Organizational Needs Assessment

Organizational Needs Assessment process and directions for use.

An Organizational Needs Assessment has been prepared to replace the current Incident Complexity Analysis.

The new process is designed as a chart format has been developed and is based on input variables of:

- Relative risk
- Implementation difficulty
- Decision concerns

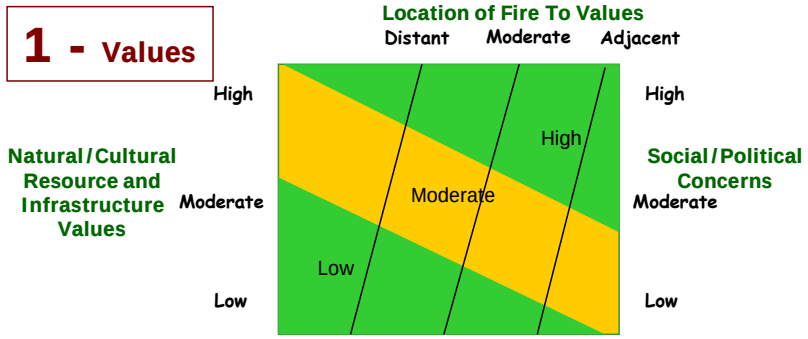
The following sections provide example charts to determine the Organizational Needs with accompanying guidance to help work through the various input variables. The process consists of four parts:

- Part 1 – determine Relative Risk Rating
- Part 2 – determine Implementation Difficulty
- Part 3 – determine Decision Concerns
- Part 4 – input the three values from above into the Organizational Needs Assessment chart and determine recommended Organizational Need in terms of type of Incident Management Organization.

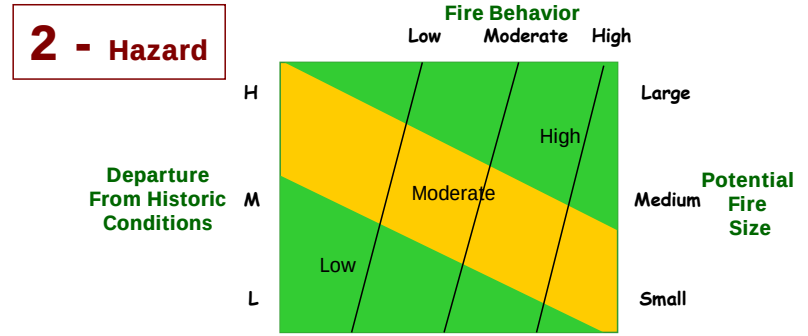
The Organizational Needs Assessment guides Agency Administrators in their management organization selection both in escalating and moderating situations (i.e., can be used to go up or down in organizations).

ORGANIZATIONAL NEEDS ASSESSMENT – PART 1: Relative Risk Assessment

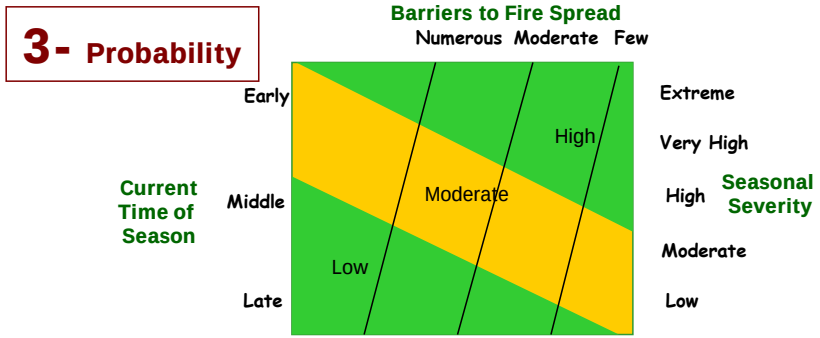
1 - Values



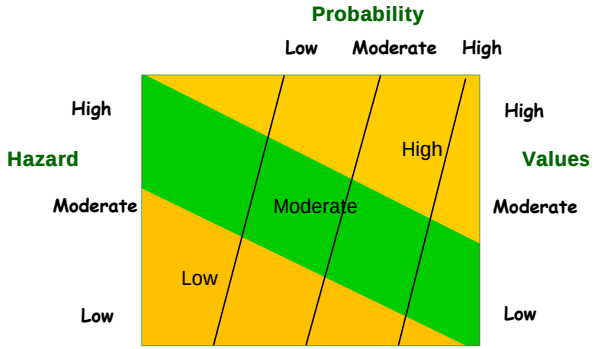
2 - Hazard



3- Probability



4 - Relative Risk



Guidance for variables in Steps 1-3 are on the following pages.

