# Wildland Fire Guide

**Fire Information**

(907) 356-5511

*http://fire.ak.blm.gov*

*blm_ak_afs_public@gmail.com*

Alaska Wildland Fire Coordinating Group

Call **911** to report a fire

# ALASKA

**"People can live compatibly with wildland fire if they are aware of and prepared for local fire conditions. The more populated and closer a community is to fire prone areas, the greater the need for a proactive approach and a community's involvement in fire risk reduction activities."**

**~ Firewise Alaska Brochure**

# Fire in Alaska

## *A Balancing Act*

**Average # of fires per year:**
187 lightning-caused
320 human-caused

*Map is an example of a year's worth of recorded lightning-strikes; it shows the 68,938 strikes recorded in 2010.*

Fire caused by lightning is a natural part of Alaska's boreal forest and tundra ecosystems. It plays a role in maintaining the diverse mosaic of vegetation on the landscape, reduces the risk of more intense fires by breaking up the continuity of fuels, rejuvenates habitat, returns nutrients to the soil, and enables the growth of new plants.

Human-caused fires are most often in close proximity to people and communities. They pose the most direct risk, but are preventable.

Fires start without warning, but the response to those fires is pre-planned by land managers and fire professionals to provide rapid initial attack where needed or monitoring where desired fire can benefit the land and habitat. Managers consider and adjust goals if fires grow to reflect life and property, ecosystem benefits, individual policies and costs.

The National Cohesive Wildland Fire Management Strategy provides vision to safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and live as a nation with wildland fire.

## Did You Know?

Alaska generally receives somewhere between 40,000 and 100,000 lightning strikes per year!

Alaska may get wildfires as early as March and as late as December.

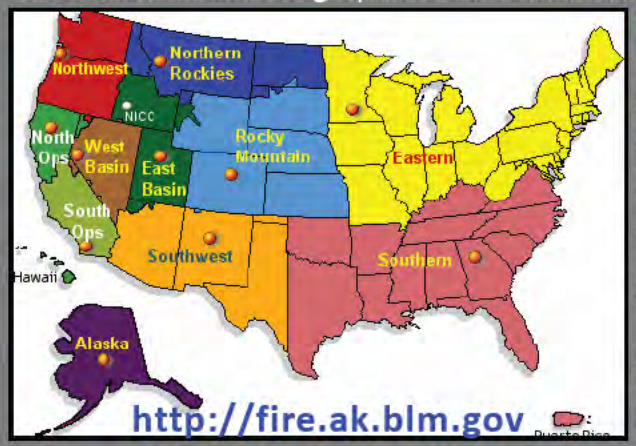
Based on the Alaska Interagency Coordination Center average, 1.7 million acres are burned statewide each year.

