation records for actions taken on a fire.
- Monitor smoke emissions to identify health concerns (if necessary, health advisories should be issued). State air quality organizations or the NPS air quality division may serve as sources for technical assistance and monitoring equipment.

See Chapter 11 (Wildland and Prescribed Fire Monitoring) for more information.

#### 7. Information and Interpretation. Wildland fire use programs should include an information and interpretation program which provides for the timely and accurate communication of:

- The specific fire management objectives of NPS and the park.
- Information on fire location, behavior, growth.
- Information on the effects of fire.
- Fire management actions taken on a fire.
- Fire impacts, on and off the park, on public and private facilities and services.
- Restrictions and closures within the park.
- A "step-up plan" addressing all aspects of a park's fire management program and when contact activities will escalate, including:
  - 1) Minimum public and media contact requirements (park residents, concessionaires, neighbors, cooperators, and inholders).
  - 2) Program management responsibility.

- 3) Provisions for increased interpretive and information programs commensurate with increased fire activity or fire danger.
- 4) Pre- and post-season fire management interpretation and information programs.
- 5) Minimum training requirements identified by individual parks for interpreters and public information specialists assigned park fire information responsibilities (not to be construed as requiring full certification under 310-1 standards).
- 6) Information on the natural role of fire, the park's efforts to restore natural fire to park ecosystems, or other discussions of the benefits of fire will not be mixed with information on the status of wildland fire suppression.

#### 8. Interagency Agreements and Commitment

Parks with complex wildland fire use programs on lands that abut neighboring lands having similar objectives should develop mutually agreeable fire management plans or interagency agreements to amend existing plans. Common management responses to fire occurrences, clear understanding and implementation of funding procedures, and policies for managing fires that cross agency boundaries must be included.

Where agreement on decision criteria and management actions are not possible or desirable, or where NPS fire management zones abut jurisdictions having conflicting fire management objectives, buffer zones must be defined. The buffer zones should be wide enough to provide a defensible space for the adjacent jurisdiction. Insufficient buffer zones and/or indefensible boundaries will cause the appropriate management response to assume a suppression orientation.

9. Fire Management Committee. A committee approach, involving key staff from all divisions, has been found to be an effective method of reviewing and evaluating wildland fires and is a recommended technique to provide review and oversight. A key function of both the initial and subsequent reviews is to ensure that various management considerations are addressed in the Implementation Plan, and to seek consensus on the Maximum Manageable Area and its internal decision points. Since the approval of the new or modified Implementation Plan by the superintendent is mandatory, he or she is strongly encouraged to participate in the committee meetings. This is particularly true in situations involving road or trail closures, deteriorated visibility, or impact on businesses in or near the park.
10. Postfire Rehabilitation. FIREPRO will not pay for postfire rehabilitation of effects caused by wildland fire use actions. Activities which rehabilitate impacts associated with direct management actions, such as flying out refuse, flush cutting stumps, or obliterating handline is a normal part of wildland fire use, and charged to the fire account. Mitigation of

long term impacts, such as replacing burned wooden water bars in trails, bucking fire-killed trees off trails, or repairing burned backcountry bridges cannot be charged to the fire account. Requests for FIREPRO funds to be spent on long-term rehabilitation of effects from wildland fires will be submitted to, and reviewed by the Fire Management Program Center, NIFC (refer to Chapter 12, Burned Area Emergency Rehabilitation for more information).

#### 11. Wildland Fire Use Organizational Management

In addition to planning decisions which specify the size of the wildland fire and its behavior and effects, the workload requirements imposed from the management of the fire must be defined and met. These include all positions (overhead, firing, holding, monitoring, logistics, backup, etc.) which will be required to manage the fire, as specified in the Implementation Plan. Appropriate skill levels are guided by NPS complexity analysis.

As organizational requirements escalate in response to increasing fire complexity and values to be protected, units are expected to staff appropriately. Appropriate organizational levels will be identified through the Wildland Fire Implementation Plan or the Wildland Fire Situation Analysis (WFSA) process or by evaluation of in-park capabilities. Fire Use Management Teams (FUMT) or Incident Management Teams (Type 1 or 2) can augment wildland fire use, when exceeding local capabilities. Both forms of teams can be ordered through the dispatch mobilization system and are described in the National Interagency Mobilization Guide. Fire Use Management Team considerations are summarized in the next section. Complete descriptions of team configuration, capabilities, mission, and responsibilities of the Fire Use Management Teams are described in the Interagency FUMT Operations Guide, available from the National Interagency Fire Center (NIFC) in Boise.