Complete Steps 1 -3: Connect the left and right variables with a line. At the top of the chart, select the appropriate value; follow the line beneath this value down to its intersection with the line connecting the left and right variables.

Take results as inputs to Step 4.

Complete Step 4: Read the relative risk from the background area where the intersection occurs.

Take relative risk result as inputs to Part 4: Organizational Needs Assessment.

Relative Risk Assessment Guidance:

STEP 1: VALUE ASSESSMENT: Values are those ecologic, social, and economic effects that could be lost or damaged because of a fire. Ecologic values consist of vegetation, wildlife species and their habitat, air and water quality, soil productivity, and other ecologic functions. Social effects can include life, cultural and historical resources, natural resources, artifacts, and sacred sites. Economic values make up things like property and infrastructure, economically valuable natural and cultural resources, recreation, and tourism opportunities. This assessment area allows opportunity for the local Agency Administrator to identify particular local concerns. These concerns may be identified in the fire management plan or other planning documents.

Natural/Cultural Resource/Infrastructure Values - key resources potentially affected by the fire. Examples include, but are not limited to habitat or populations of threatened, endangered, or sensitive species, water quality, erosion concerns, and invasive species. Infrastructure concerns may include potential impacts to property, business, or infrastructure and include costs to repair or replace sediment catchments, wildlife guzzlers, corrals, roads, culverts, power lines, domestic water supply intakes, and similar items.

Low	Moderate	High
Resource concerns are few and generally do not conflict with management of the fire. No risk to people or property within or adjacent to fire Mitigation measures are effective. No risk to natural, cultural, and/or social resources within or adjacent to fire	Significant resource concerns exist, but there is little conflict with management of the fire. Mitigation measures are generally effective. Several values to be protected Mitigation through planning and/or preparations is adequate May require some commitment of specialized resources Several values to be protected Mitigation through planning and/or preparations is adequate May require some commitment of specialized resources	Multiple resource concerns exist, some of which may conflict with management of the fire. The effectiveness of needed mitigation measures is not well established. Numerous values and/or high values to be protected Severe damage likely without significant commitment of specialized resources with Numerous values and/or high values to be protected Severe damage likely without significant commitment of specialized resources with appropriate skill levels appropriate skill levels

Social/Political Concerns - the risk of the fire, or effects of the fire, impacting the social or economic concerns of an individual, business, community or other stakeholder involved with or affected by the fire. Social concerns may include degree of support for the wildland fire program or resulting fire effects, potential consequences to other fire management jurisdictions, impacts to tribal subsistence or gathering of natural resources, air quality regulatory requirements and public tolerance of smoke.

Low	Moderate	High
Local support for wildland fire is high. The fire should have little or no impact on subsistence or Tribal activities involving treaty rights. The	Local support of wildland fire is clearly divided between supporters and opponents. The fire may have some impacts on subsistence or Tribal activities	Local support for wildland fire may be mixed but generally not favorable. The fire may have significant impacts on subsistence activities or

fire is expected to remain within a single jurisdiction or agreements are in place to allow the fire to move across several jurisdictions. Media coverage is favorable. Few structures or business ventures are potentially affected by the fire. There are few impacts to recreation and tourism.	involving treaty rights. The fire is expected to involve more than one jurisdiction, cooperator, or special interest group and agreements need to be developed. Media coverage tends to be a mix of favorable and unfavorable views. Some structures may be threatened by the fire or some business ventures may be affected by the fire.	Tribal activities involving treaty rights. Smoke impacts may become a concern for higher level air quality regulatory agencies. The fire is expected to involve several jurisdictions, cooperators, and special interest groups and agreements requiring significant negotiation need to be developed. Media coverage tends to be unfavorable. Many structures or private properties could be threatened. Closures and evacuations could occur.

Location of Fire to Values

Distant	Moderate	Adjacent
Fire location is not proximate to values to be protected or fire is located where it is highly unlikely that it would reach the values.	Fire location is moderately proximate to values. Location is such that, based on historical data, fire could potentially reach the values but will take multiple burning periods and sustained fire activity to reach the values.	Fire location is in close proximity to values. Without mitigation actions, fire will be expected to reach the values.

