

# Alaska Interagency Wildland Fire Management Plan

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*(2023 Review)*

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## SIGNATURES

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As the Administrator of an organization represented on the Alaska Wildland Fire Coordinating Group, I concur with their recommendation to update the *Alaska Interagency Wildland Fire Management Plan*. This updated plan affirms that firefighter and public safety is the single overwhelming priority in all fire management activities. It also reiterates the concepts presented in the 2016 plan and previous Alaskan interagency fire planning efforts for a consistent, cost-effective interagency approach to wildland fire management. It is the interagency reference for fire operations and provides the standards and terms to be used by all state, federal and Alaska native entities. This plan does not supersede individual agency policies and requirements. Where available, individual unit fire management plans should be used in conjunction with this plan and referenced for supplemental information applicable to that unit. My signature authorizes the use and implementation of the *Alaska Interagency Wildland Fire Management Plan, 2021* on lands under my organization's jurisdiction:

### For the U.S. Department of the Interior:

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**For the State of Alaska:**

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Corri A. Feige, Commissioner  
Alaska Department of Natural Resources



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Douglas Vincent-Lang, Commissioner  
Alaska Department of Fish and Game



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Jason W. Brune, Commissioner  
Alaska Department of Environmental Conservation

**For Alaska Native Organizations:**

*Vivian Korthuis*

Vivian Korthuis (May 11, 2021 15:18 AKDT)

May 11, 2021

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Vivian Korthuis, Chief Executive Officer  
Association of Village Council Presidents



05/12/2021

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Angela J. Vanderpool, Executive Director  
Chugachmiut



5/3/21

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Pollack B. Simon, Jr., Chief/Chairman  
Tanana Chiefs Conference

## MARCH 2023 REVIEW OF THE 2021 ALASKA INTERAGENCY WILDFIRE MANAGEMENT PLAN

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The *Alaska Interagency Wildland Fire Management Plan* is reviewed annually by AWFCG. Every five years, or as deemed necessary by a majority of AWFCG voting members, a comprehensive review will be completed and approved by all AWFCG organizations. The latest comprehensive review was completed in 2021 and amendments were approved by line officers from all participating organizations.

The *Alaska Interagency Wildland Fire Management Plan, 2021* has been reviewed by the Alaska Wildland Fire Coordinating Group as of **March 2, 2023**.

The following edits were completed:

- Minor grammatical, punctuation, spelling, and format changes. Blank pages were removed from the document.
- Contacts were updated.
- All instances of Alaska, Department of Natural Resources, Division of Forestry (DOF) replaced with Alaska, Department of Natural Resources, Division of Forestry and Fire Protection (DOF) to reflect Division name change.
- **3.2.1 Statewide Management Requirements** updated:
  - Amended to recognize that values include economic, social, and/or resource values.
  - Three bullets describing requirements for incident camps, staging areas, helispots and other support areas are consolidated into two bullets.
- **3.2.2 Wildfire Management Options** reorganized to reduce duplication and provide clarity.
- **3.2.3 Non-standard Responses** definitions clarified and aligned with Statewide Operating Plan Initial Strategy definitions.
- **3.3 Site Protection Designations** requirement to notify jurisdictions amended to provide intent of notifications.
- **3.4 Fire Notifications** notification requirements amended to provide intent of notifications.
- **3.11 Air Quality and Smoke Management** amended to clarify that Air Resource Advisors can be ordered through the ordering system.
- **Appendix D. Fire Management Option Change Procedures** amended to include an introduction for jurisdictions unfamiliar with their role in the process.

The updates and revisions described above have been approved and will be incorporated into an amended version of the *AIWFMP* document. These changes do not compromise the original intent of the Plan, but serve to clarify direction or update terminology, processes, and policy references; and therefore, do not require approval at the agency line officer level.

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Sue Rodman  
Chair- Alaska Wildland Fire Coordinating Group

# 1 INTRODUCTION, POLICY, AND LAND MANAGEMENT PLANNING

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## 1.1 INTRODUCTION AND PURPOSE

This *Alaska Interagency Wildland Fire Management Plan, 2023 Review (AIWFMP 2023)* updates and supersedes the *Alaska Interagency Wildland Fire Management Plan, 2022 Review (AIWFMP 2022)*. It provides operational detail for the [Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement \(Alaska Master Agreement\)](#) and the [Alaska Statewide Operating Plan](#) into which it has been incorporated by reference. Its purpose is to promote a cooperative, consistent, cost-effective, interagency approach to wildland fire management and it is the interagency reference for wildland fire operational information. The *AIWFMP 2023* clarifies and updates interagency guidelines, policies, and operational direction for responses to wildland fires and brings terminology up to date.

Firefighter and public safety is emphasized throughout this Plan as the single, overriding priority in all fire management activities for all agencies.

This Plan does not supersede individual agency policies and requirements. Some agencies and units rely solely on this plan for fire direction; however, it must be used in conjunction with jurisdictional unit land/resource management plans and fire management plans (FMPs) where they exist. Unit FMPs contain definitive objectives and constraints based on Jurisdictional Agency policy and land/resource management plans for individual units.

The Plan describes four Fire Management Options that define initial responses to a wildfire ranging from aggressive suppression to surveillance/point protection. These Options were originally developed during the 1980s in a set of interagency plans that spanned the state and were later merged into the *1998 Alaska Interagency Wildland Fire Management Plan (AIWFMP 1998)* that carried forward into the *AIWFMP 2010*, *AIWFMP 2015*, *AIWFMP 2021*, and *interim reviews* (see **Appendix G**). Jurisdictional Agencies have worked collaboratively to apply these Options at a landscape scale across agency boundaries, based on resource management goals and objectives, and the likely consequences of a fire on firefighter and public safety. The Options offer an opportunity for agencies to achieve both protection and natural resource management goals and objectives. The standard responses identified for each option address normal fire conditions and a high percentage of wildfire situations that occur in Alaska. In some cases, non-standard responses are prudent and justifiable. Procedures for implementing non-standard responses are included as are procedures for revising management option boundaries and protection levels to reflect new management direction or changed conditions on the landscape.

In addition to providing initial response direction, the Plan summarizes or references direction from the following sections of the [Alaska Master Agreement](#) and [Alaska Statewide Operating Plan](#):

- Fuels Treatments
- Invasive Species Control
- Post-fire Response (BAER/ES/BAR/FEMA Hazard Mitigation Grant Program)
- Prevention



- Origin and Cause Determination
- Fire Investigation
- Air Quality and Smoke Management

The Plan and its appendices will be available on the [Alaska Master Agreement webpage](#). The Plan will be reviewed annually and updated as needed. Appendices will provide for dynamic updates.

## **1.2 INTERAGENCY ORGANIZATION AND COLLABORATIVE PLANNING**

An essential element of Alaska wildland fire management is interagency cooperation and collaboration. Individual agencies are responsible to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight. The integrated, full-spectrum wildland fire management program in Alaska is a joint effort among federal, state, and Native organizations to minimize functional duplication and promote organizational efficiencies.

The Alaska interagency wildland fire organization offers the opportunity for federal, state, and Alaska Native organizations to collaborate to provide for public safety, accomplish fire-related management objectives, and maintain healthy ecosystems, while each partner agency adheres to agency-specific rules and regulations that support their agency's mission. Agency employees are trained, certified, and available to participate in wildland fire activities locally, regionally, and nationally as the situation demands. Each agency's role and responsibilities contribute to the success of interagency wildland fire and fuels management. Individual agency fire management plans, the *Alaska Master Agreement*, and the *Alaska Statewide Operating Plan* identify and define these roles.

### **1.2.1 POLICY AND AUTHORITIES**

General authorities underlying *AIWFMP* fire management direction are cited in the [Alaska Master Agreement](#). Additional agency-specific direction to fire management programs is provided by Agency manuals and handbooks. Agency-specific resource management and planning authorities are cited in agency land use plans and fire management plans that tier from them.

An integrated fire management program must allow individual agencies to adhere to their agency-specific policies, regulations, laws, and missions. The following sub-chapters provide brief descriptions of directives that promote the interagency working relationship in Alaska and provide the basis for current wildland fire management practices.

#### **1.2.1.1 FEDERAL FIRE MANAGEMENT POLICY**

Federal wildland fire policy forms the basis for Department of the Interior (Bureau of Indian Affairs, Bureau of Land Management, National Park Service, and U.S. Fish and Wildlife Service) and Department of Agriculture (U.S. Forest Service) fire management programs in Alaska. Additional guidance for the lands withdrawn for military use can be found in memorandum of agreements and annual operating plans between Bureau of Land Management-Alaska Fire Service and the Department of Defense agencies. Federal policies and programs are implemented through Congressional appropriations and funding levels vary annually.

## ***GUIDANCE FOR IMPLEMENTATION OF FEDERAL WILDLAND FIRE MANAGEMENT POLICY***

The [Federal Wildland Fire Management Policy and Program Review Final Report \(December 18, 1995\)](#) was the first joint comprehensive fire policy for the Departments of the Interior and Agriculture. The Final Report contained guiding principles that directed federal agencies to achieve a balance between suppression to protect life, property and resources, and fire use to regulate fuels and maintain healthy ecosystems. It promoted the use of wildland fire to accomplish resource management objectives and supported implementation of policies and recommendations in conjunction with states, tribes, and local governments.

The [Review and Update of the 1995 Federal Wildland Fire Management Policy \(January 2001\)](#) contained specific actions to enhance wildland fire management and sought to build on the strengths of the original policy. Firefighter and public safety is listed as the first priority and the 2001 policy directs all fire management plans and activities to reflect this commitment. The 2001 guiding principle and policy statements guide the philosophy, direction, and implementation of fire planning, activities and projects on federal lands. All the principles and policy statements are incorporated by reference into this Plan and, where appropriate, the statements are included within this Plan.

The first Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy was issued in 2003 and was later replaced by the [Guidance for Implementation of Federal Wildland Fire Management Policy \(February 13, 2009\)](#). The 2009 Guidance affirmed the soundness of the 2001 Review and Update and clarifies implementation direction to achieve the intent of the 2001 policy.

### ***NATIONAL FIRE PLAN***

The [National Fire Plan \(NFP\)](#) was developed in August 2000, following a landmark wildland fire season in the Lower 48, with the intent of actively responding to severe wildfires and their impacts to communities while ensuring sufficient firefighting capacity for the future. The *NFP* addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

### ***HEALTHY FORESTS INITIATIVE & RESTORATION ACT***

Fuels management was addressed further in the *Healthy Forests Initiative (August 2002)* which sought to reduce the risks severe wildfires pose to people, communities, and the environment. The Initiative was followed by the [Healthy Forests Restoration Act of 2003](#) which contains a variety of provisions to speed up hazardous fuels reduction and forest restoration projects on specific types of federal land that are at risk of wildfire and/or of insect and disease epidemics.

### ***GOOD NEIGHBOR AUTHORITY***

The Good Neighbor Authority authorizes the U.S. Forest Service and BLM to partner with states, local governments, and tribes in order to implement watershed and forest management activities on federal lands. The Authority was permanently authorized in the [2014 Farm Act \(PDF\)](#). It is intended to expand limited federal capacity to implement and plan projects, and addresses

shared, cross boundary priorities like fire risk, invasive species, water quality, and wood products supply. The authority is broad, allowing for a wide range of restoration services that will improve “forest, rangeland, or watershed health.”

### ***FEDERAL AID IN WILDLIFE RESTORATION (PITTMAN-ROBERTSON ACT)***

The Pittman-Robertson Act, passed in 1937, now known as the [Federal Aid in Wildlife Restoration Act \(PDF\)](#), imposes an excise tax on the sale of firearms and ammunition to help fund wildlife conservation in the United States. Revenues generated from these excise taxes are apportioned to state wildlife agencies for their conservation efforts, hunter education programs, and operation of archery and shooting ranges. The Alaska Department of Fish & Game (ADF&G) has been able to leverage funds generated through this act for habitat restoration projects.

### ***RESERVED TREATY RIGHT LANDS (RTRL)***

Beginning in FY 2015, Fuels Management Funding has been appropriated for the purpose of treating and restoring tribal landscapes within and adjacent to reserved treaty right lands. The Department of Interior’s (DOI) Reserved Treaty Right Lands (RTRL) program enables Tribes to participate in collaborative projects with non-Tribal landowners to enhance the health and resiliency of priority tribal natural resources at high risk to wildland fire. The RTRL allocation is provided to the Bureau of Indian Affairs (BIA) through the DOI’s Wildland Fire Management appropriation and is made available through their fuels management program.

### ***NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY***

The [Cohesive Strategy](#) is the result of a collaborative effort by federal, state, local, and tribal governments, non-governmental partners and public stakeholders, in conjunction with scientific data analysis. It recognizes and accepts fire as a natural process necessary for the maintenance of many ecosystems and strives to reduce conflicts between fire-prone landscapes and people. By simultaneously considering the role of fire in the landscape, the ability of humans to plan for and adapt to living with fire, and the need to be prepared to respond to fire when it occurs, the Cohesive Strategy takes a holistic approach to the future of wildland fire management.

The vision of the Cohesive Strategy is “to safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire.”

The primary, national goals identified as necessary to achieving the vision are:

- **Restore and maintain landscapes:** Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.
- **Fire-adapted communities:** Human populations and infrastructure can withstand a wildfire without loss of life and property.
- **Wildfire response:** All jurisdictions participate in making and implementing safe, effective, and efficient risk-based wildfire management decisions.

## ***DINGELL ACT***

Public Law 116-9, the [\*John D. Dingell, Jr. Conservation, Management, and Recreation Act\*](#) of March 12, 2019 (Dingell Act), is a combined package of more than 100 individual bills introduced by over 50 members of Congress. It lays out provisions for various programs and activities affecting the management and conservation of natural resources on federal lands, to include wildland fire operations. Section 1114 of the Dingell Act, titled Wildfire Technology Modernization, mandates interagency collaboration to expand the use of unmanned aircraft systems, location trackers, and decision management systems. It also calls for the enhancement of smoke projections, erosion data, and predictive services.

## ***EXECUTIVE ORDER 13855***

In response to the deadly wildfires of 2017 and 2018, the President signed Executive Order 13855 - [\*Promoting Active Management of America's Forests, Rangelands, and Other Federal Lands To Improve Conditions and Reduce Wildfire Risk\*](#) on December 21, 2018, calling for federal land managers to improve conditions and reduce wildfire risk through active management of their lands. Executive Order 13855 emphasizes that federal agencies must collaborate with state and local institutions and incorporate active management principles into all land management planning efforts in order to address the challenges of wildland fire. Quoting from Section 1:

*“With the same vigor and commitment that characterizes our efforts to fight wildfires, we must actively manage our forests, rangelands, and other Federal lands to improve conditions and reduce wildfire risk.”*

Section 5 of the executive order directs the Secretaries of Interior and Agriculture to jointly develop a Wildfire Strategy in collaboration with federal, state, tribal, and local partners that supports local Federal land managers in project decision-making and informs local fire management decisions related to forests, rangelands, and other Federal lands; thereby protecting habitats and communities and reducing risks to physical infrastructure.

### **1.2.1.2 STATE FIRE MANAGEMENT POLICY**

#### ***DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY AND FIRE PROTECTION (DOF)***

The mission of the State of Alaska, Department of Natural Resources, Division of Forestry and Fire Protection (DOF) is to develop, conserve, and enhance Alaska's forests to provide a sustainable supply of forest resources for Alaskans. The Division provides wildland fire protection services on over 150 million acres of land. The goal of their Fire and Aviation Program is to provide safe, cost-effective, and efficient fire protection services and related fire and aviation management activities on state, private, and municipal lands, and lands negotiated through agreement, commensurate with the values at risk.

The Division of Forestry and Fire Protection is bound by the Alaska statutes and administrative code sections that directly govern forest management activities on state forest lands and by the *Alaska Forest Resources and Practices Act* and *Alaska Forest Resources and Practices Regulations*. Information on the state fire management and forest health programs - including burn permits,

available grants, Community Wildfire Protection Plans, and Firewise - is available on the [Alaska Division of Forestry and Fire Protection webpage](#). The State of Alaska is not bound by federal fire management policies on lands under state jurisdiction (e.g., state, private and municipal lands).

[Alaska Statutes sections 41.15.010 - 41.15.240 \(PDF\)](#) mandate the Division of Forestry and Fire Protection to manage the wildland fire program for the State of Alaska. Statute 41.15.010 addresses “protection from wildland fire and other destructive agents, commensurate with the values at risk, on land that is owned privately, by the state, or by a municipality.”

[Alaska State House Bill 395](#), signed on May 4, 2005, defines the official Alaska Fire Season as April 1 through August 31. This was incorporated into state law under statute 41.15.050.

In 2018, the Alaska State Legislature updated and approved [Alaska State House Bill 355](#) which brought additional changes, revisions and updates to the existing Alaska wildland fire protection laws. Statutory changes went in effect on January 1, 2019, with regulatory changes and the implementation of a new minor offense bail schedule following on June 1, 2019. Links to the updated statutes and regulations can be found on the [Alaska Division of Forestry and Fire Protection webpage](#).

#### ***DEPARTMENT OF FISH AND GAME (ADF&G)***

The mission of the [State of Alaska, Department of Fish and Game \(ADF&G\)](#) is to protect, maintain, and improve the fish, game, and aquatic plant resources of the state, and manage their use and development in the best interest of the economy and the well-being of the people of the state, consistent with the sustained yield principle. The goal in the 2009 ADF&G fire management policy is to encourage wildland and prescribed fire management policies, practices and decisions that benefit the fish and wildlife resources of Alaska.

Pursuant to [Alaska Statute 16.20](#), ADF&G shares jurisdictional authority with the Department of Natural Resources for 32 state game refuges, critical habitat areas, and wildlife sanctuaries across the state, totaling 3 million acres. ADF&G manages the wildlife and habitat within these legislatively designated areas.

[Alaska Statute 16.05.871\(a\)](#) requires ADF&G to specify the various rivers, lakes, and streams, or parts of them, that are important for spawning, rearing, or migration of anadromous fishes. Protection of these specified water bodies is addressed by other sections of [AS 16.05.871](#), which requires persons or governmental agencies to submit plans and specifications to ADF&G and receive written approval in the form of a Fish Habitat Permit or concurrence prior to beginning the proposed use, construction or activity that would take place in specified water bodies.

#### ***DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC)***

The State of Alaska, [Department of Environmental Conservation \(ADEC\)](#) has primacy for implementing the federal [Clean Air Act \(CAA\)](#) and maintaining and enforcing the National Ambient Air Quality Standards (NAAQS) within the State ([AS 46.03.020\(a\)](#)). ADEC’s policy is to minimize air pollution that is injurious to human health or welfare, animal or plant life, or property, or that would unreasonably interfere with the enjoyment of life or property. All prescribed burning in the

state, whether requiring written approval from ADEC or not, must be done in a way that maintains maximum combustion efficiency throughout the burning period.

In Alaska, many small communities choose to burn trash to reduce waste volumes in the landfill (dump) and reduce animal attraction to the site. The ADEC Solid Waste Program provides outreach and technical support to ensure that landfills are aware of the best management practices for burning to reduce impacts to the community, including preventing fires from escaping the landfill. In addition, most landfill permits contain specific conditions for burning practices that must be adhered to.

### **1.2.1.3 POLICY AFFECTING FIRE MANAGEMENT ON ALASKA NATIVE LANDS**

Policy affecting fire management responsibilities relating to Alaska Native organizations and lands can be found in the following documents:

- [1891 Townsite Act \(PDF\)](#)
- [1906 Alaska Native Allotment Act \(amended 1956\)](#)
- [1971 Alaska Native Claims Settlement Act \(ANCSA\)](#)
- [1980 Alaska National Interest Lands Conservation Act \(ANILCA\)](#)
- [1998 Alaska Native Veteran Land Allotment Equity Act](#)
- [Department of the Interior Manual 620 Chapter 5.3](#)

Fire Management responsibilities for three categories of Native lands in Alaska are described briefly in the sections below. More detailed information can be found in *Attachment 9: Alaska Native Organizations and Lands of the Alaska Statewide Operating Plan*.

#### ***ANCSA NATIVE CORPORATIONS***

Alaska Regional and Village Native Corporations (ANCSA Corporations) were established in 1971 by the *Alaska Native Claims Settlement Act (ANCSA)*. Individual ANCSA Corporations are considered the Jurisdictional Agency for their lands and are annually given the opportunity to validate or change the *AIWFMP* Fire Management Options for those lands. As specified in *DOI Manual 620 Chapter 5.3*, the Bureau of Land Management Alaska Fire Service (BLM-AFS) is responsible for fire protection on ANCSA Corporation lands. BLM-AFS provides fire management liaisons to the ANCSA Corporations to ensure they are informed about fires occurring on or threatening their lands and that their interests are represented in fire management decisions.

