

USFS Fire Response Protocol's 7 Standards for Managing Incident Risk & Wildland Fire Decision Support System (WFDSS)

Overview

There are many different ways to describe, discuss, and document a risk informed decision process. The deliberative risk analysis in the Wildland Fire Decision Support System (WFDSS) is one example; the Seven Standards for Managing Incident Risk (Chief's 2013 FS Wildland Fire Response Protocol document) is another; while the six components to risk management as described in the publication *Decision Making for Wildfires: A Guide for Applying a Risk Management Process at the Incident Level*, is yet another process. All of these describe similar processes; they label and combine the components slightly differently.

The system for wildfire decision analysis currently required by the USFS is WFDSS which is based on a deliberative risk process. This document is designed to assist you in understanding the processes that exist and how they cross-walk to the Seven Standards for Managing Incident Risk (Chief's 2013 FS Wildland Fire Response Protocol) and WFDSS. Table 1 provides a cross walk of several known risk management models (shades of brown) with WFDSS (dark blue) and the USFS Wildland Fire Response Protocol's Seven Standards for Managing Incident Risk (light blue). Using the Risk Management Cycle in the first line as a general concept, it can be seen how the other processes described fit the same elements but with a different naming convention or slightly different combination of components. An additional table is provided with more detail regarding WFDSS and the USFS Protocols in [Appendix A](#).

TABLE 1 – Cross walk of known risk management models.

Risk Management Cycle	1 - Situational Awareness	2 - Assessment	3 - Risk Control	4 - Decision	5 - Implementation	6 - Evaluation
Deliberative Risk Informed Decision Model	1 - Problem Formulation	3 – Analysis	5 - Affirmation of Analysis Results	6 - Application-Decision Implementation		
	2 - Information Gathering	4 - Synthesis		7 - Archival Documentation		
Structured Decision Model	1-Frame the Position	2 – Problem Analysis		3 – Decision Point	4 – Implementation & Monitoring	
WFDSS	Information tab	Situation tab	Objectives tab	Validation tab	Objectives tab	Periodic Assessment
	Situation tab	Objectives tab	Course of Action tab	Decision tab	Course of Action tab	
		Relative Risk Assessment			Management Action Points	
USFS Wildland Fire Response Protocol, 7 Standards for Managing Incident Risk		1 – Incident Risk Assessment	2 – Risk Analysis	5 – Risk Informed Decision		7 Monitor & Adjust
	3 – Two Way Communication					
	4 – Risk Sharing Dialogue					
	6 – Document the risk					

Each component of the risk management cycle, the USFS 7 standards for managing risk and the WFDSS risk informed decision process can be cross walked as shown in the image above.

In the USFS Wildland Fire Response Protocol's 7 Standards for Managing Incident Risk, there are three elements that are common in every aspect of decision making and WFDSS utilization. They are:

- Complete two-way communications (Standard 3)
- Conduct Risk Sharing Dialogue (Standard 4)
- Document the Risk (Standard 6)

Throughout the decision process, risks should be continuously communicated with partners and stakeholders to ensure all important values are considered and risk is shared across the incident. Benefits and risks are identified strategies and actions must be developed to ensure success in managing them.

USFS Response Protocol's 7 Standards for Managing Risk & How WFDSS Supports It

Standard 1 - Incident Risk Assessment

As part of the incident risk assessment, line officers and fire managers must frame their decision space based on values, hazards and probabilities. Information obtained in this phase is used to determine who to communicate with and the risks or benefits of the incident. Using the best available information to make a risk informed decision is critical and WFDSS provides much of the information to do this.

- **Information tab** – Displays basic information about the incident.
- **Situation tab** – Users can view their fire perimeter on the landscape and review many geospatial layers provided within the system.
 - Incident
 - Planning area – After a planning area is drawn, users can review a values inventory to assist in determining which values are threatened, the jurisdictions that might be involved, and what to address when completing the risk assessment and making decisions for the fire.
 - Analysis – Displays completed fire behavior modeling in relation to values, boundaries, and other features.
 - Fire Environment and Safety – Displays information about the estimated ground evacuation time and retardant avoidance.
 - Disturbance History – Displays fuel treatment and wildfire history in relation to the fire location to determine if they might affect fire spread.
 - Fire Weather & Danger – Displays the 7 day significant fire potential fire forecast and RAWS station information to assist with determining the fire potential.
 - Boundaries – Displays jurisdictional and fire management unit information that assists managers in determining who might need to be involved in the decision process.
 - Designated Areas – Displays wilderness, potential wilderness, and other designated areas to determine the fire's location and proximity to possible changes in objectives and requirements.