#### **FIRE USE MANAGEMENT TEAM (FUMT) CONSIDERATIONS**

The Fire Use Management Teams have been established to provide a specialized management organization to fulfill the need for assigned resource support to fire use actions that exceed local units' management capability at activity levels experienced during long duration situations or when preparedness levels are high and high priority fires with protection objectives are requiring large resource commitments. Fire Use Management Teams are not designed to displace existing Incident Management Teams (IMTs). Instead, these teams are intended to supplement and support existing IMTs by providing additional resources to facilitate concurrent fire use and wildland fire suppression accomplishments.

The FUMTs bring unique risk assessment and fire growth projection capabilities to support decision-making and improve planning and implementation activities on fire use actions. The teams consist of an overhead configuration based around Incident Command System (ICS) command and staff positions.

The teams have been identified in the National Mobilization Guide (NMG).

Currently defined roles and responsibilities of teams include assistance and/or implementation tasks in the following areas:

1. Technical assistance in the planning, implementation, and evaluation of wildland fires managed for resource benefits (wildland fire use actions):
  - a) direct assistance in long-term programmatic preparation and decision-making for wildland fire use (could include historical weather analysis); input file preparation; fire management plan prescription; Wildland and Prescribed Fire Complexity Analysis; and decision criteria evaluation or formulation; Delegation of Authority preparation, etc.
  - b) direct assistance or counsel in short-term wildland fire use preparation,
  - c) direct technical support in decision-making and developing appropriate management responses as part of the preparation of Wildland Fire Implementation Plans (WFIP),
  - d) complete management, oversight, and implementation of appropriate management responses as directed in Wildland Fire Implementation Plan,
  - e) assistance in evaluation of effectiveness and efficiency of specific fire implementation (in terms of periodic assessment and final fire assessment), and program implementation,
  - f) develop recommendations, as requested designed to improve programmatic effectiveness.
2. Technical assistance in the planning, implementation, and evaluation of complex prescribed fire projects, as requested by an ordering unit:
  - a) direct assistance in planning and preparation, including, but not limited to, prescription development, input to Go/No-Go decision criteria checklist, fire behavior prediction and forecasts, design of fire weather, fire behavior, fire effects, and smoke monitoring schemes, evaluation of objectives, and development of implementation plans,
  - b) direct assistance or management of complete implementation of a Prescribed Fire Plan for a prescribed fire project. This responsibility could involve management of pre-burn preparation, ignition, holding, monitoring, and post-ignition operations,
  - c) technical counsel or advisement involving prescribed fire accomplishment. Includes evaluation of objectives and recommendations.

3. Technical assistance and support for implementation of appropriate management responses to accomplish joint wildland fire use and suppression objectives for low-moderate complexity wildland fires (could include design and implementation of monitoring schemes, assistance to local staff or Fire Management Officer (FMO) in monitoring and evaluation of multiple fires, analysis of historical weather, and completion of situation assessments, probability calculations, fire behavior forecasts, rare event risk assessment, and implementation of limited holding actions).

Characteristics of a fire use/wildland fire where a FUMT represents the desirable management organization include:

- Management objectives of achieving resource benefits,
- Low – moderate complexity wildland fire with a suppression-oriented appropriate management response indicating long-duration time frames and limited on-the-ground operational actions,
- A Maximum Manageable Area (MMA) is established to set limits of the ultimate acceptable fire size,
- Long-term risk assessment and other aids to decision-making are necessary/desirable,
- Most or all of the command and general staff positions may be needed,
- The fire extends into multiple operational periods,
- A written operational management plan (Wildland Fire Implementation Plan) is needed and prepared,
- A written daily action plan is needed and prepared,
- Operations personnel do not generally exceed 100 for long time periods,
- Divisions may be established to geographically facilitate making work assignments,
- Role of Superintendent
  - \* Complexity analysis
  - \* Wildland Fire Implementation Plan
  - \* Written Delegation of Authority
  - \* Superintendent briefings

## **B. WILDLAND FIRE SUPPRESSION**

### **INTRODUCTION**

Objective. The objective of wildland fire suppression, as an integral part of wildland fire management in the National Park Service, is to manage wildland fires safely and efficiently to accomplish protection objectives. It will be integrated into land and resource management plans and activities on a landscape scale, across agency boundaries, and will be based on best available science.