#### ***TRIBAL GOVERNMENTS***

There are 229 federally recognized tribes in Alaska. Most have tribal councils as their governing bodies. Tribal governments in Alaska are distinct from ANCSA Regional and Village Corporations and have the same governmental status as other federally recognized Indian tribes by virtue of their status as Indian tribes. They have a government-to-government relationship with the United States, and are entitled to the same protections, immunities, and privileges as other federally recognized tribes. Some tribes receive funding from BIA to provide certain fire management services such as advising protection agencies of their needs during active wildfires and fuels management work.

Even though ANCSA places its land entitlement with the ANCSA Corporations, most tribes in Alaska own some land. Most tribally owned lands in Alaska are in fee simple status and are not considered held in Trust for jurisdictional purposes. Although fire management responsibilities are not identified in ANCSA, ANILCA, or 620 DM 5.3 for tribally owned lands in fee simple status, these lands are currently treated similarly to ANCSA Corporation lands for fire management purposes.

The fee-to-trust process allows tribes to have land taken into trust by the Department of the Interior (DOI) under the authority of the [1934 Indian Reorganization Act, 25 U.S.C. 5108 \(PDF\)](#). Under DOI *Solicitor's Opinion M-37069*, Native Villages in Alaska may apply to have land taken into trust for their benefit through the fee-to-trust process.

### ***FEDERALLY ADMINISTERED INDIAN TRUST LANDS (INCLUDING NATIVE ALLOTMENTS)***

Federally administered Indian trust lands in Alaska include the Annette Island Indian Reservation, some Town Site lots created under the *1891 Townsite Act*, and lands placed into trust under the fee-to-trust regulation described above.

A Native Allotment is a parcel or parcels of land, totaling up to 160 acres, conveyed by restricted title to an Alaska Native under the terms and conditions of the *Alaska Native Allotment Act of 1906* and *1956 amendment* and the *Alaska Native Veteran Land Allotment Equity Act of 1998*. 43 U.S.C. §§ 357, 357a, 357b. The restricted title exempts the land from taxes and specifies that the federal government will maintain the land and associated trust assets in perpetuity. Restricted title Alaska Native Allotments are treated as trust lands for the purpose of fire protection. The Native Allotment itself is a value that needs to be protected from fire. Other trust assets (values) such as timber, cultural sites, houses, fish camps, exist on the allotments. Allotments are placed in Full protection regardless of the fire management option selected on surrounding lands by other agencies.

The Department of the Interior, Bureau of Indian Affairs (BIA) has been tasked with the protection of Alaska native trust lands and serves as the Jurisdictional Agency for fire management purposes. Some of Alaska's federally recognized tribes, as well as several tribal consortiums, have compacted with the BIA through their Tribal Governments to become a service provider for some allotment owners. These providers serve as additional points of contact for fire managers. The BIA is still ultimately responsible for ensuring that the federal government's trust responsibilities are met. Where an additional provider exists, both the BIA and the provider need to be notified of wildfires and included in the decision-making process. The BIA will assist with this.

Per *DOI Manual 620, Chapter 5.3*, the BLM-AFS provides fire protection for the BIA. In some parts of the state, the DOF or United States Forest Service (USFS) have agreed to carry out BLM-AFS' fire protection responsibilities on BIA land through the *Alaska Master Agreement*. Thus, both BIA and BLM-AFS will be involved in fire management decisions in order to ensure that federal responsibilities are met.



## **1.2.2 INTERAGENCY COLLABORATION & ORGANIZATION**

Wildland fire management in Alaska has been accomplished on an interagency basis since the mid-1970s when the State of Alaska, Department of Natural Resources - Division of Forestry (now the Division of Forestry and Fire Protection) began to assume wildfire suppression responsibilities for state, municipal, and private lands.

*Department of the Interior Manual 620 Chapter 5, the Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement (Alaska Master Agreement) and the Alaska Statewide Operating Plan* work together to define an interagency organization that manages wildland fire across agency boundaries throughout the state. The organization separates protecting responsibilities from jurisdictional responsibilities in order to reduce duplication and provide efficiencies of scale. See **Appendix G** for a more thorough history of wildland fire management planning in Alaska.

### **1.2.2.1 JURISDICTIONAL AGENCIES**

A Jurisdictional Agency has land and resource management responsibility for a specific geographical or functional area as provided by federal, state, or local law. Jurisdictional Agencies must develop and adhere to agency planning documents describing unit level wildland fire and fuels management programs.

The [1959 Alaska Statehood Act \(PDF\)](#) authorized the transfer of approximately 105 million acres of federal land to the State of Alaska. An additional 45 million acres was authorized for transfer to ANCSA Corporations by the *1971 Alaska Native Claims Settlement Act (ANCSA)*. Not all lands selected for transfer have been conveyed. Jurisdiction for these unconveyed lands remains with the federal government until they have been either Interim Conveyed (unsurveyed) or Patented (surveyed). The Alaska Wildland Fire Jurisdictions spatial dataset provides a rapid assessment of jurisdictional authority for an area but is not authoritative. If there are any questions regarding jurisdiction, agency realty staff should be consulted.

In Alaska, the surface and subsurface ownership and jurisdiction for a parcel of land may differ. Usually, jurisdictional responsibilities relating to fire management belong to the surface jurisdiction. Where subsurface jurisdictions have permitted or leased surface occupancy and/or assets (e.g., mining camp, oil/gas infrastructure, etc.), the surface Jurisdictional Agency will be the primary jurisdictional contact and will be responsible for ensuring subsurface jurisdictions are kept informed. Alaska Jurisdictional Agencies are identified in **Table 1**.



Table 1: Alaska Jurisdictional Agencies based on Ownership/Land Status

Jurisdictional Agency	Ownership/Land Status
<p><b>Alaska Department of Natural Resources<sup>1</sup></b></p>	<ul style="list-style-type: none"> <li>• <b>Alaska State managed lands including:</b> <ul style="list-style-type: none"> <li>○ State Parks, Forests, Mental Health, and other state lands</li> <li>○ State Critical Habitat Areas, Range Areas, Refuges and Sanctuaries (joint w/Alaska Department of Fish and Game)</li> <li>○ Lands “Tentatively Approved” for conveyance to the state</li> <li>○ DNR lands permitted or leased to another entity<sup>2</sup></li> </ul> </li> <li>• <b>City, Borough, and Municipality lands</b></li> <li>• <b>Private fee simple lands</b></li> </ul>
<p><b>Alaska Native Claims Settlement Act (ANCSA) Village and Regional Corporations</b> (BLM-AFS may act as the Agency Administrator Representative, when necessary)</p>	<ul style="list-style-type: none"> <li>• <b>Patented, Interim Conveyed, or “Tentatively Approved” ANCSA Regional or Village Corporation lands</b></li> <li>• <b>ANCSA lands permitted or leased to another entity<sup>2</sup></b></li> </ul>
<p><b>Bureau of Indian Affairs<sup>3</sup></b></p>	<ul style="list-style-type: none"> <li>• <b>BIA managed lands including:</b> <ul style="list-style-type: none"> <li>○ Restricted Native Allotments (patented or certificated)</li> <li>○ Annette Island Indian Reservation</li> <li>○ Other federally administered Indian trust lands including restricted title townsites</li> </ul> </li> </ul>
<p><b>Bureau of Land Management</b></p>	<ul style="list-style-type: none"> <li>• <b>BLM managed lands including:</b> <ul style="list-style-type: none"> <li>○ National system of public lands as defined in Federal Land and Management Policy Act</li> <li>○ National Conservation Areas</li> <li>○ BLM Wild and Scenic Rivers</li> <li>○ National Recreation Areas</li> <li>○ National Petroleum Reserve-Alaska</li> <li>○ BLM lands permitted or leased to another entity<sup>2</sup></li> <li>○ Pending Native Allotment Applications (not yet patented or certificated)</li> <li>○ ANCSA Regional or Village Corporation selected lands outside of National Parks, National Wildlife Refuges, and National Forests that are not conveyed, interim conveyed, or “Tentatively Approved”</li> <li>○ State selected lands outside of National Parks, Wildlife Refuges, and Forests that are not conveyed or “Tentatively Approved”</li> </ul> </li> </ul>
<p><b>National Park Service</b></p>	<ul style="list-style-type: none"> <li>• <b>NPS managed lands including:</b> <ul style="list-style-type: none"> <li>○ National Parks, Preserves, and Historical Parks</li> <li>○ Aniakchak, Cape Krusenstern, &amp; World War II Valor in the Pacific National Monuments</li> <li>○ NPS Wild and Scenic Rivers</li> <li>○ NPS lands permitted or leased to another entity<sup>2</sup></li> <li>○ ANCSA Regional or Village Corporation selected lands within National Parks, Preserves, Historical Parks and Monuments that are not conveyed, interim conveyed, or “Tentatively Approved”</li> <li>○ State selected lands within National Parks, Preserves, Historical Parks, and Monuments that are not conveyed or “Tentatively Approved”</li> </ul> </li> </ul>

<i>Jurisdictional Agency</i>	<i>Ownership/Land Status</i>
<b>U.S. Fish and Wildlife Service</b>	<ul style="list-style-type: none"> <li>• <b>FWS managed lands including:</b> <ul style="list-style-type: none"> <li>○ National Wildlife Refuges</li> <li>○ FWS Wild &amp; Scenic Rivers</li> <li>○ FWS lands permitted or leased to another entity<sup>2</sup></li> <li>○ ANCSA Regional or Village Corporation selected lands within National Wildlife Refuges that are not conveyed, interim conveyed, or “Tentatively Approved”</li> <li>○ State selected lands within National Wildlife Refuges that are not conveyed or “Tentatively Approved”</li> </ul> </li> </ul>
<b>U.S. Forest Service</b>	<ul style="list-style-type: none"> <li>• <b>USFS managed lands including:</b> <ul style="list-style-type: none"> <li>○ National Forests</li> <li>○ Admiralty Island &amp; Misty Fjords National Monuments</li> <li>○ USFS lands permitted or leased to another entity<sup>2</sup></li> <li>○ ANCSA Regional or Village Corporation selected lands within National Forests that are not conveyed, interim conveyed, or “Tentatively Approved”</li> <li>○ State selected lands within National Forests that are not conveyed or “Tentatively Approved”</li> </ul> </li> </ul>
<b>Department of Defense Agencies<sup>4</sup></b> including:	Each of these agencies is responsible for management of wildland fire on their own lands except where specific agreements exist.
<ul style="list-style-type: none"> <li>• U.S. Army</li> <li>• U.S. Air Force (USAF)</li> <li>• U.S. Navy</li> </ul>	
<b>Other Federal Agencies</b> including (but not limited to):	Each of these agencies is responsible for management of wildland fire on their own lands except where specific agreements exist. Currently, there are no agreements in place for lands in these jurisdictions.
<ul style="list-style-type: none"> <li>• U.S. Postal Service</li> <li>• U.S. Coast Guard</li> <li>• Federal Aviation Administration</li> <li>• General Services Administration</li> <li>• U.S. Public Health Service</li> <li>• National Oceanic and Atmospheric Administration</li> </ul>	

<sup>1</sup>Under state statute, the State of Alaska, Department of Natural Resources, Division of Forestry and Fire Protection maintains jurisdictional authority over private lands (excepting restricted Native Allotments, and Alaska Native Corporation lands conveyed under ANCSA). Private landowners may negotiate management option changes with the state.

<sup>2</sup>Federal and state permits, leases, sales contracts and other documents that allow for private use of federal and state lands may contain information regarding wildfire protection levels and management option designation in the document or document’s stipulations. Those designations are applicable to the lands and personal property located on those lands. The issuing Jurisdictional Agency is responsible for selecting the response management option.

<sup>3</sup>In some cases, BIA authority may be managed by a contract service provider. Jurisdictional authority for lands sold out of restricted status is based on the purchaser’s status.

<sup>4</sup>U.S. Army Garrison Alaska (USAG Alaska) manages some lands in conjunction with the Bureau of Land Management including the Yukon and Donnelly training ranges. The AFS Military Zone FMO works with USAG Alaska and BLM to determine jurisdictional and fiscal responsibility for fires on these lands. An agreement between Alaska DNR and the U.S. Air Force Joint-Base Elmendorf-Richardson describes fire management roles and responsibilities for fires occurring on the

base. There are no agreements or fiscal arrangements in place for other military lands in Alaska, including the Fort Greely Missile Defense site.

### **1.2.2.2 PROTECTING AGENCIES**

Protecting Agencies provide wildfire suppression services to Jurisdictional Agencies within their area of operation. Protecting Agencies are responsible for implementing courses of action that support strategic direction provided by Jurisdictional Agencies through land/resource management plans, unit FMPs, and decision documents for incidents that have been developed through a decision support process. The Protecting Agency may provide operational expertise and assist, as requested, in the development of jurisdictional strategic objectives and management requirements.

To promote cost-effective suppression services and minimize unnecessary duplication of suppression systems, three Protecting Agencies have been delegated suppression responsibility for all lands in Alaska based on geographic location instead of jurisdictional authority:

- Alaska Department of Natural Resources – Division of Forestry and Fire Protection
- Bureau of Land Management – Alaska Fire Service
- U.S. Forest Service

Each Protecting Agency responds to all wildfires within their area of responsibility regardless of Jurisdictional Agency (Figure 1). Agreements and statewide operating plans delineate services and billing procedures in accordance with state and federal laws.

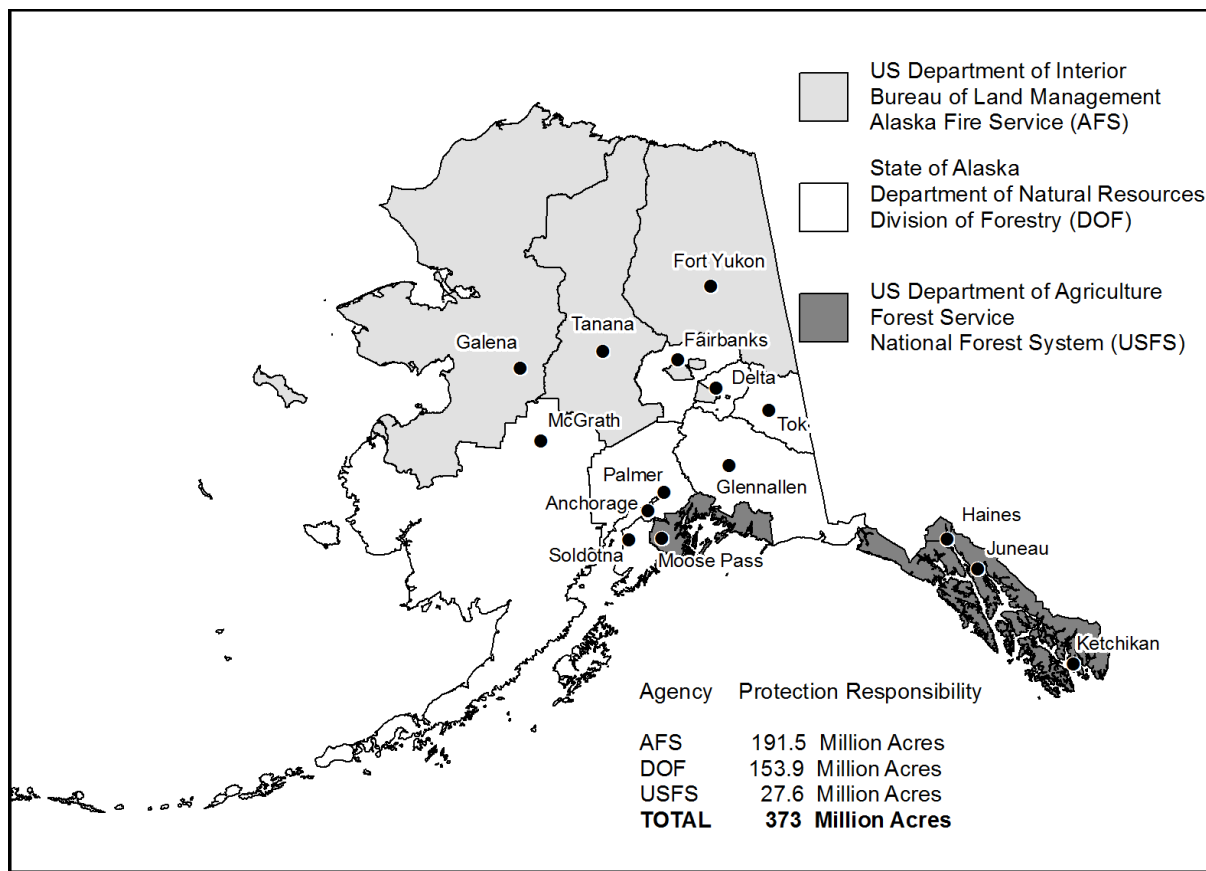


Figure 1: Alaska Protecting Agency Areas of Responsibility

### 1.2.2.3 INTERAGENCY GROUPS

#### ***ALASKA WILDLAND FIRE COORDINATING GROUP (AWFCG)***

The Alaska Wildland Fire Coordinating Group (AWFCG) was organized based on direction in the *Department of the Interior Manual Part 620, Wildland Fire Management Chapter 5*. Its mission is to provide a forum that fosters cooperation, coordination, collaboration, and communication for wildland fire management and related activities within Alaska. It serves as the geographic area clearinghouse and forum for the identification of interagency fire management issues and their solutions. The AWFCG is the leadership focus for planning and implementing interagency fire management statewide and has established committees to promote specific programs and interagency partnerships. The AWFCG is responsible for the oversight of this interagency FMP and determines when updates, amendments, or revisions are needed.

Agencies with voting membership in the AWFCG include the Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, U. S. Forest Service, Tanana Chiefs Conference, Chugachmiut, the Association of Village Council Presidents, the Alaska Department of Natural Resources, and the Alaska Department of Fish and Game. The Alaska Department of Environmental Conservation is a non-voting member. The Anchorage Fire

Department is currently inactive. Additional organizations seeking membership may petition the AWFCG. The *AWFCG Memorandum of Understanding, Standard Operating Plan*, and other AWFCG documents are posted on the [AWFCG webpage](#).

### ***ALASKA MULTI-AGENCY COORDINATING GROUP (AMAC)***

The Alaska Multi-Agency Coordinating Group (AMAC) is activated on a situational basis when fire activity or resource mobilization requires interaction between agencies to ensure that decisions are responsive to the priority interests of the geographic area as a whole. The AMAC provides a forum to discuss strategic actions to be taken to ensure that an adequate number of resources are available to meet the anticipated needs. The AMAC considers agency specific fire management priorities, addresses politically and publicly sensitive issues that are common to all in an interagency format, and provides mutual support to the National Multi-Agency Coordinating Group (NMAC). The AMAC functions include:

- Assist in establishment of priorities for allocation of resources.
- State and federal disaster response or coordination.
- Provide political interfaces.
- Provide information flow to the public, the media, and involved agencies through use of the Joint Information Center (JIC).
- Assist in identification of strategic actions in anticipation of future needs.
- Identification and resolution of issues common to all parties.
- Identify protection objective revisions/non-standard responses.
- Coordinate Prescribed Fire Activity authorizations at Planning Levels 4 and 5.
- Provide burning restriction suggestions.
- Coordination with NMAC on intelligence and resource needs.

The *AMAC Operations Handbook* is posted on the [AMAC webpage](#).

### **1.3 RESOURCE MANAGEMENT PLANNING AND ENVIRONMENTAL COMPLIANCE**

The Alaska Interagency Fire Management Plans (IFMPs) 1982-1988 and the AIWFMP 98 (see **Appendix G**) were developed with broad goals and objectives that support the various agencies' missions in Alaska. An environmental assessment (EA) which met federal NEPA requirements was prepared for the Alaska IFMP, Tanana/Minchumina Planning Area in 1982. The 1984 *Alaska Interagency Fire Planning Guidelines* (page 7 Step No. 12) references the authorization of that EA to serve as the programmatic EA for the original IFMPs completed during the 1980s fire planning efforts. No further NEPA documentation was completed for the 1998, 2010, 2016, or the 2021 AIWFMP update.

