

# Strategic Operations Planning—It’s Not Just for Wilderness! How the Strategic Operations Planner Can Help

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**Abstract**—The Strategic Operational Planner (SOPL) wildland fire management position was created in the United States in 2009 to reflect updated terminology. SOPL merges the former Fire Use Manager positions (FUM1 and FUM2) and is now an established position within the Incident Command System. Traditionally, the FUM positions and the SOPL have been used on incidents managed for resource benefit, wildland fire use, and on long-duration events. The use of the SOPL to develop a strategic operational plan on “suppression” strategy wildfires is fairly new, thus, creating some confusion about the position’s future roles and responsibilities in incident management. Our intent with this paper and associated poster is to illustrate how the SOPL position can provide value to incident management teams and the agency administrator in the development of strategic operational plans that achieve desired management goals and objectives for an individual incident.

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## Introduction

The Strategic Operational Planner (SOPL) evolved from the former Fire Use Manager positions (FUM1, 2) within the Incident Command System (ICS), which were merged to reflect updates made in wildland fire management terminology (NWCG 2010). The SOPL is an established position within the Incident Command System. Required experience includes qualification as a Prescribed Fire Burn Boss Type 2 (RXB2) and Division/Group Supervisor (DIVS) (NWCG 2012). Advanced Fire Management Applications (S-482) is required training, with Fire Program Management (M-581) as suggested training (NWCG 2012).

The SOPL provides information to fire managers that can be used to determine appropriate actions to accomplish desired objectives for an incident as well as assisting in the development of relative and extended risk assessments and management actions, which enable achievement of established objectives associated with an incident.

A series of YouTube videos were developed through the Wildland Fire Lessons Learned Center to describe the evolution and development of the SOPL position. These short videos may be of interest as back-ground material regarding the SOPL position and the use of the SOPL in wildland fire management operations.

- In this first video Tom Zimmerman, former Program Manager for the Wildland Fire Management Research, Development and Application (WFM RD&A) program describes the evolution of the Strategic Operational Planner position from earlier positions in the prescribed fire program.

- <http://www.youtube.com/watch?v=1GXkOeQUmU0>
- In this second video, Zimmerman discusses how the SOPL position fits into the Wildland Fire Decision Support System (WFDSS) process and into the overall direction of wildland fire management.  
[http://www.youtube.com/watch?v=\\_uOpv9Xlc68](http://www.youtube.com/watch?v=_uOpv9Xlc68)
- Tim Sexton, the Fire Use Program Manager for the U.S. Forest Service when this video was made, and current Program Manager for the WFM RD&A, explains the evolution of the Strategic Operational Planner position and how a SOPL can help fire managers and decision makers develop a long-term plan to achieve their objectives on a wildfire incident.  
<http://www.youtube.com/watch?v=d9fn9Hj0K0o>

## The Strategic Operations Planner (SOPL) Position

The primary role of the SOPL is to provide decision support to the local Agency Administrator and Incident Commander to help ensure that actions taken on a wildfire will achieve incident objectives and are consistent with the local agency’s Land Management Plan (LMP), Resource Management Plan (RMP), Fire Management Plan (FMP), or other documents providing guidance and direction for land and resource management in a designated area, as well as Federal wildland fire management policy (Taber and others 2013).

The SOPL’s responsibilities include:

1. Analyze incident objectives and incident requirements (for example, are they clear? Are they consistent? Do they conflict with LMP, RMP, and FMP?)
2. Conduct assessments to quantify risks and identify uncertainties in managing wildfires

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In: Keane, Robert E.; Jolly, Matt; Parsons, Russell; Riley, Karin. 2015. Proceedings of the large wildland fires conference; May 19-23, 2014; Missoula, MT. Proc. RMRS-P-73. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 345 p.

