Exhibit 1

NPS Fire Management Plan Template
-Detailed Guidance-

TITLE PAGE
- ✓ *Be creative and make an impression. An attractive title page with a photo and/or classy graphic can express a lot about the professionalism of your fire management program.*

SIGNATURE PAGE
Purpose: Record approving signatures and signature dates according to local/regional requirements.

- ✓ *Usually signed as "Recommended" by Fire Management Officer. At times other park program leads such as Chief Ranger and/or Chief of Natural Resources also sign as "Recommended".*

- ✓ *The park Superintendent signs the "Approved" line. Some regions also require a regional signature. National concurrence may be requested but is not required.*

- ✓ *Some Signature pages also list major contributors as co-authors*

- ✓ *Annual reviews and updates may include inserting a new signature page each year as part of the process.*

EXECUTIVE SUMMARY [Optional]
Purpose: The Executive Summary should give casual readers, managers, and cooperators the most important information about the park's fire management program in a page or two.

- ✎ *Summarize key issues and direction contained in the Fire Management Plan.*

- ✎ *Mention any related compliance documents that support the FMP.*

TABLE OF CONTENTS
Purpose: The 'Table of Contents' and its related elements (List of Figures and Tables) is to be sufficiently detailed that a casual user can quickly and easily find information.

- ✓ *The 'Table of Contents' should use the major outline headings and numbering system in this template. Additional subsections may be included at the option of the park.*

LIST OF FIGURES
- ✎ *List the figures (e.g. maps, graphs, photos) that you include in the FMP to support the text.*

LIST OF TABLES
- ✎ *List the tables (e.g. excel spreadsheets, matrices, etc.) that you include in the FMP to support the text.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 2
Exhibit 1

1.0 INTRODUCTION

Intent: In the sections that follow introduce the reader to the purpose of the fire management plan, the park area covered by the FMP and describe the major program elements of the fire management program.

1.1 Reason For The Fire Management Plan

✎ *In a few bullets or sentences, briefly state the reasons for developing this plan.*

Required by NPS Policy*:*

✎ *Include the following quote from NPS Directors Orders-18 Wildland Fire Management (January 1, 2008):*

"Each park with burnable vegetation must have an approved Fire Management Plan that will address the need for adequate funding and staffing to support its fire management program. Parks having an approved Fire Management Plan and accompanying National Environmental Policy Act (NEPA) compliance may utilize wildland fire to achieve resource benefits in predetermined fire management units. Parks lacking an approved Fire Management Plan may not use resource benefits as a primary consideration influencing the selection of a suppression strategy, but they must consider the resource impacts of suppression alternatives in their decisions."

Other Purposes of the Plan*:*

✎ *Hopefully your plan will serve purposes other than just fulfilling policy requirements. Describe other major purposes of the plan that may include but are not limited to:*
- *Provide consistent operational guidance*
- *Provide stakeholders with a concise description of why and how fire will be managed in the park*
- *Provide park managers a concise communications tool for understanding actions, roles and responsibilities*
- *Demonstrate the connection between park-wide goals and objectives (contained in the GMP, RMP, RSS, wilderness management plan and others) to fire management actions*
- *Document fire program logic and objectives*
- *Define other purposes that the plan is intended to achieve.*

1.2. General Description of the Park

1.2.1 Purpose of the Park

✎ *Summarize the enabling legislation and the purpose of the NPS unit as described in the park's General Management Plan or equivalent document.*

✎ *Include a vicinity map showing general location, park boundaries, and all lands covered by the FMP.*

✎ *If more than park lands are included (i.e. if it's a joint plan with multiple parks and/or cooperator such as USFS or BLM) list and describe those lands.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 3

Exhibit 1

1.2.2 Management Environment

1.2.2.1 Land ownership, significant resources, mission and management direction

 ✎ *List different management designations (e.g. wilderness, wild and scenic rivers, research natural areas, cultural/religious areas, habitat management areas, etc.) that affect or constrain fire management activities.*
 ✎ *Describe adjacent non-park lands and their management direction (e.g. Urban area/WUI, State Park, other federal lands, etc.).*
 ✎ *Include maps to support the descriptions if useful.*

1.2.2.2 Overview of physical and biotic characteristics of park

 ✎ *Provide a brief high level physical, biological and cultural resource description of the park area covered by the FMP.*
 ✎ *Briefly discuss vegetation communities, soil, aquatic resources, air quality issues, wildlife, cultural and historical resources, T&E species, featured species, and real property that are likely to be positively or negatively affected by fire management actions.*
 ✎ *Generally describe types or categories of resources that require particular protection from fire, or that require fire for maintenance or restoration.*
 ✎ *Include maps to support the descriptions if useful.*

1.2.3.3 Role of fire in the park

 ✎ *Summarize the historic/ecological, current, and desired role of fire in the park.*
 ✎ *Cite key studies/scientific papers and findings, and monitoring results to date that support this section.*
  o *Refer the reader to more in-depth discussions/citations. Include in Appendix.*
 ✎ *Note: the historic and/or desired role of fire may be different from the ecological role (e.g. in the case of maintaining a cultural landscape).*

1.3 Environmental Compliance

 ✎ *State that the plan meets the requirements of the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act (ESA) and Section 107 of the National Historic Preservation Act (NHPA).*
 ✎ *Reference the titles and dates of associated NEPA document(s) and decision documents supporting this FMP.*
 ✎ *Include decision documents (Record of Decision (ROD), Finding of No Significance (FONSI), Documented Categorical Exclusion (CE), Memo-to-Files) in the appendix.*
 ✎ *Summarize significant commitments, mitigations or sideboards contained in the compliance and decision documents.*

 ✓ *The NEPA document(s) and the decision(s) document is the basis for the FMP; Park units should have comprehensive Resource Management input during the NEPA process.*
 ✓ *The NEPA document(s) should include all planned wildland fire management activities. For example, herbicide use is an emerging tool for fire and vegetation management, and should be considered in the NEPA analysis if not covered in other park compliance documents. BAER/BAR should also be considered in the NEPA analysis.*

Exhibit 1

- ✓ *Consider utilizing a Programmatic Agreement (PA) for Consultation under Section 106 of the National Historic Preservation Act with the SHPO/THPO. PAs are most appropriate for reoccurring actions through the fire program, and should be used for more efficient Section 106 consultation. The PA should include all options available to the fire program (including herbicide application and BAER/BAR).*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 5

Exhibit 1

2.0 POLICY, LAND MANAGEMENT PLANNING & PARTNERSHIPS

Intent: The reader should clearly understand how the actions in the FMP relate to and fulfill NPS policy and park management objectives

✓ *In the following sections, you should establish a clear linkage between interagency and NPS fire policy, park specific legislation, and park level planning documents that provide direction (e.g. GMP, RMP, RSS). Tell how the fire management actions you describe in the FMP fulfill that direction.*

2.1 Fire Policy

✐ *Identify and cite key sources of Interagency and NPS guidance and direction that affect or drive actions described in the FMP.*

✓ *These may include:*
- *National interagency and departmental policy (e.g. National Fire Plan, Departmental manuals)*
- *NPS specific policies (e.g. DO-18, RM-18)*
- *Compliance requirements, laws and authorities (e.g. NEPA, NHPA, ESA, programmatic agreements).*
- *Note: Section 2.1 should deal primarily with Interagency and NPS laws and policy drivers. Park specific direction will be summarized in section 2.2.*

