This is a brief refresher outlining the various sections of the Wildfire Decision Support System (WFDSS). These presentation will refer to a more in depth modular training videos. The Alaska Fire Science Consortium – is graciously hosting the Alaska Scenario Modular. Also please refer to the National WFDSS training documents
The Protection Agency is responsible for initiating new fires in WFDSS. Fires within State protection will be uploaded IFM and Federal Agencies – through Fire Beans.

Fires will need to be transferred to the appropriate Jurisdictional Agency. It is the Jurisdictional Agency policy and discretion to complete additional entries or to publish a decision.
• Strategic Objectives are set forth approved
  • Land Management Plan
  • Resource Management Plan
  • Guiding Documents “Desired Future Conditions
    • These are broad statements that identify changes in water, soil, air or vegetation.
  • Strategic Objectives deal with large areas over long time periods

• Management Requirements
  • Requirements set forth in an approved Land Management Plan, Resource management plan, Fire management plan.
  • These are directives, standards, specifications or constraints that must be complied with – when implement management actions.
• LRMP, Unit/ FMU should be uploaded in WFDSS pre – season if not uploaded should be discussed with
  • Protection Administrator
  • Jurisdictional Administrator
Do you have your User Name and Password

Request an account
Left hand menu on Home screen
Recommended User Roles
  Jurisdictional FMO: Author, Data Manager
  Protecting FMO: Author
  Agency Administrators: Author (Data Manager optional).

Training VS Production
Blue Banner Green Tabs = Production
Gold Banner / Yellow Tabs = Training

Single Login / password – but user’s roles may be different for Production/ Training
Roles granted to a User in Training are not mirrored to Production

Production and training run on different databases
Training Page / Help/ Feedback
Add your information – secret question/ answer.
Most are designed to be uploaded in WFDSS pre-season – spatial planning – site specific.

Here are other pre-season tasks.

Manage Unit/ FMU Strategic Objectives and Management Requirements (Data Manager role).

- Based on Unit Land Resource Management Plan and Fire Management Plan
- Strategic Objectives deal with large areas over long time periods and project intended outcomes of management activities that contribute to the maintenance or achievement of desired conditions.
- Management Requirements – directives, standards, specifications or constraints that must be complied when implementing management actions

Spatial planning
- Strategic Objectives and Management Requirements associated with shapes
- Auto-populate based on incident shapes
- No spatial planning in Alaska yet, US Forest Service implementing this year.

FMU Planning (not spatially enabled)
- Manually applied to incidents through FMU/SO list tab in left hand menu.

FMU Planning (spatially enabled)
- Similar to Spatial Planning but not as flexible
- SOs/MR associated with FMUs and apply to all incidents in FMU
View of the Strategic Objectives
View of the Management Requirements –
Modular 3 Incident Initiation

All Alaska incidents will be initiated either in Fire Beans or IFM by a Protecting Agency dispatch Office and migrated to WFDSS through IRWIN. Most fields will be read-only in WFDSS (greyed out).

- Protecting and Jurisdictional FMOs should review the data on the Information tab and ensure that the information is correct. See AK AOP Table 5.
- The information tab – most fields will be read only in WFDSS (greyed-out)
  - Changes should be made in CAD (IFM/ Fire Beans) to ensure data consistency
- Ownership of the incident should be accepted by the Jurisdictional agency and privileges should be granted to appropriate jurisdictional, Protecting and Fiscally responsible representatives.
- Jurisdictional will choose fMU (Strategic Objectives/ Management requirements)

Nationwide review of 2014 fires found that there was a disparity between the decision, the delegation of authority, leader’s intent and the In Briefing package.