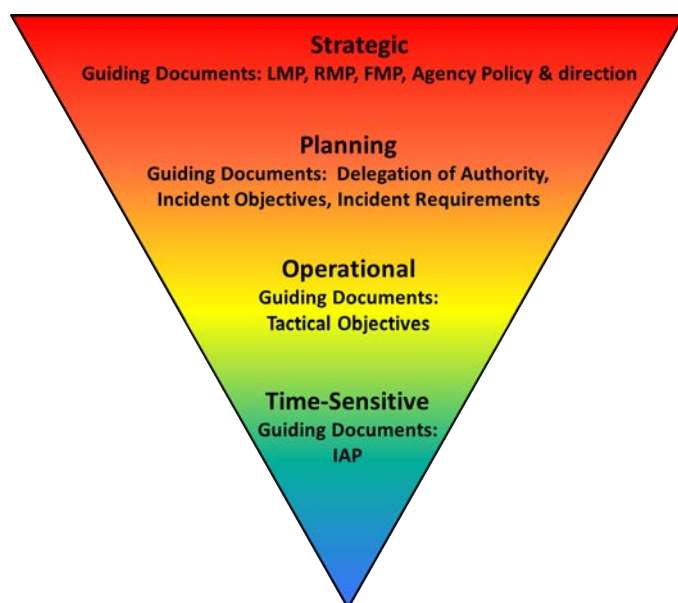
3. Develop a Course of Action for the incident. The course of action typically focuses 3 days out or further and is an overall plan describing the selected strategies and management actions intended to meet incident objectives and requirements based on current and expected conditions for the incident. The course of action may address some or all of the following: cultural assets, threatened and endangered species habitat, and utility infrastructures values that may be negatively and positively impacted by the wildfire. The SOPL facilitates the incorporation of the course of action into the Incident Action Plan (IAP)
4. Provide advice, support, and recommendations to the agency administrator and Incident Commander, and often serve as a liaison or bridge between the local agency and the incident management team/organization
5. Manage the implementation of an incident decision.

### Decision-Making Levels

The SOPL is familiar with incident-level risk management and the decision-making levels that affect wildland fire management: Strategic, Planning, Operational, and Time-Sensitive (Taber and others 2013), and how they relate to strategic operational planning (figure 1).

Each level of decision making tiers to the levels above and below it (Taber and others 2013). The SOPL can provide an overall perspective on the incident—by looking at the incident from these decision making levels. For example, *are decisions made at the strategic level consistent with decisions made at the operational level?* The SOPL can provide the overall perspective and serve as the bridge between these levels of decision making.

The SOPL is challenged to look at the different decision making levels to ensure that each is consistent with



**Figure 1**—Four decision-making environments that affect wildland fire management.

the others and that there is a strong tie to Leader's Intent (NWCG 2007). The SOPL focuses on how decisions made at the strategic level are interwoven between the planning and operational levels. The SOPL must effectively communicate challenges and opportunities with the various decision makers connected with an incident if the decisions made at the strategic level are to be successfully implemented.

### Incident Objectives and Incident Requirements

The SOPL, working with the agency administrator, develops incident objectives and incident requirements that reflect the agency administrator's intent to achieve desired outcomes and avoid undesirable consequences. These are developed tiering off of agency policy and strategic objectives and management requirements found in the unit's Land and Resource Management Plans, and Fire Management Plans.

Incident objectives help explain the agency administrator's intent for the incident. The incident objectives and incident requirements are determined by the agency administrator and often communicated in the Delegation of Authority to the incident management team. The SOPL can provide advice and recommendations to the agency administrator and incident management team that help accurately reflect the land management objectives and requirements for jurisdictions and landowners within the planning area.

Incident objectives offer site specific guidance and direction necessary for the selection of appropriate strategy(s) and the tactical direction of resources on an incident (NWCG 2014). Management requirements usually have a legal basis, are required by policy, directives, standards and specifications, or they define the methods that must be used or avoided to meet strategic objectives (NWCG 2014). The intent of the incident objectives and incident requirements are to provide more detailed information specific to the area of the fire than the overarching strategic objectives and management requirements from the land, resource, or fire management plans for the unit(s) affected by the incident.