- Infrastructure – Displays preloaded system values including facilities, energy, communication, roads and trails.
- Natural & Cultural Resources – Displays air quality, critical habitat, and other to determine the risks.
- Unit Fire Planning – Fire Management Unit, Unit Shapes, Objective Shapes and Management Requirement Shapes are available for use in determining management options for the fire.
- **Objectives Tab** – Objectives and requirements from land and resource management plans (LRMPs) and Fire Management Plans (FMP) are preloaded in the system. Reviewing this tab allows users to determine what is and isn't allowed on the landscape so incident objectives and requirements specific for managing the incident can be developed.
- **Relative Risk Assessment (left menu)** – This can be completed early in the incident to provide line officers and fire managers with an initial qualitative sense of the risk involved with the incident.
- **Values Inventory / Values at Risk** - Values inventory information provided for all values loaded into the system that may need to be protected can be obtained either as listing of values within 1.0 miles of the point of origin or as a list of all values within the drawn planning area. After a FSPRO analysis is completed a values at risk inventory with a probability of the value being impacted within a given time frame is also provided.

Standard 2 - Risk Analysis

As managers evaluate the values, hazards, and probabilities for the incident they must ensure compliance with the strategic objectives and requirements and ensure there is no unnecessary exposure to firefighters. After the values and hazards are identified there are many ways the probability or risks can be analyzed through expertise or models. The WFDSS application provides several places to obtain information to support the analysis.

- **Situation Tab** – As described earlier, there are many geospatial layers users can review to determine what values might be threatened by the fire, where there might be benefits or impacts from the fire, where there have been previous fires, and so forth.
- **Objectives Tab** – Reviewing information on this tab allows users to determine the overall land objectives for the land on which the fire is burning and develop incident objectives and requirements specific for managing the incident.
- **Relative Risk Assessment (left menu)** – Although an initial risk assessment may have been completed during the situation assessment, further quantitative analysis can be completed to update it as new information is obtained.
- **Course of Action Tab** – Action items are defined for managing the incident while considering the risks that were analyzed. Some action items may be initially considered and documented but then rejected as more information becomes available to the line officers and fire managers. Management Action Points (MAPs) are defined in WFDSS to develop strategies for long term management and mitigation of risk.
- **Rationale section of the Decision Tab** – Document any alternative strategies that were considered and the reasons why they were not selected in the decision rationale. Analysis or further documentation to support the information in the Rationale section can be documented in the Validation tab.

Consider using some of the risk management framework questions to structure what to analyze or evaluate.

1. What alternatives (objectives, strategies, and tactics) are being considered?
 - Use the **Objectives Tab** to determine what LRMP/FMP fire management options are available for the fire. *Objectives content is automatically added to a decision.*
 - Complete analysis to determine what actions might be taken. For instance multiple FSPRO analyses can be completed to demonstrate the effects of adding barriers or not adding barriers. The Line Officer could then weigh the probable risks to firefighters short term against the long term potential of the fire reaching a certain area.
2. What is the exposure of responders for the alternatives being considered?
 - See #1 above. Modeling can be used to consider benefits versus risks.
 - View the estimated ground evacuation layer (**Situation Tab**, Fire Environment and Safety layer) to weigh risks with varying evacuation timeframes.
3. What is the relative probability of success associated with the alternatives being considered?
 - To determine if the exposure is worth the risk associated with a fire reaching a point of concern, FSPRO analysis can be completed to determine the probability of a fire reaching a certain area.
 - FSPRO can also be used to model fire strategies such as the effects of a burn out, proposed line or no line at all. The outputs will show the various effects on the fire spread probability and the values at risk.

Standard 3 - Two-way Communication

Identifying who may be affected by the incident is critical during the early stages of the incident. Although much of the dialogue for communication should take place pre-season to ensure all cooperators and partners understand the unit's intentions in managing fires that season, additional conversation must take place during the incident. In WFDSS there are several tools that can assist line officers and fire managers in determining who might be affected by the incident and decision.