STEP 2: HAZARD ASSESSMENT: The hazard in wildland fire is made up of the conditions under which it occurs and exists, its ability to spread and circulate, the intensity and severity it may present, and its spatial extent.

Current Fire Behavior – the current fire behavior or that most recently observed. Changing fire behavior is addressed through repeated completion of the Periodic Fire Assessment.

Low	Moderate	High
Short duration flaming front with occasional torching. Fuels are uniform and fire behavior can be easily predicted and tactics implemented.	Short range spotting occurring. Moderate rates of spread are expected with mainly surface fire and torching. Fuels and terrain are varied but don't pose significant problems in holding actions.	Long range spotting > ¼ mile. Extreme rates of spread, and crown fire activity are possible. Fuels, elevation, and topography vary throughout the fire area creating high resistance to control.

Departure from Historic Conditions – a measure of ecological functions at risk based on changes in vegetation.

Low	Moderate	High
Vegetative composition and structure are resilient and key components are at low risk of loss. Few, if any, fire return intervals have been	Both the composition and structure of vegetation has shifted towards conditions that are less resilient and more at risk of loss. Some fire return intervals have	Vegetation changes have resulted in either missed fire return intervals or increased fire return events. Significant vegetative changes from the historic

missed and fuel complexes are similar to historic levels. Native species are abundant and invasive species are sparse. Changes resulting from insect and disease outbreaks are minimal.	been missed, stand structure and composition, and fuel complexes have been altered and present potential for fires of severity and intensity levels in excess of historic levels. Native and invasive species are both present in varying amounts. Changes resulting from insect and disease outbreaks are present.	situation have occurred. Invasive species may be strongly competing with native species. Changes resulting from insect and disease outbreaks are substantial. The highly altered composition and structure of the vegetation predisposes the landscape to fire effects well outside the range of historic variability, potentially producing changed fire environments never before measured.

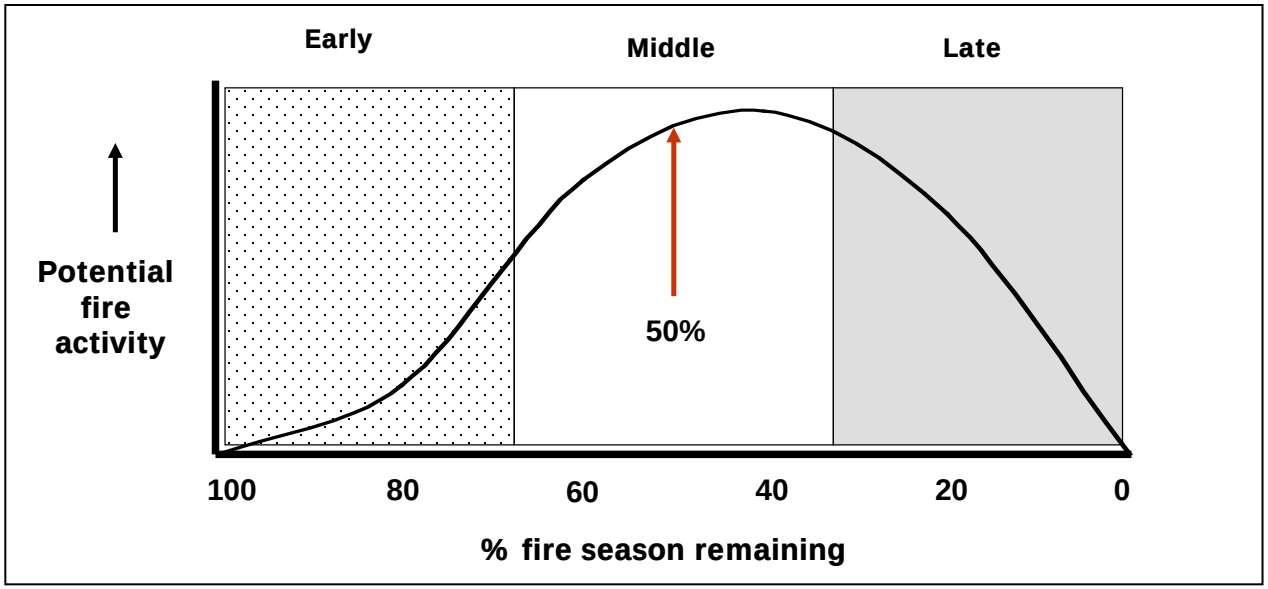
Potential fire size - the potential fire size by the end of the season in comparison to historical fire occurrence.