Protection priorities are (1) human life and (2) property and natural/cultural resources. If it becomes necessary to prioritize between property and natural/cultural resources, this is to be done based on relative values to be protected, commensurate with fire management costs. Once people have been committed to an incident they become the highest value to protect.

The full spectrum of tactical suppression options is available to the manager of a wildland fire. One or all of the actions may be employed on any given incident.

Any one or a combination of tactical options may be chosen and specified by the manager, depending on the anticipated consequences and management objectives for the area that is likely to burn. This will be done as a part of the operational management plan.

Responsibilities. Every National Park Service employee has a responsibility to support wildland fire operational activities as the situation demands. All personnel involved in fire management activities shall meet the current National Park Service wildland fire qualification standards, to include accepted interagency competencies (knowledge, skills, and abilities) where appropriate.

#### **INITIAL AND EXTENDED ATTACK**

Initial Attack. Wildland fires, which are deemed unacceptable, must receive appropriate initial attack action (IA) as defined in the fire management plan. The goal in all initial attack actions is to limit damage to values to be protected and to prevent the escape of the fire.

Closest Forces. Cooperative agreements or memoranda of understanding with adjacent agencies or fire protection organizations must cover the use of closest forces, i.e., the nearest available appropriate resources to respond to an incident. These agreements will be part of the fire management plan. Orders for additional resources will be placed in accordance with existing agreements including the designated geographical area or zone dispatch.

Extended Attack. Extended attack occurs when a fire has not been contained or controlled by the initial attack forces and continues, either until transition to a higher level incident management team is completed, or until the fire has been contained/controlled. Extended attack action requires a Wildland Fire Situation Analysis to guide the re-evaluation of suppression strategies.

Wildland Fire Situation Analysis (WFSA). The WFSA is a decision process that employs a systematic and reasonable approach to determine the most appropriate management strategy for a particular situation. Reasonable management alternatives are identified, analyzed and evaluated, and are consistent with the expected probability of success/consequences of failure. The superintendent shall approve the WFSA and any revisions. Evaluation criteria include firefighter safety, anticipated costs, resource impacts, and environmental, social, and political considerations. The evaluation of alternatives must clearly identify the point at which the failure

of the alternative is imminent. This becomes the triggering mechanism for re-evaluation of the WFSAs.

For situational guidelines for selecting alternatives in the WFSAs see Wildland and Prescribed Fire Management Policy Reference Guide.

Pre-Attack Wildland Fire Situation Analysis. The pre-attack WFSAs are WFSAs that are completed by the park staff during the pre-attack planning process. It translates park fire management objectives into a concise action document, which determines initial management strategy. To ensure that all important decision criteria are adequately addressed during the initial stages of a wildland fire, selective use of a pre-attack WFSAs is recommended. Although this process applies in any park with identified protection zones, it is most useful in those parks, or portions of parks, where fire is unacceptable. The pre-attack WFSAs will serve as the framework for a WFSAs if the fire exceeds the parameters of the selected management alternative.

A sample pre-attack WFSAs is contained in Exhibit 1.

Fire Complexity Analysis. The fire complexity analysis is a checklist intended to guide the superintendent in determining incident organizational needs and when transition from extended attack to a higher qualified incident management team is necessary. Before additional resources are ordered, an analysis must be completed and becomes part of the fire record.

A Fire Complexity Analysis Guide is contained in Exhibit 2 (This is not to be confused with the Wildland and Prescribed Fire Complexity Analysis described in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).

## **INCIDENT MANAGEMENT TEAM TRANSITION**

Limited Delegation of Authority. The transfer of authority for suppression actions on a fire is done through the execution of a written limited delegation of authority from the superintendent to the incident commander. This procedure facilitates the transition between incident management levels.