Identifying who the unit should communicate with:

- **Situation Tab** – As described earlier, gathering information begins with the situational assessment of the incident via spatial data layers, fire behavior analyses, values assessments and comprehension of objectives set forth in land/resource/fire management plans. It is important to look at the boundaries, planning area, values inventory, and fire behavior analysis projections.

Locations to document who is involved in the dialogue:

- **Validation Tab** – Document who is involved in the decision and key information.
- **Rationale section of the Decision Tab** – Document the communication that has taken place and the decisions agreed upon. Agency direction indicates the risk management framework responses should be documented in this location as well. Taking time to reference the framework support or writing the dialogue that has taken place is important.

- **Decision Approval** – When multiple cooperators are involved in managing the incident, they should all approve the decision. If access to the system isn't available, review the decision together and document in the rationale portion of the decision who has agreed to the decision. This review can take place while the decision is being written – it does not have to be marked for the Begin Review/Approval Process, and then rejected to write the rationale. The rationale should be written prior to marking it for Begin Review/Approval Process. Decision approvers have edit privileges in the decision. A draft decision can be printed and provided to individuals without a WFDSS log in for their review.
- **Periodic Assessment** – When multiple jurisdictions are involved, there can be multiple approvers. Anyone who is a decision approver can go in at any time and complete a periodic assessment on a published decision. There can be multiple assessments completed each day by all approvers. There is no limit on the frequency and number of periodic assessments allowed.

Standard 4 - Risk Sharing Dialogue

Dialogue will assist line officers and fire managers in ensuring that the incident is being managed with all the necessary cooperators and stakeholders input which allows unit managers to share the risk decision. There are several ways to identify the key communication elements described above - see Standard 3 to review specific information about where information can be viewed and documented.

The Red Book (Page 05-11) describes the Risk Management Framework and questions that can be used to focus dialog around risk assessment, risk analysis and risk decision making. Much of the information needed for that conversation can be found and documented in WFDSS. The questions are listed below with information about where to find it in WFDSS. Much of the information that should be considered has been described in Standard 1 and 2 above.

Risk Assessment –

1. What are the critical values at risk?
 - The WFDSS Values Inventory based on the Planning Area (**Situation Tab** – Planning Area – Values Inventory) or the Values at Risk based on FSPro fire behavior analysis (**Situation Tab** – Analysis – Values at Risk) can assist line officers and fire managers in determining what critical values may be threatened by the fire. Consider what critical values are at risk by suppressing the fire or suppression activities on landscapes, vegetation types, wildlife, and so forth. *The values inventory is automatically added to the VALUES section of the WFDSS decision.*
 - The **Situation Tab** – Review Disturbance History to determine where other fires have occurred on the landscape. *A map capture can make the map image available for a decision.*
 - The **Situation Tab** – Review the Natural Cultural Resources or Infrastructure or Unit Fire Planning to determine other values that may be affected. *A map capture can make the map image available for a decision.*
2. What is the chance that critical values will be impacted, and if so what are the consequences?

- The Fire Spread Probability (FSPro) (**Situation Tab** – Analysis – Values at Risk) can help determine the likelihood of a fire impacting a value. *The completed Values at Risk or analysis can be added to a decision.*
3. What are the opportunities to manage fire to meet land management objectives?
 - Use the **Objectives Tab** to determine what LRMP/FMP fire management options are available for the fire. *Objectives content is automatically added to a decision.*
 - Review the **Situation Tab** – Disturbance History to determine where other fires have occurred on the landscape. *A map capture can make the map image available for a decision.*
 - Review the **Situation Tab** – Unit Fire Planning to view unit shapes, strategic objective shapes and management requirement shapes (if the unit uploaded them). *A map capture can be used to make the map image available for a decision.*
 4. What are the possible low probability/high consequence events?
 - Use the **Objectives Tab** – Analysis – to review fire behavior predictions that have been completed. *A map capture can be used to make the map image available for a decision.*
 5. Who are the stakeholders that should be consulted prior to making a decision?
 - See Standard 2 and 3 for information.