Examples:
- *Federal Wildland Fire Management Policy and Program Review (2001).*
- *Guidance for Implementation of Federal Wildland Fire Management Policy (2009)*
- *Managing Impacts of Wildfires on Communities and the Environment, and Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy (USDOI/USDA).*
- *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan.*
- *NPS Management Policies (2006)*
- *NPS Directors Order 18 – Wildland Fire Management*
- *NPS Reference Manual 18 – Wildland Fire Management*
- *NPS Directors Order 41 – Wilderness Management*
- *NPS Reference Manual 77 – Natural Resource Management*
- *NPS 28 – Cultural Resources Management*
- *NPS DO-12 and Handbook – Conservation Planning, Environmental Impact Analysis and Decision Making*
- *Various environmental laws such as; Clean Air Act, NHPA, Endangered Species Act, Wilderness Act, and various others*
- *Executive Orders*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 6

Exhibit 1

2.2 Park/Resource Management Planning

✐ *Identify and cite requirements and direction contained in park-specific documents that influence or affect fire management actions.*

  ✓ *Guiding park documents may include the General Management Plan or equivalent, Strategic Plan, Foundation Document, and other implementation plans such as a Wilderness Management Plan and Resource Management Plan*

  ✓ *Larger scale landscape plans that affect park level activities may also be included – e.g. Comprehensive Everglades Restoration Plan, Greater Yellowstone Ecosystem, Northwest Forest Plan, State and/or regional State Implementation Plans for smoke/air quality, and others.*

✐ *Summarize the planning process you used to develop this FMP. Include elements such as:*
  • *Consultation with stakeholders and cooperators consulted (both internal and external)*
  • *Issues identified*
  • *The compliance process (e.g. memo-to-file, CE, EA, EIS) utilized, and decision produced (memo-to-file, CE, FONSI, ROD; (place decision document in the Appendix).*

2.3 Partnerships

✐ *Describe how the park has fulfilled the Interagency and NPS requirement for interagency fire management planning.*

✐ *Discuss the internal and external fire management partnerships or planning teams that helped you develop this FMP. Describe how those partnerships will be used to improve interagency management of fire on the park and adjacent lands.*

  Examples include:
  • *Interagency planning teams (e.g. Local groups that share boundaries, FPA partners)*
  • *Non-federal agencies/departments*
  • *Tribal governments*
  • *Internal interdisciplinary planning teams*

3.0 PARK-WIDE & FIRE MANAGEMENT UNIT CHARCTERISTICS
Intent: In the following sections, describe park-wide fire management considerations and FMU specific information.

✓ *Section 3.1 describes park-wide considerations across all Fire Management Units (FMUs).*

✓ *Section 3.2 describes FMU specific objectives, conditions, and requirements.*

✓ *Since Section 3.1 (requirements and information common to all FMUs) and Section 3.2 (requirements and information specific to each FMU) may contain non-redundant information, they must be used together for a complete representation of FMU characteristics and management considerations.*

✓ *A **Fire Management Unit** is any land management area definable by objectives, management constraints, topographic features, access, values-to-be-protected, political boundaries, fuel types, or major fire regime groups, etc., that sets it apart from management characteristics of an adjacent unit.*

✓ *The primary purpose of developing FMUs in fire management planning is to assist in organizing and evaluating information in complex landscapes. The process of creating FMUs divides the landscape into smaller geographic areas to more easily describe physical/biological/social characteristics, and depict associated planning guidance based on these characteristics. The information contained in the following sections may also be used for incident decision support (e.g. WFDSS), and incident management. The organization and presentation of information should be concise and easily locatable for those purposes.*

If possible, FMUs should be developed through interagency and interdisciplinary efforts and interactions consistent with each unit's land management objectives to facilitate cooperative fire management across boundaries.

3.1 Park-wide Fire Management Considerations
✓ *In the following sections you will state the range of management actions that will be used to achieve the goals and objectives park-wide. Application of management actions may vary by FMU and may be noted in the FMU specific sections below.*

✓ *You will also be summarizing the direction for managing fire on the landscape found in the park's land and resource management planning documents. Describe how the fire management goals, desired conditions, objectives and actions fulfill the parks management direction.*

✓ *When writing the following sections, consider formats that make the information readily accessible and usable for other purposes such as in the Wildland Fire Decision Support (WFDSS) software, letters of delegation, fuels treatment plans and other documents.*

3.1.1 Fire Management Goals and Objectives

🖉 *List the fire management goals and objectives. These provide the programmatic direction for the fire program. They should be stated within the context of the approved land and resource management plan direction to the extent that direction exists.*

🖉 *In this section of the fire management plan, provide overall objectives of the fire management program, including the desired timeframe for accomplishment. List the general targets for operational and park conditions as well as specific desired conditions/objectives for vegetation communities, cultural landscapes, or other program goals.*

Program Objectives Examples:
- *50% of fire adapted communities in the park will be maintained within their known fire return interval by 2020*
- *Lost time injuries on the fireline will be reduced by 25% over the 2009 baseline*
- *90% of unwanted and unplanned ignitions will be aggressively suppressed in the first burning period each year*
- *75% of all unplanned ignitions each year that have potential for achieving resource benefits will be managed under a strategy that maximizes the benefit consistent with firefighter and public safety*
- *80% of visitors and residents in the adjacent communities have a basic understanding of the fire management actions in the park*

Resource Objectives Examples:
- *Restore savannah/prairie complexes to 60-80% native grass cover after three prescribed fire treatments*
- *Maintain woody species cover <20% and native grass cover >75% for all battlefields after a combination of summer burn and mow treatments*
- *In the lower montane mixed-conifer forest, reduce total fuel load by 25-50% after one prescribed fire treatment.*

✓ *Goal Statements & Desired Conditions*
  Definition: "The desired state or target/threshold condition that a resource management policy or program is designed to achieve."

  A goal is usually not quantifiable and may not have a specific due date. Desired conditions help to provide benchmarks that define broad goal statements more specifically. Goals and desired conditions form the basis from which objectives are developed.

✓ *Objectives*
  Definition: "Specific results to be achieved within a stated time period."

Objectives are subordinate to goals, are narrower in scope and shorter in range, and have an increased possibility of attainment. An objective specifies the time periods for completion and measurable, quantifiable outputs or achievements.

