



# Wildland Fire Decision Support System (WFDSS) Guide for Alaskans

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*May 1, 2023*

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## Introduction

WFDSS is a web-based application that provides several fire behavior analysis tools and a framework for making strategic decisions on wildfires. It standardizes the decision-making process, allows for collaboration, and documents decisions once they are made. All of the federal fire management agencies use WFDSS for decision support and documentation.

## WFDSS Preparedness Activities

Prior to each fire season, WFDSS users should do the following:

### Request Accounts/Roles

The following are likely to require WFDSS accounts in Alaska:

- Jurisdictional FMOs
- Protecting FMOs
- Alaska Fire Program Leads
- Agency Administrators (Refuge Managers, Field Office Managers, Park Superintendents, Regional and Area Foresters, etc.)
- Deputy/Assistant Agency Administrators
- Dispatchers

New WFDSS users will need to request a WFDSS account with one or more of the following roles:

### Author

**Most Alaska WFDSS users should request the “Author” role.** The Author role provides editing privileges and allows for drafting decision content and button-pushing in WFDSS. Authors can accept ownership of incidents and can be granted decision review and approval privileges by incident Owners. Authors can run simple automated fire behavior analyses and can request an analyst's assistance for more advanced fire behavior modeling.

### Viewer

Viewers can view incident information for all WFDSS incidents and groups. They can view completed analyses and reports, but do not have access to draft analyses or decisions. Viewers cannot make changes to WFDSS data unless they have additional roles.

### Dispatcher

The Dispatcher role is limited to:

- Creating and editing Relative Risk Assessments for fires without an Owner.
- Uploading shape files (except M.A.P.s or Incident Obj. Shapes) for incidents in their geographic area.
- Creating Relative Risk Assessments for incidents in their geographic area and without an Owner.
- Running automated Basic and Short-Term Fire Behavior analyses for incidents in their geographic area.

## Data Manager

Data Managers are responsible for:

- Entering and maintaining unit strategic objectives and management requirements.
- Creating, activating, and deactivating unit FMU/SO codes.
- Maintaining fire management unit associations for individual agency units.
- Managing unit shapes.

Each jurisdictional unit in Alaska should have at least one Data Manager assigned to them, typically the Jurisdictional FMO. A Data Manager may be responsible for multiple units.

## Fire Behavior Specialist or Super Analyst

Persons with these roles are trained to run advanced fire behavior analyses for incident decision-makers. Because of the unique fuels in Alaska, it is usually best when analysts have Alaskan experience. There are currently twenty or so Alaskan analysts in the State with varying levels of experience and availability. See Consider Requesting a Fire Behavior Analysis in the Situation Tab section for details on ordering an analysis.

## Geographic Area Editor (GAE)

GAEs are WFDSS subject matter experts and work cooperatively for the benefit of all users within their geographic area. They are both able and expected to assist any caller from any agency within their geographic area. The current Alaska GAEs are:

| GAE Name        | E-mail Address   | Office Ph.   | Cell Ph.     | Agency        |
|-----------------|--|--------------|--------------|---------------|
| Jennifer Barnes | <a href="mailto:jennifer_barnes@nps.gov">jennifer_barnes@nps.gov</a> | 907-455-0652 | 907-244-9073 | NPS           |
| Casey Boespflug | <a href="mailto:Cboespflug@blm.gov">Cboespflug@blm.gov</a>           | 907-356-5859 | 907-482-0055 | BLM           |
| Mike Butteri    | <a href="mailto:mike.butteri@alaska.gov">mike.butteri@alaska.gov</a> | 907-388-3089 | 907-388-3089 | State         |
| Peter Butteri   | <a href="mailto:peter_butteri@fws.gov">peter_butteri@fws.gov</a>     | 907-356-5874 | 907-350-4782 | BLM-AFS/USFWS |
| Jennifer Hrobak | <a href="mailto:jhrobak@blm.gov">jhrobak@blm.gov</a>                 | 907-356-5866 | 907-370-3826 | BLM-AFS       |
| Eric Morgan     | <a href="mailto:eric.morgan@usda.gov">eric.morgan@usda.gov</a>       | 907-789-6210 | 907-789-6210 | USFS          |
| Lisa Saperstein | <a href="mailto:lisa.saperstein@fws.gov">lisa.saperstein@fws.gov</a> | 907-786-3422 | 907-202-2732 | USFWS         |
| Brian Sorbel    | <a href="mailto:brian_sorbel@nps.gov">brian_sorbel@nps.gov</a>       | 907-644-3413 | 907-244-9054 | NPS           |
| Tom St. Clair   | <a href="mailto:thomas.stclair@bia.gov">thomas.stclair@bia.gov</a>   | 907-209-0105 | 907-978-0104 | BIA           |

Table 1: Current Alaska GAEs

## Ensure Accounts/Passwords current

Ensure all WFDSS users in your unit have refreshed their passwords prior to fire season.

## Validate/Update Unit Strategic Direction

Each unit Data Manager in Alaska is responsible for maintaining unit-specific strategic direction in WFDSS. This direction should tier from unit land/resource management plans and fire management plans.

All Alaska units have been prepared for conversion from the FMU Planning Process to the Spatial Planning Process.

**Alaska Data Managers should work with GAEs to update and spatially enable their strategic direction.**

## Attend a WFDSS Refresher

National WFDSS Refreshers are scheduled each spring by the Wildland Fire Management Research, Development & Application group. WFDSS Geographic Area Editors may also schedule area or local refreshers.