Some agencies and administrative units rely solely on the *AIWFMP* for fire management direction. However, the following agencies have analyzed fire management in land/resource management plans (L/RMPs) and/or fire management plans to comply with NEPA requirements, *Sections 304 and 810* of *ANILCA*, the *2001 Review and Update of the 1995 Federal Wildland Fire Management Policy*, and agency specific direction:

- The National Park Service and U.S. Fish and Wildlife Service implemented agency-related fire management direction by completing administrative unit Fire Management Plans (FMPs).
- The Bureau of Land Management completed a FMP for all Bureau of Land Management managed lands within Alaska.
- The U.S. Forest Service additionally relies on Spatial Fire Planning contained in the Wildland Fire Decision Support System (WFDSS) and the Fire Management Reference System (FMRS), which identifies a collection of plans required for fire program management, such as aviation, operations, dispatch, and fire danger operating plan products. Maintaining current WFDSS and FMRS products will be a continuing effort to ensure guidance is consistent with Land & Resource Management Plan direction and they reflect available fire response options to move from current to desired conditions.
- The U.S. Army-Alaska has included Forestry and Wildland Fire Management as an annex to their Integrated Natural Resource Management Plans that meets Army regulations and serves as their Fire Management Plan.

These plans reference agency-specific policies, authorities, and missions; and facilitate the achievement of the land use/resource goals and objectives identified in unit land use plans that they tier from. These agency L/RMPs and FMPs are the foundation for the implementation of the interagency plan for their units.

## 2 FIRE MANAGEMENT GOALS AND OBJECTIVES

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This Plan does not supersede individual agency policies and requirements. Some agencies and units rely solely on this Plan for fire direction; however, it must be used in conjunction with jurisdictional unit fire management plans (FMPs) where they exist. Unit FMPs contain definitive objectives and constraints based on Jurisdictional Agency policy and land/resource management plans for individual units.

While each Jurisdictional Agency has agency-specific guidelines for their fire management program, the following mutually developed goals, objectives, and management considerations apply across jurisdictional boundaries throughout Alaska.

### 2.1 GOALS

The protection of human life is the first priority in every fire management activity. Setting priorities among protected communities and community infrastructure, other property and improvements, and natural and cultural resources is done based on human health and safety, the values to be protected, long-term and short-term risk management considerations, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.

The need to provide protection levels to protect human life and health, qualifying property, and valued natural and cultural resources, while also allowing Jurisdictional Agencies to complete mission-related activities and accomplish fire-related land use and resource management in a cost-effective manner, has driven the range of available responses.

The following goals are central to the statewide interagency fire planning effort represented by this Plan:

- Recognize firefighter and public safety as a core value that governs every decision and activity.
- Promote cooperation, collaboration, and partnerships for fire management between federal, state, and local governments, Alaska Native groups and other organizations.
- Consider risks, benefits, and resource objectives within the scope of existing legal mandates, policies, and regulations.
- Manage wildland fire using ecologically, operationally, and fiscally sound principles.
  - Integrate fire management, mission objectives, land use, and natural resource goals.
  - Minimize adverse environmental impacts of fire suppression activities.
  - Balance the cost of suppression actions against the value of the resource warranting protection and consider firefighter and public safety, benefits, and resource objectives.
- Maintain a flexibility that allows agencies to adhere to their policies and respond to changes in objectives, fire conditions, land use patterns, resource information, and technologies.

## 2.2 STATEWIDE PLANNING OBJECTIVES

The following statewide fire management objectives were developed to meet and support Jurisdictional Agency goals and to provide implementation guidance for fire operations:

- Emphasize firefighter and public safety as the single, overriding priority in all fire management actions.
- Use a full range of fire management activities to achieve ecosystem sustainability including its interrelated ecological, economic, and social components.
  - Prioritize areas for protection actions and allocation of available firefighting resources without compromising firefighter and public safety.
  - When and where appropriate, allow fires to burn naturally to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.
- Realize short- and long-term cost efficiencies by weighing costs and associated environmental impacts of suppression actions against the values to be protected.
- Manage vegetation through various fuels treatment techniques to reduce and mitigate risks of damage from wildland fire.
- Annually review fire management options and values inventories to maintain currency, reflect revised priorities, and adapt to changing legal mandates, policies, and conditions.
- Prevent human starts to the extent possible.
- Investigate wildfires to understand cause and recover cost when possible.

## 2.3 STATEWIDE MANAGEMENT CONSIDERATIONS

This Plan provides the framework for planning a response to a wildfire by selecting fire management options based on land use patterns, values to be protected, and resource objectives. General incident management considerations include:

- Lightning-caused wildfires are an important component of the boreal forest and arctic tundra ecosystems, and the complete exclusion of these fires is neither ecologically sound nor economically feasible.
- Human-caused wildfires often pose a threat to values and public safety; therefore, response planning should provide for appropriate prevention, education, restriction and community assistance plans and programs.
- In many areas of Alaska, subdivisions and residential areas are expanding into previously undeveloped areas.
- The natural role of fire in the environment must be tempered by the need to protect human life and health, qualifying property, and valued natural and cultural resources.



- Well-trained, well-equipped, and adequately funded fire-related resources are essential to maintain public safety and public confidence in the fire management programs and to provide cost effective suppression.
- Wildland fire management programs, activities, and processes should be compatible within and between Jurisdictional and Protecting Agencies.
- During the fire season, the availability of suppression resources may be limited, and prioritization is frequently necessary.
- Fire management options are defined independent of administrative boundaries. They prioritize initial response based on values at risk including human life, property, and ecosystem health and sustainability and substantially improve the effectiveness of wildland fire management.
- Annual review of fire management options is necessary to ensure that options remain appropriate as the distribution of values on the landscape, ownership, policies, and land management objectives change.
- Fire management options are designed to guide initial response. However, every incident is unique, and the default initial response will not always be appropriate. Managers should evaluate each incident independently and determine whether a non-standard initial response is warranted.
- Incident strategies and tactics will take into account life safety, values at risk, the availability of firefighting resources, access, local site and weather conditions, and the overall statewide and national situation.
- Incident strategies and tactics may change as an incident evolves. Documentation of strategic wildfire decisions will be in accordance with applicable federal or state policies and procedures.
- Agencies will work together with partners and other affected groups and individuals to prevent unauthorized ignition of wildfires and to pursue investigation of wildfires to understand cause and recover cost when appropriate.
- Fuels (vegetation) treatments are important tools for mitigating wildfire risk to communities and other values, reducing wildfire expenditures, and accomplishing land and resource management objectives. Fuels mitigation activities may include the use of wildfire, prescribed fire, mechanical, and/or other types of treatments.
- Agencies will work both individually and jointly to enhance knowledge and understanding of wildland fire management policies and practices through internal and external communication and education programs.
- All fire management activities should be based on best available science and information. Alaska-specific fire-related research is encouraged.

- Climate change and associated ecological and fire regime changes have been documented in Alaska. The extent of further change is unknown, but modeling efforts predict an increase in fire occurrence over the next 50 years, with potential decreases in areas that experience a fire-mediated shift from coniferous to deciduous-dominated forest. Anticipated longer fire seasons and changes in fuels and vegetation may complicate fire management activities and preparedness.
- With climate change and other natural processes, ecosystems are slowly shifting across the landscape (e.g., shrubs expanding further north and west in areas that were previously tussock tundra) and may result in unanticipated changes in fuels and fire regimes.

## 3 WILDLAND FIRE OPERATIONAL GUIDANCE

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### 3.1 PREPAREDNESS

Preparedness responsibilities for Jurisdictional and Protecting Agencies are described in the *Alaska Statewide Operating Plan*, the *Alaska Interagency Mobilization Guide*, and in agency-specific plans.

### 3.2 MANAGEMENT OF WILDFIRES

Fire occurrence is a vital component of many ecosystems, particularly those associated with the boreal forest, and is important to the biodiversity of the resources and the long-term ecological health of the land. Jurisdictional Agencies in Alaska have acknowledged and supported a natural fire regime in their planning efforts. However, the need to protect certain resources and the density and distribution of populated areas warrants fire management that also regulates the extent of fire on the landscape.

#### 3.2.1 STATEWIDE MANAGEMENT REQUIREMENTS

Jurisdictional Agencies have identified the following general constraints and guidelines. Additional constraints applicable to specific incidents are at the discretion of the Jurisdictional Agency and are documented in the Jurisdictional Agency's fire management plans, the incident's decision record, and/or the Delegation of Authority.

- Weigh the cost and environmental impacts of suppression actions against the economic, social, and/or resource values warranting protection. Consider risk to firefighters and the public in all fire management decisions.
- To the extent possible, minimum impact suppression tactics should be used. Firelines will be constructed in a manner that minimizes erosion and will follow natural contours wherever possible. Indirect attack will be used to the extent practical. A suppression repair plan for wildfire suppression activity damage, as approved by the Jurisdictional Agency(ies), must be completed before the final demobilization occurs.
- Locate base camps, spike camps, staging areas, helispots, and other incident support areas in natural clearings if possible and minimize their visible footprint consistent with operational need and safety requirements. Make Jurisdictional Agencies aware of all support areas located on their lands. Keep these areas clean so as not to attract animals and ensure all unused supplies including fuel, oil, food, etc. are removed prior to demobilization of the incident. Exceptions must be explicitly authorized by the Jurisdictional Agency.
- Support areas on private lands or Native Allotments require a land use agreement. No resources (e.g., firewood, etc.) will be removed from private lands or Native Allotments without an approved agreement. Agreements involving Native Allotments must be prepared by the BIA or the local BIA service provider.
- The use of tracked or off-road vehicles requires approval by the Jurisdictional Agency(ies) prior to use.

- When withdrawing water from a fish-bearing stream with portable pumps, scooper aircraft, or aerial buckets; or when crossing it with a vehicle or heavy equipment, comply with the stipulations and notification requirements in the ADF&G statewide *Fish Habitat Permit FH20-SW-0001 Amendment 3*.
- If a game animal is killed in defense of life or property (DLP) on an incident, an Alaska Department of Fish & Game (ADF&G) DLP report will be filed, and the Jurisdictional Agency(ies) will be notified.
- Protecting and Jurisdictional Agencies will coordinate with State of Alaska land managers if wildland fire or wildland fire management activities have the potential to affect public access to public waters or impact state resources. Protecting and Jurisdictional Agencies will coordinate if wildland fire or wildland fire management activities may result in fire area public access closures or may adversely impact values at risk.
- Take measures to prevent the introduction and spread of terrestrial and aquatic invasive species during fire operations. Waterbodies known to harbor invasive species will not be used as water sources for air or ground-based water delivery equipment unless needed to protect life or property. If used, equipment will be cleaned and sanitized before the next use. Communicate concerns, questions, and needs regarding invasive species to jurisdictional resource advisors in a timely manner.
- Application of aerial fire retardant near lakes, wetlands, streams, rivers, and sources of human water consumption or areas adjacent to water sources should be avoided. A minimum of 300 feet is identified in the *Interagency Standards for Fire and Fire Aviation Operations* (Red Book). Individual Jurisdictional Agencies may have more restrictive retardant use guidelines.
- Suppression activities including flight patterns on or near cultural sites or sites designated as “Avoid” must be coordinated with the Jurisdictional Agency.
- Jurisdictional Agencies should be consulted concerning any operational restrictions in designated wilderness areas.
- Jurisdictional Agencies will communicate planned fuels treatment locations to incident management organizations for consideration when locating firelines.
- Structure protection (not suppression) activities by wildland firefighters will be limited to exterior efforts, and only when such actions can be accomplished safely and in accordance with agency policy and established wildland fire operations standards.
- Wildland firefighters will not take direct suppression action on vehicle fires. Suppression efforts on vehicle fires by wildland firefighters will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the burning vehicle.

- Wildland firefighters will not take direct action on fires within landfills. Suppression actions will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the landfill. Protecting Agencies will notify the ADEC Solid Waste Program of all fires that escape from landfills or that have a high potential to escape.
- Any discovery by firefighters of potential unexploded ordnance (UXO) or other potentially hazardous materials (e.g., mining sites, etc.) will be immediately reported through proper channels. Firefighters will remain clear of the area until the threat has been evaluated and mitigated.

### ***3.2.2 WILDFIRE MANAGEMENT OPTIONS***

This Plan recognizes that each of the land managing Federal and State agencies and ANCSA Corporations in Alaska have their own missions, goals, and objectives related to their lands and that in order to effectively prioritize and manage Alaska wildfires there is a need to consider the full spectrum of initial responses to wildfire; from suppression actions designed to contain and control fire growth, to periodic surveillance of fires that are allowed to spread naturally across the landscape. To accomplish this, jurisdictional organizations and Protecting Agencies have collaboratively assigned one of four wildfire management options (**Critical, Full, Modified, and Limited**) to nearly all lands in Alaska. Pre-identified Wildfire Management Options allow fire managers to:

- Quickly prioritize areas for protection actions and the allocation of available initial attack firefighting resources to achieve protection objectives.
- Optimize the ability to achieve land use and resource management objectives and integrate fire management, mission objectives, land use, and natural resource goals.
- Reinforce the premise that the cost of suppression efforts should be commensurate with the economic, social, and resource values identified for protection.

Management options are assigned at a landscape scale and apply across jurisdictional boundaries. Considerations in their selection may include public and private values to be protected. Operationally, the management option at a wildfire's point of origin prescribes the default initial response to the incident and allows Protecting Agencies to rapidly prioritize initial attack resources and respond when Jurisdictional Agencies are unavailable for consultation.

Management options do not take into account incident-specific factors **3.2.3 Non-standard Responses** default initial response will not be appropriate for every fire and may be overridden based on incident-specific considerations. See **3.2.3 Non-standard Responses** for more detail.

For all fire management options, management decisions beyond initial response should be assessed situationally by the Protecting Agency and the affected Jurisdictional Agencies. If the default response is no longer appropriate or has a low probability of success, a decision support process, including situational assessment and risk analysis, will be used to develop incident-specific objectives, requirements, and courses of action, and document the rationale behind them.

Management option designations are intended to be flexible. Jurisdictional Agencies and ANCSA Corporations have the opportunity to review wildfire management options and site designations on their lands annually and update them if warranted by changes in objectives, fire conditions, land use patterns, resource information, and/or technologies. Management option changes should be a collaborative effort between all affected jurisdictional and protecting units. Changes will not be made without the approval of all Jurisdictional Agencies whose lands are affected.

**Sections 3.2.2.1 through 3.2.2.4** predesignate detection and initial resource allocation priorities, default initial actions, and initial action priorities for wildfire ignitions in each management option. In general, response priority will be as follows:

1. Critical
2. Full
3. Pre-conversion Modified
4. Post-conversion Modified
5. Limited

**Section 3.3** describes similar protection levels that can be assigned to specific sites identified in the Alaska Known Sites Database.

There is no guarantee of protection from wildfire in any management option or on any site.

### 3.2.2.1 CRITICAL FIRE MANAGEMENT OPTION

#### *PLANNING CONSIDERATIONS – CRITICAL OPTION*

Lands in wildland urban interface and other densely populated areas where there is an immediate threat to human life, primary residences, inhabited property, community-dependent infrastructure, and structural resources designated as National Historic Landmarks should be considered for the Critical Management Option. This classification is applicable to an entire village or town as well as a single inhabited structure. (See **Site Protection Designations Section 3.3.**)

Excluding fire from Critical Management Option areas may necessitate vegetation (fuels) management projects to reduce and mitigate the risks of damage from a wildfire.

#### *OPERATIONAL GUIDELINES – CRITICAL OPTION*

Table 2: Operational Guidelines – Critical Option

Operational Area	Guidelines
Initial Resource Allocation Priority	Wildfires occurring in the Critical Management Option or that threaten Critical sites are assigned the highest priority for suppression actions and assignment of available firefighting resources.
Detection	Critical Management Option areas and sites are the highest priority for detection coverage when lightning activity or human use indicate a high potential for ignition, or at the request of a Jurisdictional Agency.
Initial Notification Requirements	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.
Default Initial Action (Standard Response)	Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.
Initial Action Priorities	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires at the smallest acreage reasonably possible in order to limit short and long-term threats to values.</li> </ol>
Extended Action & Notifications	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
Resource Benefit Objectives	Only appropriate in extraordinary circumstances at the explicit documented direction of an affected Jurisdictional Agency. The course of action will be documented with a decision analysis and support process.

### 3.2.2.2 FULL FIRE MANAGEMENT OPTION

#### *PLANNING CONSIDERATIONS - FULL OPTION*

The Full Management Option provides for protection of moderately populated areas, cultural and paleontological sites, developed recreational facilities, physical developments, administrative sites and cabins, structures, high-value natural resources, Native Allotments, and other high-value areas. Structures on or eligible for inclusion on the National Register of Historic Places and non-structural sites on the National Register are placed within this category. Either broad areas or specific sites qualify to be designated as Full. (See **Site Protection Designations Section 3.3.**)

The long-range effects on fire-dependent ecosystems are a land management consideration when designating Full at the landscape scale. The attempt to exclude fire may necessitate implementing vegetation (fuels) management projects.

#### *OPERATIONAL GUIDELINES - FULL OPTION*

Table 3: Operational Guidelines - Full Option

Operational Area	Guidelines
Initial Resource Allocation Priority	Wildfires occurring in the Full Management Option or that threaten Full sites are assigned a high priority for suppression actions and assignment of available firefighting resources but are below wildfires within or threatening a Critical Management Option area or site.
Detection	Full Management Option areas and sites are the next priority after Critical for detection coverage when lightning activity or human use indicate a high potential for ignition, or at the request of a Jurisdictional Agency.
Initial Notification Requirements	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.
Default Initial Action (Standard Response)	Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.
Initial Action Priorities	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires at the smallest acreage reasonably possible in order to limit short and long-term threats to values.</li> </ol>
Extended Action & Notifications	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
Resource Benefit Objectives	Only appropriate on rare occasions, based on site-specific circumstances (e.g., the initial size-up and response is delayed beyond 24 hours, or a fire is primarily burning into Limited). The course of action will be documented with a decision analysis and support process.



### **3.2.2.3 MODIFIED FIRE MANAGEMENT OPTION**

#### ***PLANNING CONSIDERATIONS - MODIFIED OPTION***

The Modified Management Option provides a management level between Full and Limited. It allows for a response to wildfire that tailors the initial action to the time of year that the fire starts. It provides for an initial response designed to protect identified sites early in the season when the probability is high that they will eventually be affected; but later in the year, allows fire-related land use and resource objectives to be accomplished in a cost-effective manner while still providing appropriate levels of site protection. The Modified Option is based on the assumption that in a normal fire year, early season ignitions are more likely to spread to the point that they threaten values than late season ignitions.

The initial response to wildfire ignitions before the pre-identified conversion date is similar to the Full Management Option, recognizing that lands placed in this category will usually be suited to indirect attack. Early suppression action will be taken in order to avoid threats to values later in the season that may potentially require costly and difficult protection actions.

After the conversion date, when it is less likely that the fire will spread and threaten values, the initial response is similar to the Limited Management Option in order to balance acres burned with suppression costs and accomplish land and resource management objectives when conditions are favorable. As with the Limited Fire Management Option, sites that warrant higher levels of protection may occur within Modified Option areas. Periodic surveillance will be conducted to evaluate the need for action to protect human life or site-specific values. By allowing fire to spread naturally, a natural mosaic of burn severity and intensity can be maintained. This option reduces both long-term risks and costs while sustaining a natural range of variation in vegetation composition and structure.

Regardless of conversion date, Protecting Agencies will adhere to jurisdictional policy and guidelines concerning decisions to protect individual sites. The highest priority must always be placed on firefighter and public safety. The costs and environmental impacts of suppression actions should be weighed against the potential benefits of taking action. Every effort should be made to minimize the adverse effects of fire suppression efforts and realize short and long-term cost efficiencies.

#### ***CONVERSION DATES***

When establishing Modified Management Option areas, Jurisdictional Agencies assign a default conversion date for the area. The default conversion date for most Modified areas in Alaska is July 10. Some Modified areas have been assigned different default conversion dates based on local influences. The AWFCG reviews assigned conversion dates each season as they are approached and determines if conversion is appropriate based on local and statewide fire and weather conditions. The decision to convert may be made statewide, by a geographically defined area, or by administrative unit, and can be informed by Fire Danger Operating Plan (FDOP) analyses.

A Jurisdictional Agency may request, through their AWFCG representative, that the AWFCG consider an earlier or later conversion date. Requests must include a rationale and supporting

data for the change as well as the opinions of all affected Jurisdictional Agencies. Protecting Agencies may facilitate this process. The rationale and supporting data will be included with the AWFCG decision record. If the conversion date is postponed, the AWFCG will re-evaluate at intervals no longer than 10-days until conversion takes place.