3.1.2 Wildland Fire Management Actions

✎ *Briefly describe the broad range and scope of wildland fire management program elements that are approved for use in the park. This information may be included as a narrative or in table format.*

✓ *Include the following if they apply to your program:*
  • *Preparedness activities*
  • *Safety Program*
  • *Management of Unplanned Ignitions*
     o *Suppression focused, or including the full range of options to consider resource benefit?*
  • *Management of Planned Fuels Treatments*
     o *Used or not?*
     o *Fire and non-fire?*
  • *Communications, education, prevention, mitigation*
  • *Adaptive management (monitor, research, review, incorporate)*

✓ *Operational aspects of each program element will be detailed in Chapter 4.*

3.2 Fire Management Unit Specific Characteristics

✓ *In the following sections you will describe the unique characteristics of each FMU.*

✓ *As your FMP is being written, you will need to determine the amount of detail to be included in the park-wide considerations (Section 3.1) versus the detailed FMU section below. For example, an area of low complexity may have most of the information contained in the area-wide section (3.1). Conversely, large complex landscapes may have few common characteristics and considerations between FMUs, and may have most information contained in the FMU specific sections below.*

✓ *If program elements are applied differently to FMUs, consider summarizing in this introductory section in a table or other easily understood format (e.g. if fuels management projects will only be used in some FMUs, indicate which FMUs allow treatments, along with the general scope of the treatments (e.g. 3,000-5,000 acres per year will be treated in treatments units that typically will range from 1-500 acres in size.)*

✓ *Consider developing a summary table outlining critical information relative to each FMU as a handy reference.*

✎ **FMU Snapshot / Summary Table** *(Optional)A summary table for each FMU may be useful to have 'at-a-glance' information. Below is a sample of what such a 'snapshot' might include.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 10

Exhibit 1

FMU Snapshot - *example*

FMU Name	Northwest Territory
FMU Identifier	FMU-AKRO 1
Defining Characteristics	Contains caribou, lots of trees, and melting permafrost burping up CO^2. You can see Russia from here.
Acres	More than you have in the lower 48!
Approved Fire Mgmt. Strategies	- Management of unplanned ignitions and point protection and is the dominant strategy throughout the unit. - Fuels treatments may be used within 0.5km of isolated structures, private lands and native allotment boundaries
Constraints	- No use of dozers without specific permission from the superintendent for each event - Avoid dipping water from key lakes (see map below)
Associated Wx Station(s)	NCR-Gnome Creek
Interagency FMU/ Collaboration?	BLM, FWS, Alaska State
Dominant Vegetation or Fuels	Black Spruce/Tundra
Lat/Long of Centroid (NAD 83)	LAT: 57.16945 / LONG: -157.2711

🖉 **[*FMU Name*] Specific Information –** *repeat for each FMU*

✓ *In the following sections, summarize the direction for managing fire in each FMU. Include specific goals, desired conditions, and objectives as they pertain to fire management activities.*

✓ *Specific management direction and data required for Wildland Fire Decision Support (WFDSS) should be listed in the Appendix of the FMP so that they can be easily retrieved for uploading into the WFDSS application, and can also be reviewed annually and updated as needed.*

✓ *When writing these sections, parks are encouraged to use a format that provides convenient access to FMU specific information such as in fuels treatment plans, letters of delegation, and other documents.*

FMU Approved Strategic Direction

🖉 *State the strategic direction for management within this FMU, including but not limited to the approved response to unplanned wildland fires (both human causes and natural causes) and approved fuels management actions.*

FMU Fire Management Actions

🖉 *List and very briefly describe the range and scope of wildland fire management program elements that are approved for use in the FMU.*

🖉 *Discuss as appropriate:*
- *Preparedness activities*
- *Safety Program*
- *Management of Unplanned Ignitions*
  - o *Suppression focused, or including the full range of options to consider resource benefit?*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 11

Exhibit 1

- *Management of Planned Fuels Treatments*
    - o *Fire and non-fire?*
- *Communications, education, prevention*
- *Adaptive management (monitor, research, review, incorporate)*

FMU Goals and Objectives

🖉 *List the fire management goals and objectives for this FMU.*

✓ *Goal Statements & Desired Conditions*
Definition: "The desired state or target/threshold condition that a resource management policy or program is designed to achieve."

A goal is usually not quantifiable and may not have a specific due date. Desired conditions help to provide benchmarks that define broad goal statements more specifically. Goals and desired conditions form the basis from which objectives are developed.

Objectives
Definition: "Specific results to be achieved within a stated time period."

Objectives are subordinate to goals, are narrower in scope and shorter in range, and have an increased possibility of attainment. An objective specifies the time periods for completion and measurable, quantifiable outputs or achievements.

FMU Description

🖉 *Briefly describe key FMU characteristics*

Examples are:
- *Jurisdictional boundaries (e.g. Adjacent or intermingled federal, private, tribal, state, county ownership)*
- *Physical and biological description of FMU (e.g. Topographic features, fuel types, special conditions that may result in extreme fire behavior, access, Fire Regime Condition Class (FRCC), high value concerns, special areas)*
- *Historic, current, desired role of fire in FMU*
- *Communities and other values at risk within and adjacent to FMU*
- *Fire behavior and weather descriptions (e.g. Energy Release Component (ERC) tables, past fire behavior and perimeter histories, typical fire season, control problems)*
- *Air quality/smoke characteristics affecting fire management in the FMU (e.g. class 1 airshed, non-attainment status, etc.)*
- *Fire regime*

FMU Management Constraints and Guidance

🖉 *Describe equipment and seasonal use restrictions by management area or FMU, including restrictions due to weather, species sensitivity, or other concerns that may affect implementation. Include considerations for unplanned ignitions and fuels*

treatments that may occur in the FMU. These may be found in the NEPA decision document.

Examples are:
- *Potential size and scope of vegetation treatments to meet both fire and land management goals*
- *FMU specific guidelines, constraints, or mitigation considerations (e.g. Minimum Impact Suppression Techniques (MIST), minimum suppression in special areas, retardant or chemical limitations, etc.)*
- *Burned area emergency stabilization and rehabilitation considerations if applicable (e.g. Seeding requirements or treatments)*

FMU Safety Considerations

🖉 *Briefly describe or list FMU safety issues and features.*

✓ *Include or reference maps as appropriate.*

Examples are:
- *Gas lines*
- *Power lines*
- *Mine shafts*
- *Aviation hazards*
- *Restricted access due to hazards*
- *Poisonous plants and venomous animals*

FMU Operational Information

🖉 *Briefly describe or list FMU operational information.*

✓ *This information may be contained in this section, or in an appendix and referenced here.*

Examples include:
- *Permanent repeater locations, recommendations of successful temporary sites*
- *Radio frequencies*
- *Radio 'dead spots'*
- *Communication plan*
- *Evacuation plan*
- *Water dip sites*
- *Helispots*
- *Remote automated weather stations (RAWS)*
- *Smoke monitoring equipment associated with the FMU*
- *Potential fire camp locations*
- *Include maps as appropriate*

Exhibit 1

4.0 WILDLAND FIRE OPERATIONAL GUIDANCE

Intent: Chapter 4 describes local guidance and procedures for implementing wildland fire activities across the park. It includes sub-sections outlining procedures for management of planned and unplanned ignitions, preparedness activities, communications and education programs, burned area rehabilitation actions, safety, smoke management, and data/records management.