# Fire Management Involves Cooperation

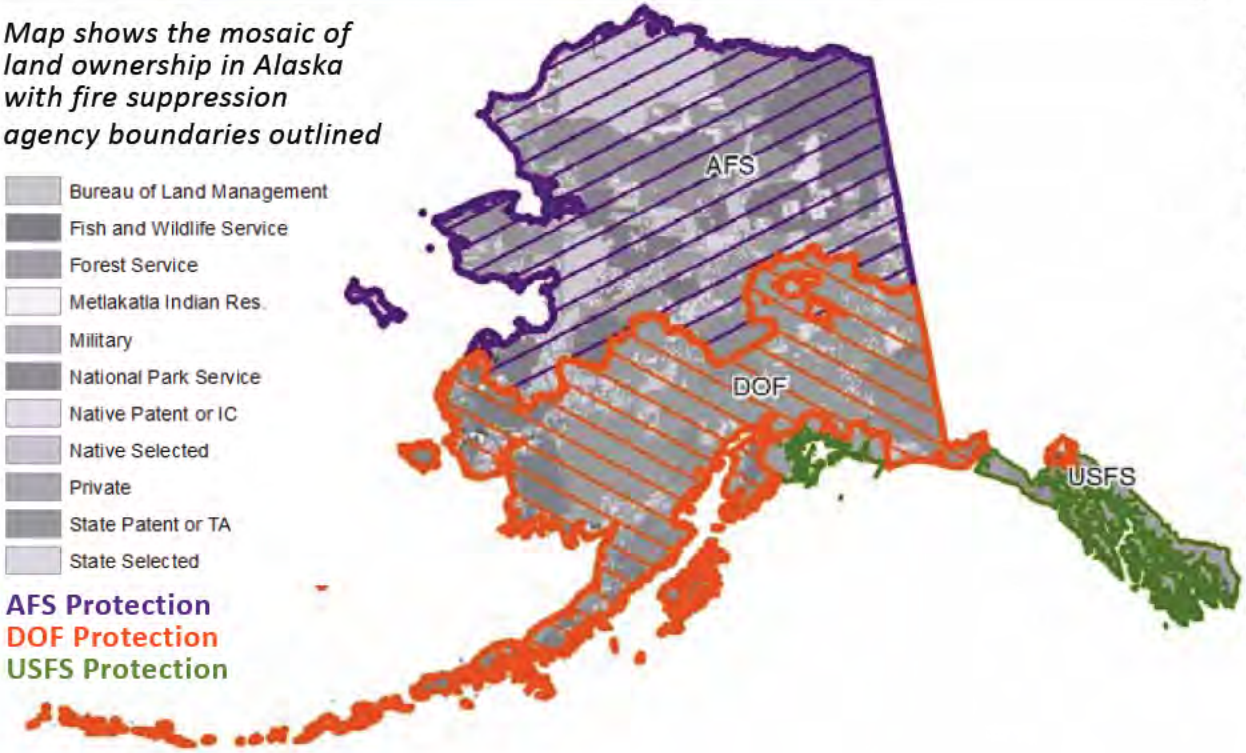
## Alaska Interagency Coordination Center

AICC is one of 11 Geographic Area Coordination Centers located throughout the US. It serves as the focal point for initial attack resource coordination (including smokejumpers and air tankers); logistical support and resource mobilization (including aircraft, personnel, equipment and crews); and predictive services.

AICC operates on an interagency basis and includes both Federal and State agencies.




*Map shows the mosaic of land ownership in Alaska with fire suppression agency boundaries outlined*




## Did You Know?

**An essential element of Alaska wildland fire management is interagency cooperation and collaboration to provide for public safety, accomplish fire-related management objectives, and maintain healthy ecosystems. In addition, each partner agency adheres to agency-specific rules and regulations that support their agency's mission. Interagency agreements/plans identify and define agency roles.**

## Fire Management

Federal, State, and Alaska Native jurisdictional land managers have the overall planning and management direction responsibility for their lands. Fire management decisions incorporate fire science research, vegetative fuels data, proactive public education, as well as training and qualification of firefighters.

Three agencies provide wildland fire suppression services to the jurisdictional agencies:

- **Bureau of Land Management-Alaska Fire Service (AFS)**
- **State of Alaska Department of Natural Resources - Division of Forestry (DOF)**

*Note: Under agreements with the Division of Forestry, cooperating fire departments provide wildland fire response to their communities and surrounding areas.*

- **US Forest Service (USFS)**

# The Alaska Interagency Wildland Fire Management Plan

**Four wildland fire management options (Critical, Full, Modified, Limited) are utilized statewide by Federal, State, and Alaska Native entities.**

The **AIWFMP** defines management options which pre-select initial strategies for a wildland fire; responses range from immediate suppression actions to periodic surveillance.

The management options provide a guide for the agencies to prioritize the use of suppression resources upon initial attack. Management Options are defined in the Alaska Interagency Wildland Fire Management Plan and designations are reviewed yearly.

## The Management Option categorizations:

- *Prioritize areas for initial response and ensure human life, designated property and identified resources receive an appropriate level of protection with available firefighting resources.*
- *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 the suppression effort be commensurate with values identified for protection.*

http://fire.ak.blm.gov/administration/awfcg.php (See section C)

**Critical (red):** Critical addresses areas and sites where people live and fulfills legal mandates; the objective in the Critical option areas is to protect the area or site from fire.