Alaska Geographic Area Editors will announce refreshers as they are scheduled. Additional WFDSS training can be made available upon request to an Alaska Geographic Area Editor.

## Activation of a Decision Support Center

A Decision Support Center (DSC) may be activated during periods of high fire activity or in anticipation of increased activity within the Geographic Area. A DSC can provide a broad range of wildland fire decision and risk management products and can help facilitate decision support for incidents, local units, and the AMAC. A DSC offers a common point of contact for all fire managers and agency administrators and helps to provide coordination and consistency across the Geographic Area.

At Preparedness Level 3, the Alaska Geographic Area Editors (GAEs) will coordinate with the AICC Manager to order, if needed, a dedicated GACC-level Strategic Operational Planner (or subject matter expert with previous DSC experience). This position will coordinate with the GAEs, Protection and Jurisdictional FMOs, AICC, and AWFCG members to assess the current and projected decision support/analysis workload, evaluate the need to activate a DSC, and provide additional decision support assistance. At Preparedness Level 4, a DSC should be activated if that has not already occurred. A DSC may be activated prior to Preparedness Level 4 at the request of the AICC Manager, an AWFCG member, an AMAC member, or at the recommendation of the Alaska GAE Group. Upon DSC activation, notifications will be distributed from AICC, and the DSC Coordinator role will be assigned. The DSC will work for the AICC manager in coordination with an Alaska GAE Representative.

When activated, the Decision Support Center (DSC) will be staffed through single resource orders for various technical experts and specialists in positions including fire behavior analysts (FBAN), strategic operational planners (SOPL), long term analysts (LTAN), and Wildland Fire Decision Support System (WFDSS) support positions (THSP). The staffing arrangement will vary based on need and resource availability. See Chapter 10, Decision Support Center (DCS) for more information.

# WFDSS Decision Development

## When is a WFDSS Decision Required?

Not all wildfires require a WFDSS Decision. The Red Book states that for the federal agencies, decisions are required for fires that:

- Escape initial attack, or
- Exceed initial response, or
- Have both protection and resource benefit objectives.

In addition to the Red Book requirements, there are some additional requirements in Alaska. All the agencies including the State have agreed in the Statewide Operating Plan that Decisions will be published for:

- Non-standard responses involving a federal partner.
- Any Type 1, 2, or 3 fire involving a federal agency.
- At the request of any agency affected by a fire.

Conditions that require a new decision include:

- Conditions have changed and the course of action is no longer valid
- The fire exceeds the Planning Area
- Approval authority thresholds are exceeded.
- Or the incident complexity exceeds the current management organization.

## Who should participate in Alaska WFDSS Decision development?

Individual jurisdictions are responsible for determining whether a WFDSS decision is needed for a fire that affects or is likely to affect their lands. Any affected Jurisdictional or Protecting Agency may initiate the decision process.

Incoming incident management organizations for all fires with federal involvement and Type 3 or above complexity will be provided with approved WFDSS decisions reflecting the strategic intent of the involved jurisdictions. If another jurisdiction has not already taken the lead, the Jurisdictional Agency at the point of origin (or the Alaska Fire Service if the point of origin falls on ANCSA lands) is responsible for ensuring that a decision is coordinated for these fires.

The decision-making process requires a collaborative effort by all agencies responsible for management of the incident. The following will be given the opportunity to participate in the decision process.

- All Jurisdictional Agencies within the Planning Area. Jurisdictional Agency(ies) are responsible for identifying values of concern, strategic objectives and management requirements based on their unique land and resource management priorities.
- The Protecting Agency responsible for operational management of the incident. The Protecting Agency is responsible for developing an implementable, fiscally responsible course of action that meets objectives and complies with management requirements.

- BLM Alaska Fire Service maintains some fiscal responsibility for fires on Native Allotments and/or FWS, NPS and ANCSA lands and will participate in decisions for fires affecting these lands even within DOF protection areas.

## Who approves a WFDSS Decision in Alaska?

WFDSS approval authorities for Alaska fires are identified in Chapter 11 of the [Interagency Standards for Fire and Fire Aviation Operations \(Red Book\)](#) and in **Table 5** below.

- All Jurisdictional Agencies within the Planning Area (see **Table 16: Jurisdictional Agencies based on Ownership/Land Status**) will be offered the opportunity to approve a Decision.
- The Protecting Agency responsible for operational management of the incident will also approve the Decision.
- In addition, BLM Alaska Fire Service maintains some fiscal responsibility for fires on Native Allotments and/or FWS, NPS and ANCSA lands and will approve decisions for fires affecting these lands even within DOF protection areas.