Validate initial response and assess initial organization requirements
Note – the individual must have a WFDSS account and be in the system
Ownership of the incident should be accepted by the Jurisdictional Agency and privileges should be granted to the appropriate people.
See Alaska Statewide Annual Operating Plan Table 5
• Jurisdictional FMO – Owner / Editor
• Jurisdictional Agency Administrator – Approver/ Editor
• Protecting FMO/ Agency Administrator – Approver/ Editor
• Fiscal Approver – Approver/ Editor.
Map from AICC site

- Statewide Fire Management Options are not available in Production (they are working on it).
- Perimeters, Objective Shapes, Analysis shapes, and M.A.P.s can be uploaded from GIS or created
- Planning Area and Points of Interest (one at a time must be added within WFDSS
- Base Layers
  - Google Map imagery good – but does not publish requires screen capture
  - WFDSS Tops – distorted projection –
- Fire Environment and Safety
  - MODIS/VIIRS
- Disturbance History – fire history
- Boundaries
  - Jurisdictional Agencies
  - Responsible Agencies
- Designated Areas i.e. Wilderness
- Unit Fire Planning
- Best to open maps on AIC website including Known Sites or IFM concurrently with WFDSS and screen capture.
Map from the Integrated Fire Management System (IFM) – State of Alaska
Module 5 - need to create a decision

**Default Decision requires Internet Explorer 11 or Chrome**

- When is the decision required – Red Book Policy
  - Limited / no action fires escape initial attack; extended attack, multiple objectives, resource management objectives.
  - Suggest that most of the limited fires that remain active longer than a couple of weeks have a resource objective and a protection objectives
- No Default objective or validation tab this year.
  - Periodic assessment only available after a decision published.
- Limited – no action fire
  - Create Monitor course of action
  - Use incident notes to document revalidation
- There is Default Decision and Advanced Decision
  - Advance Decision is “old” decision and for those with older internet explorer
  - Default Decision is new decision – required with Internet Explorer 11 and Chrome.
  - Be careful about how you tab
Module 5 – to access select pending decision and then Edit
Default Decision Editor new in 2015
Decision Requirements Checklist
Navigate using vertical tables
Left to right
Come are auto generated some are customizable
  Save and Return
  Check In / Out Section
  * if you click on the horizontal menu – you will be taken out of the default editor and will
  have to navigate back in

Remember to use the Save and Return Buttons when adding content

Check in / out section by section.

Note if you click on the horizontal menu you will be taken out of the editor and will have to
navigate back in.
This will give you a list of the items that need to be completed – the check mark indicates complete
Module 5A – if you wish to add additional information / image – click Add Incident Information Section
Modular 5 B— parts of the decision editor
Incident Information – as mentioned this is read only
however there is the ability to insert images, information.

Weather – auto populated with zone forecasts
able to insert section including images
The Weather forecast current stays current until published.
Does not auto-populate in Training
Module 5B – added additional information
Module 5C Modeling: This section must be pre requested – in order for the items to be included in the decision.
- Short Term 1-3 days
- Near Term 1-6 days
- FSPro - > 6 days.

Alaska Process Guide under review – the information will be posted in the Agency Administrative Guide appendix.
- Call First
- Be prepared to discuss your concerns and provide additional input.
- Pool of Alaskan analysts available. If not then analyst will be assigned from the National pool.
- If you place an online request – may have a delayed response.

- Last part of this slide section – additional material including imagery.
Module 5D Risk  remember one does not have to complete the decision in order from left to right –
To make changes/ add – select assess Relative Risk

Risk – Assess Relative Risk
Risk Assessment:

Values: Natural/ cultural/ and infrastructure; proximity and threat to values, social/economic concerns

Hazards: fuel conditions, fire behavior, potential fire growth

Probability: time of season, barriers to spread, seasonal severity
Module 5D Risk  remember one does not have to complete the decision in order from left to right –
To view the risk and the notes select view section
To assess Organization

**Organizational Assessment:**
Implementation difficulty: duration, incident strategies, functional concern
Socio / Political Concerns
External Influences: such as limited local resources

Ownership Concerns – Need to document: Consideration disagreements over policy, responsibility, and or management response, different or conflicting management objectives, ...

Current version recommends organization and allows override.

Long duration fires always recommend 3,2,or 1 in Alaska unstaffed Limited fires should be overridden to Type 4 with Notes.
New in 2015
Slider available optional inclusion

Insert Section including images
View of the Benefit – if include the slider
Objectives  

*Remember the Strategic Objectives and Management requirements auto populated based on FMU selection*

Incident objectives: primary method of directing actions and will greatly influence the fire cost, duration and outcomes. The incident objectives are documented in the WFDSS, Delegation of Authority and the IAP. These objectives reflect the Agency Administrator’s intent – desired outcomes and avoid and avoid the undesirable consequences.