Small	Medium	Large
Fire size is expected to be small for the dominant fuel type involved.	Fire size is expected to be in the mid-range for the dominant fuel type involved.	Fire size is expected to be large for the dominant fuel type involved.

STEP 3: PROBABILITY ASSESSMENT: Probability refers to the likelihood of a fire becoming an active event having potential to adversely affect values.

Current Time of Season - the current time in relation to the historical fire season. The chart below the guidelines reinforces the importance of time of season. During the early part of the fire season, the peak of burning activity is still to come, thus the fire could present substantial variation in behavior and activity. In the middle of the season, the peak of burning activity may or may not have occurred while in the late part of the season, the peak of fire activity generally has occurred and managers can reasonably expect diminishing fire activity and behavior as time progresses. As the amount of fire season remaining decreases or as the time of season progresses from early to late, management concerns and issues associated with potential fire activity decrease.

Early	Middle	Late
The current date is in the early portion of the historic fire season, at least 2/3 of the established fire season remains and the peak of burning activity is still to come.	The current date is in the middle of the historic fire season, at least 1/3 of that period has passed and no less than 1/3 remains. The peak burning activity period either has occurred, is occurring now, or will occur very soon.	The current date is in the latter part of the historic fire season. At least 2/3 of the historic period has passed, the peak burning activity period has occurred, and the probability of a season-ending or fire-ending event is increasing quickly.



Seasonal Severity - a measure of the potential burning conditions as expressed by factors such as energy release component (ERC), drought status, live fuel moistures, dead fuels moistures, soil moisture, stream discharge, and similar types of measures.

Low	Moderate	High	Very High	Extreme
Measures of fire danger are below seasonal averages. Drought status is below seasonal norms with no long-term drought present. Fire danger indicators are at the low end of the scale.	Measures of fire danger are at or slightly below seasonal averages. Drought status is at or below seasonal norms with no long-term drought present. Fire danger indicators are at or near the middle of the scale.	Measures of fire danger are above seasonal averages but not setting new records. The area is in short-term drought (1-2 years of drought) but not considered to be in long-term drought. Fire danger indicators are at the middle of the scale.	Measures of fire danger are well above seasonal averages and setting new records. The area is in short-term drought (1-2 years of drought) and moving toward long-term drought. Fire danger indicators are above the middle of the scale.	Measures of fire danger are setting new maximum records. The area is considered to be in long-term drought (3 or more years of drought). Fire danger indicators are at the top of the scale.

Barriers to Fire Spread – a measure of the natural defensibility of the fire location and an indication of degree of potential mitigation actions needed.

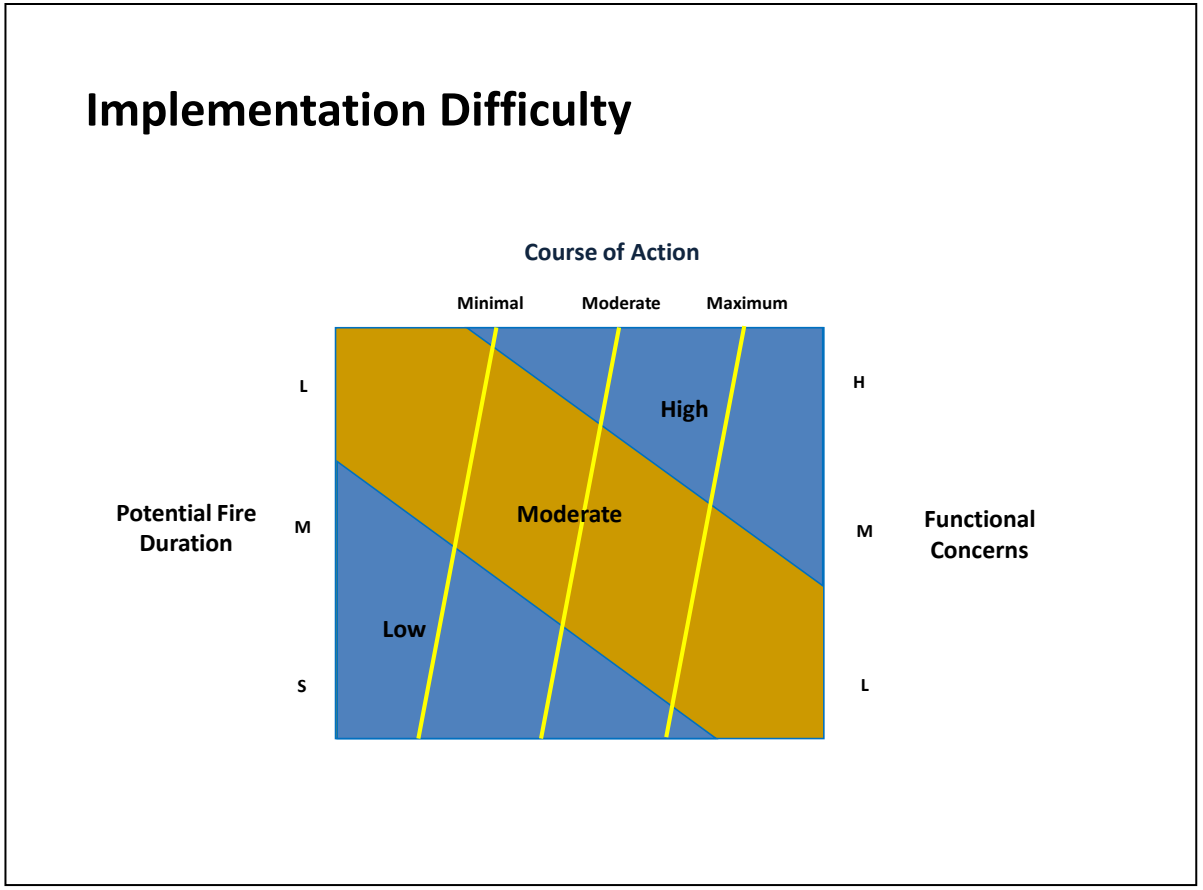
Numerous	Moderate	Few
The location of the fire and presence of natural barriers and fuel breaks limit the horizontal fuel	The location of the fire and presence of some natural barriers and fuel breaks limit the horizontal fuel	The location of the fire and presence of only limited natural barriers and fuel breaks will permit