✓ *The following sub-sections should be addressed directly here in the body of the FMP or a reference should be cited where the information can be readily found (e.g. in an Appendix). A general rule of thumb is if the sub-sections are extensive and detailed (more than 2-3 pages), or if elements will require annual review and updating (e.g. emergency contact numbers) a summary should be included here, and the reader directed to the Appendix for details.*

4.1 Safety

✓ *In the sections below summarize elements of the safety program that the park commits to implementing and provides useful safety reference material which can be used by fire staff at all levels in the program. If extensive, details and supporting examples/plans/information may be included by reference in an Appendix or addenda.*

✎ *The safety section must begin with the following statements:*

> *"Firefighter and public safety is our first priority. This Fire Management Plan and the activities defined within reflect this commitment. The commitment to and accountability for safety is a joint responsibility of all firefighters, managers, and administrators. Individuals must be responsible for their own performance and accountability. Every supervisor, employee, and volunteer is responsible for following safe work practices and procedures, as well as identifying and reporting unsafe conditions. All firefighters, fireline supervisors, fire managers, and agency administrators have the responsibility to ensure compliance with established safe firefighting practices.*

> *All actions defined in the Fire Management Plan will conform to safety policies defined in agency and departmental policy, including, but not limited to:*

> a. *Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)*
> b. *NPS Director's Order 18 Wildland Fire*
> c. *NPS Reference Manual 18, Chapter 3 - Standards for Operations and Safety"*

4.1.1 Firefighter Safety

✎ *Describe the specific elements of the parks fire program that focuses on firefighter safety. Supporting plans and examples for each element can be included by reference in an Appendix or addenda if needed.*

Examples of fire safety program elements to consider:
- *Health screening*
- *Wellness/fitness training and testing*
- *Safety training*

- *Job hazard analysis*
- *After Action Review standards/process*
- *Work/rest standards*
- *Safety committee oversight*
- *Serious accident/incident review procedures*
- *Fireline evacuation process/procedures/standards*
- *Critical Stress Debriefing procedures*
- *Right of refusal of assignment*
- *Others as appropriate*

4.1.2 Public Safety

✐ *Describe the specific elements of the park's fire program that focuses on public safety (including non-fire park staff and residents). Supporting plans and examples can be included in an Appendix as needed. Many public safety planning efforts should be coordinated with, and may be included in emergency plans developed by other divisions (e.g. Ranger Division). Such plans may be incorporated into the FMP by reference.*

Examples of fire safety program elements to consider:
- *Standards and procedures for closures (roads, trails, campgrounds, etc.)*
- *Road visibility standards*
- *Emergency notifications*
- *Evacuation plans and routes*
- *Smoke/air quality alerts and mitigations*
- *Post-fire hazards (e.g. snags)*
- *Notifications and mitigations*
- *Others as appropriate*

4.2 Preparedness

✐ *State that: Preparedness activities provide detailed procedures and standards for wildland fire operations, including pre-season and ongoing activities throughout the fire season. It also includes pre-planned procedures for initial response and incident management.*

✐ *Introduce and describe the range of preparedness activities to be implemented.*

✓ *A description of park preparedness activities will be included as an Appendix to the FMP and will be reviewed/updated as part of the annual FMP review.*

4.2.1 Coordination and Dispatching

✐ *State how the park coordinates wildland fire operations and dispatching including interagency coordination and mobilization.*
✐ *Describe inter-park and/or interagency relationships that significantly engage in operations of the parks fire management program.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 15

Exhibit 1

✎ *Examples include FPA FPU partnerships, interagency agreements, park fire management clusters, national and regional shared resources such as Modules, Aviation assets, etc.*

4.2.2 Preparedness Activities

✎ *State that wildland fire preparedness activities include a wide range of readiness activities and program elements that are essential to dealing with unplanned ignitions and fuels treatments. Ideally, the details for each preparedness activity would be included in the appendix so that they can easily be reviewed and updated on an annual basis. In less complex programs, these elements may be listed here in the body of the FMP.*

Required elements
- *Annual Delegation of Authority from Park Superintendent*
  - ✓ *See Redbook Chapter 3 – Fire Management Staff Roles – Park Superintendent*
- *Response Plan (may be local shared interagency)*
- *Step-up Plan and Staffing Plan (including reference to Duty Officer roles and responsibilities)*
- *Strategic fire size-up procedures*
- *Minimum impact suppression tactics guidelines that are used in the park, including wilderness considerations if applicable*
- *Location of Fire Danger Rating Operating Plan (recommended to be developed and maintained by the local dispatch center, with NPS involvement*
- *Location of Job Hazard Analyses for wildland fire and fire aviation operations*
- *Location of current copy of Agency Administrators Guide to Critical Incident Management (NFES 1356)*

Recommended elements
- *List of wildland fire qualified park personnel, reviewed and updated annually*
- *Structure protection inventory and needs*
- *Identify location of procedures for park evacuation and closure*
- *Identify location of current fire cache inventory*
- *Additional items appropriate for program complexity, such as cooperative agreements and Annual Operating Plan(s)*
- *Transfer of Command Package, including a sample Delegation of Authority from Park Superintendent to incoming incident commanders, burn bosses, and/or incident management team*
- *Location of Incident Service and Supply Plan (recommended to be developed and maintained by the local dispatch center, with NPS involvement)*

✎ *It is recommended that the preparedness plan include an annual timeline for preparedness activities to indicate sequences of events/activities that are needed to enter and remain in a state of readiness for the duration of the fire season. The timeline should include person or positions that are responsible for each activity.*

4.3 Management of Unplanned Ignitions

✓ *In the following sections Describe in detail required planning and implementation procedures for managing unplanned ignitions in your park.*

✓ *NPS policy allows park units considerable latitude in how they manage unplanned ignitions. The fire management plan is where you describe how you plan to respond to ignitions under different circumstances and in different places (if applicable). The actions described here must be supported by the decisions and agreements made as a result of the NEPA compliance process you went through in developing the FMP.*

✓ *The sub-sections below should be used to describe your specific situation.*

A. Preparing for Unplanned Ignitions

1. Objectives

✎ *Describe fire management objectives for unplanned ignitions and how they relate to land and resource management direction. Include relevant information on collaborative planning, decision making, and implementation processes.*

2. Risk Assessment

✎ *Describe the relative risk assessment and any area-specific environmental parameters that will be used to make informed management decisions on all unplanned ignitions. If applicable, include specific criteria that would be used to make a decision on strategy during the WFDSS process such as time of year, position of ignition within the FMU, ERC/BI index, etc.*

3. Implementation Procedures

✎ *Describe all pre-planned incident implementation procedures. Include annual pre-season and fire season activities necessary to prepare for, and implement, the wildfire management program, such as interagency agreements, permits, compilation of weather/severity data, training needs, etc.*

✎ *Where possible, clearly identify all pre-planned actions (see Decision Criteria checklist, Short-term Implementation Actions, Implementation Guide, Chapter 4, Section C-2) and display on maps any pre-planned Maximum Manageable Areas (MMAs) at the FMU planning-level scale. Information about useful data for helping to manage wildfire incidents is included in the Wildland Fire Use Implementation Procedures Reference Guide, Appendix B.*

✓ *The Wildland Fire Decision Support System (WFDSS) process will be used to document decisions for all unplanned wildland fires.*

✎ *Designate the position/positions in the park who will be responsible for initiating the WFDSS record that provides the decision framework for selecting the appropriate management response. Annually pre-load WFDSS with current information needed to manage fire events for the upcoming season.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 17

Exhibit 1

✓ *The initial WFDSS record documents the current and predicted situation, documents all appropriate administrative information, and aids managers by providing them with decision criteria to make the initial decision whether to manage the fire primarily for resource benefits or take aggressive suppression action to limit spread.*

🖋 *Define the park's weather monitoring capability and network, including applicable cooperators (list all NPS and other organization weather stations, locations, applicable fuel models, etc.) that will be used in decision-making.*

4. Staffing

🖋 *Identify the staff positions that must be present to implement and manage the wildfire program. Identify the staff positions responsible for initiating and implementing steps in the decision process necessary to support the selected response. Identify key resource draw down levels that will preclude implementation. State the relationship of wildfire management to the park's step-up staffing plan.*

5. Information

🖋 *Describe general provisions for public information and interpretation of the wildfire program. Develop a list of key agency, interagency, state and congressional delegation contacts for inclusion in each planning cycle. See RM 18, Communication and Education chapter for additional guidance.*