The SOPL compares incident objectives and incident requirements from the respective agency's decision documents (for example, RMP, LRMP, FMP), the Delegation of Authority, and Incident Action Plan to determine and ensure consistency between the various decision-making levels. The SOPL coordinates with all jurisdictional agencies and landowners to ensure that all needs have been identified. The SOPL reviews incident objectives and incident requirements to help develop the course of action, risk assessments (relative and extended), and Management Action Points (MAPs). Working with the agency administrator, the SOPL should make recommendations as appropriate to clarify objectives, establish priority of objectives and requirements, examine concerns related to objectives, and discuss options for resolving any conflicting objectives or requirements.

### SOPL Interactions

The SOPL will need to interact not only with the agency administrator but also members of the incident management team and other specialists such as a Long-term Fire



Analyst (LTAN) or Fire Behavior Analyst (FBAN), and a GIS Specialist. The level of involvement and interaction will be determined by the complexity of the incident. Here we describe some of the interactions a SOPL may have with various individuals.

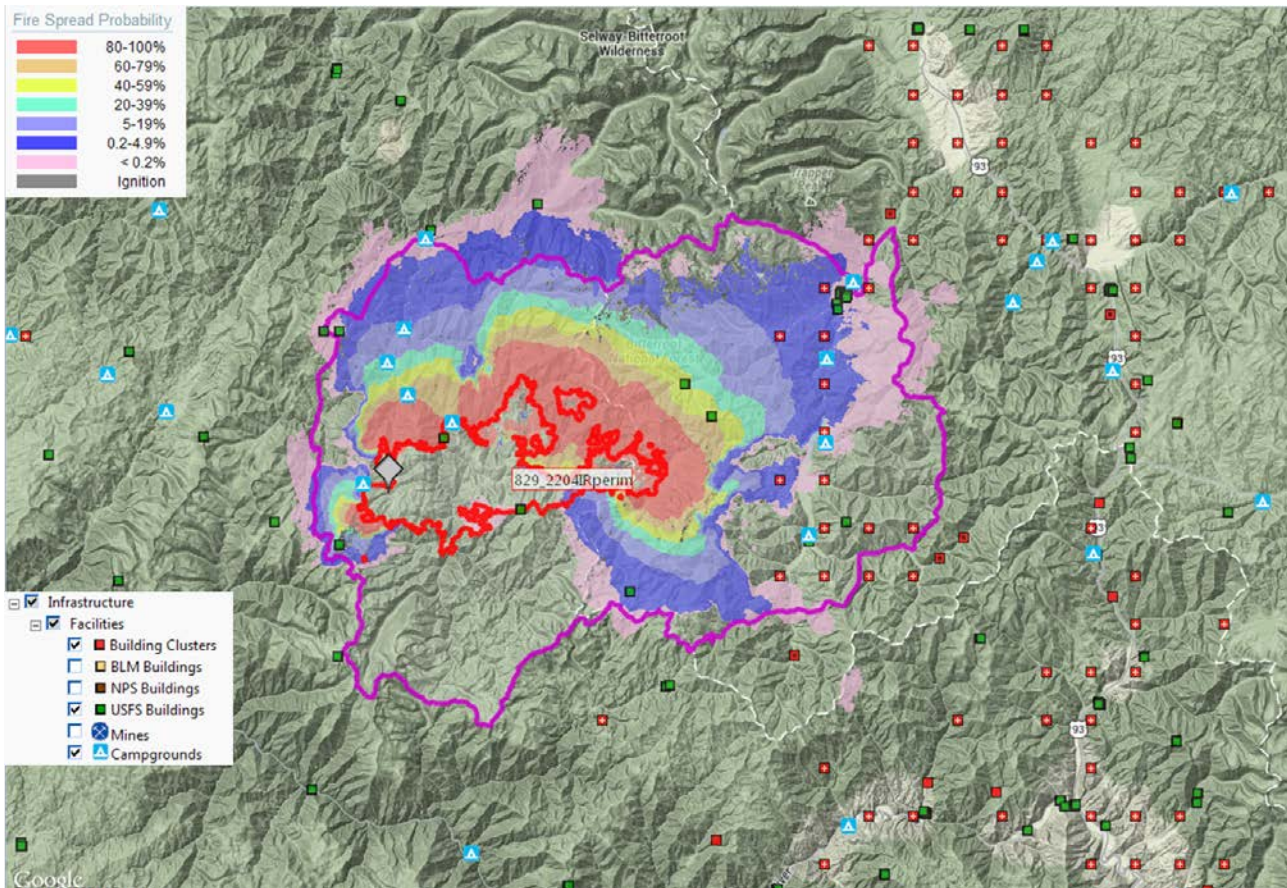
**SOPL and the Agency administrator**—The relationships between the local agency administrators and the SOPL are critical. The agency administrator is the most important person the SOPL works with to develop the incident decision.