***OPERATIONAL GUIDELINES - MODIFIED OPTION (PRE-CONVERSION)***

**Table 4: Operational Guidelines - Modified Option (Pre-conversion)**

Operational Area	Guidelines
Initial Resource Allocation Priority	<p>Before the conversion date, fires occurring within Modified will receive priority for allocation of initial action forces after the protection of Critical and Full areas.</p> <p><b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within pre-conversion Modified is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.</p>
Detection	<p>Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.</p>
Initial Notification Requirements	<p>Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.</p>
Default Initial Action (Standard Response)	<p>Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.</p>
Initial Action Priorities	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires in order to limit short and long-term threats to values.</li> </ol>
Extended Action & Notifications	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
Resource Benefit Objectives	<p>May be appropriate, based on site-specific circumstances and time of season (e.g., a pre-conversion Modified ignition that as of the conversion date has little potential to threaten values). The course of action will be documented with a decision analysis and support process.</p>

**OPERATIONAL GUIDELINES - MODIFIED OPTION (POST-CONVERSION)**

**Table 5: Operational Guidelines - Modified Option (Post-conversion)**

Operational Area	Guidelines
Initial Resource Allocation Priority	<p>After the conversion date, the priority is low for the allocation of initial action forces and is equal to the Limited Option.</p> <p><b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within post-conversion Modified is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.</p>
Detection	<p>Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.</p>
Initial Notification Requirements	<p>Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered.</p>
Default Initial Action (Standard Response)	<p>Conduct surveillance, assessments, and site protection as warranted.</p>
Initial Action Priorities	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Allow fires to burn naturally to the extent possible in order to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.</li> </ol>
Extended Action & Notifications	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
Resource Benefit Objectives	<p>It is routinely appropriate to manage all or part of post-conversion Modified fires for resource benefit. A documented decision analysis and support process may be needed based on complexity or initiated at the discretion of an affected Jurisdictional Agency.</p>

### 3.2.2.4 LIMITED FIRE MANAGEMENT OPTION

#### *PLANNING CONSIDERATIONS - LIMITED OPTION*

The Limited Management Option is designed for broad, landscape-scale areas where there is a low density and wide distribution of values to be protected. Wildland fires in these areas can be routinely managed to protect, maintain, and enhance natural and cultural resources and, as nearly as possible, enable fire to function in its ecological role and maintain natural fire regimes. By allowing fire to spread naturally, a mosaic of burn severity and intensity can be achieved. Periodic surveillance will be conducted to evaluate the need for action to protect human life or site-specific values. The Limited Option both reduces long-term risks and costs and supports healthy fire-dependent ecosystems.

The Limited Option may also be assigned to areas where the cost of suppression may exceed the value of the resources to be protected, where the environmental impacts of fire suppression activities may have more negative impacts on the resources than the effects of the fire, and where safety considerations preclude the commitment of firefighters to an area (e.g., military impact zones).

Protecting Agencies will adhere to jurisdictional policy and guidelines regarding decisions to protect individual sites. The highest priority must always be placed on firefighter and public safety. The costs and environmental impacts of suppression actions should be weighed against the potential benefits of taking action. Every effort should be made to minimize the adverse effects of fire suppression efforts and realize short and long-term cost efficiencies.

Sites that have been assigned higher levels of protection may exist within the boundaries of Limited Option areas, and actions to protect these sites may be taken when warranted without compromising the intent of this management option. Site protection actions that do not seek to contain the fire are considered a standard response to a Limited fire.

**OPERATIONAL GUIDELINES - LIMITED OPTION**

Table 6: Operational Guidelines - Limited Option

Operational Area	Guidelines
Initial Resource Allocation Priority	<p>Fires within Limited Management Option areas are assigned the lowest resource allocation priority.</p> <p><b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within Limited is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.</p>
Detection	<p>Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.</p>
Initial Notification Requirements	<p>Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered.</p>
Default Initial Action (Standard Response)	<p>Assess the fire’s potential to affect neighboring values. Conduct surveillance and site protection as warranted.</p>
Initial Action Priorities	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Allow fires to burn naturally to the extent possible in order to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.</li> </ol>
Extended Action & Notifications	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
Resource Benefit Objectives	<p>It is routinely appropriate to manage all or part of Limited fires for resource benefit. A documented decision analysis and support process may be needed based on complexity or initiated at the discretion of an affected Jurisdictional Agency.</p>

### 3.2.3 NON-STANDARD RESPONSES

The operational guidelines prescribed by the point of origin management option (**Figure 2**) are not appropriate for every fire. It may be prudent and justifiable to provide an increased response level to protect specific values from immediate or long-term risk, or to keep a fire small in order to avoid potential for a large resource commitment later in the season. Similarly, response level may be decreased to accommodate safety concerns, higher management priorities, and/or lack of resource availability. The decision to initiate a non-standard response based on various factors include but are not limited to:

- Firefighter safety (considerations include but are not limited to site condition, location, surrounding vegetation, and presence of hazardous materials).
- Values at risk in the vicinity of the fire or lack thereof.
- Probability of success.
- Availability and prioritization of firefighting resources.
- Analysis of the overall statewide situation.
- Current and/or forecasted fire danger at the point of origin or surrounding area.

Non-standard determination will be based on the initial response, regardless of intent. The following are considered **non-standard responses**:

- Critical, Full, or pre-conversion Modified Management Option fires where the initial strategy is **Monitor, Confine, or Point/Zone Protection** (no suppression actions meant to fully contain the fire are taken by ground or air resources within 12 hours of discovery). Justifications include, but are not limited to:
  - Lack of available resources or higher priorities.
  - Safety/weather concerns.
  - Re-evaluation of threat potential, risks, benefits (e.g., natural barriers preclude escape, extended forecast for wet weather, etc.).
- Post-conversion Modified or Limited Management Option fires where the initial strategy is **Full Suppression** (ground or air resources take suppression action on the fire within 12 hours of discovery with the goal to fully contain it). Justifications include, but are not limited to:
  - Re-evaluation of threat potential, risks, benefits (e.g., site specific conditions warrant containment effort or proximity of values requiring protection).
  - Initial site protection most efficiently achieved by containing the fire.
  - Partial containment/confinement.

A non-standard response to an individual incident should be a collaborative decision but may be initiated at the discretion of either the Protecting or Jurisdictional Agency. Non-standard responses will be documented in the Fire Notification Checklist and decision document.

The AWFCG and the AMAC have the authority to increase or decrease response and resource allocation priorities regardless of management option designation if conditions warrant. In addition, the AMAC may be convened to implement a temporary change from pre-identified management

options for a specific geographic area during periods of unusual fire conditions (e.g., numerous fires, predicted drying trends, smoke problems, unusually wet conditions, or suppression resource shortages). Past actions have included discretionary suppression of all new starts regardless of fire management options. These departures usually do not apply statewide but to specific regions of the state.

Jurisdictional Agencies may request a temporary management option change for a specific geographic area through an AMAC group representative. The Jurisdictional Agency(ies) requesting the change must provide a supporting rationale that includes the opinions of all potentially affected jurisdictions. The Protecting Agency may facilitate this process. This document will be included with the AMAC group decision record.

Actions based on temporary option changes or adjusted conversion dates for Modified Option areas that have been approved by AWFCG do not constitute non-standard responses.

Non-standard responses provide an opportunity for agencies to validate existing management option boundaries, as well as to evaluate their ability to adjust quickly and respond appropriately to unusual or incident-specific situations. Each fire season's non-standard responses will be reviewed in an interagency forum at the annual Fall Fire Review and should be reviewed by affected Jurisdictional Agencies during their annual internal reviews to determine if management option designations should be re-evaluated.

Decision support documentation requirements vary by agency (see *Alaska Statewide Operating Plan, Section V.E.*); however, for all non-standard responses in Alaska, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action, and document the rationale behind them.

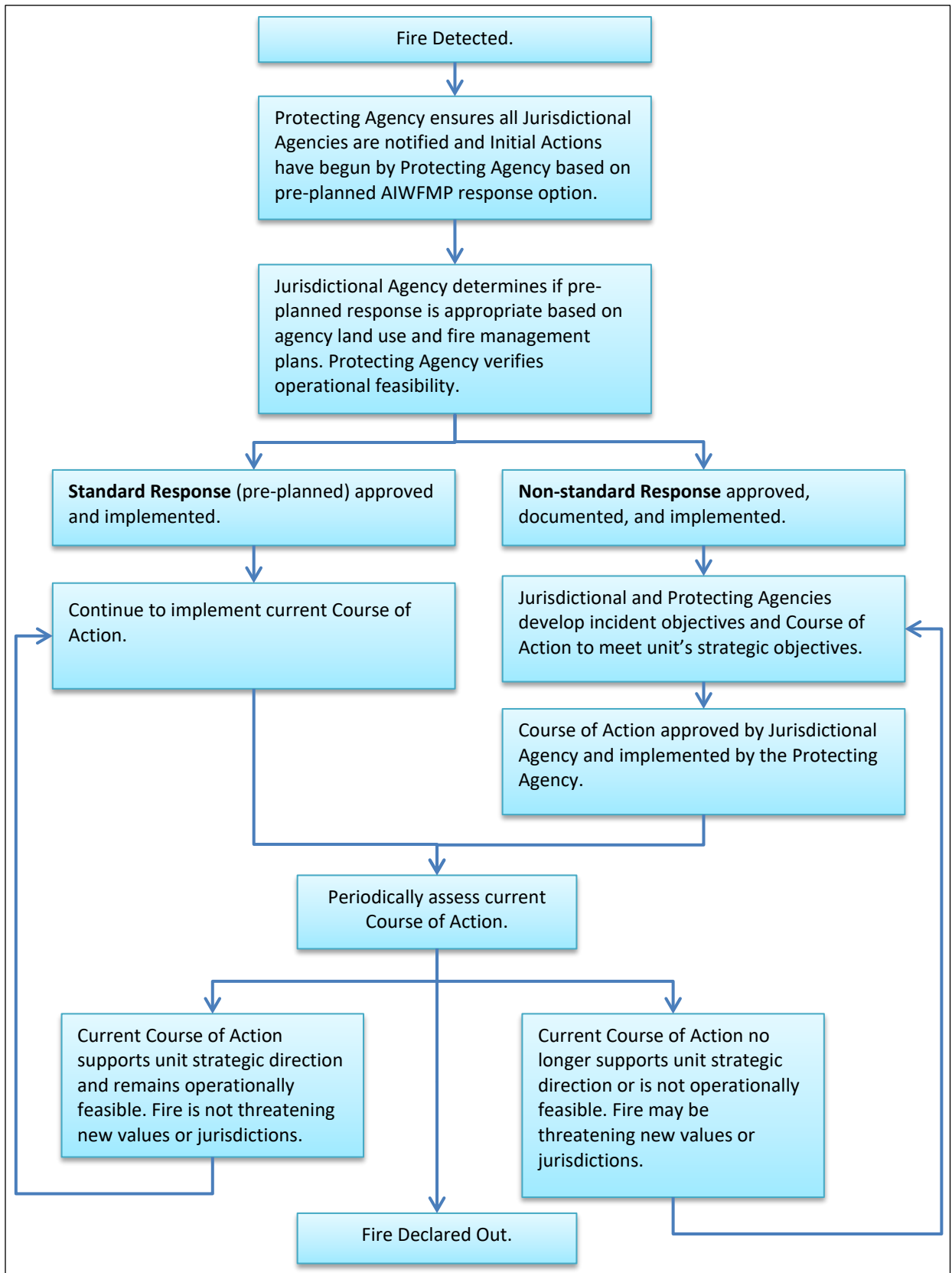


Figure 2: Operational Decision Chart for All Wildfire Management Options



### 3.3 SITE PROTECTION DESIGNATIONS

**Critical, Full, Avoid, No Protection, and Undesignated** site protection designations have been established to identify the appropriate actions to be taken within the management option areas. These site protection designations give Protecting Agencies specific guidance for structures, cultural and paleontological sites, small areas of high resource value and threatened and endangered species nesting areas.

- **Critical** sites are to be protected from fire and receive the same priority as Critical Management Option areas.
- **Full** sites are to be protected from fire and receive the same priority as Full Management Option areas.
- **Avoid** sites are areas where ground fire suppression activities and/or aircraft activity should be avoided in order to minimize damage to a site or resource resulting from suppression efforts.
- **No Protection** sites have been located and identified by the Jurisdictional Agency and do not require any type of protection, suppression actions, or other fire management consideration.
- **Undesignated** sites have been located but have not yet been assigned a protection designation by the Jurisdictional Agency.

The safety of the public and fire suppression personnel is the highest priority when planning actions to be taken to protect sites from wildfires. The presence of humans at any site may elevate its protection priority.

Jurisdictional Agencies are responsible for annually identifying infrastructure, cultural sites, and natural resources on their lands and for providing direction to the Protecting Agencies regarding protection priorities. Jurisdictional Agencies are responsible for ensuring that fire management options reflect these priorities, and that individual sites are included in the Alaska Known Sites Database and assigned appropriate protection designations. Some sites (e.g., cultural resources, endangered species) may be excluded from the database to protect sensitive data.

Whenever possible, site protection designations should be validated with the appropriate jurisdiction prior to taking (or not taking) a protection action due to the challenges associated with keeping designations current. Jurisdictional Agencies should be consulted regarding the appropriate protection actions for Undesignated sites and threatened sites not appearing in the database. Known Sites updates may be delegated to protecting organizations or IMTs, but jurisdictions are ultimately responsible for ensuring sites on their lands are appropriately designated.

As with fire management option boundaries, the Alaska Known Sites Database should be reviewed annually by Jurisdictional Agencies and site protection designations should be updated as necessary. Jurisdictions may update site protection designations throughout the year but should keep their Protecting Agency informed of any changes.

### 3.4 FIRE NOTIFICATIONS

Protecting Agencies are responsible for informing Jurisdictional Agencies when wildfires occur on or threaten their lands. Jurisdictional Agency Administrators are responsible for all fire management actions affecting their lands and must be kept informed and involved in the decision-making process. This includes:

- Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.
- Provide early notification to additional jurisdictions whose lands become threatened by fire throughout the life of the incident even if no suppression action is being taken or is being considered. This allows all jurisdictions affected by a fire to identify and prioritize values, communicate concerns, help to validate current strategy, participate in the incident decision-making process, and keep their leadership and stakeholders informed.
- Jurisdictional notifications must also be made for Natural Outs, False Alarms, [nonstatistical fires](#) as defined by NWCG, and prevention actions recorded by the Alaska DNR, including actions such as issuing burn pile warnings or putting out unattended campfires.

Affected jurisdictions will also be notified of significant incident-related events including but not limited to:

- Increase or decrease in complexity
- Incident status change
- Incident strategy change
- Recordable injury or accident
- Significant property damage
- An animal is killed in defense of life or property
- Initiation of an investigation or cost recovery action

Additional notification requirements include:

- BIA notification is required when a fire affects any Native Allotment, regardless of application status. Both BIA and BLM must be notified if a pending (or not yet patented) Native Allotment is affected even though BLM retains jurisdictional authority for the parcel until it is certified.
- Protecting Agencies will notify state land managers if wildland fire or wildland fire management activities have the potential to affect public access to public waters or impact state resources.

- Protecting Agencies will notify the ADEC Solid Waste Program (Rebecca Colvin, 907-269-7802, [rebecca.colvin@alaska.gov](mailto:rebecca.colvin@alaska.gov)) of all fires that escape from landfills or that have a high potential to escape so that additional outreach on proper burning practices can be provided to the community.

Protecting Agencies must document notifications and notification attempts. The Fire Notification Checklist in Appendix C provides a blueprint of detailed information that should be communicated through the notification process. (**Appendix C: Fire Notification Checklist**). Appropriate notification contacts are described in **Appendix B: Required Jurisdictional Fire Notifications**.

### **3.5 FUELS TREATMENTS**

Fuels (i.e., vegetation) management assists private landowners, communities, and agencies in mitigating the risks of wildfire and achieving desired land use and resource management conditions.

#### ***3.5.1 AGENCY PROGRAMS***

Fuels management activities assist in accomplishing land use and resource management goals and objectives. Fuels treatments may be necessary in areas where the objective is to exclude or restrict wildfires to improve the effectiveness of fire management programs, the efficiency of wildfire suppression efforts, or to achieve desired resource and land management conditions. Projects may also be developed and implemented in support of scientific research. Each project is approved and funded on a case-by-case basis and available funding varies annually.

Fuels projects, funding, and planning requirements are developed based on agency-specific policies and guidelines; however, some aspects of fuels management are addressed at an interagency level. Ideally, large prescribed fire projects are implemented and coordinated between agencies in order to minimize public impacts and maximize the efficient use of available resources. Fuels treatment projects, including prescribed fires, require agency-specific reviews and approvals.

The following sections address general fuels management information.

##### **3.5.1.1 PRESCRIBED FIRE**

Prescribed fires are planned ignitions to achieve land use and resource objectives. Prescribed fires are implemented only with the Agency Administrator's approval of a formal prescribed fire plan. For federal agencies or for projects on which federal dollars are expended, a National Environmental Protection Act (NEPA) analysis may be required. In addition, an ANICLA 810 statement regarding project effects on subsistence, and/or concurrence from the State Historic Preservation Office that there are no adverse effects on historic properties may also be appropriate. Air quality criteria are included in the prescribed fire plan.

ADEC regulates open burns to minimize health impacts from smoke and to maintain National Ambient Air Quality Standards. When conducting prescribed fires, agencies follow the ADEC *Enhanced Smoke Management Plan (ESMP)* available on the [ADEC Open Burn Application webpage](#). The *ESMP* is an agreement and program plan developed and agreed upon by the AWFCG. The purpose of the *ESMP* is to provide a clear and equitable regulatory basis for smoke management in Alaska. ADEC is responsible for protecting the health and welfare of Alaskans from

the impacts of smoke from fire as well as protecting visibility according to federal Regional Haze Rules. Prescribed fires require an ADEC permit prior to ignition if the intent is to burn 40 acres or more, or clear and burn the debris from 40 acres or more during a year. DOF permits large-scale burns including agricultural land crop burning from April 1 through September 1 on lands less than 40 acres. ADEC regulations on open burning are available at their [Air Permit Program webpage](#). DOF large-scale burn permit information is available at their [Burn Permit webpage](#). Depending on the location of the project area, additional permits may be required from local government entities such as municipal fire departments or borough air quality offices.

The [Interagency Prescribed Fire Planning and Implementation Procedures Guide](#) may be supplemented by agency or administrative unit guidance. Interagency sharing of expertise, resources, and personnel for prescribed fire is encouraged.

#### **3.5.1.2 MECHANICAL AND MANUAL TREATMENTS**

Mechanical and manual treatments are implemented based on funding availability and under approved project plans. Projects on federal land or expending federal dollars may require site-specific analyses, including the appropriate NEPA documentation, an ANILCA 810 statement regarding project effects on subsistence, and/or concurrence from the State Historic Preservation Office that there are no adverse effects on historic properties.

#### **3.5.2 PUBLIC AND COMMUNITY PROJECTS**

One of the goals of the *National Cohesive Wildland Fire Management Strategy* is that, “Human populations and infrastructure can withstand a wildfire without loss of life and property.” Proactive measures by individuals and communities can assist in reducing the risks of wildfire to homes, other structures, and private property.

##### **3.5.2.1 COMMUNITY WILDFIRE PROTECTION PLANS (CWPP)**

CWPPs are developed by local community members to address issues such as wildfire response, hazard mitigation, community preparedness, and/or structure protection. The process of developing a CWPP can help a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland urban interface. It can also lead community members through valuable discussions regarding management options and implications for the surrounding watershed. Federal and state agencies may assist but are not responsible for development of CWPPs. For additional information and templates, see the [Forest and Rangelands Helping Communities webpage](#). A modified CWPP template for Alaska is posted on the [AWFCG webpage](#). Completed Alaska plans are available on the [Alaska Division of Forestry and Fire Protection CWPP website](#).

##### **3.5.2.2 FIREWISE ALASKA AND FIREWISE COMMUNITIES/USA**

Firewise is a cooperative effort among local, state, federal and private agencies and organizations to promote fire safety in the wildland urban interface. Firewise Alaska is a reference guide for homeowners developed by the AWFCG Wildland Fire Prevention & Education Committee. It describes steps an Alaskan homeowner can take to increase the probability that their home and

property will survive a wildfire. The Firewise Alaska brochure and other prevention materials are available on the [AWFCG webpage](#).