Risk Decision -

1. What alternatives (objectives, strategies, and tactics) are being considered?
 - Use the **Objectives Tab** to determine what LRMP/FMP fire management options are available for the fire. *Objectives content is automatically added to a decision.*
 - Complete analysis to determine what actions might be taken. For instance multiple FSPro analyses can be completed to demonstrate the effects of adding barriers or not adding barriers. The Line Officer could then weigh the probable risks to firefighter's short term against the long term potential of the fire reaching a certain area.
2. What is the exposure of responders for the alternatives being considered?
 - See #1 above. Modeling can help consider benefits versus risks.
 - View the estimated ground evacuation layer (**Situation Tab**, Fire Environment and Safety layer) to weigh risks with varying evacuation timeframes.
3. What is the relative probability of success associated with the alternatives being considered?
 - To determine if the exposure is worth the risk associated with a fire reaching a point of concern, FSPro analysis can help determine the probability of a fire reaching a certain area.
 - FSPro can also model fire strategies such as the effects of a burn out, proposed line or no line at all. The outputs will show the various effects on the fire spread probability and the values at risk.
4. What alternative provides for the best balance between the desired outcome and exposure to responders?
 - As considerations are given to the Strategic Objectives and Requirements, the Incident Objectives and Course of Action are written. The Line Officers must weigh the various

options presented through the analysis to determine the best alternative and document that.

5. What are the critical thresholds that trigger reconsideration of the proposed alternative and how will they be monitored?
 - These thresholds should not only be discussed with stakeholders but documented in the decision rationale. Further detail and information can be easily referenced in the validation as well.

Standard 5 - Risk Informed Decision

A risk informed decision must be made at the time of the incident, considering the situation, strategic objectives and strategic requirements, risk assessment, and analysis. A determination must be made while documenting the decision as to how often the decision will be reviewed.

Documentation of that decision occurs in Standard 6.

- Validation Tab – The decision should be validated to ensure the course of action supports the strategic objectives/requirement and the incident objectives/requirements.
 - Within the decision content, the validation history and relative risk is auto populated from the Validation Tab and Relative Risk Assessment (left menu). Users can insert information regarding modeling that has been completed assessing scenarios or considered during development of the course of action.
- Decision Content – See information in Standard 6 regarding how to document a decision and the risk associated with it.
- Decision Content – Rationale – Risk-informed decisions must tie the course of action to incident objectives and requirements by explaining why the proposed actions are likely to achieve strategic land management objectives/requirements and the fire-specific incident objectives/requirements. Decision rationale should illustrate the tradeoffs being made; for example, firefighter exposure against potential change in fire size, given the planned tactical actions. Identify stakeholders, cooperators, and neighbors who have a vested interest in the fire decision, their values at risk, and their support, or lack thereof, for the course of action.
 - Periodic Assessment – Approving officials should regularly review the fire situation to verify that the objectives as defined in the published decision are still being met. As the decision is periodically assessed, add notes to describe key changes or information related to the incident.

Standard 6 - Document the Risk

WFDSS fully supports documenting the risk assessment, analysis, communication, and decision. Within the Decision Tab there are several places for fire managers to document the risk, their considerations and decisions. Although some of the information is auto populated from work that was completed on the sub-tabs, authors can edit and add to this information anywhere in the decision in the following folders. It is an opportunity to describe the incident, what was considered in making the decision, and to provide supporting information to the Standards 1-5.

- Decision Content – Assessment – Incident Information – The decision is auto populated with information about the incident such as name, number, jurisdictions, and so forth. An incident

map is also available at the time the decision is published. Users can add information here about the incident.