**Full (orange):** In Full, the objectives include control of all wildland fires at the smallest reasonable size and to protect high value natural resource areas. Native allotments are designated Full or Critical; developed recreation facilities or administrative sites may also be designated Full. Each agency has a structure or site protection policy and it varies between agency.

**Modified (yellow):** The Modified option designations afford jurisdictional agencies the opportunity to accomplish fire-related land use and resource management objectives when fire and environmental conditions are favorable.

**Limited (green):** Limited is designed for broad, landscape-scale areas where the low density and wide distribution of values to be protected best allows for fire to function in its ecological role. Site-specific action may be taken as warranted.

**Land management agencies operate from their respective unit fire management plans. The AIWFMP complements the plans and facilitates cooperation/coordination across boundaries.*

# When a Fire Starts

*Managing wildland fire in Alaska balances risks and benefits in an ever-changing environment.*

## 1. Fire Discovered/Reported

**Fires are managed using a broad range of actions from suppressing fire at its smallest acreage, to allowing the fire to take its natural course.**

## 2. Initial Response

**Immediate decisions are made based on safety conditions, pre-planned land designations, and values at risk.**

## 3. Actions taken may range from immediate suppression efforts that can increase in complexity, to general surveillance and monitoring.

### Initial Attack

An aggressive action to put the fire out, consistent with firefighter and public safety, and values to be protected.

### Extended Attack

Occurs when a wildland fire is progressing beyond what initial attack forces can handle; additional personnel and equipment may be on order. If a fire escapes initial attack, fire managers reassess the planning efforts to address the firefighting objectives.

### "Project" Fire Response

Incident Management Team responds (fires and resources are "typed" by complexity from Type 1 (most complex), to Type 2, 3, 4, 5.

### Surveillance & Monitoring

Aerial surveillance and monitoring of fire behavior and spread to protect life, property, and natural and cultural resources in order to allow fire to accomplish a benefit.

**INCIDENT COMMAND SYSTEM (ICS):** A standardized on-scene emergency management concept designed to allow users an organizational structure equal to the complexity and demands of single or multiple incidents.

**INCIDENT MANAGEMENT TEAM (IMT):** IMTs are pre-established and configured with Command and General Staff, and other leadership/support positions. Alaska has the capacity for both Type 1 and 2 IMTs. The Alaska Type 1 IMT is on a national rotation list and available for wildland fires and other all-hazard incidents.

*IMT webpage http://alaska.imtcenter.net/main/Index.aspx*

# Where there is Fire there is smoke

## Fire and smoke are often part of Alaskan summers.

- Keep informed of local fire information sources and air quality reports.
- Keep indoor air as clean as possible; keep windows and doors closed.
- Limit indoor pollution. Do not smoke or use candles, fireplaces, or gas stoves. Do not vacuum as it stirs up particles inside the home.
- Run an air conditioner if you have one; keep the fresh-air intake closed and clean the filter to prevent outdoor smoke from entering.
- Use a high-efficiency particulate air (HEPA) filter to reduce the number of irritating fine particles in indoor air.
- If you have asthma or other lung diseases, make sure you follow your doctor's directions about taking your medicines and following your asthma management plan. Call your doctor if your symptoms worsen.

### Additional online information

- AK Department of Environmental Conservation (DEC)- Smoke:
  http://www.dec.state.ak.us/air/am/smoke.htm
  http://dec.alaska.gov/air/smokemain.htm
- DEC Air Quality Advisories/Alerts:
  http://dec.alaska.gov/Applications/Air/airtoolsweb/Advisories/

**Receive these advisories via Twitter @AlaskaDEC**

- Fairbanks North Star Borough Smoke Visibility/ Air Quality Index:
  http://co.fairbanks.ak.us/airquality/
  http://co.fairbanks.ak.us/airquality/Docs/ParticulateLevels.pdf

**Frequently Asked Questions** http://www.dec.state.ak.us/air/smoke_qa.htm

# What can YOU do?

http://forestry.alaska.gov/pdfs/firewise09.pdf

## 1. Prevent!

Nearly **70%** of wildland fires in Alaska are **human-caused**; therefore, **preventable!**

## 2. Prepare!

Through individual efforts and community programs, Alaskan's can take measures to protect homes and property. **Firewise Alaska** provides a guide for home and property owners.