Table 1: WFDSS Approval Authorities in Alaska

| Signature Type           | Agency                                       | DOI: < \$5 Million <sup>1</sup><br>USFS: Type 3,4,5 Incident | DOI: \$5 - \$10 Million <sup>1</sup><br>USFS: Type 2 Incident | DOI: > \$10 Million <sup>1</sup><br>USFS: Type 1 Incident |
|--------------------------|--|--|---|---|
| Jurisdictional Authority | Alaska State (incl. municipal, & pvt. lands) | Regional Forester  | Regional Forester   | Regional Forester   |
|                          | BIA (Native Allotments)                      | BIA Deputy Regional Director/Agency Super. <sup>2</sup>      | BIA Regional Director   | BIA Regional Director <sup>2</sup>                        |
|                          | BLM  | BLM District Manager <sup>3</sup>                            | BLM District Manager <sup>3</sup>                             | BLM District Manager <sup>3</sup>                         |
|                          | NPS  | NPS Park Superintendent                                      | NPS Park Superintendent <sup>4</sup>                          | NPS Park Superintendent <sup>4</sup>                      |
|                          | FWS  | FWS Refuge Manager   | FWS Refuge Manager <sup>5</sup>                               | FWS Refuge Manager <sup>5</sup>                           |
|                          | ANCSA Corporation                            | AFS FMO <sup>6</sup>   | AFS Manager <sup>6</sup>                                      | AFS Manager <sup>6</sup>                                  |
|                          | Other Federal and Department of Defense      | TBD <sup>7</sup>   | TBD <sup>7</sup>  | TBD <sup>7</sup>  |
|                          | USFS   | Agency Administrator (Working Level Cert.) <sup>8</sup>      | Agency Administrator (Journey Level Cert.) <sup>8</sup>       | Agency Administrator (Advanced Level Cert.) <sup>8</sup>  |
| Protecting Authority     | AFS Protection                               | AFS FMO  | AFS Manager   | AFS Manager   |
|                          | DOF Protection                               | Regional Forester  | Regional Forester   | Regional Forester   |
|                          | USFS Protection                              | Agency Administrator (Working Level Cert.) <sup>8</sup>      | Agency Administrator (Journey Level Cert.) <sup>8</sup>       | Agency Administrator (Advanced Level Cert.) <sup>8</sup>  |
| Fiscal Authority         | FWS, NPS, ANCSA & BIA (Native Allotments)    | AFS FMO <sup>6</sup>   | AFS Manager <sup>6</sup>                                      | AFS Manager <sup>6</sup>                                  |

<sup>1</sup> NPS/FWS/BIA – Cost estimate should be based on estimated final cost of the incident.

<sup>2</sup> BIA – For fires costing less than \$5 million, WFDSS approval authority is delegated to the Agency Superintendent for lands within the Fairbanks Agency (Doyon Region). Outside of the Fairbanks Agency, decisions for fires costing less than \$5 million will be approved by the Associate Regional Director. Approval authority for fires costing more than \$10 million has been delegated to the Regional Director.

<sup>3</sup> BLM–District Managers may redelegate WFDSS approval authority to a qualified Agency Administrator (AADM) in accordance with BLM policy.

<sup>5</sup> FWS – FWS WFDSS approval authority has been delegated to Refuge Managers for all fires in Alaska.

<sup>7</sup> Other Federal and Department of Defense Agencies - 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 federal and military lands in Alaska, including the Fort Greely Missile Defense site.

<sup>8</sup> USFS- This authority may be retained at the Regional Forester level.

## Steps for developing a WFDSS Decision

Once you have determined a decision is necessary it helps if you take some basic steps prior to initiating it in the WFDSS application. Note that simple WFDSS decisions for low complexity incidents can be created without requiring every step below, and can be created fairly quickly.

1. **Request analysis** – it takes some time to identify an analyst and conduct an analysis.
2. **Create an initial Planning Area** – this helps you to focus on a geographic area and identify partners and values.
3. **Identify & contact affected agencies** – all agencies in the Planning Area should be offered the opportunity to participate in the Decision.
4. **Conduct an initial strategy meeting** – meet with affected partners and develop a common operating picture before you begin work on the Decision.
5. **Create, edit, and publish a Decision** – Use the Decision to document decisions made in the strategy meeting and to identify additional questions that need to be answered. Continue to involve all partners throughout the process.

## Initial Strategy Meeting

The initial strategy meeting should be used to:

- Introduce partners
- Describe the current situation and discuss fire potential
- Identify values (Political, Security, Economic, Social, Infrastructure, Information)
- Identify Risks
- Develop Draft Objectives
- Discuss Strategy & Course of Action alternatives and their costs
- Discuss incident complexity & management organization
- Assign incident privileges, delegate decision tasks, and establish timelines

## WFDSS Decision Components

### Request a Fire Behavior Analysis

WFDSS houses fire behavior tools that can help fire managers assess fire behavior and growth potential for an incident. Modeled results help inform and support the overall strategic planning of the incident, and are usually included in a Decision. Using the model descriptions and examples below for guidance, determine which tools will best meet the incident's needs based on the types of questions being asked, and then work towards locating an analyst to generate some modeled outputs.

- **FSPro or Fire Spread Probability:** Long-term tool that relies on climatological records to produce an ensemble of fire simulations and probabilities of a fire reaching certain points on a map.
- **Basic Fire Behavior:** provides 'snapshot in time' fire behavior outputs for every cell of an analysis area.
- **STFB or Short Term Fire Behavior:** Provides potential fire spread (arrival times and major paths) for user defined length of time, such as a burn period.
- **NTFB or Near Term Fire Behavior:** Models fire growth for up to seven days although it's generally most appropriate for the 'near term' of one to three days.



**Requesting Procedures and Questions to Consider When Requesting an Analysis can be found at:**

<https://fire.ak.blm.gov/administration/aaguide.php>

## **Situation Tab**

### **Create a Planning Area**

Begin by creating a Planning Area on the Situation tab. Planning Areas need to be large enough to include:

- Values you are concerned about.
- The physical reality of where the fire could burn during the life of the current decision (even if you don't want it to burn there.)
- Where you want to contain the fire.
- Where actions are planned (e.g., firelines, evacuation points, protection points.)
- Contingency plans and Management Action Points (M.A.P.s.)
- Fire behavior modeling outputs.