An incident management team may assume the authority to manage a fire only after receiving a signed limited delegation of authority from the superintendent. The delegation of authority is a part of the briefing package provided to the incoming incident management team.

A sample delegation of authority is contained in Exhibit 3.

Briefing. The superintendent and local incident commander must brief the incoming incident management team.

The briefing guidelines are contained in Exhibit 4.

## **INCIDENT MANAGEMENT CONSIDERATIONS**

Use of minimum impact tactics is the policy of the National Park Service. Minimum impact tactics guidelines are contained in Exhibit 5.

Air Operations. Air operations during fire incidents will comply with the provisions of DO-60, Aviation Management Guideline.

Personnel Work/Rest Guidelines. Management of crew, overhead, and support personnel to assure safe, productive fire suppression activity is a basic responsibility of all supervisory personnel.

Personnel work/rest guidelines are contained in the Interagency Incident Business Management Handbook.

Extraordinary Fire Situations. Occasionally, instances of fire behavior, which exceed the fire organization's ability to achieve management objectives, occur. In such instances, neither traditional strategies and tactics nor any amount of additional resources will control the fires.

While these isolated incidents occur infrequently, the conditions resulting from extreme resistance to control must be addressed in fire management planning. Under such circumstances, a variety of situations may arise, including unacceptable threats to firefighter safety, substantial losses of acreage, uncontrollable losses of improvements, consistent failure to meet suppression objectives and overwhelming political involvement.

Fire management during these situations will require extraordinary, nontraditional thinking. The overall management goal to suppress the fire remains constant. In such situations, however, incident commanders must shift their focus from perimeter control to an interim strategy for protecting life and high value park resources while providing for the safety of firefighting resources until conditions are more favorable for suppression.

Managers should determine those critical values, protection strategies, and indicators which will assist them in identifying and responding to these extraordinary fire incidents, then document them in park fire management plans.

Incident Status Reporting. The status of the incident must be reported in accordance with local, geographical area, and national mobilization guide standards. Incident status is reported on the Incident Status Summary (ICS-209). (<http://fire.r9.fws.gov/fm/pms/forms/ics.htm>)

Rehabilitation. Fire rehabilitation and fire recovery involve types of actions that must be clearly differentiated. Rehabilitation involves short-term actions (usually 0-6 months) to stabilize a burned area and mitigate the effects of fire suppression activities. Immediate rehabilitation

actions to prevent further land degradation or resource loss, or to ensure safety, may be carried out as part of the incident. For more detail on rehabilitation see Chapter 12.

Recovery involves long-term actions to restore an area to its pre-fire appearance and function, including restoration of plant and animal communities and replacement or enhancement of park infrastructure, including the construction of buildings and facilities. Rehabilitation actions may be funded through the emergency fire operations accounts, whereas recovery actions are part of normal park ONPS operations.

As a general rule, burned areas that are not managed to preserve a cultural or historic scene will be allowed to regenerate naturally. Rehabilitation needs should be considered for each fire, and plans prepared for those fires requiring complex rehabilitation efforts. Each park will identify its rehabilitation techniques and standards in the park's fire management plan.

Release of Incident Management Team. The release of an incident management team is basically the reverse of the transition to the incident management team from extended attack. The superintendent must approve the date and time. The incoming incident management team should have had 24 hours off prior to assuming control of the incident.

Guidelines for the release of an incident management team are contained in Exhibit 6.

Incident Management Team Evaluation. At the time of closeout, the superintendent must complete a written evaluation of the incident management team, appraising them of their compliance to the incident objectives and the delegation of authority. A second more thorough narrative should be completed after sufficient time has elapsed so that incident costs, claims, demobilization, and rehabilitation are essentially complete and can be thoroughly evaluated.

This delay in preparing the complete narrative evaluation will also provide the superintendent with the opportunity to evaluate the incident management team's effectiveness with cooperating agencies, the media, and park neighbors. However, the written evaluation should be completed prior to the end of the current calendar year.

The delegation of authority, escaped fire situation analysis, and superintendent's direction shall serve as the primary standards against which the incident management team is evaluated.

The superintendent will provide a copy of the evaluation to the incident commander, regional fire management officer, and Fire Management Program Center and retain a copy for the final fire package.

Factors to consider in a written evaluation of an incident management team are contained in Exhibit 7.

