

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Office of Fire and Aviation
3833 South Development Avenue
Boise, Idaho 83705

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To: State Directors
From: Director, Office of Fire and Aviation
Subject: Fire Danger Operating Plan Guidance

A key part of the Bureau's Preparedness strategy as described in Chapter 7 of the 1999 *Standards for Fire Operations* is the establishment of Fire Danger Operating Plans at the district/field office level. The Fire Danger Operating Plan describes how fire danger ratings are applied to help make operational decisions which support firefighter safety, organizational preparedness, and efficient resource utilization. The plan defines roles and responsibilities, fire danger rating areas (where the system outputs apply), NFDRS thresholds used as decision points, and operational procedures.

The attached guidance is now available for developing these operating plans. It should be noted that the minimum standard for Fire Danger Operating Plans is defined on pages 79-80, Chapter 7 of the 1999 *Standards for Fire Operations*. This guidance is a recommended approach to developing the plan to meet the standard. Other approaches may also be appropriate. (More complete instruction on Fire Danger Operating Plan development is available from the NFDRS course presented at NARTC.) Review and recommendations for this guidance were provided by four field offices and three state offices.

Due to the timing of this guidance, development of Fire Danger Operating Plans will not be expected until FY 2000.

Questions, comments, or requests for specific examples can be directed to Paul Schlobohm at 208-387-5444 or paul_schlobohm@nifc.blm.gov.

Signed by:
Edward W. Shepard
Acting Director, Office of Fire and Aviation

Authenticated by:
Pat Lewis
Supervisory Mgmt. Asst.

1 - Attachment

1 - Guidance for Developing a Fire Danger Operating Plan (14 pp.)

FIRE DANGER OPERATING PLAN

or other appropriate title, for example: Interagency Preparedness Guide

BUREAU OF LAND MANAGEMENT
(YOUR) DISTRICT OR FIELD OFFICE

and any other cooperating agencies, such as:

USDA FOREST SERVICE
(YOUR COOPERATING) NATIONAL FOREST

US FISH & WILDLIFE SERVICE *(or other Federal Agency)*
(YOUR COOPERATING) NATIONAL WILDLIFE REFUGE

YOUR LOCAL STATE FORESTRY AGENCY

YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE

Effective Date

Approved

District (Field) Manager, Your District (Field) Office Date

Signatures of all others as appropriate Date

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1. Introduction

The introduction statement briefly describes what the Plan is, what it is based upon, and what it is not based on. For example:

This Fire Danger Operating Plan establishes the setup and implementation of the NFDRS fire danger modeling program for the South Central Oregon Fire Management Partnership as required by Chapter 7-Preparedness of the BLM *Standards for Fire Operations 1999*. Fire danger is one of several factors used to determine preparedness levels and resulting operational decisions. Other factors include resource availability, current weather, and fire activity. The resulting decision matrix of action items described below (in Part 5) does not necessarily account for other factors such as, training levels, political factors, mutual aid status, overriding budget constraints, and other pertinent factors.

2. Roles and Responsibilities

In this section the roles and responsibilities of those involved with the implementation of the Plan are defined.

a. Fire Weather

Who provides forecasted fire weather and fire danger products? Identify anyone else with responsibilities for fire weather. For example:

The fire weather forecasts are provided by the Medford NWS office. Fire weather forecasts used to generate forecasted fire danger indexes are the responsibility of this office.

The Fremont National Forest fire weather coordinator is Rich Stubbs.

b. Fire Danger Operating Plan

Who prepares and maintains the Plan? Who ensures its implementation? For example:

The Lakeview Interagency Fire Center Manager is responsible for the preparation and maintenance of this Fire Danger Operating Plan. The South Central Oregon Fire Management Partnership is responsible for implementing this plan.

c. Weather Station Maintenance

Identify the weather station maintenance arrangements. For example:

Rich Stubbs is the RAWS coordinator for the Fremont National Forest. BLM stations are maintained in accordance with the BLM RAWS Strategic Plan (1997). ASCADS is used to track RAWS maintenance and station status.