- Decision Content – Assessment – Weather – A current forecast for the area is populated in the decision. If other information about weather or seasonal severity has been obtained, users can add it here.
- Decision Content – Assessment – Values – The values inventory based on the planning area is auto populated based on the information within the WFDSS application. The values at risk, as determined through FSPRO or Near Term Fire Behavior analysis, can be added here as well as other values that are threatened, and planned mitigations. Benefits to values can also be addressed in this section.
- Decision Content – Assessment – Situation – No information is auto-populated in this location; users can add any supporting information obtained during the assessment. Information might range from various fire behavior analysis completed, to support actions on the ground, to fuels information, or general long term modeling.
- Decision Content – Objectives – Information available in the Objectives Tab is auto populated here. Users can address any prioritization of objectives or requirements or note any discrepancies such as irrelevant information.
- Decision Content – Course of Action - The estimated cost, course of action, management action points map and report are auto populated from the Course of Action Tab. Users can add more information to clarify what was considered.
- Decision Content – Validation – The validation history and relative risk is auto populated from the Validation Tab and Relative Risk Assessment (left menu). Users can insert information regarding modeling that might have occurred assessing scenarios or considerations for the course of action here.
- Decision Content – Rationale – Risk-informed decisions must tie the course of action to incident objectives and requirements by explaining why the proposed actions are likely to achieve strategic land management objectives and the fire-specific incident objectives. Decision rationale should illustrate the tradeoffs being made; for example, firefighter exposure against potential change in fire size, given the planned tactical actions. Identify stakeholders, cooperators, and neighbors who have a vested interest in the fire decision, their values at risk, and their support, or lack thereof, for the course of action.

The results of Standard 3 – Two Way Risk Communication and Standard 4 – Risk Sharing Dialog can be documented in the Rational along with a discussion about what if any influence they had on the final decision.

Standard 7 - Monitor & Adjust

The approved strategies documented in the decision become the basis for planning specific tactical direction and making assignments to incident resources. The planned actions are then progressively evaluated at the planning, operational, and time-sensitive levels of the risk management process to determine if they are effective. If at any time the incident management organization finds they can no longer adequately mitigate the risks involved in implementing the approved course of action, the risk management process begins again and a new decision with a revised course of action is developed.

- Periodic Assessment – Approving officials should regularly review the fire situation to determine if the objectives, as defined in the published decision, are still being met. As the decision is periodically assessed notes should be added to describe key changes or information related to the incident.
- Management Action Points – As management action points are implemented, or modified, it should be noted in the WFDSS application.

WFDSS Tabs & How the USFS 7 Standards for Managing Incident Risk Fit Together

The risk management process is the foundation for the Wildland Fire Decision Support System. Since WFDSS’s framework uses the deliberative risk decision process and is only slightly different in thought process and flow than the Seven Standards, WFDSS fully supports both analysis and documentation of the 7 Standards for Managing Incident Risk and is Standard 6 – Document the Risk.

Information Tab

This tab is where the incident is identified. The user completes the information tab entries to describe the incident information, such as location, jurisdiction, responsible agency, ownership.

Standard 1 - Incident Risk Assessment

Standard 3 - Two-way Communication

Situation Tab

Information gathering begins with the situational assessment of the incident via spatial data layers, fire behavior analyses, values assessments and comprehension of objectives set forth in land management plans. Additionally information can be gathered to inform line officers and fire managers of what analysis has been completed, who two-way dialogue may need to take place and shared with (planning area), and to monitor the incident status (fire perimeter, historic fires, fire behavior analysis, MODIS, predictive services information.)

Standard 1 - Incident Risk Assessment

Standard 2 - Risk Analysis

Standard 3 - Two-way Communication

Standard 4 - Risk Sharing Dialogue

Standard 7 - Monitor & Adjust

Objectives Tab

Within the Objectives Tab there is information from the LRMP/FMP that defines the strategic objectives and strategic requirements for the incident. This not only informs line officers and fire managers about what to consider in the risk assessment, but also may identify important stakeholders to have dialogue with and share the risk. Additionally continually monitoring the fire to ensure the objectives are being met or new analysis information hasn’t influenced a change in the objectives is critical. An iterative process for decision making is critical for sound risk management; if

objectives are not being met, exposure is too high, or there is a change that warrants a different decision, a new decision should be made.

Standard 1 - Incident Risk Assessment

Standard 3 - Two-way Communication

Standard 4 - Risk Sharing Dialogue

Standard 5 - Risk Informed Decision

Standard 7 - Monitor & Adjust

Course of Action Tab

All information gathered through the situation assessment and analysis is deliberated and synthesized to produce the best course of action for the incident. This deliberation may alter the incident objectives and requirements in the Objectives Tab, but all should be in alignment. The course of action, action items, as well as the incident objectives, should frame the delegation of authority provided to a team.

As courses of action and MAPs are identified, coordination and communication with stakeholders is imperative to not only define them, but to ensure risk is shared across the incident.