## 3. Be Aware!

Interested in reducing the fire risk around your home? Wondering where all the smoke is coming from? Need current fire information? Become familiar with the many information sources available to you (see last page of this guide).

### A Few Firewise Tips

- ◊ **Remove all conifers and dry or dead vegetation from within 15 ft. of structures.**
- ◊ **Maintain the lawn at 3 in. or less and keep well watered.**
- ◊ **Keep the area under stairs/decks free of debris. Enclose with noncombustible screens.**
- ◊ **Clean out your gutters and remove needles, leaves, and branches.**
- ◊ **Prune limbs of mature conifers up to 6-8 ft. on trees that are 15-30 ft. from structures.**
- ◊ **Keep firewood piles at least 30 ft. away from the house.**

# Before Wildfire

**Before a wildland fire threatens your home, make an emergency plan to provide for your family's safety.**

- Create/maintain defensible space around your home.
- Rehearse evacuation plans with family members.
- Designate someone to be an out-of-area contact through whom family members can relay information.
- Clearly mark home address. Identify alternative ways out of your neighborhood in case a route is blocked.
- Place important documents in a fireproof box and keep in an accessible location.
- Have a plan for your pets and where they should go in the event of an evacuation.

**The Firewise Alaska brochure provides several helpful tips for before and during a wildfire, including evacuation situations. Please review the brochure well in advance of wildland fire season.**
**http://forestry.alaska.gov/pdfs/firewise09.pdf**

# Evacuations

Stay informed about fires in your area. Authorities may not have time for a formal evacuation notification if conditions change quickly.

**Remember the 5 "P"s**

- **> People**
- **> Pets**
- **> Prescriptions**
- **> Photos**
- **> Papers** (important documents)

# After a Wildfire

## If the Fire Is Not Out

Firefighters and equipment may be working in the area. Residents and visitors to the area are advised to be alert for firefighters and equipment at work. Please drive slowly with headlights on and use caution when crossing hose lays.

## Potential Hazards

### Burned Trees

Tree root systems that have burned and standing dead trees can fall down, even with very little wind.

### Ash Pits

White ash on the ground may indicate deep pockets of hot ash where roots and ground vegetation have burned and may continue to burn below ground level.

### Hazardous Smoke

Smoldering piles may include plastics or other materials that produce toxins in the smoke. Please avoid breathing direct smoke from smoldering areas.

### Children and Animals

Children and pets should be carefully supervised to avoid potential hazards.

**Wildfires change the landscape. Please be aware and careful in this new environment.**

**Firefighter safety and public safety is the first priority!**

**Every Task ~ Every Time**

# People & Equipment

**Aircraft** - Aircraft used to support detection, firefighting operations, and logistics include air tankers, smaller fixed-wing aircraft, and helicopters.

**Smokejumpers** - Highly trained firefighters that primarily travel to wildland fires by aircraft and use parachutes to reach remote locations.

**Helitack** - Firefighters that are transported by and specialize in the use of helicopters for tactical and logistical operations.

**Engine Crews** - Firefighters that staff wildland fire engines (vehicles equipped with water tanks/hose/pumps) for tactical operations.

**Hand Crew** - Typically a 20-person crew of firefighters that uses hand tools, chainsaws, portable pumps, and ignition devices for tactical operations. Types of hand crews include, Interagency Hotshot Crews (IHCs), Type 1 Crews, Type 2 Initial Attack (IA) Crews, and Type 2 Crews. The type refers to the different level of tactical, logistical, and managerial capability.

**Alaska Crews**

- IHCs: Pioneer Peak (DOF), Midnight Suns (AFS), Chena (AFS)
- Type 2 IA: White Mountain (DOF), Gannet Glacier (DOF), Yukon (DOF), Tanana Chiefs (DOF), USFS R10 (US Forest Service)
- Type 2: North Stars (AFS)
- Emergency Firefighter (EFF) Crews: Alaska has designated approximately 70 Type 2 EFF Crews that are hired as needed for fire assignments.