The SOPL is a unique position because the position may be assigned to an incident management team/organization, yet it serves as an advocate for the agency administrator, making sure their needs are being met. The SOPL is the intermediary between the agency administrator, Incident Commander, and the incident management team/organization. The SOPL is the advocate for the agency administrator working with the team to ensure that their Leader’s Intent is being implemented in the Course of Action and MAPs. The SOPL works with the agency administrator to assist in development of incident objectives and incident requirements, course of action, MAPs, Relative and Extended Risk Assessments and the Organizational Needs Assessment. The SOPL should always obtain feedback and consensus from the agency administrator as work progresses.

The SOPL should have regular communication with the agency administrator, keeping them abreast of changes and status of the incident, focusing on activities involving the incident decision.

**SOPL and the Incident Management Team**—Depending on the incident, the incident activity and complexity, the SOPL will interact with multiple positions in the Command and General Staff. The SOPL position resides within the Planning Section and in a unity of command sense works for the Plans Section Chief. Initially, as the long term plan is being developed, the SOPL is working with the Operations Section Chief to develop actions and resource needs to address Course of Actions and MAPs. In the daily schedule, the SOPL interacts with the Plans Section Chief, working to ensure that the team is prepared to implement the approved Course of Action or a MAP.

**SOPL and the Long-Term Fire Analyst (LTAN)**—The SOPL and the LTAN work as a team in the development of the Strategic or Long Term Plan. In most cases the SOPL will be more effective when working with an LTAN who produces fire behavior, climatology, and fire effects components in support of decisions (Taber and others, 2013). This team is critical for identifying values at risk and the potential impact by fire activity (2). The LTAN works with the SOPL to model fire growth and fire spread probabilities



**Figure 2**—FSPro output from the WFDSS system is used to calculate fire spread probability and evaluate potential impacts to values of concern (campgrounds – white tents/blue background; Forest Service buildings - green squares; and US Counties/FGDC Cadastral based building clusters- red squares). The pink line delineates the planning area while the red line represents the current fire perimeter.

using a variety of models such as FSPro or the Near-term and Short-term fire behavior models within WFDSS. The outputs of these models can assist in the development and implementation of MAPs. The LTAN and SOPL work together throughout the life of the incident. They observe fire behavior and modeled outputs to provide an Operations Section Chief with projections regarding when fire may reach a MAP or other values that would require a change in strategy or tactics (figure 2).

**SOPL and Wildland Fire Decision Support System (WFDSS)**—The incident decision document resides in WFDSS and during the life of an incident the decision documented in WFDSS will require attention to keep it current. The SOPL position, while not specifically tasked to maintain the decision in WFDSS, can provide a point of contact to maintain the relevancy of information in the decision. As the course of action is met and management action points are either implemented or deactivated, the SOPL can update this information and capture when the actions occurred and evaluate costs associated with the actions. As an incident organization ramps up and down with fire activity and complexity, the relative risk and organization assessment should also be evaluated and revised as needed to reflect current and anticipated conditions. The SOPL position can make recommendations to assist the agency administrator.

### Products

The SOPL can be involved in the development of a variety of products depending on the complexity of the individual incident. These include development of the Relative Risk or Organizational Assessments, Course of Action, establishment of MAPs, and strategic operation plans. All should be tiered to the respective agency Land Management and Fire Management Plans, and require coordination and involvement with the agency administrator and incident management team personnel. Because the level of analysis and products is so variable by incident we do not address all of the potential products that a SOPL may be involved with.