Standard 3 - Two-way Communication

Standard 4 - Risk Sharing Dialogue

Standard 5 - Risk Informed Decision

Validation Tab

The user confirms and documents that the course of action is achievable based on the analysis that occurred. This may also be used to document scenarios considered and rejected, or to document analysis completed to support the decision.

Standard 2 - Risk Analysis

Standard 7 - Monitor & Adjust

Decision Tab

This is the point where the user documents the decision incorporating the information gathered, the analyses completed, summarizes the synthesis that occurred, and provides rationale for the synthesis and affirmation. The user answers the question “My decision is...” and “We made that decision based on...” Information regarding who was involved in the decision process, how the risk is being shared, and who is managing the incident can be documented here.

The decision is published to document the risk informed decision analysis. Custom reports can then be produced to create special reports on topics such as fire behavior and long term weather assessments.

Standard 2 - Risk Analysis

Standard 3 - Two-way Communication

Standard 4 - Risk Sharing Dialogue

Standard 5 - Risk Informed Decision

Periodic Assessment

The decision maker should periodically assess the decision to ensure that it is still valid based on the previous information gathered, analyses that were completed, and the synthesis that was conducted.

Standard 3 - Two-way Communication

Standard 4 - Risk Sharing Dialogue

Standard 7 - Monitor & Adjust

Appendix A

The WFDSS framework is based on the deliberative risk decision process which is only slightly different than the risk management cycle (orange). This table provides a crosswalk between the USFS 7 Standards for Managing Incident Risk (green), the components of the cycle (left orange), the activity or intent (blue), the tools and information used to support the components (aqua), and the WFDSS specific elements (gray).