6. Record Keeping

🖋 *Develop a standard outline of contents for a permanent project record for each incident. Discuss record retention requirements and responsibilities in Section 3.2.8.*

🖋 *Include as a minimum:*
  - *Approved planning document that guided management actions (e.g. WFDSS report). Include all amendments and revisions.*
  - *Monitoring reports and summaries of findings, along with a summary of all monitoring activities including a monitoring schedule (level 1 and 2 monitoring).*
  - *Revalidation and certification documents.*
  - *Funding codes and cost accounting.*
  - *Project maps. Permanently map and archive all fires greater than 10 acres, using GIS whenever possible. Park units without local access to GIS should draw upon regional resources.*
    - *See RM 18 Information and Technology Management chapter for more information about GIS and data standards.*
  - *Other information as appropriate for the situation, such as photo points.*
  - *Explain the funding/fiscal tracking of costs associated with the incident.*

B. Expected Fire Behavior

🖋 *Describe the range of potential fire behavior expected on your park unit throughout a typical and extreme season. Describe critical thresholds for problem fire behavior.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 18

Exhibit 1

C. Initial Response Procedure.

✎ *Describe the range of initial response allowed in the park (monitoring to aggressive suppression). Describe whether initial response varies in intensity or strategy based on whether the ignition is from a unplanned human source or from a natural source.*

✎ *Initial response should be based on park management objectives and a assessment of risk factors. It must be consistent with firefighter and public safety and values to be managed (protected or enhanced).*

1. Information Needed To Set Initial Response Priorities.

✎ *List information sources that will need to be consulted when determining response: wildland-urban interface, timber type and vegetation maps, wildlife habitat, archaeological sites, fuel maps, smoke/air quality impact models, sensitive natural resources (e.g., riparian areas). Include preplanned dispatch strategies.*

2. Incident Documentation and Reporting

✎ *Note that a record for each unplanned ignition will be initiated in the WFDSS system as soon as practical. As management of the incident proceeds, WFDSS will be used to capture information and decisions. Each fire will be reported in the WFMI system of record within 3 weeks from being declared out.*

3. Criteria For Selecting The Initial Response

✎ *Determine and document the criteria that should be used to define the intensity of response warranted based on the risk, ambient conditions, other fire activity, and the expected effects on resources.*

4. Response Times

✎ *Specify typical fire response times on the park unit by resource type and time of year.*

5. Management Requirements and Restrictions

✎ *For each FMU, summarize restrictions on equipment use, aircraft use, use and location of chemical fire retardant, tracked equipment, plows, movement of water to prevent contamination, equipment disinfection requirements, restrictions on use of fireline explosives, etc. List who may give restricted use exemptions (generally the superintendent or designee). A table by FMU might be an appropriate way to display this information.*

6. Other Special Issues or Concerns

✎ *Include special considerations such issues as tribal relationships, local government issues, the hiring of local people, recycling, local issues in implementing firefighter R&R, etc.*

D. Transition to Extended Response and Large Fire
1. Criteria for Transition

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 19

Exhibit 1

✎ *Describe criteria that indicates the need to transition from initial response to extended response, and from extended response to Type I or Type II incident management.*

2. Implementation Plan Requirements and Responsibilities.

✎ *Describe how WFDSS will be used to develop and document decisions and support extended response needs. Describe positions on the park staff that will fill various roles involved in the development and review of this document (may include fire staff, resource staff, wilderness managers, concession specialists, rangers, etc.).*

3. Delegation of Authority

✎ *Draft a Delegation of Authority for Incident Commander which would be used during the transfer of command from outside of the park fire organization and/or when appropriate. An example is recommended to be included in the FMP Appendix. A template for the Delegation can be found in Interagency Standards for Fire and Fire Aviation Operations, Appendix H.*

✓ *Include a section on communication responsibilities or agreements between the park and the incoming team, such as the role of the superintendent or media affairs office in speaking about the activity of the fire.*

✓ *Include a section detailing the role of resource advisors on the incident and their decision making authority.*

4.4 Burned Area Emergency Response

✓ *This section should summarize processes, park standards and other information needed to implement burned area emergency response actions. Reference RM-18 Chapter 19 for formal processes and timeframes.*

4.4.1 Minimum Impact Tactics

✎ *State the requirement for minimum impact tactics as the policy for all fire management activities on NPS lands. Describe specific minimum impact suppression guidelines for this NPS unit (summarize here and include full guidelines and details in appendix).*

✎ *Consider consulting with the Park unit's or regional Wilderness Coordinator to create/updated current park-level guidelines.*

4.4.2 Burned Area Emergency Response

✎ *Describe short and long-term rehabilitation standards, guidelines and procedures. Include prohibited activities (e.g. reseeding, construction of water impoundments in wilderness, etc.) specific to your park. Place details in appendix or addendum; this will facilitate the development of rehabilitation plans for future fires by establishing a basic protocol and standards. This Section should be developed in concert with RM-18, Chapter 19, Section 5.2, "Pre-Planning".*

✎ *Additional information to document:*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 20

Exhibit 1

- *Planning and burned area assessments team requirements (anticipated data and technical specialists needed)*
- *Anticipated post-wildfire issues and values to be protected*
- *Treatment maintenance and monitoring requirements*
- *Reporting requirements (accomplishment reports and NFPORS)*

4.4.3 Emergency Stabilization

✎ *State process and park standards for assessing and implementing for Emergency Stabilization for all unplanned ignitions. Emergency Stabilization actions may be implemented concurrently while the fire is still being actively managed. Describe immediate post wildfire actions needed to minimize the threat to life and health and prevent unacceptable degradation to natural and cultural resources.*

4.4.4 Burned Area Rehabilitation

✎ *This phase is a continuation of the Emergency Stabilization, as necessary. This phase focuses on repair/replace minor facilities and damage to natural and cultural resources sustained by the unplanned fire event. The BAR phase of the unplanned fire event should occur between one and three years after confinement of the fire.*

4.5 Management of Planned Fuels Treatments

✎ *Describe the process and procedures for selecting fire and non-fire fuels projects and implementing treatments*

4.5.1 Fuels Planning and Documentation

✎ State that the fuels management program will implement fire management policies and help achieve resource management and fire management goals as defined in:
- *Federal Wildland Fire Management Policy and Program Review;*
- *Managing Impacts of Wildfires on Communities and the Environment, and Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy (USDOI/USDA); and*
- *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan.*

✓ *Multi-year fuels treatment plans are required elements of National Park Service Fire Management Plans and included in the Appendix. The plans represent a multiple year moving 'window' of current and out-year treatments. The multi-year plans are updated and extended annually as part of the annual FMP review and update.*

✓ *In the sections below document the staff positions involved in developing and updating the multi-year fuels treatment plan.*

✓ *Below you must explain the decision process used to identify candidate projects, and describe the rationale and criteria used for annual project prioritization.*

Exhibit 1

✓ *To promote maximum effect and minimize risk , fuels treatment planning should include coordination and interaction with adjacent land owners at all planning levels including; during development of the Fire Management Plan, annually when updating the multi-year treatment, and within the current year implementation planning.*

a. Identify Participants.

✎ *Identify by title or position the key members of the interdisciplinary group that will be involved in developing and updating the fuels treatment program.*

> *Examples:*
> - *FMO*
> - *Fuels Specialist*
> - *Natural Resource Specialist*
> - *GIS/Data Coordinator*

b. Identify Candidate Projects.