Weather station site maintenance is described in Chapter 4 of the "Weather Station Handbook -- an Interagency Guide for Wildland Managers" by Arnold I. Finklin and William C. Fischer.

d. Station Catalogs and NFDRS Outputs

Identify who manages the weather station catalogs, daily data collection, and distribution of fire danger-related products. For example:

The Lakeview Interagency Fire Center Manager is responsible for managing the weather station catalogs in the Weather Information Management System (WIMS)

throughout the year and for generating and communicating daily outputs from the NFDRS in a timely manner.

e. Fire Danger Pocket Cards

Identify who maintains current fire danger pocket cards for the unit and how they are distributed.

The Lakeview Interagency Fire Center Manager is responsible for maintaining current pocket cards. They are provided to all unit fire personnel, during briefings to all off-unit crews, and to the national pocket card website at <http://fire.blm.gov/nfdrs>.

f. WIMS Edit Access

Identify who is responsible for the Access Control List (ACL) in the Weather Information Management System (WIMS). This list enables or disables edit access to station catalogs.

g. Action Items

Identify who has a role in developing the actions triggered by decision points. Actions to address include initial attack, prevention/education, restrictions, detection, fuels, and information. For example:

The South Central Oregon Fire Management Partnership is responsible for establishing appropriate actions for each preparedness level. Actions include fuels, fire prevention/education, suppression, information, and others.

3. Fire Danger Inventory

In this section, the fire danger characteristics of the area involved are described.

a. The Planning Area

Describe the land base to which the plan applies. For example:

The planning area for this Interagency Preparedness Guide consists of approximately 5 million acres in South Central Oregon. It is the areas of responsibility for the Bureau of Land Management Lakeview District, the Fremont National Forest, the Sheldon/Hart National Wildlife Refuges, and the Lake Unit of Oregon Department of Forestry. See map in appendix.

b. Fire Occurrence

Describe the fire occurrence data used in the analysis. Provide fire occurrence data such as fires and acres by month, fires by cause class, fires by size class, large and multiple fire days (from FMP or Firefamily Plus). Maps of this data is also recommended if available. For example:

Fire activity data used in this analysis range from 1980-1996 for BLM Lakeview District and 1980-1998 for the Fremont National Forest. At this time, fire activity data from Lake Unit Oregon Department of Forestry and Sheldon/Hart National Wildlife Refuges was not used in the analysis.

c. Weather Stations

Describe the location and status of weather stations in the Plan. For example:

Gerber	1970-present	manual station upgraded to RAWS 1978
Strawberry	1980-present	RAWS
Cabin Lake	1982-present	RAWS
Coffee Pot	1987-present	RAWS
Ft. Rock	1968-present	manual station upgraded to RAWS 1980
Catnip	1985-present	RAWS
etc.		

See station catalog/ASCADS printouts in Part 6 below for locations, NFDRS parameters, and other information.

d. Vegetation and Fuels

Describe predominant fuels and vegetation in the plan area. This may be found in a district or forest fire management plan. This could be described in text or map form.

e. Topography

Describe general topography in the plan area. This may be found in a district or forest fire management plan. This could be described in text or map form. A description of NFDRS slope class is suggested.

f. Climate Class

Identify the NFDRS climate class for the plan area. A map is suggested.

g. The Fire Danger Rating Areas

A fire danger rating area is a geographical zone within which the fire danger can be assumed to be uniform. It is relatively homogeneous in climate, fuels, and topography. Identify fire danger rating areas to be used in the plan and how they were developed. It is recommended that recent fire planning efforts be considered and used when appropriate. For example:

Established dispatch blocks were used to define decision blocks for staffing levels and preplanned dispatch due to the location of resources. IFPL decision blocks were based on weather stations in forested areas. The rating area for adjective rating, preparedness levels, and prevention activities is the entire South Central Oregon Fire Management Partnership. See map in appendix.

4. Decision Points

In this section, explain how decision points were determined and identify the decision points for activities. Highly recommend using FIREFAMILY PLUS analysis (which compares historical fire danger outputs to fire occurrence). Determine breakpoints for as many different types of activities as necessary.