Drawing a large planning area may incorporate more FMUs or Strategic Objectives, which in turn may require you to include additional jurisdictions, and address more Strategic Objectives, Management Requirements, and values at risk; but if your Planning Area is too small, you will have to create a new decision each time management actions occur outside of it.

### **Identify Decision Participants & Grant Incident Privileges**

All Agencies and Units that fall within the Planning Area should be offered the opportunity to participate in the WFDSS planning process.

#### **Owners**

All incidents with a decision must have a minimum of one Owner. It is usually best to assign multiple owners in case one is unavailable. Only Incident Owners (and those with the Geographic Area Editor role) can assign privileges, initiate decisions, and request reviews.

Owners should be familiar with the WFDSS application and understand the owner privilege. It is reasonable to assign one owner for each agency participating in the decision.

#### **Editors**

Editors are responsible for editing decision information, requesting analyses, and uploading shapes and other files to the decision. Typically in Alaska, Jurisdictional FMOs, Protecting FMOs, SOPLs, Analysts, others involved in decision editing are assigned the Editor privilege.

#### **Reviewers**

Reviewers are provided an opportunity to review a decision and suggest edits prior to its approval and publishing. Review is not required and a decision can be approved and published without input from any or all reviewers.

Jurisdictional FMOs, resource specialists, and other subject matter experts without approval authorities are often assigned the Reviewer privilege.

## Approvers

Approvers have the authority to approve decisions or return them for edits. Agency-specific WFDSS approval authorities are identified in Chapter 11 of the Red Book. The Alaska Statewide Operating Plan further defines WFDSS approval authorities for Alaska incidents to include:

- An Agency Administrator from each of the participating jurisdictions, and
  - For ANCSA incidents in AFS protection areas the Protecting Unit FMO represents ANCSA jurisdictions as the jurisdictional authority.
  - For ANCSA incidents in the DOF Fairbanks the AFS Military Zone FMO represents ANCSA jurisdictions as the jurisdictional authority.
  - For ANCSA the AFS South Zone FMO represents ANCSA jurisdictions as the jurisdictional authority.
- The Protecting Unit FMO, and
- The Fiscal Authority for DOI/ANCSA incidents if applicable.
  - For ANCSA, FWS, NPS, and BIA incidents in AFS protection areas the Fiscal Authority is the Protecting Unit FMO.
  - For ANCSA, FWS, NPS, and BIA incidents in the DOF Fairbanks, Delta, and Tok Areas the Fiscal Authority is the AFS Military Zone FMO.
  - For ANCSA, FWS, NPS, and BIA incidents in all other DOF protection areas the Fiscal Authority is the AFS South Zone Zone FMO.

## Email Notifications

WFDSS incident email notifications for decision participants can be toggled on and off in the Incident Privileges screen. At least one Approver and one Owner must accept emails.

## Identify Values within the Planning Area

It is a good idea to insert a “Values of Concern” section in the Risk portion of the decision that lists values identified by each unit participating in the decision. In Alaska, the auto-generated WFDSS Values Inventory will not accurately represent values of concern in most cases. Sources of values data for Alaska include (but are not limited to):

- The AICC Digital Atlas Known Sites Database
- Borough parcel/building footprint data
- Agency/Unit values data
- Native Allotment data
- AIWFMP Fire Management Options

Shapefile(s) containing values data may be uploaded to WFDSS as Objective Shape(s) in order to display them in the Situation tab. Clip shapes to a reasonable size (Planning Area) before uploading.

## Incident Map

WFDSS will auto-generate an Incident Information table for inclusion in the decision. In Alaska, the quality of the auto-generated Incident Map is usually poor; therefore, it is a good idea to create an incident overview map in ArcGIS or other mapping program, upload it to WFDSS, and insert it here.

Adobe pdf files cannot be uploaded to WFDSS, so maps must be saved as .png or .jpg image files. WFDSS will resize large format maps to fit on a letter- sized page, but it is best to create letter-sized maps for upload. If landscape layout maps are rotated and saved in the portrait orientation they will fill an entire page instead of a half page, and may be more readable.

## Incident Information

WFDSS will auto-generate an Incident Information table for inclusion in the decision. Review the table to ensure information is complete and accurate.

| NAME                         | VALUE                                   |
|------------------------------|---|
| Incident Name                | Template Fire                           |
| Unique Fire Identifier       | 2017-AKUYD-00TEST                       |
| Responsible Unit Name        | Alaska Fire Service - Upper Yukon Zone  |
| FireCode                     |   |
| P-Code                       |   |
| Point of Origin              | 68.16667 N / 142.71611 W                |
| Incident Size                | 0.1 acres                               |
| Latest Perimeter Size        | 0 acres                                 |
| Incident Cause               | Natural                                 |
| Incident Type                | Wildfire                                |
| Incident Discovery           | 02/12/2017 15:00                        |
| Contained                    |   |
| Controlled                   |   |
| Out                          |   |
| Jurisdictional Unit          | AKARR - Arctic National Wildlife Refuge |
| Jurisdictional Agency(s)     | USFWS                                   |
| Geographic Area (prep level) | Alaska (1)                              |
| Owner Name(s)                | Peter Butteri                           |