Firewise Communities/USA is a national program sponsored by the National Fire Protection Association (NFPA) directed at America's fire prone communities. Its goal is to encourage and acknowledge action that minimizes home loss due to wildfire. It focuses on preparation before a fire occurs and is well adapted to small communities, developments, and residential home associations of all types. Reference the [Alaska Division of Forestry and Fire Protection Firewise webpage](#) for information on the steps a community needs to take to be recognized as a Firewise Community in Alaska.

### **3.6 INVASIVE SPECIES CONTROL**

Preventing the introduction and spread of invasive species is an important consideration during fire operations. See *Section V.D.1.i.* of the [Alaska Statewide Operating Plan](#) for additional details about invasive species control.

### **3.7 POST-FIRE RESPONSE**

Suppression Repair, Emergency Stabilization, and Rehabilitation activities are integral components of wildfire incidents, but are planned, programmed, and funded separately from each other. Requirements and processes vary between agencies. See *Section V.D.1.j.* of the [Alaska Statewide Operating Plan](#) for additional details about post-fire response.

### **3.8 PREVENTION**

Although fire prevention programs are a jurisdictional responsibility, communication, collaboration, and cooperation between jurisdictional and Protecting Agencies is encouraged. See *Section IV.E.* of the [Alaska Statewide Operating Plan](#) for additional details about fire prevention and prevention programs.

### **3.9 ORIGIN AND CAUSE DETERMINATION**

Accurate fire cause determination is a critical first step for a successful fire investigation and for targeting fire prevention efforts. Protecting Agencies are responsible to perform origin and cause determination findings on all fires. See *Section V.J.1.* of the [Alaska Statewide Operating Plan](#) for additional details about origin and cause determination.

### **3.10 FIRE INVESTIGATION**

If evidence indicates human involvement, a Wildland Fire Investigator (INVF) should be ordered to conduct an investigation. Investigations and all ensuing legal actions beyond origin and cause determination are the responsibility of the affected Jurisdictional Agencies; however, investigation support may be requested from the Protecting Agency subject to resource availability and appropriate regulations and agency limitations. See *Section V.J.2.* of the [Alaska Statewide Operating Plan](#) for additional details about fire investigation.

### 3.11 AIR QUALITY AND SMOKE MANAGEMENT

Wildland fire smoke in Alaska is inevitable. Public outreach efforts are essential to keep the public informed and provide opportunity for individuals to take action based on individual health factors. Land managers, the Alaska Department of Environmental Conservation (ADEC), and suppression providers share the task of providing pro-active and adequate public information on wildfire smoke before, during, and after wildland fires occur.

ADEC is the regulatory agency responsible for air quality and smoke management. During the fire season, ADEC routinely issues air quality advisories addressing air quality levels and may recommend actions that individuals can take to protect their health. ADEC is represented on the AWFCG as a non-voting member. When communities are affected by smoke, assigning Air Resource Advisors at the incident, local, and/or GACC levels should be considered. Additional technical expertise for addressing air quality and health related issues is available through ADEC.

The [\*Alaska Enhanced Smoke Management Plan for Planned Fire \(ESMP\)\*](#) was developed by ADEC in coordination with the AWFCG Air Quality Committee. The *ESMP* outlines the process and identifies issues that need to be addressed by ADEC and federal and state agencies or private landowners/corporations to help ensure that prescribed fire activities minimize smoke and air quality problems. The *ESMP* Appendices provide additional assistance for interagency sharing of information, the applicability and availability of current smoke management techniques, monitoring protocol, public education strategies, and emission reduction techniques.

The *ESMP* helps fulfill Alaska's responsibilities for protection of air quality and human health under federal and state law and reflects the Clean Air Act requirement to improve regional haze in Alaska's Class I areas. Adoption of the *ESMP* enables the State to certify to the EPA that we are implementing a smoke management plan that addresses elements of the EPA's *Interim Air Quality Policy on Wildland and Prescribed Fire, April 23, 1998*. If states do not certify that a basic smoke management plan is being implemented, EPA will not provide special consideration to particulate matter health standard violations attributed to fires managed for resource benefits.

The AWFCG-approved *Smoke Effects Mitigation and Public Health Protection Protocols* are available the [AWFCG web page](#). For current smoke information and forecast, regulations, advisories, and educational materials, refer to the [ADEC website](#).

When convened, the AMAC addresses air quality and smoke management issues. During periods of extensive fire activity, the AMAC group in conjunction with ADEC may determine that new fire starts will be suppressed due to smoke and air quality concerns regardless of fire management options.

### 3.12 STRUCTURE, VEHICLE, AND LANDFILL FIRES

Structure, vehicle, and landfill fire suppression are not functional responsibilities of wildland fire resources. Wildland firefighters are not trained or authorized to take direct action on these fires.

Structure protection (not suppression) activities by wildland firefighters will be limited to exterior efforts, and only when such actions can be accomplished safely and in accordance with agency policy and established wildland fire operations standards.

Suppression efforts on vehicle fires by wildland firefighters will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the burning vehicle.

Wildland firefighters will not take direct action on fires within landfills. Suppression actions will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the landfill. Protecting Agencies will notify the ADEC Solid Waste Program of all fires that escape from landfills or that have a high potential to escape. (See **Section 3.4 Fire Notifications.**)

### **3.13 DATA SOURCES, REPORTS AND SYSTEMS**

#### ***3.13.1 FIRE MANAGEMENT OPTION BOUNDARIES***

The Fire Management Options Boundary Layer within the Digital Atlas is the official record that delineates Fire Management Option boundaries. Management Option change procedures are described in **Appendix D.**

#### ***3.13.2 ALASKA KNOWN SITES DATABASE***

The Alaska Known Sites Database (AKSD) identifies infrastructure, and cultural and natural resource sites throughout Alaska that may be threatened by wildfire. The intent of this dataset is to provide information on known sites located outside of the urban areas and is not a replacement for “structure” data available from the different Boroughs. Furthermore, not all known sites information collected by Agencies and other partners are included in the AKSD. Protecting Agencies will need to work with the Jurisdictional Agencies to ensure they have access to these additional known site records.

The AKSD provides locations, descriptions, and jurisdictions, as well as direction regarding site protection priorities. These data are made available to fire managers and other authorized data users through a password-protected website (National Interagency Fire Center – ArcGIS Online) in order to support wildland fire planning and decision-making. There are two primary sources of site information included in the AKSD:

- Jurisdictional Agency inventory and assessments.
  - Jurisdictional Agencies are responsible for reviewing AKSD data for accuracy and are responsible for assigning Protection Levels.
- Data collected by Protecting Agency staff and IMTs. These data are subject to review by Jurisdictional Agency administrative units on which sites reside.
  - AKSD is a dynamic product with real-time updates (i.e., new data are available for immediate use).

The AKSD has editor tracking so there will be a record of who created and updated data points. Additionally, there is an “Alaska Known Sites Database Changes” web application that will help simplify the data review process.

Access to AKSD can be requested through one of the Alaska Known Sites Database Points of Contact or by contacting AFS GIS staff at [BLM\\_AK\\_AFS\\_GIS@blm.gov](mailto:BLM_AK_AFS_GIS@blm.gov). See **Appendix F**.

### ***3.13.3 ADDITIONAL DIGITAL ATLAS DATA***

See [Sections VI.C. and VI.D. of the Alaska Statewide Operating Plan](#) for detail regarding additional Digital Atlas datasets and other geospatial products.

### ***3.13.4 NATIONAL EMISSIONS INVENTORY***

ADEC provides prescribed and wildfire emissions data to the EPA on a triennial basis as a part of the National Emissions Inventory program. Wildfire and prescribed fire emission reports are developed on an annual basis and are available from the [ADEC Air Non-Point & Mobile Sources webpage](#).

### ***3.13.5 COMPUTER-AIDED DISPATCH SYSTEMS***

See [Section VI.C.3. of the Alaska Statewide Operating Plan](#) for detail regarding computer-aided dispatch systems (CADs).

### ***3.13.6 FINAL FIRE REPORTING***

See [Section V.A.2. of the Alaska Statewide Operating Plan](#) for detail regarding final fire reporting.



## 4 MONITORING AND EVALUATION

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The current approved version of the *Alaska Interagency Wildland Fire Management Plan* is posted on the [AWFCG web page](#). Regular review and revision of the Plan and its components is necessary in order to maintain currency and maintain the effectiveness of the interagency fire management program in Alaska.

### 4.1 AWFCG FIRE MANAGEMENT PLAN REVIEW/REVISION

The *AIWFMP* will be annually reviewed by AWFCG. Amendments will be identified by the January AWFCG meeting and approved by the AWFCG chair by March 15. Every five years, or as deemed necessary by a majority of AWFCG voting members, a comprehensive review will be completed and approved by all AWFCG agencies by March 15.

### 4.2 FIRE MANAGEMENT OPTION AND ALASKA KNOWN SITES DATABASE REVIEWS

The flexibility to change fire management option boundaries and protection levels in response to changing conditions and objectives is an essential attribute of the fire planning effort in Alaska.

#### 4.2.1 INTERNAL JURISDICTIONAL AGENCY REVIEWS

Jurisdictional Agencies should annually review:

- Non-standard responses to fires within their jurisdiction.
- Fire Management Option boundaries and protection levels within and surrounding their jurisdiction.
- Alaska Known Sites Database location data and site protection designations.

Jurisdictional reviews should consider:

- Changes in ownership pattern.
- Changes in management objectives.
- Changes in the distribution of natural and cultural resources on the landscape.

#### 4.2.2 INTERNAL PROTECTING AGENCY REVIEWS

Protecting Agencies should annually review:

- Non-standard responses within their Protecting Units.
- Operational feasibility of fire management options within their Protecting Units.
- Known sites data gaps within their Protecting Units.

Reviews should identify:

- Successes and opportunities for improvement.
- Site data collected by Protecting Units and IMTs during the fire season that have not been posted to the Alaska Known Sites Database.

#### **4.2.3 INTERAGENCY FALL FIRE AFTER-ACTION REVIEW**

The AWFCG sponsors an annual interagency post-season review (usually within the first two weeks of October) to discuss issues and concerns and evaluate agencies' performance and achievements. The *AIWFMP* elements that will be addressed include:

- A review of non-standard responses that occurred during the season.
- Initial response successes and opportunities for improvement.
- A brief synopsis of any changes to Fire Management Option boundaries and/or protection levels that are being proposed or considered.
- Known sites data gaps and updates.

#### **4.3 FIRE MANAGEMENT OPTION BOUNDARY AND/OR PROTECTION LEVEL UPDATES**

It is the responsibility of Jurisdictional Agencies to ensure that Fire Management Option boundaries and protection levels are appropriate for the lands that they manage; however, Protecting Agencies may also recommend updates based on operational concerns. If a need for a Fire Management Option update is identified, the procedures identified in **Appendix D** may be initiated by either a Jurisdictional or a Protecting Agency.

#### **4.4 ALASKA KNOWN SITES DATABASE UPDATES**

It is the responsibility of Jurisdictional Agencies to ensure that known sites within their jurisdiction are identified and assigned protection levels; however, Protecting Agencies may also recommend location updates based on operational concerns and data collected by the Protecting Units or IMTs during incidents. Jurisdictional Agencies are the final authorities for determining what sites will be maintained in the database and for assigning protection levels. See **Appendix F**.

#### **4.5 SPRING FMO/AGENCY ADMINISTRATOR MEETING UPDATE SUMMARY**

The AWFCG sponsors an annual interagency pre-season meeting for FMOs and Agency Administrators in the spring to discuss the outlook for the coming fire season and changes in processes and personnel. The *AIWFMP* elements that should be addressed include:

- Fire Management Option boundary and/or protection level updates.
- Alaska Known Sites Database updates.
- *AIWFMP* updates.

## 4.6 CLIMATE CHANGE

The Earth, which has always experienced climate variation, is undergoing a period of rapid climate change that has been enhanced by anthropogenic atmospheric carbon enrichment over the past 100 years (Inkley *et al* 2004, Overland *et al* 2019). Climate changes in boreal and arctic regions is well documented and warming rates of surface air temperature exceeds those from other regions (*Arctic Climate Impact Assessment 2005*, Hinzman *et al* 2005, Serreze *et al* 2011, IPCC 2015, and IPCC 2019). Mean annual air temperature in Alaska has increased by 3-4° F compared to the early and mid-20<sup>th</sup> century (Thoman and Walsh 2019) and is expected to increase another 5.4 – 12.6° F by the end of the 21st century (Chapin *et al* 2010). The snow free period has increased (Hinzman *et al* 2005, Euskirchen *et al* 2006) and the snow-off date, when statewide cover of snow drops to 50%, is nearly 2 weeks earlier compared to the 1990s (Thoman and Walsh 2019).

Wildfire seasons are starting earlier and extending later in the year, and the number of large fire years (years with >1 million acres burned) has increased in the last two decades in Alaska (AICC Fire Statistics, Grabinski and McFarland 2020). Research papers have predicted increased frequency, extent and severity of fires in Alaska (Flannigan *et al* 2013, Young *et al* 2016) and increased lightning, the main cause of large fires in Alaska (Bieniek *et al* 2020). Such changes have already affected natural systems such as vegetation, hydrology, and permafrost in Alaska and continued change could fundamentally alter boreal forest and tundra ecosystems and, consequently, wildfire frequency and severity (Box *et al* 2019). Modelling results suggest that the average area burned per decade in Alaska and Canada will double by 2041-2050 (Balshi *et al* 2009), and the incidence of tundra fires will increase as well (Hu *et al* 2015). Documented and potential changes that may be of concern to land and fire managers include:

- Thawing permafrost, with associated changes in vegetation and surface hydrology (Jorgenson *et al* 2001, Nossov *et al* 2013, Brown *et al* 2015, Biskaborn *et al* 2019);
- Melting sea ice, which may have implications for regional weather patterns (Hu *et al* 2010);
- Drying wetlands (Riordan *et al* 2006);
- Changing fire regimes (Kasischke *et al* 2010, de Groot *et al* 2013), including changes in wildfire seasonality, extent, frequency, intensity and severity;
- Shifts in distribution of plants and animals (Murphy *et al* 2010, Beck *et al* 2011, Holsinger *et al* 2019);
- Increased likelihood for invasive plant establishment (Villano 2008);
- Increased insect outbreaks and decreased forest health (Gauthier *et al* 2015); and
- Feedbacks to climate patterns through emissions and changes in albedo (Euskirchen *et al* 2010, Walker *et al* 2019).

Research and modeling efforts provide insight on potential future conditions but specific guidance on addressing these changes is currently limited. Continued monitoring of fire effects and participation in research efforts will better inform management decisions in the face of climate change. Fire science and climate change research are prioritized by the AWFCG Fire Research, Development and Application Committee and facilitated by the [Alaska Fire Science Consortium](#).

## References:

- Balshi, M.S., A.D. McGuire, P. Duffy, M. Flannigan, J. Walsh, and J. Melillo. 2009. Assessing the response of area burned to changing climate in western boreal North America using a Multivariate Adaptive Regression Splines (MARS) approach. *Glob. Change Biol.* 15:578-600.
- Bieniek, P.A., Bhatt, U.S., York, A., Walsh, J.E., Lader, R., Strader, H., Ziel, R., Jandt, R.R., Thoman, R.L. 2020. Lightning variability in dynamically downscaled simulations of Alaska's present and future summer climate. *Journal Applied Meteorology and Climatology* 59(6):1139-1152
- Biskaborn, B. K., Smith, S. L., Noetzli, J., Matthes, H., Vieira, G., Streletskiy, D. A., Schoeneich, P., Romanovsky, V. E., Lewkowicz, A. G., Abramov, A., Allard, M., Boike, J., Cable, W. L., Christiansen, H. H., Delaloye, R., Diekmann, B., Drozdov, D., Eitzelmüller, B., Grosse, G., Guglielmin, M., Ingeman-Nielsen, T., Isaksen, K., Ishikawa, M., Johansson, M., Johannsson, H., Joo, A., Kaverin, D., Kholodov, A., Konstantinov, P., Kröger, T., Lambiel, C., Lanckman, J.-P., Luo, D., Malkova, G., Meiklejohn, I., Moskalenko, N., Oliva, M., Phillips, M., Ramos, M., Sannel, A. B. K., Sergeev, D., Seybold, C., Skryabin, P., Vasiliev, A., Wu, Q., Yoshikawa, K., Zheleznyak, M., and Lantuit, H. Permafrost is warming at a global scale. *Nature Communications*, 10 (1): 264, 2019. ISSN 2041-1723. 10.1038/s41467-018-08240-4. URL <https://doi.org/10.1038/s41467-018-08240-4>.
- Box, J. E., Colgan, W. T., Christensen, T. R., Schmidt, N. M., Lund, M., Parmentier, F.-J. W., Brown, R., Bhatt, U. S., Euskirchen, E. S., Romanovsky, V. E., Walsh, J. E., Overland, J. E., Wang, M., Corell, R. W., Meier, W. N., Wouters, B., Mernild, S., M\aaard, J., Pawlak, J., and Olsen, M. S. Key indicators of Arctic climate change: 1971–2017. *Environmental Research Letters*, 14 (4): 045010, April 2019. 10.1088/1748-9326/aafc1b. URL <https://doi.org/10.1088>.
- Brown, D.R. M.T. Jorgenson, T.A. Douglas, V.E. Romanovsky, K. Kielland, C. Hiemstra, E.S. Euskirchen, and R.W. Ruess. 2015. Interactive effects of wildfire and climate on permafrost degradation in Alaska lowland forests. *J. Geophys. Res. Biogeosci.*
- De Groot, WJ, MD Flannigan, and AS Cantin 2013. Climate change impacts on future boreal fire regimes. *For. Ecol. and Management*.
- Euskirchen, E.S., A.D. McGuire, F.S. Chapin III, and T.S. Rupp. 2010. The changing effects of Alaska's boreal forests on the climate system. *Can. J. For. Res.* 40: 1336-1346.
- Flannigan, M., A. S. Cantin, W. J. de Groot, M. Wotton, A. Newbery, and L. Gowman. 2013. Global wildland fire season severity in the 21st century. *Forest Ecology and Management* 294: 54-61.
- Gauthier, S., P. Bernier, T. Kuuluvainen, A.Z. Shvidenko, and D.G. Schepaschenko. 2015. Boreal Forest health and global change. *Science* 349:819-822.
- Grabiniski, Z. and H.R. McFarland. 2020. Alaska's changing wildfire environment. Alaska Fire Science Consortium, International Arctic Research Center, University of Alaska Fairbanks.
- Holsinger, L, SA Parks, MA Parisien, C Miller, E Batllori, MA Moritz. 2019. Climate change likely to reshape vegetation in North America's largest protected areas. *Conservation Science and Practice*.

- Hu, F.S., P.E. Higuera, P. Duffy, M.L. Chipman, A.V. Rocha, A.M. Young, R. Kelly, and M.C. Dietze. 2015. Arctic tundra fires: natural variability and responses to climate change. *Front. Ecol. Environ.* 13(7)369-377.
- Inkley, D. B., M.G. Anderson, A.R. Blaustein, V.R. Burkett, B. Felzer, B. Griffith, J. Price, and T.L. Root. 2004. Global climate change and wildlife in North America. *Wildlife Society Technical Review* 04-2. The Wildlife Society, Bethesda, Maryland, USA. 26 pp.
- Kitzberger, T., D. A. Falk, A. L. Westerling and T. W. Swetnam, 2017: Direct and indirect climate controls predict heterogeneous early-mid 21st century wildfire burned area across western and boreal North America. *PLOS ONE* 12 (12), doi:10.1371/journal.pone.0188486
- IPCC. 2015. *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyers (eds.)]. IPCC, Geneva, Switzerland, 151 pp.
- IPCC. 2019. Summary for Policymakers. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*. Editors: H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, M. Nicolai, A. Okem, J. Petzold, B. Rama, N. Weyer. In press.
- Jorgenson, M. T., C.H. Racine, J.C. Walters, and T.E. Osterkamp. 2001. Permafrost degradation and ecological changes associated with a warming climate in central Alaska. *Climate Change*, 48:551-579.
- Nossov, D.R., M.T. Jorgenson, K. Kielland, and M.Z. Kanevskiy. 2013. Edaphic and microclimatic controls over permafrost response to fire in interior Alaska. *Environ. Res. Lett.* 8. 12 pp.
- Overland, J., Dunlea, E., Box, J. E., Corell, R., Forsius, M., Kattsov, V., Olsen, M. S., Pawlak, J., Reiersen, L.-O., and Wang, M. The urgency of Arctic change. *Polar Science*, 21: 6 – 13, 2019. ISSN 1873-9652. <https://doi.org/10.1016/j.polar.2018.11.008>. URL <http://www.sciencedirect.com/science/article/pii/S1873965218301543>.
- Serreze, M. C. and Barry, R. G. Processes and impacts of Arctic amplification: A research synthesis. *Global and Planetary Change*, 77 (1): 85 – 96, 2011. ISSN 0921-8181. <https://doi.org/10.1016/j.gloplacha.2011.03.004>. URL <http://www.sciencedirect.com/science/article/pii/S0921818111000397>.
- Thoman, R. and J.E. Walsh (2019). Alaska's changing environment: documenting Alaska's physical and biological changes through observations. H.R. McFarland, Ed., International Arctic Research Center, University of Alaska, Fairbanks.
- Walker, XJ, JL Baltzer, SG Cummin, NJ Day, C Ebert, s Goetz, JF Johnstone, S Potter, BM Rogers, EAG Schuur, MR Turetsky, and MC Mack. 2019. Increasing wildfires threaten historic carbon sink of boreal forest soils. *Nature*
- Young, A.M., P.E. Higuera, P.A. Duffy, and F.S. Hu. 2016 Climatic thresholds shape northern high-latitude fire regimes and imply vulnerability to future climate change. *Ecography* 39: 1-12.