Lakeview example:

The FIRES (now FIREFAMILY PLUS) program was used to develop decision points for staffing classes, adjective ratings, preplanned dispatch, preparedness level inputs, prevention activities, industrial fire precaution levels and other restrictions, and detection. Correlations of fire business were used to determine weightings for groups of weather stations. Decision points for staffing levels and adjective ratings are listed in the station catalogs found in part 6 below. Weights are located in the attached preplanned dispatch guide. Preparedness level is determined as a combination of current fire activity, wind, resource availability, and fire danger index as described in the attached Preparedness Level Determination sheet. *(The preplanned dispatch guide and preparedness level determination process had already been developed; FIRES runs for decision point analysis were the only new work here related to developing this plan)*

Rocky Mountain Area example:

Preparedness level parameters are defined in the RMA Mob Guide section 26.7. *(This is an example of existing decision points that may fit directly into your plan, or may need to be validated)*

East Zone Northern Rockies example:

Preparedness level parameters are defined as follows. *(See attached table. This is another example of existing decision points that may fit directly into your plan, or may need to be validated)*

5. Implementation

In this section, describe the standard management decisions corresponding to the decision points defined in Part 4. For example:

Lakeview example:

Specific actions are defined in the attached staffing guide for funded resources, extra funding (severity), intelligence and safety, detection, prevention, and suppression. Further considerations are outlined in the attached interagency preparedness guide.

Rocky Mountain Area example:

Preparedness Levels are established and defined according to the Rocky Mountain Area Mobilization Guide section 26. Decision points and action items are described in sections 26.7 and 26.8 respectively and are attached.

Craig example:

Implementation is tracked in the attached Preparedness Plan chart for the Craig District.

East Zone Northern Rockies example:

Actions and responsibilities are defined for the Northern Rockies East Zone in the attached Preparedness Plan.

6. Operational Procedures

In this section, document the current weather station NFDRS parameters and the established procedures for maintaining the station catalog and archiving the daily weather observation into the National Interagency Fire Management Integrated Database (NIFMID).

a. WIMS Station Catalog Settings

Provide NFDRS parameters used for each weather station. A print-out of the WIMS station catalog is recommended.

The attached RAWs document for the South Central Oregon Fire Management Partnership includes maps of station locations, station catalog printouts, ASCADS station descriptions, and Special Interest Group (SIG) definitions.

b. Daily Schedule

1300 local standard time weather is archived by 1500 local standard time every day of the year.

7. Program Needs

In this section, identify needs for program improvement.

- a. Weather Station Sites
- b. Computer Equipment/Software
- c. NFDRS and other training

Most geographic areas are now offering intermediate-level technical skills training in NFDRS. This material will be standardized by NWCG as S-491 Intermediate Fire Danger Rating by about 2001.

Other courses to consider include weather station maintenance, basic computer skills, and WIMS.

8. Appendix

- a. Maps (*such as:*)
 - i Fire Danger Planning Area
 - ii Vegetation Type Map
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(*for example:*) Daily 1300 hr Local Standard Time observations are archived in the Weather Information Management System (WIMS) using Webterm at <http://fire.nifc.nps.gov/webterm/default.asp>. The historical 1300 hr data are retrieved from the National Interagency Fire Management Integrated Database (NIFMID) using the website: <http://famweb.usda.gov/>. Current hourly weather data from Remote Automatic Weather Stations are retrieved from the BLM Weather and Lightning Website: <http://www.nifc.blm.gov/index.html>. Historical hourly RAWS data are requested from the Western Regional Climate Center, Reno, Nevada. RAWS site, maintenance, and troubleshooting information is located in ASCADS (Automated Sorting Conversion and Distribution System) via NetTerm. Fire danger analysis software such as Firefamily Plus is accessible via the internet at <http://www.fs.fed.us/fire/planning/nist/>

- ii logon ID's, security

The logon id's and passwords for each are:

- iii accounting

The accounting is handled by

iv support services

The phone numbers for support services are as follows: BLM: WIMS and NFDRS technical support: Paul Schlobohm (208) 387-5444, RAWS maintenance: Buddy Adams (208) 387-5362; USFS technical support help desk: 208-387-5290.

- d. Other documents as necessary