**Risk Assessments**—Risk assessments are simply the process of identifying values and analyzing the probability that they may be impacted by some type of hazard, such as wildfire (Taber and others 2013). The initial relative risk assessment may be all that is required, depending on the complexity of the incident or expected duration. This is typically accomplished by Federal agencies using the Relative Risk Assessment (RRA) process (Taber and others 2013). However, incidents which are more complex or of long-duration may necessitate detailed extended risk assessments that include not only negative impacts but the potential benefits of use of wildland fire to achieve resource objectives as outlined within the respective Land Management Plan and Fire Management Plans (USDA-USDOJ 2009). Regardless of the required level of risk assessment, they both include information regarding the values, hazard and probability associated with the incident.

**Course of Action**—The course of action describes the selected strategy or strategies, priorities, and management actions for accomplishing the incident objectives and requirements based on current and expected conditions. The agency administrator is responsible for developing the course of action but may rely on a SOPL to assist with its development, potentially making the SOPL an integral part in the development of an incident's course of action. SOPLs work with the agency administrator to gain an understanding of their expectations, concerns and priorities. With this knowledge the SOPL works with the agency administrator, the Incident Commander, Operations, the Long-Term Fire Analyst, and others to determine strategies and priority management actions. These are then written clearly with strong Leader's Intent (NWCG 2007) so that the incident management team/organization can develop tactical plans that address the course of action. The course of action needs to be specific enough that it is meaningful but not so specific that it constrains the incident management team/organization. The course of action should help explain what needs to be done, why it is important, and how it should look when the action is completed.

The SOPL manages the course of action, evaluating that it continues to meet incident objectives and incident requirements. If the SOPL finds that it is not meeting these, then the SOPL may recommend that a new decision is needed and assist with that task.

**Management Action Points**—Management Action Points (MAPs) are clearly specified incident conditions that, when reached, prompt a predefined modification to existing fire management actions, or trigger the implementation of new strategies and/or tactics (figure 3).

- MAPs are generally incident-specific; some units have pre-planned MAPs for sensitive areas, or reuse MAPs from previous fires in the same area.
- If the incident conditions defined by the MAP are met, timely implementation is generally critical for successful accomplishment of the incident objectives.
- MAPs define the conditions necessary for the MAP to be implemented, the actions that should be implemented, and the general resources that are needed to be successful.
- The SOPL, working with the incident management team operations section, local resource advisors, and agency administrator develop MAPs to address specific guidance/instruction from the incident objectives and requirements and actions in the approved course of action.

## Summary

During a fire, the SOPL is the advocate for the agency administrator, working with the incident management team/organization to ensure that leader's intent is being implemented on any type of wildland fire. The position is critical in the development of a variety of supporting