**Table 2: Sample Incident Information Table from WFDSS**

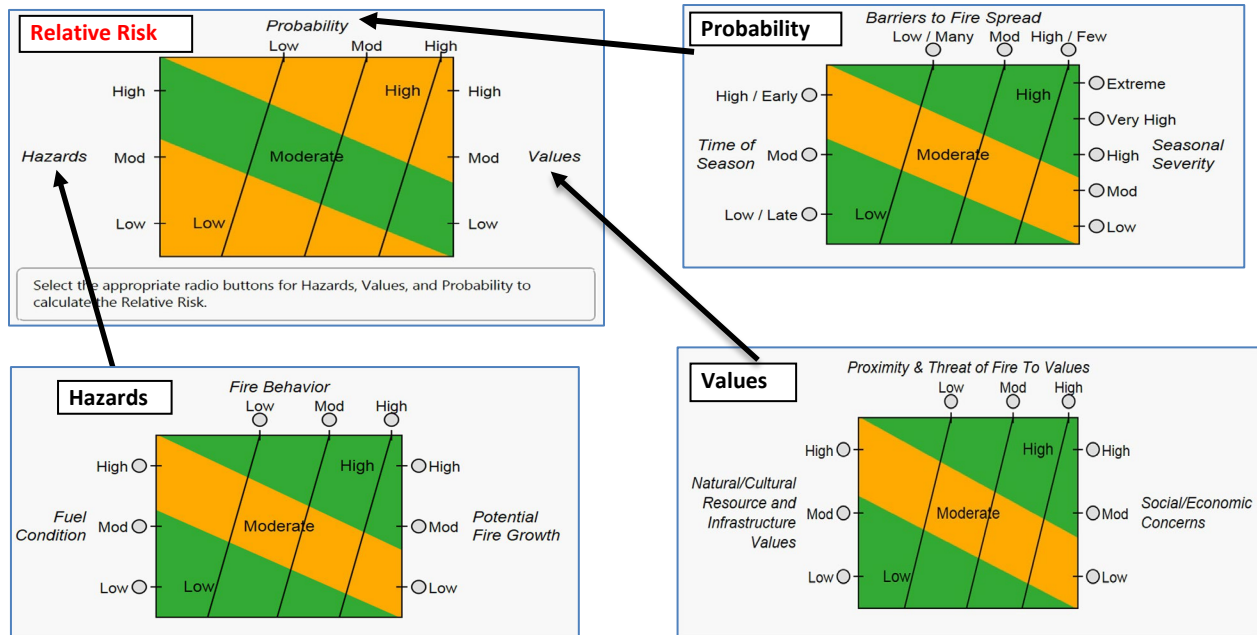
Note that:

- The Responsible Unit Name will be the Protecting Zone/Area/Forest at the Point of Origin.
- The Jurisdictional Unit will be the Jurisdictional Unit Identifier and Unit Name at the Point of Origin.
- Most of the information in the Incident Information table is passed by IRWIN from the Computer-aidedDispatch System (CAD). **Corrections usually need to be made in the originating CAD (either FireBeans or IFM in Alaska).**
- The Jurisdictional Agency(s) list is an exception and is not passed by IRWIN. This list is auto-generated in WFDSS based on units falling within the Planning Area. It can be overridden manually to include or exclude agencies, but each time the Planning Area is modified these values will be overridden by auto-generated data that may need to be manually updated.
- In Alaska, ensure the boxes under the Other Information heading are checked for Jurisdictions that will be participating in the decision process. It is acceptable to uncheck an Agency that has jurisdiction within the Planning Area, but has opted out of the planning process.
- You may want to insert an “Additional Information” section in the Incident Information portion of the decision that identifies one or more of the following:
  - AIWFMP Management Option at Point of Origin
  - A short narrative describing fire discovery and initial actions that were taken on the fire.
  - Participating Jurisdictional Units, Agency Administrators, and FMOs, and their contact information.
  - Jurisdictional Units and Agency Administrators within the Planning Area that have elected not to participate in the decision process.
  - Contact information for the “Lead” Editor of the decision.

## Relative Risk Assessment

The Relative Risk Assessment (RRA) is required before publishing a Decision for an incident. Its purpose is to document the consideration of risk by fire managers, assist in the management of the incident, and is used by the Organization Assessment to aid in determining complexity level and management organization type. The RRA charts and accompanying **notes** (the most important part!) are all included as part of the published Decision.

The RRA chart uses three risk components; *values*, *hazard* and *probability*. Despite appearing as the first risk chart in the decision, it is not itself editable, but is populated by data entered in the three risk components. The RRA **notes text box** should contain a summary of the values of concern, the hazards associated with the fire, and the probability that values will be affected by the fire.



### RRA Notes Examples

- Values at risk are moderate to high. The fire is located approximately 5 miles from Willow, Alaska within a highly utilized recreational area with both public and private recreational infrastructure. Fuels are extremely dry with BUI at historic highs for this time of year. It is late in a typical fire season for this area, with the diurnal effect starting to play a role. No significant precipitation is expected within the next 7 days. Winds are the greatest hazard for continued fire spread.
- Sparse values at risk in the planning area of this fire, and recent precipitation has minimized the risk of the fire moving towards the Alaska Highway to the south.
- Numerous structures, subdivisions, and military and communications infrastructure are within the planning area of this fire. The proximity of this fire to the community of Fairbanks will generate lots of public interest, and smoke from this incident along with numerous others around the state will cause continual impacts until there is a significant change in the weather. The fire started on solstice day, and the days will continue to be long for weeks out with longer burning periods. There is nothing in the medium to long term forecast to suggest a season ending event on the horizon.