continuity, minimal mitigation actions on-the-ground will be needed.

continuity on some, but not all fire flanks, some mitigation actions on-the-ground will be needed to protect threats to values and sensitive areas.

fire spread across continuous fuels. Mitigation actions on-the-ground will be needed but are expected to be effective.

ORGANIZATIONAL NEEDS ASSESSMENT – PART 2: Implementation Difficulty



Guidance to the variable descriptions is on the following pages. To complete this chart, connect the left and right variables with a line. At the top of the chart, select the appropriate value; follow the line beneath this value down to its intersection with the line connecting the left and right variables. Read the implementation difficulty from the background area where the intersection occurs. Take the implementation difficulty rating as inputs to Part 4: Organizational Needs Assessment.

Implementation Difficulty Guidance:

PART 2: IMPLEMENTATION DIFICULTY: The Implementation Difficulty is a measure of how the specific situation circumstances that may be associated with a particular fire combine to represent potential intricate implementation concerns. While many specific situational elements have been addressed by the Relative Risk, potential fire duration, special functional concerns, and what the selected course of action will require are addressed here. This assessment area also allows opportunity for the Agency Administrator to identify local information in regard to historic fire durations, special needs and concerns, and potential tactical responses.

Potential Fire Duration – the estimated length of time that the fire may continue to burn in comparison to historical fire durations and amount of fire season available for a given area. This will vary by geographic area and time of season.

Short	Moderate	Long
Fire is expected to persist for only the shortest time in comparison to historical fire durations. Generally, this could be referenced as less than the historical average fire length for a given area. This may be as short as only a few days. Fuels may be limiting, weather may be limiting, or time of fire season may be limiting. Weather patterns driving fire activity are expected to subside. Season ending event has or is predicted to occur within 5 – 7 days.	Fire is expected to last for a time period similar to the historical average length of fires. Fuels, weather, and /or time of fire season may or may not be limiting. Weather patterns driving fire activity may be expected to continue or to worsen. Season ending event has not occurred and is not predicted to occur in the foreseeable future.	Fire is expected to last for a time period longer than the historical average length of fires. Fuels, weather, and /or time of fire season are not limiting fire activity. Weather patterns driving fire activity are highly unfavorable and expected to continue or worsen. Season ending event is not predicted to occur for a number of weeks or months.

Functional Concerns – indicates any special incident management functional concerns associated with the specific situation surrounding the fire.