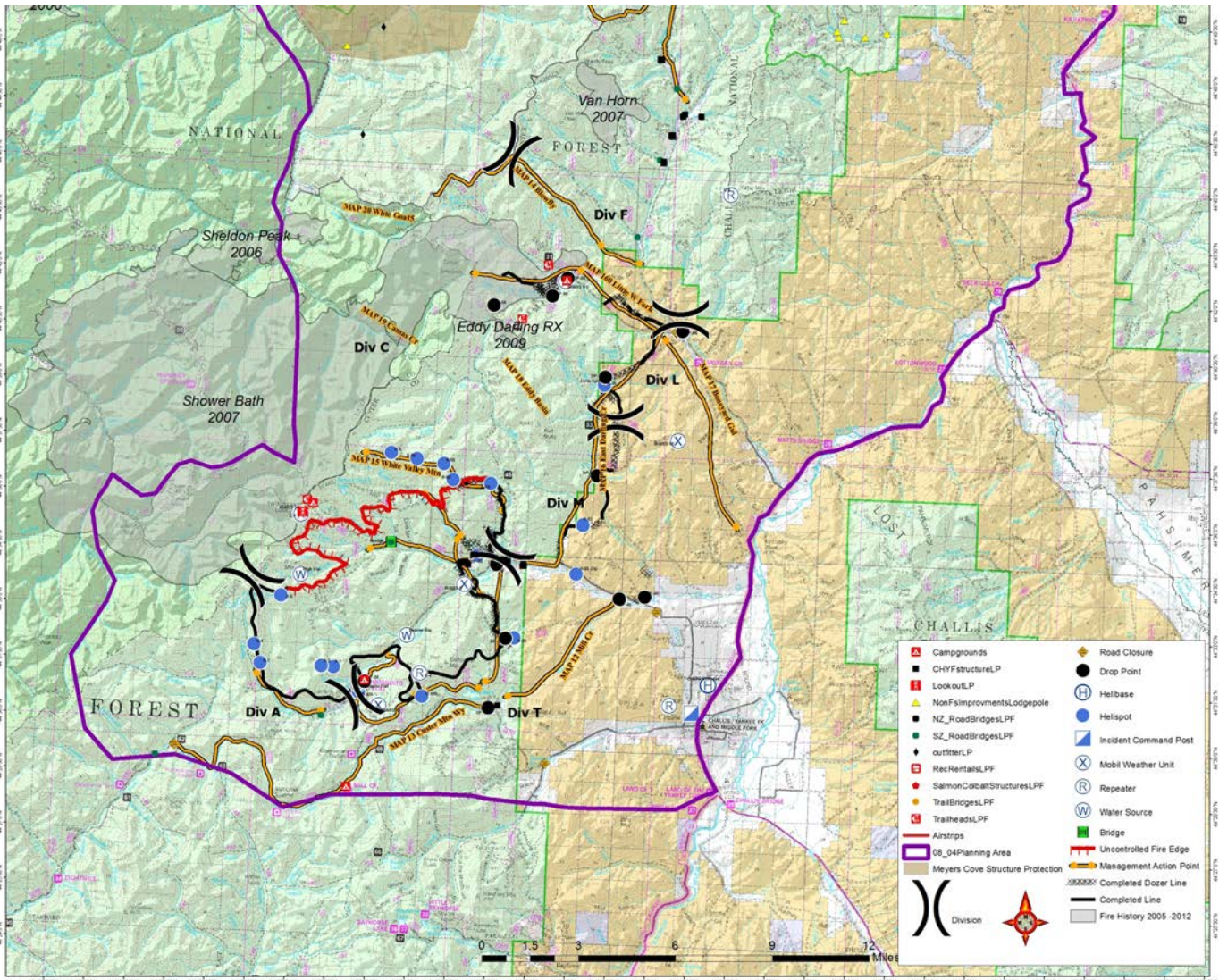


Figure 3—Example showing the Planning Area (purple line), MAPS (gold lines), and other area of concerns for the Lodgepole Fire.

documents and analysis in support of incident management goals and objectives. The use of a SOPL in managing wildland fires with a variety of objectives or of long-duration will benefit the agency administrator and incident management team/organization. As incident management teams become more familiar with the SOPL position and their expertise, knowledge, and skillset, their inclusion into fire management decision making should become less foreign in the future.

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## Glossary

The following sets of terms used in the paper are defined here. They are from three different sources as referenced at the end each definition.

National Wildfire Coordinating Group (NWCG). 2014. Glossary of Wildland Fire Terminology. Available at: <http://www.nwcg.gov/pms/pubs/glossary/index.htm>

Wildland Fire Decision Support System (WFDSS) Glossary of Terms. Available at: [http://wfdss.usgs.gov/wfdss\\_help/542.htm](http://wfdss.usgs.gov/wfdss_help/542.htm)

*Agency Administrator*—The official responsible for the management of a geographic unit or functional area. The managing officer of an agency, division thereof, or jurisdiction having statutory responsibility for incident mitigation and management. Examples: NPS Park Superintendent, BIA Agency Superintendent, USFS Forest Supervisor, BLM District Manager, FWS Refuge Man-



ager, State Forest Officer, Tribal Chairperson, Fire Chief, Police Chief. (NWCG Glossary 2014)

*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. (WFDSS Glossary)

*Delegation of Authority*—A statement provided to the incident commander by the agency executive delegating authority and assigning responsibility. The delegation of authority can include objectives, priorities, expectations, constraints and other considerations or guidelines as needed. Many agencies require written delegation of authority to be given to incident commanders prior to their assuming command on larger incidents. (NWCG Glossary 2014)