## Values:

- **Proximity and Threat of Fire to Values:** Threat to values based on their proximity to the fire.
- **Natural/Cultural Resource Concerns:** Native allotments, structures, critical municipal watershed, commercial timber, developments, recreational facilities, power/pipelines, communication sites, highways, unique natural resources, special designated areas (i.e. wilderness), T&E species habitat, and cultural sites.
- **Social/Economic Concerns:** Impacts to social or economic concerns of an individual, business, community or other stakeholder; other fire management jurisdictions; tribalsubsistence or gathering of natural resources; air quality regulatory requirements; public tolerance of smoke, including health impacts; potential for evacuation and ingress/egress routes; and restrictions and/or closures ineffect or being considered.

|                              |   |
|------------------------------|---|
| <b>Values Notes Examples</b> | <ul style="list-style-type: none"><li>• <i>Fire is located approximately five miles southwest of the community of Willow. The fire is burning within a popular recreation area. There are various recreational structures including a large boat launch facility. Private and public recreation cabins are located along the various lakes. Nancy Lake State Recreation Area is closed to recreation and hunting. A portion of Game Management Unit 14A, Willow Swamp" is also closed. Division of Forestry has also closed access to public lands.</i></li><li>• <i>Values at risk consist of a two Native Allotments, though they are on the opposite side of the Kuskokwim River, which the fire has a low probability of crossing. There is a DOF Admin cabin within proximity of the fire, and an expired State Lease for a logging operation which has a number of structures, but is not being protected due to expiration of the lease.</i></li><li>• <i>There are upwards of 12 structures in the planning area of the fire that are currently being evaluated for protection status. A mining site to the East in Canada has been identified by Canadian mangers as little value at risk/low priority. There are several Native allotments along the Alaska Highway to the south.</i></li></ul> |
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## Hazards:

- **Fire Behavior:** Consider fuel conditions where fire is currently burning and where it will be burning. Evaluate fuel conditions that exhibit high ROS and intensity for your area, such as those caused by invasive species or insect/disease outbreaks; and/or continuity of fuels.
- **Potential Fire Growth:** Considerations would include current and expected fire growth based on fire behavior analysis and the weather forecast and/or the ability to control the fire.
- **Fuel Condition:** Evaluate fuel conditions that exhibit high ROS and intensity for your area, such as those causedby invasive species or insect/disease outbreaks; and/or continuity of fuels.

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| <b>Hazards Notes Examples</b> | <ul style="list-style-type: none"><li>• <i>Fuels are extremely dry, following an unusually long periods without precipitation for this time year south of the Alaska Range. The fire was initially pushed by a strong north wind event. If the winds pick up again the fire is expected to move.</i></li><li>• <i>Fuels indices have moderated somewhat from extreme values but without significant rain the potential still exists for additional spread. There is not yet any season ending event predicted in the extended weather forecast. The last report from aerial observation reported no visible smokes (7/18/19).</i></li><li>• <i>Recent precipitation has minimized fire activity, and Alaska is entering the mid to late season phase with days getting shorter and increased chance of wetting rains.</i></li><li>• <i>The fuel codes are indicating VH, the continued hot and dry weather conditions predicted for the upcoming weeks (July 9) will further dry the deeper duff. There is a solid mix of black spruce among the hard woods, providing ample spotting potential and containment issues. As the fire burns into areas with black spruce it will have canopy fuels to sustain crown fire, causing issues with torching and associated spotting. Due to time of year, minimal fuel breaks, dryness of fuels etc, there is alignment for large fire growth. The fuels that are providing a slowing to the fire spread will become available if the persistent hot and dry conditions prevail.</i></li></ul> |
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## Probability:

Probability refers to the likelihood of a fire becoming an active event with potential to adversely affect values. For more detailed information.

- **Time of Season:** Evaluate the potential for a long-duration fire and rank this element Low, Moderate or High. Time remaining until a season-ending event should be considered.
- **Seasonal Severity:** Evaluate Seasonal Severity based on fire danger indices and rank this element Low/Moderate, High or Very High/Extreme. Considerations include fire danger indices such as CFFDRS Buildup Index (BUI), live fuel moistures, adjective fire danger rating, and geographic area preparedness level.
- **Barriers to Fire Spread:** Evaluate the barriers to fire spread as a measure of natural defensibility of the fire's location and an indication of the degree of potential mitigation actions needed.

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| <b>Probability Notes</b> | <ul style="list-style-type: none"><li>• <i>The probabilities for large fire growth are diminished due to the late stage of fire season, with the diurnal effect and shorter burning periods playing a role. Barriers to fire spread include the various small lakes, ponds, Susitna and Deshka River.</i></li><li>• <i>Alaska has entered the normal mid-season phase, with shorter hours of daylight and higher probability of fire season slowing or ending events. Mid to lower level drought codes are still in very high to extreme for this area, so short periods of drying can cause the large fire growth, but the last report showed no smokes (7/18/19), so an extended period of drying would be needed, if there is still hidden heat on the fire.</i></li></ul> |
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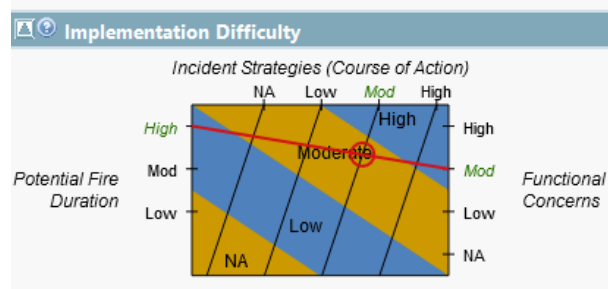
## Organization Assessment