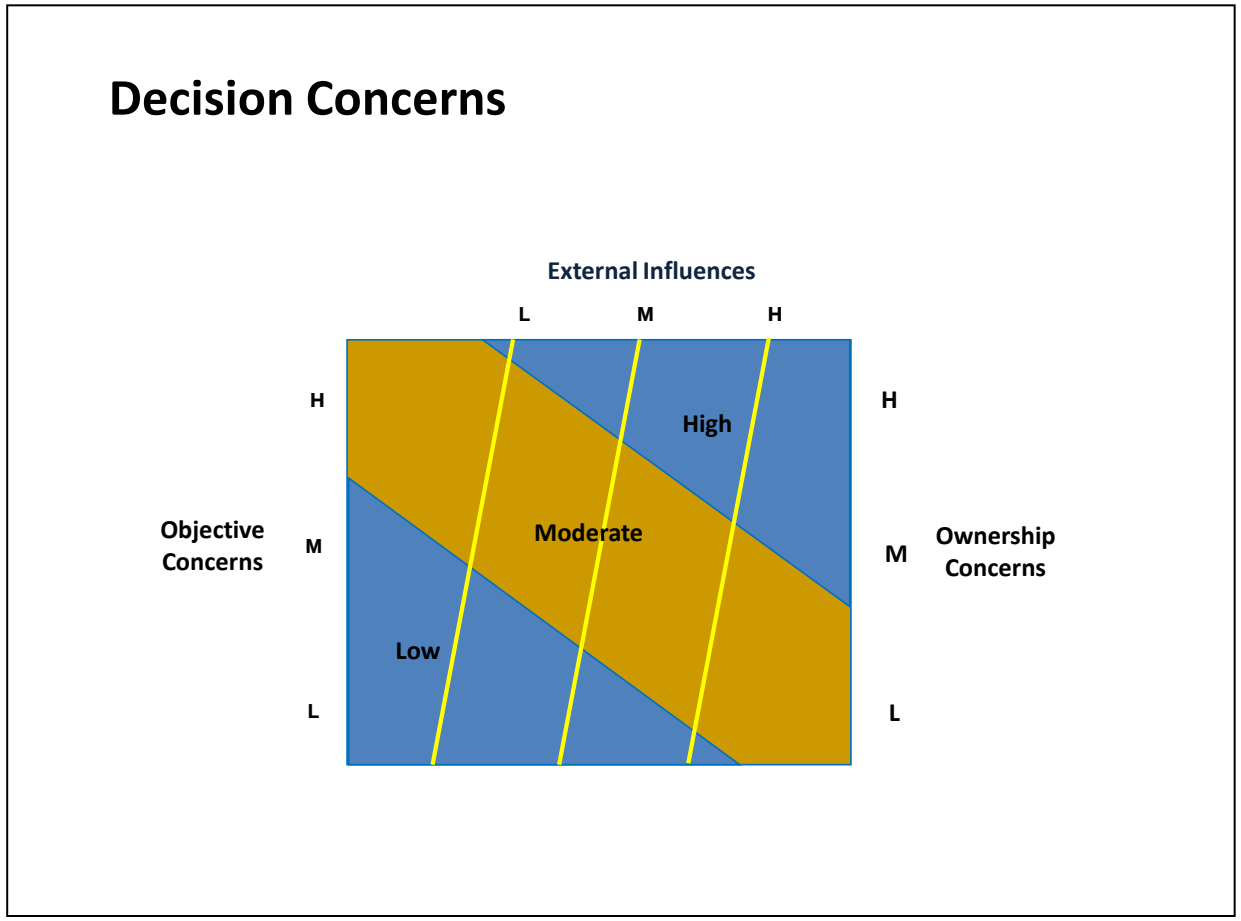
Low	Moderate	High
Existing management organization adequate or can be downsized. Special support personnel not necessary. Necessary frequency for IAP's is daily or less than daily. Safety issues are easily identifiable and mitigated. Low variability in slope & aspect. Surface fuels (grass, needles) only.	Existing overhead worked two operational periods without achieving initial objectives. Existing management organization ineffective in achieving objectives. Special support personnel are needed. A number of significant management issues have been identified. All safety hazards have been identified on the LCES worksheet and mitigated.	Potential for or current size warrants three or more divisions or perimeter. Special functional positions or units are needed. Substantial aviation operation which is not properly staffed, or special logistical, planning, finance, or special or augmented. operational needs, or complex safety needs exist. High variability in slope & aspect.