✎ *Develop and articulate the decision process and assumptions used to identify candidate fuels projects including why the fuels project locations were identified. Include a brief description of associated analysis and the collaborative processes used to identify candidate project areas. Depending on the unique park characteristics and fuels program goals, the decision process and analysis tools may be quite simple – or in the case of large complex terrain with multiple fuels goals – the process might be more involved and include more sophisticated analysis tools.*

✓ *A clear description of the process is critical to developing agreement among the interdisciplinary planning team. Clearly articulating the process also provides transparency and understanding among the larger range of partners and stakeholders.*

> *Examples of decision processes/analysis:*
> - *Evaluate hazard, risk, and values using GIS*
> - *Evaluate areas showing departure from the desired fire regime*
> - *Identify areas requiring periodic maintenance to meet management objectives*

c. Project Prioritization Criteria.

✎ *Describe how candidate projects prioritized. Often there will be more fuels projects identified than can be accomplished in any one year (or even within a five-year plan). The plan should describe how the park prioritizes projects for implementation, including how the collaboration process is used to prioritize projects in the park.*

> *Examples of Prioritization Criteria:*
> - *Extent of departure from natural process*
> - *Degree of hazard*
> - *Proximity to values at risk*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 22

Exhibit 1

- *Logical project sequence (e.g. there may be a logical sequence to implementing linked or adjacent projects that suggests a priority)*
- *Coordination with adjacent efforts and land managers*
- *Maintenance cycle*

d. Updating the Fuels Treatment Plan.

✐ *Describe the multi-year fuels treatment plan. Note that it should be reviewed annually and can be updated to include new projects and to drop or revise previously proposed projects. The updates should become part of the annual update to the Fire Management Plan and as part of the adaptive management strategy laid out in Chapter 5. Adjustments to the fuels treatment plan will require approval by the superintendent assuring that any changes in your treatment plan are within the authority of existing compliance documents.*

✓ *The NPS Environmental Screening Form is recommended as a document to guide the annual review of current and proposed projects to ensure that they are within the scope of existing compliance. Projects that fall outside existing compliance may require completion of new compliance processes.*

✓ *Consult with Director's Order 12 and your environmental compliance specialist to determine the options available to you.*

4.5.2 General Fuels Management Implementation Procedures

a. Guidance

✐ *State that prescribed fire planning and implementation will be in accordance with RM 18 Chapter 7, Fuels Management chapter*

b. Annual Actions

✐ *Describe annual activities to prepare for and implement the program (do not include copies of specific prescribed fire unit burn plans or non-fire treatment plans).*

c. Implementation Standards

✐ *State that the activities proposed in the Fire Management Plan will be planned and implemented in accordance with Reference Manual 18, Fuels Management chapter and the Interagency Standards for Fire and Fire Aviation Operations.*

d. Planning & Reporting Requirements

✐ *Describe reporting and documentation requirements for escaped fires.*

✐ *Describe the process and position responsible for inputting proposed projects and completion reports into the NFPORS system according to annual schedule put out by the National office each year. Also describe unit reporting documents, such as FEMO reports or fire effects analysis.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 23

Exhibit 1

e. Monitoring
    🖉 *Describe monitoring requirements for fire and non-fire fuel treatments. Monitor for the measurable objectives and emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix when applicable.*

f. Historic Treatment Map (*Optional. Consider including in appendix***)**
    🖉 *List and annually update an historic fuel treatment map of past activities that affect current planned actions (e.g. that provide reduced fuel buffers for proposed projects).*

4.5.3 Prescribed Fire Treatments

a. Guidance
    🖉 *State that prescribed fire planning and implementation will be in accordance with RM 18 Chapter 7, Fuels Management chapter and Interagency Standards for Fire and Fire Aviation Operations, and the Interagency Prescribed Fire Implementation Procedures Reference Guide.*

    🖉 *Explain any local prescribed fire burn plan requirements that may be in addition to RM 18 Chapter 7 or Interagency Standards.*

b. Treatment Review
Provide format for post-treatment reviews of prescribed fire projects. Reference Chapter 5 - Adaptive Management Process.

4.5.4 Non-Fire Fuel Treatments
🖉 *Describe the scope of approved non-fire fuel treatment activities.*

a. Guidance
    🖉 *State that the planning and implementation of non-fire fuels management projects will be in accordance with Reference Manual 18, Chapter 7 - Fuels Management.*

b. Planning
    🖉 *Reference RM 18 Chapter 7 section 6 on Non-Fire fuel treatment requirements.*

    🖉 *Include non-fire treatment plan template in the Appendix.*

c. Treatment Review
    🖉 *Provide format for post-treatment reviews of projects. Reference Chapter 5 - Adaptive Management Process.*

4.6 Prevention, Mitigation & Education
🖉 *Describe general approach to education and outreach in support of fire program goals and objectives. Refer specifics that may change over the life of the plan to the Appendix.*

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

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

4.6.1 Prevention/Mitigation

✎ *Fire prevention and mitigation efforts should be addressed in several ways including:*
- *Through development of a Fire Prevention Analysis and Fire Prevention Plan (see RM-18 Chapter 6 for requirements)*
    - *Required for parks with more than 26 human-caused fires over the past 10 years.*
    - *Recommended for other parks*
    - *If developed, the Fire Prevention Plan should be attached as Appendix xx to the FMP*
- *As a component of the park's overall fire communication and education strategy in order to support an integrated wildland fire communication and education program.*
- *See RM-18, Chapter 6 for additional requirements.*

4.6.2 Communications/Education

✓ *A comprehensive communication and education program emphasizes the entire scope of wildland fire management activities, particularly the role of fire in ecosystems.*

✎ *Each park should develop a Fire Communication Plan consistent with their program's focus and complexity, and which reflects the entire scope of the fire management program.*

✎ *A simple Fire Communications Plan may be included in the body of the Fire Management Plan in this section or may be included in an Appendix to the FMP if more extensive or if requiring annual review and update*
- *General guideline – if the plan is brief and simple – generally 2 pages or less, and if static – i.e. if it doesn't require annual updating – it may go directly in the FMP.*
- *If the Fire Communications Plan is more extensive and/or will require annual update (e.g. to incorporate changing technology and messages) it should be briefly described /summarized here and placed in the Appendix*

    ✓ *See RM 18 Prevention chapter, and RM 18 Communication and Education chapter for recommendations and additional direction. In addition, NWCG's Best*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 25

Exhibit 1

Practices in Communication Planning can be a good source of information.
http://www.nwcg.gov/teams/wfewt/bp/comm-planning.pdf

A. Program Capabilities

✎ *Describe public information capabilities and needs to implement the fire management program.*

1. Contact List

✎ *Include contact list for planned (Rx) or unplanned ignitions in an appendix.*

Examples:
- *Fire management staff*
- *Agency leadership and staff beyond fire management*
- *Local emergency responders (police, structure fire)*
- *Clinics*
- *Neighbors (property owners, adjacent agencies)*
- *Local, regional, state, tribal, and national elected officials*
- *Local schools*
- *Newspaper, other media*
- *Researchers whose work may be affected*
- *Community members who have included a desire to know about project due to health or other issues*