The Organization Assessment allows you to evaluate risk in relationship to resources needed and available. The Organization Assessment (OA) guides in the incident management organization selection. Agency Administrators may choose a different organization than what is recommended, but **Reasoning should be documented in the Rationale text box.**

The OA is derived by incorporating *Relative Risk, Implementation Difficulty* and *Socio/Political Concerns*. The OA can be accessed and modified at any time and is visible to the approver when completing the [periodic assessment](#). The OA must be updated if the Relative Risk Assessment is modified. No new decision is required when this occurs.

## Implementation Difficulty:

- **Potential Fire Duration:** This element is rated during the RRA process and transferred to the Organizational Needs Assessment.
- **Incident Strategies (Course of Action):** Evaluate the level of firefighter and aviation exposure. Considers the likelihood that those resources will be effective; exposure of firefighters; reliance on aircraft to accomplish objectives; and whether there are clearly defined trigger points.

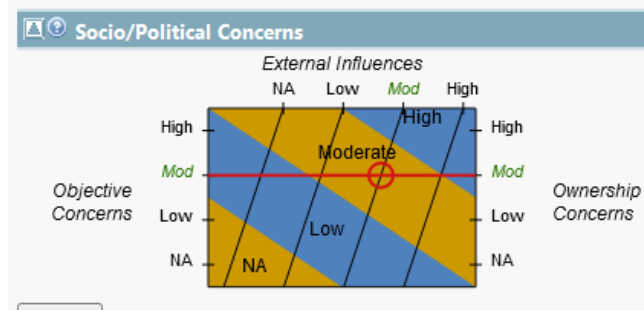


- **Functional Concerns** Incident management functions (logistics, finance, operations, information, planning, safety, and/or specialized personnel/equipment) are inadequate and needed; availability of resources; access to EMS support; heavy commitment of local resources to logistical support; ability of local businesses to sustain logistical support; substantial air operation which is not properly staffed; worked multiple operational periods without achieving initial objectives; incident personnel overextended mentally and/or physically; Incident Action Plans, briefings, etc. missing or incomplete; performance of firefighting resources affected by cumulative fatigue; and ineffective communications.

|                         |  |
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| <b>Impl. Difficulty</b> | <ul style="list-style-type: none"> <li>• Due to the other large fires in South Central and Kenai, Deshka Fire priority for receiving resources is ranked fourth. Firefighters are providing structure protection in the Red Shirt Lake area. Helicopters continue to be used to move equipment, supplies and personnel to remote sections of the fire. Extremely dry fuels, heavy brush, beetle kill and fire weaken trees have slowed crews. Due to the extremely dry duff layer and residence time, ash pits are another concern.</li> <li>• Allotments are protected by natural barrier (Kuskokwim River), and the Forestry cabin has already been prepped and plumbed for structure protection. Other structures in the area are being evaluated for protection status, but should be relatively easy to protect if needed.</li> </ul> |
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### Socio/Political Concerns

- **Objectives Concerns:** Clarity; ability of current organization to accomplish; disagreement among cooperators; tactical/operational restrictions; complex objectives involving multiple focuses; and objectives influenced by serious accidents or fatalities.
- **Ownership Concerns:** Disagreements over policy, responsibility, and/or management response; fire burning or threatening more than one jurisdiction; potential for unified command; different or conflicting management objectives; potential for claims (damages); and disputes over suppression responsibility.
- **External Influences:** Media involvement, social/print/television media interest; threat to safety of visitors from fire and related operations; restrictions and/or closures in effect or being considered; preexisting controversies/relationships; smoke management problems; and sensitive political concerns/interests.



|  |   |
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| <b>Soc/Pol Concerns Notes Examples</b> | <ul style="list-style-type: none"> <li>• The fire is located in a popular recreational, fishing and hunting area. The nearby hunting area, Willow Swamp, which was slated to open has been closed. Multiple recreational cabins (private and public) are located along the various lakes. Public access to the area is also closed.</li> <li>• Expired land use permit has associated structures and signs of recent use, but is labeled as non-protect due to expiration of permit.</li> </ul> |
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## Objectives

Strategic Objectives and Management Requirements come from the Fire Management Plans and the Land/Resource plans. They are then tiered down to specific Incident Objectives and Incident Requirements for the Planning Area. For example, a unit's Strategic Objective for a given area provides the desired condition, standard, guideline or objective relating to management of the land; the incident objectives and requirement should directly relate to what that guidance means for the current fire at hand under the current and expected conditions.

### Incident Objectives & Requirements

**Incident Objectives** are site specific guidance and direction necessary for the selection of appropriate strategy(s) and the tactical direction of resources. Incident objectives are based upon agency administrators' direction and constraints. Incident objectives must be measurable, yet flexible enough to allow for strategic and tactical alternatives.