**APPENDICES**

**APPENDIX A. FIRE MANAGEMENT OPTION OPERATIONAL DIRECTION ..... A-1**

**APPENDIX B. REQUIRED JURISDICTIONAL FIRE NOTIFICATIONS..... B-1**

**APPENDIX C. FIRE NOTIFICATION CHECKLIST..... C-1**

**APPENDIX D. FIRE MANAGEMENT OPTION CHANGE PROCEDURES..... D-1**

**APPENDIX E. FIRE MANAGEMENT OPTION CHANGE APPROVAL FORM .....E-1**

**APPENDIX F. ALASKA KNOWN SITES UPDATE PROCEDURES.....F-1**

**APPENDIX G. HISTORY OF FIRE MANAGEMENT PLANNING IN ALASKA..... G-1**

**Appendix A. FIRE MANAGEMENT OPTION OPERATIONAL DIRECTION**

Operational Area	Critical Option	Full Option	Modified Option (Pre-conversion)	Modified Option (Post-conversion)	Limited Option
<b>Initial Resource Allocation Priority</b>	Wildfires occurring in the Critical Management Option or that threaten Critical sites are assigned the highest priority for suppression actions and assignment of available firefighting resources.	Wildfires occurring in the Full Management Option or that threaten Full sites are assigned a high priority for suppression actions and assignment of available firefighting resources but are below wildfires within or threatening a Critical Management Option area or site.	Before the conversion date, fires occurring within Modified will receive priority for allocation of initial action forces after the protection of Critical and Full areas.  <b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within pre-conversion Modified is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.	After the conversion date, the priority is low for the allocation of initial action forces and is equal to the Limited Option.  <b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within post-conversion Modified is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.	Limited Management Option fires are assigned the lowest resource allocation priority.  <b>Exception:</b> When on-the-ground actions are warranted, the resource allocation priority is equivalent to the management option designation of the site being protected. For example, if an action on a fire within Limited is an attempt to keep the fire from burning on to a Full site, the resource allocation priority should be equal to that given to Full.
<b>Detection</b>	Critical Management Option areas and sites are the highest priority for detection coverage when lightning activity or human use indicate a high potential for ignition, or at the request of a Jurisdictional Agency.	Full Management Option areas and sites are the next priority after Critical for detection coverage when lightning activity or human use indicate a high potential for ignition, or at the request of a Jurisdictional Agency.	Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.	Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.	Detection coverage will be commensurate with fire conditions and availability of detection resources. Jurisdictional Agencies may negotiate additional detection flights with Protecting Agencies.
<b>Initial Notification Requirements</b>	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered. Whenever possible, notification should take place prior to taking any suppression action; however, initial response should not be delayed if contacts cannot be made.	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered.	Provide early notification to the jurisdiction at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. This applies even if no suppression action is being taken or is being considered.
<b>Default Initial Action (Standard Response)</b>	Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.	Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.	Mobilize resources to protect the area and/or sites and suppress the fire without compromising public or firefighter safety.	Conduct surveillance, assessments, and site protection as warranted.	Assess the fire’s potential to affect neighboring values. Conduct surveillance and site protection as warranted.
<b>Initial Action Priorities</b>	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires at the smallest acreage reasonably possible in order to limit short and long-term threats to values.</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires at the smallest acreage reasonably possible in order to limit short and long-term threats to values.</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Contain fires in order to limit short and long-term threats to values.</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Allow fires to burn naturally to the extent possible in order to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect human life.</li> <li>2. Protect qualifying sites and natural resources from damage by wildfire.</li> <li>3. Allow fires to burn naturally to the extent possible in order to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.</li> </ol>
<b>Extended Action &amp; Notifications</b>	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>	<p>Assess fires periodically and provide early notification to additional jurisdictions whose lands become threatened throughout the life of the incident. Surveillance frequency will be determined by the Protecting Agency in coordination with the affected Jurisdictional Agency(ies).</p> <p>If the pre-designated response is no longer appropriate, a decision support process including situational assessment and risk analysis will be used to develop incident-specific objectives, requirements, and courses of action; and document the rationale behind them.</p>
<b>Resource Benefit Objectives</b>	Only appropriate in extraordinary circumstances at the explicit documented direction of an affected Jurisdictional Agency. The course of action will be documented with a decision analysis and support process.	Only appropriate on rare occasions, based on site-specific circumstances (e.g., the initial size-up and response is delayed beyond 24 hours, or a fire is primarily burning into Limited). The course of action will be documented with a decision analysis and support process.	May be appropriate, based on site-specific circumstances and time of season (e.g., a pre-conversion Modified ignition that as of the conversion date has little potential to threaten values). The course of action will be documented with a decision analysis and support process.	It is routinely appropriate to manage all or part of post-conversion Modified fires for resource benefit. A documented decision analysis and support process may be needed based on complexity or initiated at the discretion of an affected Jurisdictional Agency.	It is routinely appropriate to manage all or part of Limited fires for resource benefit. A documented decision analysis and support process may be needed based on complexity or initiated at the discretion of an affected Jurisdictional Agency.



### Alaska Statewide Management Requirements

Jurisdictional Agencies have identified the following general constraints and guidelines. Additional constraints applicable to specific incidents are at the discretion of the Jurisdictional Agency and are documented in the Jurisdictional Agency’s fire management plans, the incident’s decision record, and/or the Delegation of Authority.

- Weigh the cost and environmental impacts of suppression actions against the economic, social, and/or resource values warranting protection. Consider risk to firefighters and the public in all fire management decisions.
- To the extent possible, minimum impact suppression tactics should be used. Firelines will be constructed in a manner that minimizes erosion and will follow natural contours wherever possible. Indirect attack will be used to the extent practical. A suppression repair plan for wildfire suppression activity damage, as approved by the Jurisdictional Agency(ies), must be completed before the final demobilization occurs.
- Locate base camps, spike camps, staging areas, helispots, and other incident support areas in natural clearings if possible and minimize their visible footprint consistent with operational need and safety requirements. Make Jurisdictional Agencies aware of all support areas located on their lands. Keep these areas clean so as not to attract animals and ensure all unused supplies including fuel, oil, food, etc. are removed prior to demobilization of the incident. Exceptions must be explicitly authorized by the Jurisdictional Agency.
- Support areas on private lands or Native Allotments require a land use agreement. No resources (e.g., firewood) will be removed from private lands or Native Allotments without an approved agreement. Agreements involving Native Allotments must be prepared by the BIA or the local BIA service provider.
- The use of tracked or off-road vehicles requires approval by the Jurisdictional Agency(ies) prior to use.
- When withdrawing water from a fish-bearing stream with portable pumps, scooper aircraft, or aerial buckets; or when crossing it with a vehicle or heavy equipment, comply with the stipulations and notification requirements in the ADF&G statewide Fish Habitat Permit FH20-SW-0001 Amendment 3.
- If a game animal is killed in defense of life or property (DLP) on an incident, an Alaska Department of Fish & Game (ADF&G) DLP report will be filed, and the Jurisdictional Agency(ies) will be notified.
- Protecting and Jurisdictional Agencies will coordinate with State of Alaska land managers if wildland fire or wildland fire management activities have the potential to affect public access to public waters or impact state resources. Protecting and Jurisdictional Agencies will coordinate if wildland fire or wildland fire management activities may result in fire area public access closures or may adversely impact values at risk.
- Take measures to prevent the introduction and spread of terrestrial and aquatic invasive species during fire operations. Waterbodies known to harbor invasive species will not be used as water sources for air or ground-based water delivery equipment unless needed to protect life or property. If used, equipment will be cleaned and sanitized before the next use. Communicate concerns, questions, and needs regarding invasive species to jurisdictional resource advisors in a timely manner.
- Application of aerial fire retardant near lakes, wetlands, streams, rivers, and sources of human water consumption or areas adjacent to water sources should be avoided. A minimum of 300 feet is identified in the Interagency Standards for Fire and Fire Aviation Operations (Red Book). Individual Jurisdictional Agencies may have more restrictive retardant use guidelines.
- Suppression activities including flight patterns on or near cultural sites or sites designated as “Avoid” must be coordinated with the Jurisdictional Agency.
- Jurisdictional Agencies should be consulted concerning any operational restrictions in designated wilderness areas.
- Jurisdictional Agencies will communicate planned fuels treatment locations to incident management organizations for consideration when locating firelines.
- Structure protection (not suppression) activities by wildland firefighters will be limited to exterior efforts, and only when such actions can be accomplished safely and in accordance with agency policy and established wildland fire operations standards.
- Wildland firefighters will not take direct suppression action on vehicle fires. Suppression efforts on vehicle fires by wildland firefighters will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the burning vehicle.
- Wildland firefighters will not take direct action on fires within landfills. Suppression actions will be limited to preventing spread into the wildlands and will be undertaken only if responders can avoid being exposed to the smoke from the landfill. Protecting agencies will notify the ADEC Solid Waste Program of all fires that escape from landfills or that have a high potential to escape.
- Any discovery by firefighters of potential unexploded ordnance (UXO) or other potentially hazardous materials (e.g., mining sites) will be immediately reported through proper channels. Firefighters will remain clear of the area until the threat has been evaluated and mitigated.

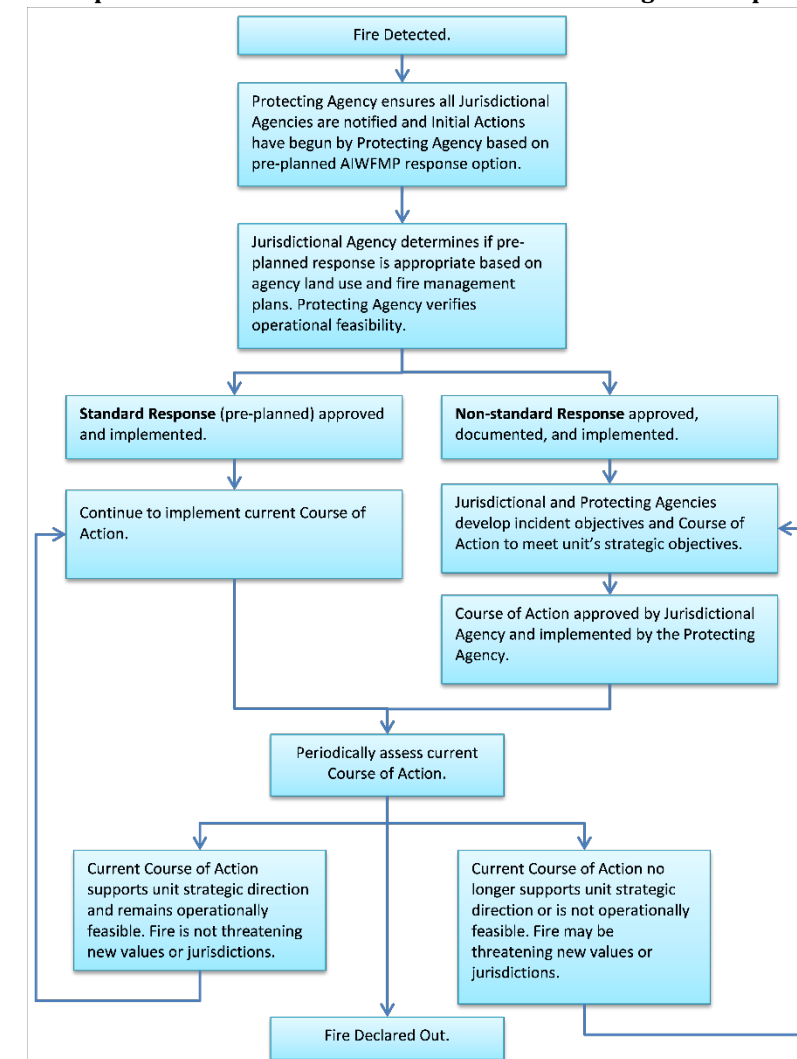
### Non-standard Responses

Non-standard determination will be based on initial response, regardless of intent.

The following are considered **non-standard responses**:

- Critical, Full, or pre-conversion Modified Management Option fires where the initial strategy is **Monitor, Confine, or Point/Zone Protection** (no suppression actions intended to fully contain the fire are taken by ground or air resources within 12 hours of discovery). Justifications include (but are not limited to):
  - Lack of available resources or higher priorities.
  - Safety/weather concerns.
  - Re-evaluation of threat potential, risks, benefits (e.g., natural barriers preclude escape, extended forecast for wet weather, etc.).
- Post-conversion Modified or Limited Management Option fires where the initial strategy is **Full Suppression** (ground or air resources take suppression action on the fire within 12 hours of discovery with intent to fully contain it). Justifications include (but are not limited to):
  - Re-evaluation of threat potential, risks, benefits (e.g., site specific conditions warrant containment effort or proximity of values requiring protection).
  - Initial site protection most efficiently achieved by containing the fire.
  - Partial containment/confinement.

**Operational Decision Chart for All Wildfire Management Options**





## Appendix B. REQUIRED JURISDICTIONAL FIRE NOTIFICATIONS

Jurisdiction	Unit Description	Jurisdictional Contact(s)
ANCSA Regional or Village Corporation	In AFS Protection	Appropriate Native Corporation Contact
	In DOF Protection (TAS, DAS FAS)	Appropriate Native Corporation Contact + AFS Military Zone FMO (Fiscal Authority and Jurisdictional Representative)
	In DOF Protection (SWS, MSS, KKS, CRS) & in USFS Protection	Appropriate Native Corporation Contact + AFS South Zone FMO (Fiscal Authority and Jurisdictional Representative)
Tribal Lands	In AFS Protection	Appropriate Tribal Contact
	In DOF Protection (TAS, DAS, FAS)	Appropriate Tribal Contact + AFS Military Zone FMO (Fiscal Authority and Jurisdictional Representative)
	In DOF Protection (SWS, MSS, KKS, CRS) & in USFS Protection	Appropriate Tribal Contact + AFS South Zone FMO (Fiscal Authority and Jurisdictional Representative)
BIA (Native Allotments, Reservations, and other Trust lands) <sup>1</sup>	In AFS Protection	BIA Regional Fire Management Officer
	In DOF Protection (TAS, DAS, FAS)	BIA Regional Fire Management Officer + AFS Military Zone FMO (Fiscal Authority)
	In DOF Protection (SWS, MSS, KKS, CRS) & in USFS Protection	BIA Regional Fire Management Officer + AFS South Zone FMO (Fiscal Authority)
BLM <sup>1</sup>	BLM Anchorage District Field Offices	AFS Military Zone FMO
	BLM Arctic District Office	BLM Fairbanks District FMO
	BLM Fairbanks District Field Offices	BLM Fairbanks District FMO
NPS	Gates of the Arctic National Park and Preserve	NPS Eastern Area FMO
	Yukon-Charley Rivers National Preserve	
	Wrangell-St. Elias National Park and Preserve (Tok Protection Area)	NPS Eastern Area FMO + AFS Military Zone FMO (Fiscal Authority)
	Wrangell-St. Elias National Park and Preserve (Copper River Protection Area)	NPS Eastern Area FMO + AFS South Zone FMO (Fiscal Authority)
	Kobuk Valley National Park	NPS Western Area FMO
	Noatak National Preserve	
	Bering Land Bridge National Preserve	
	Cape Krusenstern National Monument	
	Denali National Park and Preserve (Tanana Protection Zone)	
	Denali National Park and Preserve (Fairbanks Protection Area)	NPS Western Area FMO + AFS Military Zone FMO (Fiscal Authority)
	Denali National Park and Preserve (Mat-Su Protection Area)	NPS Western Area FMO + AFS South Zone FMO (Fiscal Authority)
	Lake Clark National Park and Preserve	
	Glacier Bay National Park and Preserve	
	Katmai National Park and Preserve	NPS Deputy Regional Fire Management Officer + previously identified Park staff + AFS South Zone FMO (Fiscal Authority)
	Kenai Fjords National Park	
	Klondike Gold Rush National Historic Park	
Sitka National Historic Park		
Alagnak Wild River		
Aniakchak National Monument and Preserve		

<sup>1</sup>Parcels with a pending (or not yet patented) Native Allotment application require notifications to both the BIA Regional FMO and a BLM Jurisdictional FMO (Fairbanks District FMO or AFS Military Zone FMO).

Required Jurisdictional Fire Notifications (continued)

Jurisdiction	Unit Description	Jurisdictional Contact(s)
USFWS	Arctic National Wildlife Refuge	FWS Interior District FMO
	Kanuti National Wildlife Refuge	
	Yukon Flats National Wildlife Refuge	
	Tetlin National Wildlife Refuge	FWS Interior District FMO + AFS Military Zone FMO (Fiscal Authority)
	Kenai National Wildlife Refuge	FWS Southern District FMO + AFS South Zone FMO (Fiscal Authority)
	Kodiak National Wildlife Refuge	
	Togiak National Wildlife Refuge	
	Yukon Delta National Wildlife Refuge	
	Alaska Maritime National Wildlife Refuge	
	Alaska Peninsula National Wildlife Refuge	
	Becharof National Wildlife Refuge	FWS Interior District AFMO + AFS South Zone FMO (Fiscal Authority)
	Izembek National Wildlife Refuge	
	Innoko National Wildlife Refuge	
	Koyukuk National Wildlife Refuge	FWS Interior District AFMO
	Nowitna National Wildlife Refuge	
Selawik National Wildlife Refuge		
USFS	Chugach National Forest	USFS Chugach NF FMO
	Admiralty Island National Monument	USFS Tongass NF FMO
	Tongass National Forest	
	Misty Fiords National Monument	
Dept. of Defense	Joint Base Elmendorf-Richardson (JBER) U.S. Army-Alaska	Mat-Su Area Forester + Appropriate USAF Fire Chief AFS Military Zone FMO, who will notify the appropriate Army Fire Chief, Natural Resource Specialist and Installation Range Manager
	Clear Air Force Station & Eielson Air Force Base	Appropriate USAF Fire Chief
	Other Department of Defense lands	Area/Zone FMO is responsible for determining the appropriate contacts.
Other Federal	Including (but not limited to): U.S. Postal Service, U.S. Coast Guard, Federal Aviation Administration, General Services Administration, U.S. Public Health Service, National Environmental Satellite, Data, and Information Service, National Oceanic and Atmospheric Administration	Area/Zone FMO is responsible for determining the appropriate contacts.
State of Alaska	State & Private Lands (In BLM-AFS or USFS Protection)	DOF Regional Forester
	Borough & Municipal Lands (In BLM-AFS or USFS Protection)	DOF Regional Forester + appropriate Borough/Municipal contact
	State & Private Lands (In DOF Protection)	DOF Area Forester
	Borough & Municipal Lands (In DOF Protection)	DOF Area Forester + appropriate Borough/Municipal contact

## Appendix C. FIRE NOTIFICATION CHECKLIST

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Protecting Agencies are responsible for providing early notification to the Jurisdictional Agency at the point of origin and other jurisdictions immediately threatened so that they can identify and prioritize values, communicate concerns, help to validate the default initial response, participate in any decision to take a non-standard response, and keep their leadership and stakeholders informed. Initial action should not be delayed if contacts cannot be made.

When a fire continues to spread after initial notifications are made, additional jurisdictions will be notified as early as possible prior to their lands being affected.

Protecting Units must document notification attempts. The Fire Notification Checklist below may be used for this purpose. Appropriate notification contacts are described in **Appendix B**.

Consider sharing the following items during the notification process; however, do not delay notification due to incomplete information.