Grass/shrub, or early seral forest communities. Single resource incident or project.	Moderate variability in slope & aspect Fuel types/loads variable. Cured annual grasses, or dense, tall shrub or mid-seral forest communities. Multiple resource incident or project.	Fuel types/loads highly variable. Late seral forest communities or long-return interval fire regimes. Large amounts of unburned fuel within planned perimeter.

Course of Action - the selected course of action as reflected by its level of on the ground management activity, principal type of response, potential firefighter exposure, and periodic assessment frequency. Management responses may range from monitoring to direct perimeter control or combinations.

Minimal	Moderate	Maximum
Limited on the ground response with minimal on the ground management activities. Monitoring is the principal response activity – may involve occasional actions to delay, direct, or check fire spread with some areas or management action points directing point or area protection. Potential firefighter exposure low. Periodic assessment frequency is set at or near maximum interval (11 - 14 days).	Modified management actions are warranted. Moderate levels of on the ground management activities. Combinations of monitoring, point and area protection, direct flanking and direct and indirect perimeter control activities may be warranted. Restrictions or closures considered. Potential firefighter exposure is at moderate levels. Periodic assessment frequency is set at intermediate levels (5 – 10 days).	Management actions involve full or critical responses with maximum on the ground activities. Direct perimeter control is principal response action but simultaneous use of all options in the full tactical response spectrum may occur. Unusual hazardous fireline construction. Restrictions or closures in place. Potential firefighter exposure at maximum levels. Periodic assessment frequency set at minimal levels (1 – 4 days).

ORGANIZATIONAL NEEDS ASSESSMENT – PART 3: Decision Concerns



Guidance to the variable descriptions is on the following pages. To complete this chart, connect the left and right variables with a line. At the top of the chart, select the appropriate value; follow the line beneath this value down to its intersection with the line connecting the left and right variables. Read the decision concerns rating from the background area where the intersection occurs. Take the decision concerns rating as inputs to Part 4: Organizational Needs Assessment.

Decision Concerns Guidance:

PART 3: DECISION CONCERNS: The Decision Concerns are an indicator of how difficult and involved the decision is for the specific situation that may be associated with a particular fire. Key areas that influence and affect an Agency Administrator's decision space and range of options include: the type of objectives to be implemented on the fire; the particular ownership situation; and any external influences that may exert strong influences on the Agency Administrator and his/her decision. This assessment area also allows opportunity for the Agency Administrator to identify local information in regard attention to fire activity, local public and political opinions, and local knowledge.

Objective Concerns - this section relates to how difficult the objectives are in terms of clarity, ability to accomplish, agreement among cooperators, what management requirements are involved, and if the objectives involve a single focus or present a multiple focus that may be subject to shifting emphasis over time. Concerns over objectives may affect the Agency Administrator's ability to formulate a management decision and may affect how difficult that decision will be to implement.

Low	Moderate	High
Single objective with little or no potential to shift to other objectives. Easily achieved objectives. WFDSS decision and course of action meeting objectives. Incident objectives and requirements clear and easily derived from strategic objectives and management requirements.	Multiple objectives being implemented simultaneously. Objectives judged to be moderately hard to achieve. WFDSS decision(s) have been published and course of action meeting objectives. Incident objectives and requirements clear.	Objectives may compete among cooperators. Objectives difficult to achieve. Objectives complex requiring multiple tactics on various parts of the fire. Multiple objectives with high likelihood of shifting emphasis between resource benefits and protection. WFDSS decisions and course of action may be in need of or may be in process of being revised.