2. Materials

✎ *Describe Materials needed to support public information needs*
- *Brochures describing positive aspects of fire*
- *Descriptions of anticipated projects and estimated dates for projects*
- *Maps for use in public information settings, e.g., briefing maps for library lobby, courthouse, grocery stores.*

3. Press kit

✎ *Describe and compile elements for a press kit*
- *Descriptive background documents*
- *Fact sheets*
- *Personnel profiles*
- *e.g., Superintendent, FMO*

4. Online Resources

✎ *Describe online resources like a pre-prepared web page*
- *Contact phone numbers*
- *Mechanism for public comment*
- *e.g., e-mail address, telephone number(s)*
- *Maps*
- *Link to geomac.usgs.gov*
- *Link to www.firewise.org/*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 26

Exhibit 1

- *Link to http://www.nifc.gov/fire_info.html*

B. Communications Step-Up Plan
    🖋 *Describe "step-up" public information activities and capabilities in response to escalating fire danger, fire activity, smoke impacts, and/or public and media scrutiny.*

4.7 Air Quality/Smoke Management
🖋 *In the following sections, describe significant air quality issues and procedures related to the fire management program.*

✓ *Programs with significant smoke and air quality issues should discuss/summarize issues here, and develop a Smoke Management Plan that will be included in the FMP Appendix.*

4.7.1 Air quality issues
🖋 Describe as appropriate:
- ✓ *Locations of Class I & 2 airsheds.*
- ✓ *Non-attainment status If present*
- ✓ *Description of pre-identified smoke sensitive areas.*
- ✓ *Local and regional smoke management restrictions and procedures (include in Appendix if complex).*
- ✓ *Identify relevant State Implementation Plans*

4.7.2 Smoke Management Program
🖋 *Develop a program of action to manage smoke impacts that complies with the requirements of the Clean Air Act and any additional issues identified through the NEPA process and State Implementation Plans (SIP) requirements.*

🖋 *Include all potential measures and techniques to prevent or mitigate adverse smoke events.*

A detailed smoke management plan may be developed cooperatively with the state regulatory agency responsible for regulatory air quality management for each park and include in the appendix to the FMP or as an addendum.

4.8 Data & Records Management
✓ *Considerable time and effort is dedicated to acquiring and managing fire program information and data. Information is used by the park, regions, and national offices for a variety of purposes.*

✓ *Data and recordkeeping represent a significant investment and must be well managed to be readily available for use when needed, and must be safeguarded from damage or destruction.*

🖋 *In this section, detail the process for the completion and tracking of records and reports. Include a list of required reporting and the title of the position responsible for their*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 27

Exhibit 1

completion. GPS/GIS data should be the norm for recording location data, whenever practical.

At minimum address:
- *Required reports, timeframes, and responsible individuals. Include pre-season responsibilities such as budget submissions, fuels treatment plans, annual FMP review documentation, and pre-season preparedness planning. Other reports throughout the year include fiscal reporting, incident reporting, and program accomplishments.*
- *Permanent locations of hardcopy and digital files (fire reports, treatment plans, maps, photos, geospatial files (GIS), monitoring reports, incident and program reviews, etc.). Define 'stewardship' responsibilities for staff members.*

✎ *Reference the Interagency Incident Business Management Guide*

4.9 Organizational & Budgetary Parameters

✎ *Describe general organizational structure and needs to safely and effectively conduct the fire management program. Describe in general terms the budget process. Refer specifics that may change over the life of the plan to the Appendix.*

✎ *Describe key roles, functions and responsibilities for safe implementation of the fire program beginning with the Park Superintendent (or equivalent Site Manager) and working down through the organization. Include an organization chart here or in an Appendix depending on whether it is extensive and/or subject to frequent change/updating.*

✎ *Describe the process and responsibilities for assigning the role of Duty Officer.*

✎ *Describe role, function and responsibilities of the Duty Officer. Reference the park specific Duty Officer Manual if developed , and include as an appendix.*

✎ *Describe key responsibilities for cost accountability and budget tracking. State that all financial activities will meet NPS requirements as well as Interagency Fire Business Management Standards.*

✎ *List and describe key fire related agreements. Place up to date copies in the Appendix or in an addendum. Review and update annually.*
  - *Rental Agreements*
  - *Contract Resources*
  - *Interagency agreements*
  - *Etc.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 28

Exhibit 1

5.0 Adaptive Management Strategy

> *Intent: In the following sections, describe actions the park will take to insure that the fire management program is constantly improving by using the most current information. By using an adaptive management process throughout all elements of the fire management program, fire management actions are more likely to meet desired outcomes.*

✓ *Adaptive management is an iterative learning process requiring continual evaluation of the results of management actions and the associated management objectives. The NPS Fire Management Program is committed to implementing adaptive management across the spectrum of fire management activities. Adaptive management consists of several steps including:*

- *Setting clear, meaningful fire management objectives*
- *Designing fire management activities that will accomplish objectives*
- *Implementing the fire management actions using best available knowledge and practices*
- *Monitoring to determine whether outcomes meet objectives*
- *Evaluating and adjusting management activities and/or objectives as needed based on outcomes/monitoring*
- *Initiating new research as needed to fill in knowledge gaps.*
- *Communicating results, new information, and changes in management activities or objectives to all stakeholders.*

Source for the following information: DOI Adaptive Management Initiative Website
http://www.doi.gov/initiatives/AdaptiveManagement/whatis.html

✓ *Adaptive management focuses on learning and adapting, through partnerships of managers, scientists, and other stakeholders who learn together how to create and maintain sustainable ecosystems.*

✓ *Adaptive management:*
  o *helps managers maintain FLEXIBILTY in their decisions, knowing that uncertainties exist and provides managers the latitude to change direction*
  o *will improve UNDERSTANDING of ecological systems to achieve management objectives*
  o *is about taking ACTION to improve progress towards desired outcomes*

5.1 Fire Management Objectives

✓ *The first and most important step in adaptive management is determining clear objectives for the fire management program and the resource conditions that are affected by fire management activities. Fire management objectives should be listed in section 3.1.1. Through the fire management planning process, program activities are designed and implemented to meet these objectives (Sections 3.1.2 and 4.0).*

✓ *Desired resource conditions are necessary to formulate clear objectives in order to determine if fire management activities are having the intended effects on the ecosystem. These desired conditions may be derived from RMPs/Vegetation Management Plans but may not*

have been developed to date for many parks. Fire management staff should work with the resource management staff to develop fire-related desired resource conditions so that the adaptive management process is effective.