*Fire Management Plan (FMP)*—A plan that identifies and integrates all wildland fire management and related activities within the context of approved land/resource management plans. A fire management plan defines a program to manage wildland fires (wildfire and prescribed fire). The plan is supplemented by operational plans, including but not limited to preparedness plans, preplanned dispatch plans, prescribed fire burn plans, and prevention plans. Fire management plans assure that wildland fire management goals and components are coordinated. (NWCG Glossary 2014)

*Incident Action Plan (IAP)*—Contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written. When written, the plan may have a number of attachments, including: incident objectives, organization assignment list, division assignment, incident radio communication plan, medical plan, traffic plan, safety plan, and incident map. Formerly called shift plan. (NWCG Glossary 2014)

*Incident Command System (ICS)*—A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. (NWCG Glossary 2014)

*Incident Decision*—Serves to document what the management decision is for a specific fire, why it was made, and how it supports the Land and Resource Management Plan objectives and requirements. (Taber and Others 2013)

*Incident Objectives*—Statements of guidance and direction necessary for the selection of appropriate strategy(s), and the tactical direction of resources. Incident objectives are based upon agency administrator direction and constraints. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives. (NWCG Glossary 2014)

*Land Management Plan (LMP)*—A document prepared with public participation and approved by an agency administrator that provides general guidance and direction for land and resource management activities for an administrative area. The LMP identifies the need for fire's role in a particular area and for a specific benefit. The objectives

in the LMP provide the basis for the development of fire management objective and the fire management program in the designated area. (NWCG Glossary 2014)

*Leader's Intent*—A concise statement that outlines what individuals must know in order to be successful for a given assignment. The intent communicates three essential pieces of information: Task – What is the goal or objective; Purpose – Why it is to be done, and the End State – How it should look when successfully completed. (NWCG Glossary 2014)

*Long Term Fire Analyst (LTAN)*—LTAN is critical in predicting the potential area and extent of burning, assessing long-term risk, and validating the planning area. LTANs also predict the potential for a fire reaching certain values that may be threatened over the long term and the potential timing of a fire-ending event. (Taber and Others 2013)

*Management Action Points (MAPs)*—Geographic points on the ground or specific points in time where an escalation or alternative of management actions is warranted. These points are defined and the management actions to be taken are clearly described in an approved Prescribed Fire Plan. Timely implementation of the actions when the fire reaches the action point is generally critical to successful accomplishment of the objectives. Also called Trigger Points. (NWCG Glossary 2014)

*Management Objectives*—The objectives set forth in an approved Land Management Plan, Resource Management Plan, Fire Management Plan, or other guiding document that provide the basis for the fire management program in a designated area. The objectives identify the need for and use of fire in a particular area and for a specific benefit. Not all land management objectives are directly related to the fire management program. (WFDSS Glossary)

*Organizational Needs Assessment*—Are used to provide guidance on the recommended type (level) of incident management organization based on the expected difficulty of implementing the course of action, the relative risk assessment, and management concerns. (Taber and Others 2013)

*Resource Management Plan (RMP)*—A document prepared with public participation and approved by an agency administrator that provides general guidance and direction for land and resource management activities for an administrative area. The RMP identifies the need for fire's role in a particular area and for a specific benefit. The objectives in the RMP provide the basis for the development of fire management objective and the fire management program in the designated area. (NWCG Glossary 2014)

*Relative Risk Assessment*—A risk assessment is the process of identifying values and analyzing the probability that hazards may negatively impact them. In the wildfire decision making process, risk assessment is a summary of information and analyses used to evaluate each of the three components of risk: values, hazard, and probability. (Taber and Others 2013)

*Strategic Operational Planner (SOPL)*—A SOPL is an NWCG position skilled in applying risk assessment products to the development of complex courses of action, employing the full spectrum of fire management strategies to achieve land management objectives. SOPLs are most effective when paired with a Long-Term Fire Behavior Analyst to produce the fire behavior, climatology, and fire effects components of the risk assessment and benefit analysis. (Taber and Others 2013)

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