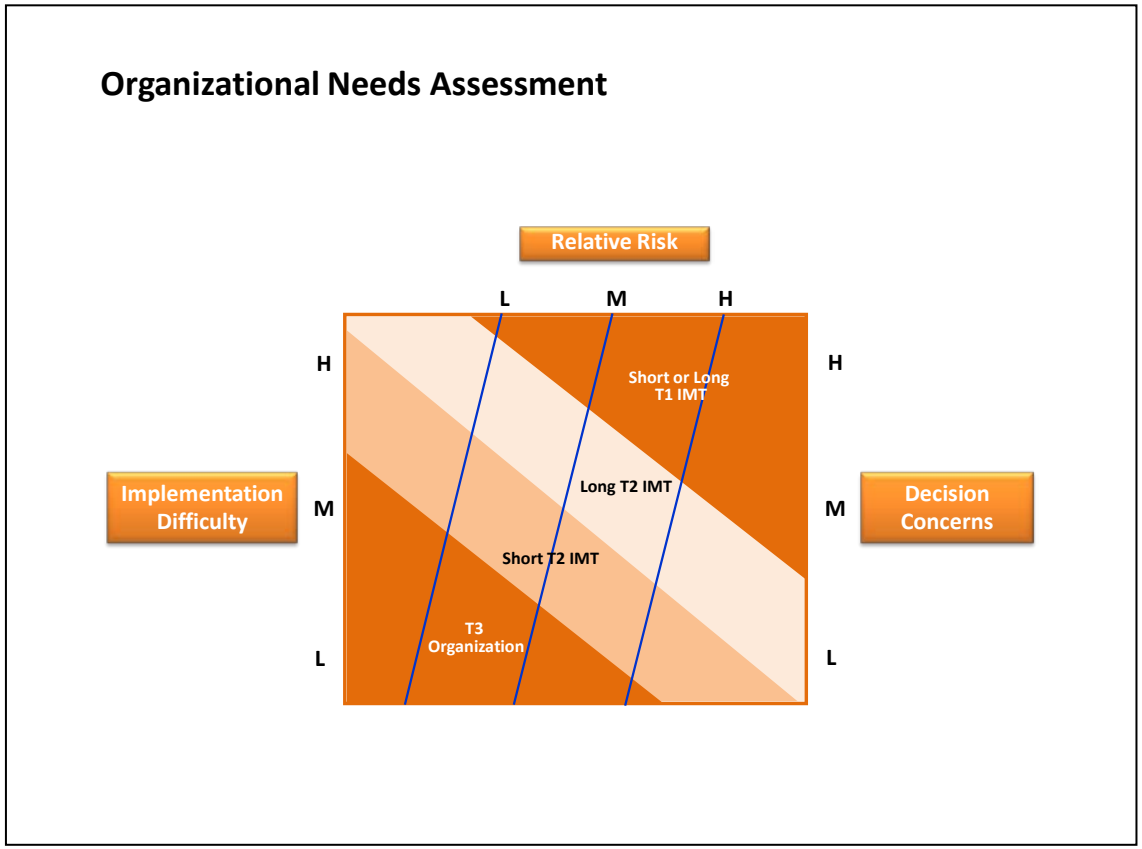
Ownership Concerns - this concern area involves how much difficulty is added to the decision process due to ownership, management direction, cooperative efforts and decision making, and if disagreements over policy, responsibility, and management response.

Low	Moderate	High
Fire burning on a single unit in one jurisdiction. Cooperators not involved in operations. No concerns.	Simple joint-unit fires in same jurisdiction. Concerns over responsibility may exist. Moderate concerns.	Multi-jurisdictional fires burning or having potential to burn onto multiple units of different jurisdiction and/or private lands. Potential for unified command. Disagreement over responsibility. Controversial fire policy among cooperators. High concerns.

External Influences - this concern area provides for other Agency Administrator concerns that must be factored into the decision making process from external influences, including; cooperators, publics, media, political sources, air quality, and the level of attention that the specific fire situation may rise to (i.e., local, regional, national). External influences must be considered as they may represent highly dominant concerns and drive decisions regardless of other decision support information.

Low	Moderate	High
No impact on neighbors or visitors. No controversy. No media interest, no sensitive media relationships. Few, if any smoke management concerns. External attention focused at the local level.	Some impact on neighbors or visitors Some controversy, but mitigated Press release issued, but no media activity during operations. Potential for smoke management concerns, but smoke impact mitigated. External attention focus may elevate to state, regional, or area level and Agency leaders at these levels.	High impact on neighbors or visitors High internal or external interest and concern. Pre-existing controversy/local or regional relationships. Media present during operations. Multiple smoke sensitive areas with complex mitigation actions required Visibility complaints likely. Attention focus may elevate to national levels and Agency heads. Highly sensitive political interests.

ORGANIZATIONAL NEEDS ASSESSMENT – PART 4: Organizational Needs Assessment



To complete this chart, input the respective values from previous charts to this chart. Connect the implementation difficulty value and the decision concerns values with a line. At the top of the chart, select the appropriate value for the relative risk rating, then follow the line beneath this value down to its intersection with the line connecting the left and right variables. Read the organizational needs assessment **recommendation** from the background area where the intersection occurs.

Area Command: Area Command teams should be considered when incident activity extends local units beyond an acceptable span of control, when local resources and managers need assistance in incident management with unified command, when multiple incident management organizations are assigned on a single administrative unit or adjoining units, or when special circumstances warrant additional management oversight and support.