- Incident Location (coordinates/ geographic description)
- Incident #
- Incident Name
- Cause
- Date/Time Reported
- Fire Management Option at Point of Origin
- Ownership/Jurisdictional Agency at Point of Origin
- Jurisdictional Agencies potentially threatened within first 48 hours
- Identified Values Threatened
- Fuels, Topography, Weather & Fire Behavior
- Resources on Site/Enroute/on Order
- Management Actions in Progress
- Management Action Recommendations (Standard/Non-Standard Response)
- Issues/Concerns (e.g., IA forces available, risk to public safety, risk to firefighters, smoke, Native Allotments, structures, probability of initial action success, etc.)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Fire Number:** \_\_\_\_\_ **Fire Name:** \_\_\_\_\_ **Mgmt Option:** \_\_\_\_\_

**Initial Response:**

- |                                       |
|---------------------------------------|
| <input type="checkbox"/> Standard     |
| <input type="checkbox"/> Non-standard |

- |  |                                  |
|--|----------------------------------|
| <input type="checkbox"/> Contain       | <input type="checkbox"/> Confine |
| <input type="checkbox"/> Point-protect | <input type="checkbox"/> Monitor |

Contact Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Contact Name/Title: \_\_\_\_\_ Contact Agency: \_\_\_\_\_

Contacted at (phone #/email address): \_\_\_\_\_

Contact Method:  Telephone  Text  Email  In-person  Other \_\_\_\_\_

Contact Confirmed:  Yes  No

Contact Notes:

Contact Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Contact Name/Title: \_\_\_\_\_ Contact Agency: \_\_\_\_\_

Contacted at (phone #/email address): \_\_\_\_\_

Contact Method:  Telephone  Text  Email  In-person  Other \_\_\_\_\_

Contact Confirmed:  Yes  No

Contact Notes:

Page \_\_\_\_ of \_\_\_\_

## **Appendix D. FIRE MANAGEMENT OPTION CHANGE PROCEDURES**

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Each of the land managing Federal and State agencies and ANCSA Corporations in Alaska have their own missions, goals, and objectives related to their lands. In order to effectively prioritize and manage Alaska wildfires there is a need to consider the full spectrum of initial responses to wildfire; from suppression actions designed to contain and control fire growth, to periodic surveillance of fires that are allowed to spread naturally across the landscape. To accomplish this, jurisdictional organizations and Protecting Agencies have collaboratively assigned one of four wildfire management options (**Critical, Full, Modified, and Limited**) to nearly all lands in Alaska. Pre-identified Wildfire Management Options allow fire managers to:

- Quickly prioritize areas for protection actions and the allocation of available initial attack firefighting resources to achieve protection objectives.
- Optimize the ability to achieve land use and resource management objectives and integrate fire management, mission objectives, land use, and natural resource goals.
- Reinforce the premise that the cost of suppression efforts should be commensurate with the economic, social, and resource values identified for protection.

Management options are assigned at a landscape scale and apply across jurisdictional boundaries. Considerations in their selection may include public and private values to be protected. Operationally, the management option at a wildfire's point of origin prescribes the default initial response to the incident and allows Protecting Agencies to rapidly prioritize initial attack resources and respond when Jurisdictional Agencies are unavailable for consultation.

**There is no guarantee of protection from wildfire in any management option or on any site.**

Management option designations are intended to be flexible. The default initial response will not be appropriate for every fire and may be overridden based on incident-specific considerations. See **3.2.3 Non-standard Responses**.

Jurisdictional Agencies and ANCSA Corporations have an annual opportunity to review wildfire management options and site designations on their lands and update them if warranted by changes in objectives, fire conditions, land use patterns, resource information, and/or technologies. Management option changes should be a collaborative effort between all affected jurisdictional and protecting units. Changes will not be made without the approval of all Jurisdictional Agencies whose lands are affected.

The following procedures are designed to ensure adequate and consistent documentation of management option changes. Collaboration between all affected Protecting and Jurisdictional Agencies (including ANCSA Corporations) is essential in the management option review/change process.

**Completed change packages are due to Alaska Fire Service by March 1.**

## Review Process

1. Protecting FMOs will annually provide written reminders of fire management option review/change responsibilities to Jurisdictional Agencies within their Protecting Units.
2. Protecting and Jurisdictional Agencies will conduct internal and interagency reviews of fire management option boundaries and/or protection levels.
3. Non-standard responses will be reviewed annually by Protecting and Jurisdictional Agencies in order to validate fire management option boundaries and protection levels.

## Change Process

1. Management Option boundary and/or protection level changes are typically initiated by Jurisdictional Agencies but may be initiated by Protecting Agencies or other cooperators.
2. Approved and verified management option change packages will be submitted by Protecting FMOs to the AFS Fire Planning Specialists, AICC Emergency Operations Coordinator, and AFS GIS by March 1.
3. The interagency Fire Management Option database within the Digital Atlas will be updated by April 1.
4. If any participant in the review/change process believes that the change process has been circumvented, unfairly implemented, or unduly delayed they will notify their AWFCG representative. The AWFCG is the final arbitrator for resolving procedural issues associated with the fire management option review/change process.

## Change Initiator Responsibilities

1. Ensure all affected and adjacent Jurisdictional and Protecting Agencies are aware of and have the opportunity to participate in the change process.
2. Prepare a written description of proposed changes and the rationale behind them.
3. Prepare GIS and map products to support the proposed changes (including display map, and shapefile or geodatabase with enough basic metadata to clearly define the change).
4. Complete the *Management Option Change Initiator* portion of the Fire Management Option Change Approval Form (**Appendix E**).
5. Obtain dated approval signatures from all affected Jurisdictional Agencies in the *Jurisdictional Agency(ies) Responsibilities* portion of the Fire Management Option Change Approval Form (**Appendix E**).
6. Submit a complete change package to the appropriate Protecting FMO for final review and certification before March 1.
7. Be prepared to answer questions and provide additional data upon request.

## **Jurisdictional Agency Responsibilities**

1. Provide values data as needed to support the proposed change and communicate jurisdictional concerns regarding proposed changes.
2. Assist with change package preparation.
3. Jurisdictional Agencies must approve all management option boundary and/or protection level changes within their jurisdiction by signing and dating within the *Jurisdictional Agency(ies) Responsibilities* portion of the Fire Management Option Change Approval Form (**Appendix E**).

## **Protecting Agency Responsibilities**

1. All management option boundaries and/or protection level changes will be reviewed by the affected Protecting FMO(s) to determine whether they are operationally feasible. Protecting FMOs may propose modifications to the change proposal if feasibility concerns are identified. Ideally, Protecting FMOs are provided an opportunity to provide feedback early in the change process.
2. If the proposed change involves more than one Protection Area, one Protecting FMO will be identified to coordinate the process.
3. The Protecting FMO signs and dates the Fire Management Option Change Approval Form (**Appendix E**) after verifying that:
  - a. The submitted fire management option boundary and/or protection level changes are operationally feasible.
  - b. The required notifications have been completed.
  - c. The Fire Management Option Change Approval Form (**Appendix E**) has been completed and all required signatures have been obtained.
  - d. All required GIS data and map products are included with the change package.
4. The Protecting FMO submits the completed change package (see **Appendix E** for details). **The deadline for submitting the completed change package is March 1.**
5. The Protecting FMO will be responsible for notifying all affected Jurisdictional Agencies that the changes have taken effect and for ensuring that any local Protecting Unit map products are updated with the approved changes.

## **BLM-Alaska Fire Service and AICC Responsibilities**

1. Changes to the Digital Atlas will be processed by the Alaska Fire Service GIS staff. Electronic archives of historical fire management option data will be maintained. Questions about spatial data will be referred to the data preparer identified on the Fire Management Option Change Approval Form (**Appendix E**).
2. The AICC Emergency Operations Coordinator will archive the Fire Management Option change package.

3. AFS GIS staff will ensure that the appropriate Protecting FMOs, AICC Emergency Operations Coordinator and the AFS Fire Planning Specialists are notified when approved changes have been incorporated into the Digital Atlas.
4. AFS Fire Planning Specialists will ensure that management option changes are made available to WFDSS and other systems (e.g., [AICC– Alaska Statewide Master Agreement webpage](#), Fire Management Option Change History).



## Appendix E. FIRE MANAGEMENT OPTION CHANGE APPROVAL FORM

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Send completed change package to:

BLM-AFS Fire Planning Specialists: [BLM\\_AK\\_AFS\\_FirePlanning@blm.gov](mailto:BLM_AK_AFS_FirePlanning@blm.gov)

BLM-AFS GIS Staff: [BLM\\_AK\\_AFS\\_GIS@blm.gov](mailto:BLM_AK_AFS_GIS@blm.gov)

AICC Emergency Operations Coordinator: [BLM\\_AK\\_ACCAIR\\_Dispatch@blm.gov](mailto:BLM_AK_ACCAIR_Dispatch@blm.gov)

### Management Option Change Initiator

**Change Description and Rationale** - Describe changes geographically and jurisdictionally. Explain the rationale for the change (use additional sheets if necessary). Specify the conversion date for any changes to Modified:

#### Changes initiated by:

Agency \_\_\_\_\_ Administrative Unit \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Email \_\_\_\_\_ Phone Number \_\_\_\_\_

#### Required Attachments:

GIS Spatial Data files including basic metadata (zipped geodatabase or zipped shapefile):

Option Change Display Maps (pdf format)

Other: \_\_\_\_\_

**Jurisdictional Agency Administrator(s)**

The following land manager(s)/owner(s) have approved these fire management option change(s) for the lands that they manage/own.

**Jurisdictional Agency #1**

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Administrative Unit

\_\_\_\_\_  
Approver

\_\_\_\_\_  
Approval Signature/Date

**Jurisdictional Agency #2**

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Administrative Unit

\_\_\_\_\_  
Approver

\_\_\_\_\_  
Approval Signature/Date

**Jurisdictional Agency #3**

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Administrative Unit

\_\_\_\_\_  
Approver

\_\_\_\_\_  
Approval Signature/Date

**Jurisdictional Agency #4**

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Administrative Unit

\_\_\_\_\_  
Approver

\_\_\_\_\_  
Approval Signature/Date

## Protecting FMO

### The following steps have been completed:

- The submitted fire management option boundary or management level change(s) are operationally feasible.
- The required notifications have been completed.
- The required signatures have been obtained.
- Required GIS data and pdf map products are included with this approval sheet.

Protecting Agency: \_\_\_\_\_ Protection Zone/Area: \_\_\_\_\_

Protecting Agency FMO Name: \_\_\_\_\_

\_\_\_\_\_  
Protecting Agency FMO Signature & Date

## Appendix F. ALASKA KNOWN SITES UPDATE PROCEDURES

The Alaska Known Sites Database (AKSD) identifies infrastructure, and cultural and natural resource sites throughout Alaska that may be threatened by wildfire. The dataset provides locations, descriptions, and jurisdictions, as well as direction regarding site protection priorities. These data are made available to fire managers and other authorized data users through a password-protected website (National Interagency Fire Center – ArcGIS Online) in order to support wildland fire planning and decision-making. There are two primary sources of site information included in the AKSD:

- Jurisdictional Agency inventory and assessments.
  - Jurisdictional Agencies are responsible for reviewing AKSD data for accuracy and are responsible for assigning Protection Levels
- Data collected by Protecting Agency staff and IMTs. These data are subject to review by Jurisdictional Agency administrative units on which sites reside.
  - AKSD is a dynamic product with real-time updates (i.e., new data are available for immediate use).

The AKSD has editor tracking so there will be a record of who created and updated data points. Additionally, there is an “Alaska Known Sites Database Changes” web application that will help simplify the data review process.

Access to AKSD can be requested through one of the Alaska Known Sites Database Points of Contact or by contacting AFS GIS staff at [BLM\\_AK\\_AFS\\_GIS@blm.gov](mailto:BLM_AK_AFS_GIS@blm.gov).

Appendix Table F-1: Alaska Known Sites Database Points of Contact

AWFCG Organization	Name	Contact Information
Alaska Department of Natural Resources	Dan LaBarre	(907) 451-2615 daniel.labarre@alaska.gov
	Tom Ruskowski	(907) 458-6877 thomas.ruskowski@alaska.gov
Alaska Department of Fish and Game	Miles Spathelf	(907) 267-2463 miles.spathelf@alaska.gov
Bureau of Indian Affairs	Kristine Kosnik	(907)523-5235 Kristine.Kosnik@bia.gov
Bureau of Land Management / Alaska Fire Service	Jennifer Jenkins	(907) 356-5587 jljenkins@blm.gov
Chugachmiut	Nathan Lojewski	907-562-4155 ext. 0165 Nathan@chugachmiut.org
National Park Service	Brian Sorbel	(907) 644-3413 brian_sorbel@nps
Tanana Chiefs Conference	Clinton Northway	(907) 452-8251 ext. 3379 clinton.northway@tananachiefs.org
U.S. Fish and Wildlife Service	Peter Butteri	(907) 356-5874 peter_butteri@fws.gov
U.S. Forest Service	Eric Morgan	208-290-6020 eric.morgan@usda.gov

## **Appendix G. HISTORY OF FIRE MANAGEMENT PLANNING IN ALASKA**

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### **Fire Management Roles and Responsibilities**

The history of fire management within Alaska dates back to 1939 when the Alaskan Fire Control Service was established under the General Land Office. Headquartered in Anchorage, it was given responsibility for fire suppression on an estimated 225 million fire-prone acres of public domain lands in Alaska. When the Bureau of Land Management (BLM) was formed in 1946, it received the management authority for most of Alaska's federal lands and absorbed the Alaska Fire Control Service. The BLM fire organization was based in Fairbanks and Anchorage and the two offices worked cooperatively but separately. The BLM also kept a Division of Fire Management at the State Office.

In 1959, the first of three big divestitures of land managed by BLM-Alaska began and, with the changes in land management authority, issues regarding wildland fire suppression responsibilities arose.

- Under the Alaska Statehood Act of 1959, the State was granted 104 million acres of land.
- Alaska Native Claims Settlement Act of 1971 (ANCSA) established Native corporations and an entitlement of 44 million acres for those corporations.
- The Alaska National Interest Lands Conservation Act of 1980 (ANILCA) transferred approximately 100 million acres from BLM administration to the National Park Service and Fish and Wildlife Service.

Under ANCSA, the federal government was directed to continue to provide wildland fire suppression on lands conveyed to Native regional and village corporations. In response to ANILCA, Secretarial Order #3077, dated March 17, 1982, creating "a fire line organization with headquarters in Fairbanks" was issued. BLM Alaska Fire Service (AFS) was formed and, in Department of the Interior Manual 620, AFS was assigned the fire suppression responsibility for all Department of Interior administered lands in Alaska and Native Corporation land conveyed under ANCSA. Department of Interior administered lands include land managed by the BLM, National Park Service, Fish and Wildlife Service, and the Bureau of Indian Affairs. Although AFS implements fire suppression for DOI agencies, individual agencies remain accountable for following agency-specific mandates and policies for resource and wildland fire management.

The State of Alaska established a wildland fire suppression organization in the Department of Natural Resources, Division of Forestry (DOF), and, in the mid-1970s, began to gradually assume suppression responsibilities beginning in the Haines area. A reciprocal fire protection agreement was signed by the BLM-AFS, the USFS, and DOF to cooperatively provide fire suppression operations in fire-prone areas. Under the agreement, AFS assumed suppression responsibility for wildland fires in the northern half of Alaska, regardless of ownership. By 1985, DOF had assumed suppression responsibility for wildland fires in Southcentral and most of Southwestern Alaska, as well as in portions of the Central Interior adjacent to the road-system. The U.S. Forest Service assumed suppression responsibility for state, federal, and Native lands within the boundaries of the Chugach and Tongass National Forests.

In 2010, the reciprocal fire protection agreements between the Protecting Agencies (DOF, BLM-AFS, and USFS) and the individual memorandum of agreement between land management agencies (FWS, NPS, BIA) were consolidated into the *2015 Alaska Master Cooperative Wildland Fire Management and Stafford Act Agreement (Alaska Master Agreement)*. The *Alaska Master Agreement* and its exhibits (including the *Alaska Statewide Operating Plan* and this *AIWFMP*) currently define the roles and responsibilities of the Jurisdictional and Protecting Agencies as well as operating procedures for fire management in Alaska.

## **Fire Management Planning**

The Alaska Land Use Council was created under the Alaska National Interest Lands Conservation Act of 1980 (ANILCA). This Council was directed “to serve as a forum for managers of public lands within Alaska and for governmental decision makers with differing perspectives and varying mandates with respect to land management of Alaska’s land resources” (Alaska Land Use Council Annual Report 1982). The Council advocated multi-jurisdictional planning efforts and created the Fire Control Project Group to establish definitions and criteria for categories of fire protection and response as well as a schedule, organization, and process for completing interagency fire plans (Alaska Interagency Fire Planning Guidelines, revised 1984). The Fire Control Project Group later became the Alaska Interagency Fire Management Council, which evolved into the current Alaska Wildland Fire Coordinating Group (AWFCG).

The basis for interagency wildland fire management in Alaska is found in the 13 Interagency Fire Management Plans (IFMPs) completed between 1982 and 1988 at the direction of the Alaska Land Use Council. Four fire management options (Critical, Full, Modified and Limited) that set the resource assignment priorities and describe the standard response to a wildfire within the option boundaries were defined. Values-at-risk, ecological considerations and suppression costs were factors used to develop the management option criteria. The first Alaska IFMP for the Tanana-Minchumina Planning Area was completed and approved in 1982. Using that plan as a model and reference, 12 more plans were completed through the collaborative efforts of interagency, interdisciplinary teams. Public input was solicited throughout the planning process.

### **1980s Interagency Fire Management Plans**

These plans were developed through the collaborative efforts of interagency, interdisciplinary teams and applied on a statewide, interagency, multi-jurisdictional, landscape scale. They provided land managers with wildland fire strategy choices and provided operational direction to the suppression agencies. *Alaska Interagency Fire Planning Guidelines* were published in 1984 to assist the planning group in expediting the completion of the plans. The following 13 plans provided “an opportunity for land managers within the planning area to accomplish their land use objectives through cooperative fire management” (*Alaska Interagency Fire Management Plan, Tanana/Minchumina Planning Area*) and standardized management options statewide.