- Alignment with LRMP
- Clear and few in number
- What when where why
- Give an overall sense of priority

Incident Requirements – related to laws and agency policy – which limit or prohibit specific actions. Requirements are also documented in the WFDSS, Delegation and IAP.

*Think about how to communicate the Leader’s Intent, and assist the IMT in understanding the priorities of the incident: What, Where, When, and Why. The How is negotiated with the Team.*
Module – Objectives - view
Module 5G Course of Action
An overall plan that describes the selected strategies and management actions to meet the incident objectives of requirements.

Management Action Points – if spatial create in Situation Tab or import
- Condition
- Action
- Resources

The Relative Risk Assessment (RRA) and the Course of Action (COA) are linked where the RRA identifies the values/benefits and the COA is the plan to control the risk or to enhance the benefits.

The Agency Administrator needs to add information regarding the expectations and the higher priority.
Module 5 Course of Action View
Module 5 H Costs can add the spreadsheet.

Cost (new in 2015)
Projected cost
Allows comment
Insert section i.e. I suite,
Protecting Agency will have best information

Remember in some cases will have Jurisdictional, Protecting and Fiscal
Modular 5 continued

Synthesis of entire Decision

• My decision is – discuss what is allowed in the overarching land management plan, 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 values of concern are.. Summarize why they are important and the likelihood of there being impacts, area closures
• The relative risk assessment and organization needs indicate – tie to the values, highlight expected firefighter exposure, IMT needs
• The current fire situation is... describe the area the fire is burning in and the fire environment.
• The following triggers would indicate revision to this decision or that a new decision is needed. Describe low probability / high consequences events.
Module 5 I – view of the Rationale
Before you can begin the Review Approval Process

- Ensure that all parts of the decision process has been completed (see requirement box)
- Select Pending Decision
- Check in
- The Begin Review / Approval box should be editable
Once you begin – no one will be able to modify the content of the decision. Confirm you want to start

Check it in
Draft PDF
Best to obtain consensus prior to beginning the review approval process avoids rejecting decisions.
Confirm that appropriate approvers will be available to approve
Begin the process
Approve or reject
Set and save the periodic assessment timeline (14 days maximum)
Create and download published PDF
Module 6 publishing and periodic assessment
Remember – to allow editors time to review and edit— but not too much time to delay the process.
Once click the button for approving – “locks” the decision from others
Any one approver can complete periodic assessment
Are the incident and strategic objectives being satisfied with the current course of action?
Is the fire expected to remain within the planning area?
Is the actual cost of the fire in line with the planned costs in the published decision?
Has there been any unexpected fire growth since the last assessment?
Have additional values been threatened?
Have significant resources not identified in the Course of Action been requested?
For Unstaffed limited fires works well to complete assessment each time fire is monitored.

A new Decision can be initiated any time based on changing conditions and periodic assessments.
Ready to sign into Production?
ANALYSIS

- Analyses must be requested prior to including the information in Decision
- Alaska Process (under review)
  - Pool of Alaskan Analysts (if not, then National)
  - Call first
    - Have a question that needs an answer
  - If use On-line Fire Behavior Request – may be delayed response
## Analysis Options

<table>
<thead>
<tr>
<th>Tool</th>
<th>Fire Growth Models in WFDSS</th>
<th>Fire Spread Probability (FSPx)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short-Term Fire Behavior (STFB)</td>
<td>Near-Term Fire Behavior (NTFB)</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>1 to 3 burn periods</td>
<td>1 to 7 days</td>
</tr>
<tr>
<td><strong>Weather</strong></td>
<td>Daily, constant weather, wind, &amp; fuel moisture*</td>
<td>Hourly, variable weather, wind, &amp; fuel moisture</td>
</tr>
<tr>
<td>Gridded Wind</td>
<td>Yes (Windings)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Spotting</strong></td>
<td>Yes (1 ember per node; start with 10% spotting probability)</td>
<td>Yes (16 embers per vertex; spotting probability value lower than STFB; start with .95%)</td>
</tr>
<tr>
<td>Principal Output(s)</td>
<td>Major flow paths; arrival times</td>
<td>Perimeter growth</td>
</tr>
</tbody>
</table>

*plus ERC seasonal trend, auto-correlation, standard deviations & artificial time series