🖉 *Summarize fire management objectives here or refer back to section 3.1.1. Identify key information needs that would improve desired conditions and objectives. Fire management programs that do not have well-articulated objectives should discuss here the steps they will take to define desired conditions/objectives to fulfill this critical part of the adaptive management process.*

5.2 Monitoring

✓ *Monitoring is not only part of the adaptive management process, but also a fundamental NPS management policy to be fulfilled. 2006 NPS Management Policies. Section 4.5, states that:*

> *"Naturally ignited and human-ignited fires managed to achieve resource management and fuel treatment objectives…. Such fires will also include monitoring programs that record fire behavior, smoke behavior, fire decisions, and fire effects to provide information on whether specific objectives are met and to improve future fire management strategies."*

✓ *Monitoring plans are developed to fulfill this requirement. All NPS units applying prescribed fire, using wildland fire use, or altering the arrangement of wildland fuels for the purpose of modifying fire behavior must prepare a fire monitoring plan or plans.*

✓ *Fire monitoring includes wildland fire, prescribed fire, and non-fire fuels treatments and is described in RM-18 Chapter 8 with more details in the NPS Fire Monitoring Handbook. The park's monitoring plan is used to characterize monitoring for particular fire events or fuel treatment as well as landscape-level objectives. Monitoring protocols used should be designed to efficiently assess objectives. Monitoring strategies may also include sampling schemes that over time will provide some predictive capability, and reduce the need to intensively monitor each event. Monitoring plans are discussed/described here and placed in the Appendix.*

✓ *The NPS Inventory and Monitoring (I&M) Program has developed a network system for monitoring park natural resource 'vital signs'. Some of these monitoring efforts may be relevant and complementary to the fire management program. Coordination/collaboration with the I&M program staff is highly encouraged to promote efficiency in monitoring and to potentially provide more powerful monitoring results. Any collaborative efforts should be documented in the monitoring plan Appendix.*

🖉 *Summarize monitoring results to date that have been used to help guide the fire management program and include in section 1.2.3.3. Key fire and fire effects monitoring findings may also be described here.*

🖉 *In this section of the fire management plan, provide:*

- *A brief description of the monitoring levels and activities that will be used for various fire management activities (more detailed information should be placed in the Monitoring Plan Appendix).*
- *A description of the type(s) of monitoring plan(s) found in the Appendix (Park, Community, and/or Project plan).*

5.3 Evaluation

✓ *A significant component of the adaptive management process is bringing new knowledge to bear on actions performed by the fire management program. New knowledge can come from recent research, monitoring results, evaluation of the programmatic accomplishments, and operational evaluations such as After Action Reviews and others.*

✓ *Evaluation can be useful at several levels including shift level (e.g. AARs and shift reports), project/event level (e.g. post project/event reviews), and annual programmatic assessments.*

✓ *RM-18 Chapter 4 requires that the park annually incorporate new knowledge, and adjust as needed. Every five years, parks are required to conduct a substantial review – defined as bringing in a larger community of knowledgeable parties such as regional and national fire management staff, university scientists and others. The five year review is intended to reinforce park perceptions or challenge them as needed with the objective of continuous improvement and excellence in fire management. Regional offices may also initiate external program reviews for a variety of reasons including; significant fire events, changeovers in key park fire staff, or others.*

✎ *In this section of the fire management plan, provide:*

- *Description of how the park intends to proactively incorporate new knowledge through incident, annual, and five year reviews. Include commitments to when these will occur, responsibilities for organizing, and describe desired participants (by role or title) for each.*

- *Description of park-specific standards and procedures for the review of monitoring and research data from wildfires, prescribed fires, and non-fire fuels treatments. Include commitments to when these will occur, responsibilities for organizing, and describe desired participants (by role or title) for each.*

- *Description of park-specific standards and procedures for the review of wildland fires. As necessary, include time frames and responsible parties for each type of critique or review. State that all wildland fires and fire-related incidents will be reviewed in accordance with Reference Manual 18, Wildland Fire and Program Reviews chapter 17 and the Interagency Standards for Fire and Fire Aviation Operations.*

5.4 Fire Research
✓ *Existing research results should be examined to aid in determining desired ecological conditions, developing appropriate management goals and objectives, determining fire management actions, and writing appropriate treatment plans. During the adaptive*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 31

Exhibit 1

management process, incorporate research findings as another link in refining land management objectives, and modifying management actions and/or treatment objectives. The initial evaluation of existing research may also point out where additional research may be needed to aid in the development of management goals and objectives. Refer to RM 18 Chapter 18.

🖉 *In this section of the fire management plan, provide:*

- *A brief bibliography or summary of key published research important to the unit's wildland fire management program and related desired conditions.*

- *A summary of ongoing fire research directly related to this NPS unit.*

- *A summary of research needed to implement or refine the wildland fire management program and/or desired ecological conditions. More detailed research needs can be elaborated in the monitoring plan (or research plan) Appendix.*

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 32

Exhibit 1

APPENDICES

Appendix	Required	Conditional*	Recommended
A. References Cited	X		
B. Definition	X		
C. Current Species of Concern	X		
D. Compliance for FMP 1. List individuals and organizations consulted during plan development. 2. List contributors (authors) and reviewers of the plan; identify their role in the Fire Management Plan. 3. NEPA - Include copy of Decision Document ((Memo-to-File, CE, FONSI, ROD) for FMP 4. NHPA (Section 106) - Include copy of response from SHPO for FMP; include the signed Programmatic Agreement if applicable. 5. ESA (Section 7) - Include copy of response from FWS for FMP; document informal consultation, or include the FWS-issued Biological Opinion if consultation was formal	X		
E. Multi-Year Fuels Treatment Plan		X	
F. Wildfire and Prescribed Fire/Fuels Treatment Monitoring Plan		X	
G. Preparedness Activity Elements	X		
• *Annual Delegation of Authority from Park Superintendent*	X		
• *See Redbook Chapter 3 – Fire Management Staff Roles – Park Superintendent*			
• *Response Plan (may be local shared interagency)*	X		
• *Step-up Plan and Staffing Plan (including reference to Duty Officer roles and responsibilities)*	X		
• *Strategic fire size-up procedures*	X		
• *Minimum impact suppression tactics guidelines that are used in the park, including wilderness considerations if applicable*	X		
• *Location of Fire Danger Rating Operating Plan (recommended to be developed and maintained by the local dispatch center, with NPS involvement*	X		
• *Location of Job Hazard Analyses for wildland fire and fire aviation operations*	X		
• *Location of current copy of Agency Administrators Guide to Critical Incident Management (NFES 1356)*	X		
• *List of wildland fire qualified park personnel, reviewed and updated annually*			X

NATIONAL PARK SERVICE
REFERENCE MANUAL 18
WILDLAND FIRE MANAGEMENT

Chapter 4
Fire Management Plans
Page 33

Exhibit 1

	Required	Conditional*	Recommended
Appendix			
• *Structure protection inventory and needs*			X
• *Identify location of procedures for park evacuation and closure*			X
• *Identify location of current fire cache inventory*			X
• *Additional items appropriate for program complexity, such as cooperative agreements and Annual Operating Plan(s)*			X
• *Transfer of Command Package, including a sample Delegation of Authority from Park Superintendent to incoming incident commanders, burn bosses, and/or incident management team*			X
• *Location of Incident Service and Supply Plan (recommended to be developed and maintained by the local dispatch center, with NPS involvement)*			X
H. **Communication and Education Plan**		X	
I. **Fire Prevention Plan**		X	
J. **Duty Officer Manual**			X
K. **Standards for MIT, BAER and Rehabilitation**	X		
L. **Cooperative and Interagency agreements**	X		
M. **Contracts for Wildfire and Prescribed Fire Resources**	X		
N. **Notification Procedure**	X		
O. **Serious injury or Death Procedure**	X		
P. **Safety Program/Plan**		X	
Q. **Smoke Management Plan**		X	
R. **WFDSS Objectives and Requirements** List, by FMU and formatted as they should appear in WFDSS: 1. Strategic Objectives 2. Management Requirements 3. Geospatial data source location and managing authority			X
S. **[Other nit specific supplemental information]**			X

* Conditional - Appendix is Required unless:
  1) Information is included in body of the FMP <u>or</u>
  2) Park doesn't implement that program element (e.g. Fuels)