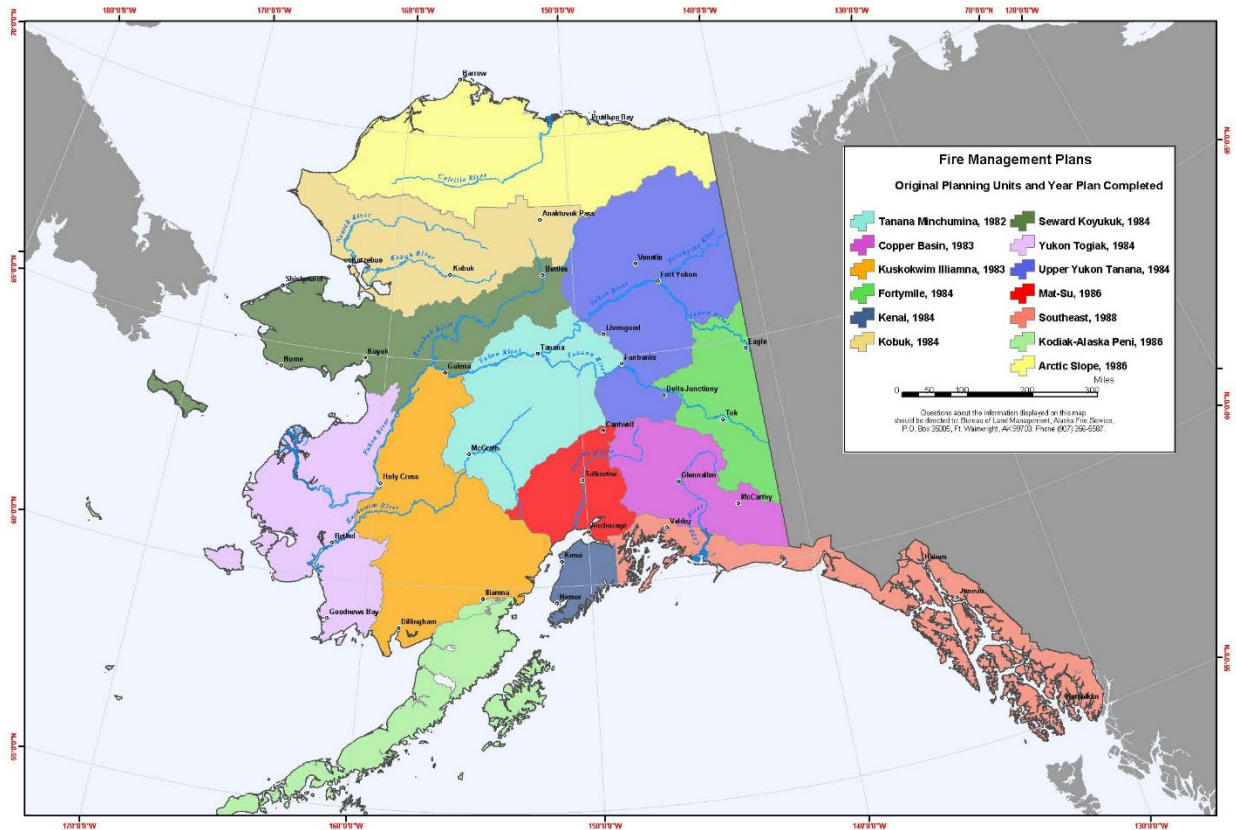


Figure 3: Alaska Interagency Fire Management Plans, Original Planning Units and Year Plan Completed

- 1982 Alaska Interagency Fire Management Plan, Tanana/Minchumina Planning Area and Amendment 1984
- 1983 Alaska Interagency Fire Management Plan, Copper Basin Planning Area
- 1983 Alaska Interagency Fire Management Plan, Kuskokwim/Iliamna Planning Area
- 1983 Alaska Interagency Fire Management Plan, Upper Yukon/Tanana Planning Area
- 1984 Alaska Interagency Fire Management Plan, Fortymile Planning Area
- 1984 Alaska Interagency Fire Management Plan, Kenai Planning Area
- 1984 Alaska Interagency Fire Management Plan, Kobuk Planning Area
- 1984 Alaska Interagency Fire Management Plan, Seward/Koyukuk Planning Area
- 1984 Alaska Interagency Fire Management Plan, Yukon/Togiak Planning Area
- 1986 Alaska Interagency Fire Management Plan, Arctic Slope Planning Area
- 1986 Alaska Interagency Fire Management Plan, Kodiak/Alaska Peninsula Planning Area
- 1986 Alaska Interagency Fire Management Plan, Matanuska/Susitna Planning Area
- 1988 Alaska Interagency Fire Management Plan, Southeast Planning Area

By 1988, the interagency fire management plans had been implemented across the state. Each plan contained a description of the local environmental and socioeconomic conditions, natural and cultural resources, fire history and behavior, and local subsistence activities. The plans provided a coordinated, cost effective, landscape scale approach to fire management, a consistent interagency approach to operational procedures and a systematic method for the identification and prioritization of values-to-be-protected. The initial response to a wildfire was determined by the management option designation and the likely consequences of the fire on firefighter and public safety.

### 1998 Alaska Interagency Wildland Fire Management Plan, as amended 1998

At the direction of the AWFCG, the common elements in the 13 original IFMPs were consolidated during the 1990s and by 1998, *Alaska Interagency Wildland Fire Management Plan* was completed. It provided the land managers and fire suppression organizations a single reference for interagency fire management operational information. The Plan clarified and streamlined existing fire management planning documents and also incorporated operational changes that had occurred since the 1980s statewide fire management planning effort.

### **2010 Alaska Interagency Wildland Fire Management Plan**

This Plan updated and superseded the *Alaska Interagency Wildland Fire Management Plan, as amended 1998*. The update was completed in response to public requests for more information regarding Alaskan fire management practices, to clarify interagency guidelines, policies and operational direction for responses to wildland fires, and to bring terminology up to date. This Plan affirms that firefighter and public safety is the first priority in all fire management activities for all agencies. It also reaffirms the concepts presented in the 1998 Plan and previous Alaskan interagency fire planning efforts. The stated purpose of the 2010 Plan was to promote a cooperative, consistent, cost-effective, interagency approach to wildland fire management and to be the interagency reference for wildland fire operational direction in Alaska.

### **2016 Alaska Interagency Wildland Fire Management Plan**

This Plan updates and supersedes the *2010 Alaska Interagency Wildland Fire Management Plan*. It updates terminology and management criteria to reflect changes in policy and interagency agreements. It continues to provide a framework of common standards, terminology, and expectations in order to facilitate effective cooperation and collaboration between the federal, state and Alaska Natives entities to achieve both wildland fire protection and ecological goals in a safe, efficient, and cost-effective manner.

Significant changes between the 2010 and 2016 plans include:

- Reorganization of chapters within the Plan to better align with DOI FMP guidance.
- Reduced duplication by referencing the *Alaska Master Agreement* and *Alaska Annual Operating Plan (AOP)* direction where possible.
- Additional emphasis on the role of Jurisdictional Unit FMPs/RMPs where they exist.
- Clarified definition of Non-standard Response.
- Revised fire notification requirements:
  - Jurisdictions should be notified immediately for fires occurring in all Management Options.
  - Jurisdictions whose lands may be threatened within two burning periods should be notified.
- Clarified the fire management roles and responsibilities related to different types of Native organizations and referenced more detailed information in the *AOP*.
- Consolidated Alaska Fire Management and Planning History into Appendix G.
- Clarified distinction between Statewide Goals and Planning Objectives and Default Initial Response Actions and Priorities.



- Revised Operational Decision Chart to reflect updated WFDSS decision support direction.
- Recognizes that Fire Management Option selection should consider population density as opposed to the presence or absence of human life and inhabited property.
- Corrected conflicting direction regarding Plan review requirements.
- Fire occurrence statistics have been removed from the Plan. Statistics are not integral to the document and are available elsewhere.

### **March 2017 Review of the 2016 Alaska Interagency Wildland Fire Management Plan**

An interagency group with representation from each of the active members of AWFCG completed an annual review of the *2016 AIWFMP* prior to the 2017 fire season. The review and associated updates were certified by the AWFCG Chair, and the updated document was republished as *the Alaska Interagency Wildland Fire Management Plan 2016 (March 2017 Review)*. Updates include:

- Minor grammatical, punctuation, spelling, and format changes.
- Hyperlinks updated.
- Department of the Interior Manual 620 Chapter 2 references updated to Chapter 5.
- Updated discussion of policy affecting fire management on Alaska Native lands to reflect the 2013 changes to the fee-into-trust regulation.
- Updated jurisdictional authorities in Table 1.
- Updated Figure 1: Alaska Protection Areas of Responsibility to reflect 2017 Protection Area boundary changes in the Haines Area.
- Corrected the AWFCG membership status of Anchorage Fire Department and the Association of Village Council Presidents (both were inactive).
- Added a Statewide Management Requirement so that ADF&G stream crossing requirements for anadromous streams are distinguished from requirements for crossing non-anadromous fish-bearing streams.
- Clarified notification requirements for all management options.
- Included the August 20 “Special” Modified Conversion date that was inadvertently omitted in 2016.
- Clarified that the default initial action for Limited fires should include assessment of the fire’s potential to affect neighboring values.
- Updated Post-fire Response language to reflect current national policy and include options for post-fire response on non-federal lands.
- Updated fire investigation language for consistency with policy.
- Updated data sources language to reflect current products and processes regarding Management Option and Protection Area boundary changes, as well as fire perimeters, Known Sites, and ownership data.
- Included a citation in the Science and Climate Change chapter that was inadvertently omitted in 2016.
- Updated Appendix A: Fire Management Operational Direction to reflect changes elsewhere in the document.

- Updated Appendix B: Fire Notification Jurisdictional Contacts based on changes in the 2017 AOP.
- Updated Appendix C: Fire Notification Log to include management option and initial response information.
- Updated Appendix D: Fire Management Option Change Procedures and Appendix E: Fire Management Option Change Approval Form to ensure proper documentation and updating of associated data.
- Updated Appendix F: Known Sites Update Procedures to reflect current processes and acknowledge potential changes to the data product.
- Added link to Statewide Fire Management Option Reference Map.
- Updated this Appendix G: History of Fire Management in Alaska to reflect 2017 updates to the AIWFMP.
- Appendix H: Annual Review Certification completed and signed by the AWFCG Chair.

### **March 2018 Review of the 2016 Alaska Interagency Wildland Fire Management Plan**

An interagency group with representation from each of the active members of AWFCG completed an annual review of the 2016 AIWFMP prior to the 2018 fire season. The review and associated updates were certified by the AWFCG Chair and the updated document was republished as the *Alaska Interagency Wildland Fire Management Plan 2016 (March 2018 Review)*. Updates include:

- Minor grammatical, punctuation, spelling, and format changes.
- Document edited for compliance with Section 508 of the Workforce Rehabilitation Act.
- Signatories on Signature page remain as they were in 2016 when the document was originally signed. The 2017 and 2018 reviews only require a signature from the AWFCG Chair. The Association of Village Council Presidents (AVCP) was inactive in AWFCG in 2016 and did not sign. AVCP is once again active in AWFCG and has reviewed and signed the document on an additional signature page. The Anchorage Fire Department is no longer a voting member and did not sign.
- Section 1.2.1.3: Corrected AVCP's AWFCG status to active and clarified that they are an additional point of contact for some allotment owners within their BIA compact service area.
- Table 1 was corrected to reflect current jurisdictional authorities.
- Section 3.9 Fire Investigation was updated to align with changes in the 2018 AOP related to notifications.
- Section 3.11 and sub-sections were updated to better describe Alaska Wildland Fire Digital Atlas products and capture changes to the Alaska Known Sites Database.
- Section 4.4 Known Sites Updates and Appendix F: Known Sites Update Procedures were updated to reflect changes to the Alaska Known Sites Database.
- Appendix B: The Fire Notification Jurisdictional Contacts Table was corrected to include the BLM Arctic District Office.
- The requirement to include the Fire Notification Log with the final fire report package was removed in order to align with changes in the 2018 AOP.

- Appendix D: Fire Management Option Change Procedures was modified to clarify that affected and adjacent agencies should be involved in the change process. The role in the change process formerly held by the AFS Business and Technology Branch Manager was given to the AFS Fire Planning Specialists.
- Updated Appendix G: History of Fire Management in Alaska to reflect 2018 updates to the *AIWFMP*.
- Appendix H: Annual Review Certification completed and signed by the AWFCG Chair.

### **March 2019 Review of the 2016 Alaska Interagency Wildland Fire Management Plan**

An interagency group with representation from each of the active members of AWFCG completed an annual review of the *2016 AIWFMP* prior to the 2019 fire season. The review and associated updates were certified by the AWFCG Chair and the updated document was republished as the *Alaska Interagency Wildland Fire Management Plan 2016 (March 2019 Review)*. Updates include:

- Minor grammatical, punctuation, spelling, and format changes.
- Document edited for compliance with Section 508 of the Workforce Rehabilitation Act.
- Signatories on Signature page remain as they were in 2016 when the document was originally signed. The 2017 through 2019 reviews only require a signature from the AWFCG Chair.
- Includes additional detail describing ADEC and the ESMP
- Edits to fee-to-trust language stating that regulation is currently under review.
- Missile Defense Agency removed from Table 1: Jurisdictional Authorities. Lands used by the agency are managed by USAG Alaska.
- Referenced the DOF-JBER agreement, new in 2019.
- Added a statewide management requirement at the request of DOF: “Coordinate with state land managers whenever fire response activities may restrict use of public waters or impact state resources below the ordinary high water mark or on emergent islands.”
- Provided additional detail regarding notifications beyond initial response.
- Added notification requirements regarding impacts to state resources below the ordinary high water mark and restricted use of public waters.
- Updated ES & BAR language to align with current national direction.
- Updated Prevention, Origin & Cause Determination, and Fire Investigation sections to align with AOP and current policies. Updated notification requirements for uncertified Native Allotments to include both BLM and BIA.

## March 2020 Review of the 2016 Alaska Interagency Wildland Fire Management Plan

An interagency group with representation from each of the active members of AWFCG completed an annual review of the *2016 AIWFMP* prior to the 2020 fire season. The review and associated updates were certified by the AWFCG Chair and the updated document was republished as the *Alaska Interagency Wildland Fire Management Plan 2016 (March 2020 Review)*. Updates include:

- Minor grammatical, punctuation, spelling, and format changes.
- Two items regarding public waters were reviewed:
  - The Statewide Management Requirement in Section 3.2.1 regarding coordination with the State when activities on public waterways might be affected.
  - The paragraph in Section 3.4 regarding notifications to the State when response activities may affect public waterways. It was agreed that the language would not be changed for the 2020 Review but that it would be reviewed again in 2021. It was also agreed that an associated WFDSS Statewide Management requirement would not be included in the system until after the 2021 review.

## 2021 Alaska Interagency Wildland Fire Management Plan

This Plan updates and supersedes the *2016 Alaska Interagency Wildland Fire Management Plan*. It updates terminology and management criteria to reflect changes in policy and interagency agreements. It continues to provide a framework of common standards, terminology, and expectations in order to facilitate effective cooperation and collaboration between the federal, state and Alaska Natives entities to achieve both wildland fire protection and ecological goals in a safe, efficient, and cost-effective manner.

Significant changes between the *2020 review of the 2016 AIWFMP* and the *2021 AIWFMP* include:

- Minor grammatical, punctuation, spelling, and format changes.
- Hyperlinks validated and updated as needed.
- Updated signature authorities to reflect personnel changes since 2016.
- Section 1.1 amended to recognize the authority of individual agency land/resource management plans.
- Section 1.2.1.1 amended to describe additional policy and authorities:
  - Good Neighbor Authority
  - Pittman-Robertson Act
  - Reserve Treaty Rights Lands
  - Dingell Act
  - Executive Order 13855
- Section 1.2.1.2 amended to reflect changes to State wildland fire protection laws implemented through House Bill 355.
- Section 1.2.1.2 amended to address Alaska Department of Fish and Game land management authority and the protection of anadromous fish habitat.
- Section 1.2.1.3 amended to clarify policy affecting fire management on Alaska Native lands.
- Section 1.2.2.1 amended to provide background on jurisdictional authorities in Alaska.

- Section 1.3 amended to describe U.S. Forest Service Fire Management Reference Systems.
- Section 2.1 amended to include two additional goals:
  - Prevent human starts to the extent possible.
  - Investigate wildfires to understand cause and recover cost when possible.
- Section 2.1 amended to remove a goal regarding adherence to laws and regulations. It was agreed that this is self-evident.
- Section 2.3 Statewide Management Considerations reorganized and amended.
- Section 3.2.1 Statewide Management Requirements reorganized and amended.
- Section 3.2.1 public waters Statewide Management Requirement updated. Change made at the request of DOI agencies was reviewed and approved by a DOI Solicitor as well as by participating agencies. Updated Statewide Management Requirement will be carried over to WFDSS Requirements.
- Section 3.2.3 amended to clarify the purpose of designated Fire Management Options.
- Sections 3.2.3.1 - 3.2.3.4 amended to clarify that notifications to jurisdictions are required when their lands are threatened by wildfires (replaced “should be notified” with “will be notified”).
- Section 3.2.3.2 amended to recognize Full protection sites as well as Full protection areas similarly to the Critical Option.
- Section 3.2.3.3 amended to include an exception for initial resource allocation priority that was unintentionally omitted from the pre-conversion Modified Option.
- Section 3.2.3.3 amended to recognize that Modified conversion dates may be selected based on local considerations informed by the Alaska FDOP and are not limited to a specific set of dates.
- Section 3.2.4 amended to clarify rationale behind non-standard responses.
- Section 3.4 public waters notification requirement updated. Change made at the request of DOI agencies was reviewed and approved by a DOI Solicitor as well as by participating agencies.
- Section 3.5.1.1 amended to clarify Alaska Department of Environmental Conservation’s smoke management role in prescribed fire.
- Section 3.5.2.2 amended to better describe FireWise programs.
- Section 3.6 and sub-sections amended to align with policy changes in Emergency Stabilization and Burned Area Rehabilitation programs.
- Section 4.6 amended and additional references cited to reflect recent advances in climate change science.
- Appendix B updated to reflect recent organizational changes.
- Appendices D & E updated to streamline Fire Management Option change procedures.
- Appendix F updated with changes to Alaska Known Sites Database contacts.
- Appendix G updated with 2021 Plan amendments.
- Document checked for compliance with Section 508 of the Workforce Rehabilitation Act.

## **March 2022 Review of the 2021 Alaska Interagency Wildland Fire Management Plan**

The *Alaska Interagency Wildland Fire Management Plan* is reviewed annually by AWFCG. Every five years, or as deemed necessary by a majority of AWFCG voting members, a comprehensive review will be completed and approved by all AWFCG organizations. The latest comprehensive review was completed in 2021 and amendments were approved by line officers from all participating organizations.

The *Alaska Interagency Wildland Fire Management Plan, 2021* was reviewed by the Alaska Wildland Fire Coordinating Group as of **March 2, 2022**.

The following edits were completed:

- Minor grammatical, punctuation, spelling, and format changes. Blank pages were removed from the document.
- Document edited for compliance with Section 508 of the Workforce Rehabilitation Act.
- Hyperlinks were updated where needed and URL text was removed for 508 compliance.
- Signatories on Signature page remain as they were in 2021 when the document was originally signed. The 2022 through 2025 reviews only require a signature from the AWFCG Chair.
- The Alaska DNR section under 1.2.1.2 State Fire Management Policy was reorganized for clarity with no significant content change.
- The Tribal Governments section under 1.2.1.3 Policy Affecting Fire Management on Alaska Native Lands was updated to briefly describe recent changes to the fee-to-trust process.
- Table 1 was corrected to indicate that for fire management purposes, tentatively approved lands fall under the jurisdiction of ANCSA corporations not the Federal Government.
- The third bullet in Section 2.3 Statewide Management Considerations was modified from “The population of Alaska is increasing; subdivisions and residential areas are expanding into previously undeveloped areas” to “In many areas of Alaska subdivisions and residential areas are expanding into previously undeveloped areas.” Per the 2020 census, Alaska population is not increasing; however, expansion into undeveloped areas continues.
- The 10<sup>th</sup> bullet under Section 3.2.1 Statewide Management Requirements was amended to clarify that waterbodies known to harbor invasive species will not be used as water sources for air or ground-based water delivery equipment unless needed to protect life or property. Previously only dip sites were explicitly mentioned.
- Section 3.2.4 Non-standard Responses was amended from, “The operational guidelines pre-determined by the point of origin management option may not be appropriate for every fire” to, “The operational guidelines pre-determined by the point of origin management option are not appropriate for every fire” in order to emphasize the need to assess the standard response to every fire and ensure it is appropriate under existing conditions.

- Site protection designation labels were changed in Section 3.3 Site Protection Designations as follows:
  - **Non-Protected** was changed to **No Protection** for clarity and in order to align with the AK Known Sites Database data standard.
  - **Unknown** was changed to **Undesignated** to help clarify that protection levels are intentionally not assigned to some sites.
- Section 3.4 Fire Notifications was amended to clarify the following:
  - That Protecting Agencies must notify Jurisdictions of non-statistical fires and prevention actions that are on or threaten their lands even if no fire number was generated and/or no suppression action was taken.
  - That BIA is also required to be notified for fires affecting uncertificated (or not yet patented) Native Allotment applications even though the jurisdictional responsibility resides with BLM. (Also amended in Appendix B.)
  - Initial and extended fire notification requirements. (Also amended Tables 2-6 and Appendix A.)
- Section 3.4 Fire Notifications was amended to show a name change from Appendix C: Fire Notification Log to Appendix C: Fire Notification Checklist and to require notification for significant property damage.
- A short Invasive Species Control section was added (3.6) that references more detailed information in the Alaska Statewide Operating Plan.
- Sections 3.7 Post Fire Response, 3.8 Prevention, 3.9 Origin and Cause Determination and 3.10 Fire Investigations were shortened to a brief statement referencing the Alaska Statewide Operating Plan instead of duplicating that information.
- Section 3.12.4 Fire Locations and Perimeters was amended to remove the statement that AICC is considered to be the definitive perimeter source. The National Incident Feature Server is now considered the authoritative source.
- Section 4.1 AWFCG Fire Management Plan Review/Revision was amended to align the plan approval date from April 1 to March 15 as indicated in the Alaska Statewide Operating Plan.
- Appendix B Required Jurisdictional Fire Notifications was amended to reflect the new USFWS and NPS Alaska organizational structures and add the DOF Area Forester as the contact for lands under state jurisdiction and state protection.
- The USFS Known Sites Database contact was updated in Appendix F, Table F-1.
- Sections 1.2.1.2, 3.4, and 3.12 were modified to describe the ADEC Solid Waste Program's responsibilities regarding landfill fires and a notification requirement for escaped landfill fires was added.