						WFDSS			
		Activity	Information or Tool	Use	Sub Tabs or Process	Decision Content**			
Incident Risk Assessment (Standard 1)	Two-Way Communication (Standard 3)	<ul style="list-style-type: none"> Obtain situational and contextual information (fire situation, topography, weather, fuels, natural barriers, values). Frame the decision space. Consolidate program history and current status. Develop shared vision. Obtain L/RMP & FMP information (strategic objectives & management requirements) 	Fire Danger	Establish fire danger trend information, provide managers with indications of relative fire danger, and provide input to Relative Risk Assessments.	WFDSS Tab – Information	Decision Editor			
			Fire Economics & Values	Critical Infrastructure – Natural & Cultural Resources	<ul style="list-style-type: none"> Values Inventory – Immediate estimates of values as a qualitative inventory based on the planning area, short-term fire behavior or near-term fire behavior predictions. Values At Risk – Values inventory summarized by probability zones as well as the expected quantity of each threatened value based on Fire Spread Probability (FSP) predictions. 	Information & Tools Available	Assessment – Incident Information – Content – Auto-populated with info from information page in WFDSS and a fire perimeter map.		
						WFDSS Tab – Situation	Assessment – Weather – Content – Auto-populated with the weather forecast for the day the decision is published.		
					Information & Tools Available	Assessment – Values – Content – Values inventory is auto-populated with values as identified by the planning area. Users should add information about priorities, probability of the fire affecting the value, modeled values at risk and so forth.			
					<ul style="list-style-type: none"> Fire area map <ul style="list-style-type: none"> Incident <ul style="list-style-type: none"> Planning area * Analysis Fire- Environment & Safety Disturbance History Fire Weather & Danger Boundaries Designated Areas Infrastructure Natural & cultural resources Unit Fire Planning Zone weather Fire danger (ERC Graph) Spatial/Values inventory Fire behavior outputs* <ul style="list-style-type: none"> Values at risk Significant 7-day fire potential Firefighter Evacuation Smoke dispersion Relative Risk Assessment (left menu) 				
Risk Analysis (Standard 2)	Two-Way Communication (Standard 3)	<ul style="list-style-type: none"> Evaluate each of the three risk elements: values, hazards, and probability. Use best analytical tools to analyze available information. Examine past performance. Evaluate fire, fuels, weather, topographic, safety, and risk assessment information to support decision making. 	Fire Weather	Create fire danger products, provide weather data for fire behavior analyses, and provide data for air quality analyses.	WFDSS Tab – Situation	Decision Editor			
			Fire Behavior	Project fire size probabilities; forecast fire progression; predict fire behavior characteristics such as rate of spread, crown or surface fire occurrence, fire intensity, and spotting distances from torching trees.	Information & Tools Available	Assessment – Values – Content - Values inventory is auto-populated with values as identified by the planning area. Users should add information about priorities, probability of the fire affecting the value, modeled values at risk and so forth.			
			Fire Economics & Values	(see above)	WFDSS Tab - Objectives	Assessment – Situation* - Users can add information about the current situation			
			Smoke – Air Quality and Emissions	Provides access to historic, real-time, and forecasted air quality information using a stand-alone web portal.	Information & Tools Available	Validation – Content – Relative Risk Assessment is auto-populated with information the user put in the RRA.			
					<ul style="list-style-type: none"> As listed above Strategic objectives Management requirements 				
Risk Decision (Standard 5)	Two-Way Communication (Standard 3)	<ul style="list-style-type: none"> Apply knowledge, processes, technology, and proven practices. Mitigate risks to an acceptable level. Apply new knowledge and technological applications to reduce hazards and risk. Incorporate best knowledge and technology into practice. Communicate risks at all levels to ensure mitigation. Evaluate strategies and management actions to meet incident objectives. 	WFDSS – Incident Objectives	Defined incident objectives & requirements and course of action commensurate with L/RMP & FMPs.	WFDSS Tab – Objectives	Decision Editor			
			WFDSS – Course of Action	Defined course of action and cost are commensurate with L/RMP & FMPs, incident objectives, and tactics to support those objectives.	Information & Tools Available	Objectives – Content – Auto-populated with the FMU list and acres, strategic objectives and requirements, and incident objectives and requirements as defined by the user on the Objectives Tab.			
			Fire Economics & Values	Stratified Cost Index – Provides a historical comparison of the costs of a current fire to ones with similar characteristics and potential.	WFDSS Tab – Course of Action	Course of Action – Content – Auto-populated with the action items, costs, and Management Action Points as defined by the user.			
					<ul style="list-style-type: none"> Action Items Management Action Points (left menu) Cost <ul style="list-style-type: none"> Stratified Cost Index (SCI) (left menu) Organizational Needs Assessment (left menu) 		Left Menu Items Relative Risk Assessment Organizational Needs Assessment Stratified Cost Management Action Point		
Two-Way Communication (Standard 3)	Risk Sharing Dialogue (Standard 4)	Document the Risk (Standard 6)	Decision	<ul style="list-style-type: none"> Document what the decision is, why it was made, and how it supports the LRMP objectives and requirements. Document overall processes, result, and dialogue that has taken place. Document practices and organizational needs. Ensure the retention of critical information. Explain why the proposed actions are likely to achieve strategic LRMP/FMP objectives and requirements while meeting incident objectives and requirements. 	WFDSS – Decision Content	Documentation of decisions and analysis.	WFDSS Tab – Validation	Decision Editor	
							Used to validate whether the course of action meets the defined incident objectives and requirement.	Decision Summary – Auto-populated with summary information such as incident owners, costs, decision history.	
							WFDSS Tab – Decision	Objectives – Content –above	
				See notes in the Decision Content column describing how the decision editor can be used to document a decision.	Course of Action – Content – above Stratified Cost – (Left Menu Item) Management Action Points – (Left Menu Item)				
				WFDSS Tab – Report	Validation Content Page – Relative Risk Assessment – (Left Menu Item)				
				Used to capture information from the decision editor for printing or reporting out.	Rationale – Content – Document considerations and decisions made that are guiding the response to the fire.				
					Left Menu Items Organizational Needs Assessment – can be added to the decision information				
Two-Way Communication (Standard 3)	Risk Sharing Dialogue (Standard 4)	Document the Risk (Standard 6)	Implementation	<ul style="list-style-type: none"> Base specific tactical actions on the approved course of action. Write the delegation of authority based on the Incident objectives, requirements, and course of action. 	WFDSS – Management Action Points	<ul style="list-style-type: none"> Evaluate M.A.P.s to ensure they are viable, effective, and acceptable given current conditions. 	WFDSS Tab – Objectives	Periodic Assessment – Note pertinent information regarding progress, coordination with stakeholders and cooperators, significant events.	
							WFDSS Tab – Course of Action		
							WFDSS Left Menu – Management Action Points		