**Wildland Fire Technicians and Fire Specialists** - Individual firefighters that are highly trained and provide aviation support, incident leadership, and other firefighting services.

## Tools of the Trade

Fire managers use a variety of tools in the planning process to make more informed decisions on current fires and in anticipation of potential fire danger:

- **Satellite Imagery**
- **Remote Automated Weather Stations** - provides hourly weather observations used for forecasts
- **Lightning Detection System**
- **Fire Behavior Models**
- **Infrared Mapping** - mapping that is based on heat detection
- **Remote Sensing** - data that is gathered from aircraft and satellites
- **Research and Fire Effects Monitoring** - learn more about the science of fire at the Alaska Fire Consortium website *http://www.frames.gov/partner-sites/afsc/home*
- **Computer Mapping** - such as Geographic Information Systems, or GIS

# Information Resources

To Report a Wildland Fire

**Call 911**

or

**(800) 237-3633**

## Websites

Wildland Fire Terminology: http://www.nwcg.gov/pms/pubs/glossary/index.htm

Alaska Interagency Coordination Center (AICC): http://fire.ak.blm.gov

AICC Morning Highlights: http://fire.ak.blm.gov/content/news/highlights/current.pdf

AICC Situation Report: http://fire.ak.blm.gov/content/aicc/sitreport/current.pdf

Map of Fire Locations: http://fire.ak.blm.gov/predsvcs/maps.php

Incident Information: http://inciweb.nwcg.gov/

National Fire Situation: http://www.nifc.gov/fireInfo/fireInfo_main.html

Firewise: http://firewise.org/ and http://forestry.alaska.gov/pdfs/firewise09.pdf

Alaska Wildland Fire Coordinating Group (AWFCG) Brochures/Educational Materials:

http://fire.ak.blm.gov/administration/awfcg.php

Interagency Standards for Fire & Aviation Operations:

http://www.nifc.gov/policies/pol_ref_redbook_2013.html

AK Division of Forestry (Including Burn Permit Info): http://forestry.alaska.gov

BLM Alaska Fire Service: http://fire.ak.blm.gov/afs/

National Parks Service: http://www.nps.gov/akso/nature/fire/index.cfm

U.S. Fish and Wildlife: http://alaska.fws.gov/nwr/visitor/fire/index.htm

USDA Forest Service: http://www.fs.fed.us/fire/

AK Dept. of Fish and Game: http://www.adfg.alaska.gov/index.cfm?adfg=ecosystems.fire

Anchorage Fire Department: www.muni.org/fire

Department of Transportation (Road Closure Info): http://511.alaska.gov/

National Weather Service: http://www.weather.gov/

FAA Temporary Flight Restriction Information: http://tfr.faa.gov/tfr2/list.html

## General Inquiry

Fire Information: (907) 356-5511

General Email: blm_afs_pio@blm.gov

## Social Media

**Twitter - www.twitter.com**

Alaska Division of Forestry: @AK_Forestry

Bureau of Land Management: @BLMAlaska

National Park Service: @AlaskaNPS

US Fish and Wildlife Service: @USFWSAlaska

US Forest Service: @AKForestService, @TongassNF, @ChugachForestAK

Bureau of Indian Affairs: @BIA_DFWFM

Alaska Fire Consortium: @AKfirescience

Department of Environmental Conservation: @AlaskaDEC

**Facebook - www.facebook.com**

Alaska Division of Forestry: AK.Forestry

Bureau of Land Management: BLMAlaska

National Park Service: AlaskaNPS

US Fish and Wildlife Service: USFWSAlaska

Bureau of Indian Affairs: BIA-Forestry-and-Wildland-Fire-Management

**Youtube - www.youtube.com**

Alaska Division of Forestry: AlaskaDNRDOF

National Park Service: AlaskaNPS

Guide created by the AK Division of Forestry Information Office,
in collaboration with interagency wildland fire partners (v. 5/2013)