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INSTRUCTOR:

LESSON: Wildland Fire Decision Support System

COURSE: S-130, 131 – Fire Fighter, Fire Fighter I
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Emphasis: introduce concepts of WFDSS decision support.

OBJECTIVES:

Upon completion of this lesson, participants will be able to:

1. Understand the basic concepts of the Wildland Fire Decision Support System (WFDSS).
2. Understand circumstances that might warrant a WFDSS decision.

I.   INTRODUCTION

WFDSS is designed to establish a process for documenting decisions on all types of wildland fires. The WFDSS process is scalable to changing fire complexity. WFDSS provides a platform for risk-informed decision-making.

Documentation and analysis of wildland fire management decisions has been required by federal agency policy for nearly 30 years. The 2009 Policy Implementation Guidance requires-

> "Managers will use a decision support process to guide and document wildfire decisions. The process will provide situational assessment, analyze hazards and risk, define implementation actions, and document decisions and rationale for those decisions."

The Wildland Fire Decision Support System (WFDSS) was developed to meet this need. At 98% initial attack success, there may not be a lot of need for analysis to inform decisions on incidents. However as incidents escape initial attack or are managed for multiple objectives, more analysis is needed to inform the decision.

II.   WHEN A WFDSS DECISION IS NEEDED

It is recommended that a decision be considered if;

- Wildland fires are no longer within the initial action defined by the Fire Management Plan (preplanned response is not effective). (The **fire management plan** is a document that lays out how **fire management** strategies and tactics will protect values-at-risk and meet resource management goals and objectives.)
- Fire continues to actively spread beyond one or more burning periods.
- Wildland fires are being managed or considered for multiple objectives.

- Prescribed fires exceed prescriptions and are declared wildfires

In some cases a WFDSS decision may not be required, such as initial attack on a small fire, other times the WFDSS decision may be ongoing while an emerging fire is being engaged. If a WFDSS decision has not yet been published it is important to follow the established management strategy (put the fire out, monitor the fire, or managed the fire for multiple objectives, etc.). Once available the WFDSS decision is the guiding document with which the incident is managed. Decision-making associated with managing wildland fire can have critical impacts. Publishing a decision provides documentation of the management action taken on the fire and the rationale behind it.

III.   WHAT IS WFDSS?

WFDSS is designed to be consistent with accepted models of risk-informed decision-making. WFDSS is a web based system that allows users to acquire information, analyze that information, apply that information to inform their decision and gain situational awareness, then to archive the decision and the documentation.

WFDSS is designed to include models and tools to analyze and assess the incident. The outputs can then be used to support the decision and assist in driving strategies and future tactics.

Decision making and publishing a WFDSS decision is the responsibility of the appropriate Line Officer or Unit Manager (District Ranger, Forest Supervisor, Regional Forester, Park or Refuge Superintendent, etc.) Fire managers and fire personnel, as well as resource managers provide critical input into the development of the decision.

IV.   YOUR ROLE IN WFDSS

It is important for a firefighter to understand that the WFDSS decision provides the framework for the tactical decisions made on an incident. The objectives in the WFDSS decision should be reflected in the incident objectives found in the Incident Action Plan (IAP).

Training aids are available on the WFDSS site on the Training tab. http://wfdss.usgs.gov/wfdss/WFDSS_Home.shtml To help users become familiar with navigating in the program. The WFDSS 101 series is an excellent source for learning how to use WFDSS.

V. SUMMARY

Management of wildland fire represents one of the most complex and highest risk activities in land management. Decision support and its contributions to decision-making are vital to fire management success. Decision support tools provide information to decision-makers. These tools and processes incorporate science and technology to assist in decision making.

Decision support give managers the ability to reduce the amount of uncertainty surrounding the fire, understand the amount of difficulty that could be encountered during management, and possible outcomes. Thus WFDSS can provide a common understanding and clearer explanation of the situation.