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*AK Tip: One approach to objective writing is to use the Objectives section to document what values you want protected. If there are only a few values they can be listed in individual objectives such as "Protect the public-use cabin on Jatahmund Lake." If there are many values you may want to group them either by category or by geographic area. For example, "Protect the communities of Chugiak, Peters Creek, and Eagle River" or "Protect Native Allotments, private parcels, and subsistence camps along the Yukon River between Hess Creek and the Bridge."*

*An additional objective is merited if there are portions of the fire that can or should be allowed to spread naturally as in, "Allow fire to play its natural role within the Kenai Wilderness Area to the extent possible."*

*Save the strategic "how" for the Course of Action section and save any constraints, stipulations, and best management practices for the Requirements section.*

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**Incident Requirements** are incident-specific directives, standards, specifications, or constraints that need to be complied with when implementing management actions on a specific fire incident. Incident requirements derive from the Land Management Requirements, legal authorities, or other local influences (e.g., county commissioners, air quality boards) that pertain to the incident or its associated actions; they often define the limitations or "sideboards" when implementing the course of action.

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*AK Tip: Some common Incident Requirement categories to consider including are:*

- *Safety/Risk*
  - *Inclusive Work Environment*
  - *Public Information*
  - *Cooperation*
  - *Natural & Cultural Resource Protection*
  - *Invasive Species*
  - *Fiscal Responsibility*
-



When developing Incident Objectives and Requirements:

- Identify what types of values and/or resources need to be addressed:
  - Review the Strategic Objectives and Management Requirements.
  - Review other sources of incident direction such as the delegation of authority, the briefing package or other related documents.
  - Review the Values Inventory.
  - Obtain local knowledge about values or events
- Develop Incident Objectives and Requirements that:
  - Tier from the over-arching Strategic Objectives and Management Requirements and address the what, where, when and why.
  - Include content that is specific to the location, conditions, and time of the fire.
  - Address values included in the Values Inventory and known locally
  - Are aligned with other sources of direction to include delegation of authority, the briefing package or ad hoc discussions.
  - Communicate the relative importance of one objective over another.
- **Avoid** developing Incident Objectives that are:
  - Generic in nature or have vague terms that have different meaning to individuals (e.g., keep the fire small)

For more detailed guidance on developing Incident Objectives and some Alaska-specific samples see <https://fire.ak.blm.gov/administration/aaguide.php>

## Course of Action

An overall plan describing the selected strategies and management actions intended to meet incident objectives and requirements based on current and expected conditions.

The Course of Action (COA) is comprised of one or more Action Items that are developed to accomplish Incident Objectives and/or Requirements. Use this section to clearly define the strategy and actions to the IMT. As you are developing Action Items make sure they help to accomplish the Incident Objectives or Requirements. If an Action Item does not contribute to the accomplishment of Objectives or Requirements it may need to be modified, or it may be an indication that there are gaps in your Incident Objectives and Requirements that need to be corrected.

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***AK Tip:** Courses of Action should follow directly from one or more Objectives or Requirements. The Course of Action should provide some strategic detail about how to accomplish the Objective or meet the Requirement, but should not be overly tactical or prescriptive. For example:*

***Objective:** Protect the community of Chalkyitsik from fire and smoke impacts.*

***Courses of Action:***

- 1. Prepare structures and other values within the community of Chalkyitsik and defend them from fire impacts.*
  - 2. Prepare indirect firelines and burnout as needed to protect the community of Chalkyitsik.*
  - 3. Monitor smoke impacts to the community. Provide logistical support for evacuation of at-risk population.*
  - 4. Coordinate evacuation procedures with the Chalkyitsik Village Council and the Alaska Department of Homeland Security.*
  - 5. Provide timely and accurate fire information to the residents of Chalkyitsik and Fort Yukon.*
- 

Create Action Items in a way that an individual Action Item can be easily excluded from a pending decision if it's no longer applicable. For more detailed description of the relationship between a Course of Action and Incident Objectives as well as some Alaska-specific examples see <https://fire.ak.blm.gov/administration/aaguide.php>.

## Management Action Points

Management Action Points or M.A.P.s can be useful for identifying evaluation points where additional actions or strategy changes may be required. They can provide reminder “alarms” for distant values that are not immediately threatened but may be in the future. Management Action Points are not always lines on map. They may be activated on a key date (hunting season opening) or based on an environmental condition such as a locally common wind-event. Management Action Point documentation should always include:

- Intent
- Condition
- Action

Optionally, it may include:

- Estimate of additional resources needed to accomplish
- Estimated time for implementation.
- Estimated cost of implementation
- Hazards & mitigations associated with the condition and/or the action.

As with Courses of Action, an effort should be made to avoid overly prescriptive Management Action Points. Actions identified should be strategic and not tactical.

## Rationale (Decision Summary)

The Rationale portion of a decision is developed by the decision Approver, or by an Incident Editor that can effectively communicate the Agency Administrator’s wishes. The Rationale:

- Documents why a specific course of action was chosen,
- Records the risk decision dialog that has occurred among agency administrators and incident managers, and
- Provides the opportunity to tell the “story” of the incident.

It works well to write the Rationale from the perspective of the Agency Administrator(s). Consider using the following template:

**Our decision is...**Discuss what is allowed in the LRMP, what are the conditions of success, what is the probability of being successful, expected duration of the incident, what was considered but rejected

**The cooperators involved in sharing this decision process are...**Discuss who and why

**The current fire situation is...**Describe the area the fire is burning in and the fire environment

**The values of concern are...**Summarize why they are important and the likelihood of them being impacts, area closures

**The Relative Risk Assessment and Organization Assessment indicate...**Tie to values, highlight expected firefighter exposure, IMT needs

**The following triggers would indicate revisions to or a new decision is needed...**Describe low probability/high consequence events.