Boise National Forest 1249 S. Vinnell Way Boise ID, 83709

To: Boise Dispatch

From: Boise NF Fire Management

Boise National Forest will be diverging from the current 2026 Fire Danger Operating Plan (FDOP) to be more prescriptive than what is in the plan in regards to Staffing Level. Staffing Level will be calculated based on Fire Business thresholds as calculated in the ROC method described within the FDOP. Staffing Level will be then substituted for adjective rating in the Plinko chart used to calculate Preparedness Level.

Adjective rating will continue to be calculated based on the 90th/97th climatological breakpoints and will be used for fire danger (Smokey's arm) as well as fire restrictions calculations.

Break Points

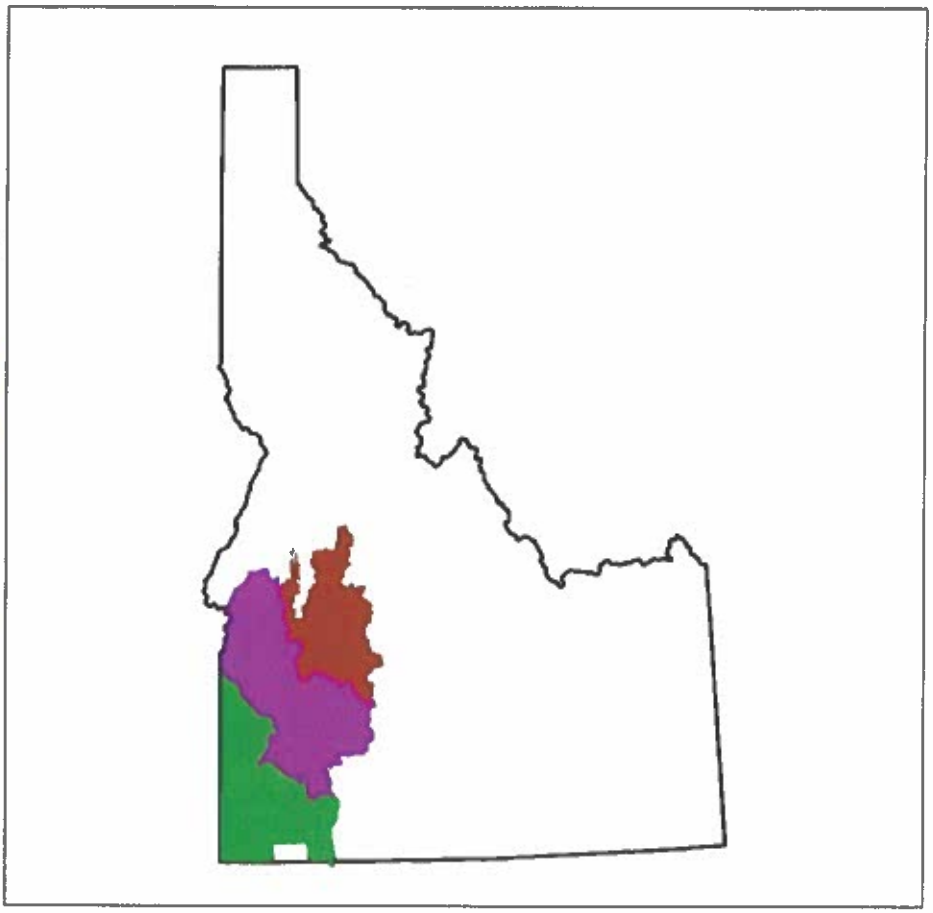
Staffing Level	I	II	III	IV	V
	<27	28-34	35-52	53-58	59+
Adjective Rating	L	M	H	VH	E
	<14	15-28	29-56	57-62	63+

RALPH LAMB Digitally signed by RALPH LAMB Date: 2026.06.25 11:50:39 -06'00'

Boise NF Forest FMO

Boise

Interagency Fire Danger Operating Plan



March 2026

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Boise

Fire Danger Operating Plan

Approved By: ***Agency Administrators***

Dean G Johnson

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Date: 2026.06.22 14:51:50 -06'00'

Dean Johnson - Southwest Area Manager
Idaho Department of Lands, Southwest Area

Date

DAVID FRANCOMB

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David Francomb - Forest Supervisor
US Forest Service, Boise National Forest

Date

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Boise

Fire Danger Operating Plan

Recommended By: ***Fire Program Managers***

MARTIN ADELL Digitally signed by MARTIN ADELL
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Marty Adell - Fire Management Officer
Wildland Fire Service, Boise District

Date

Casper Urbanek Digitally signed by Casper Urbanek
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Casper Urbanek - Fire Warden
Idaho Department of Lands, Southwest Area

Date

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Randy Lamb - Fire Management Officer
US Forest Service, Boise National Forest

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Boise

Fire Danger Operating Plan

Prepared By: ***Technical Group***

NOLIN PAGE
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Nolin Page - Fire Planner
Wildland Fire Service, Boise District

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Tyke Lofing
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Tyke Lofing - South Zone Fire Manager
Idaho Department of Lands, Southwest Area

Date

Jared Schuster
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Jared Schuster - Fire Planner
US Forest Service, Boise National Forest

Date

ANDRA PETERSON
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Date: 2026.06.10 15:05:07 -06'00'

Andra Peterson - Assistant Dispatch Center Manager
Wildland Fire Service, Boise Interagency Dispatch

Date

MARK RICH
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Date: 2026.06.11 08:41:40 -06'00'

Mark Rich - Lead Dispatcher
Wildland Fire Service, Boise Interagency Dispatch

Date

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TABLE OF CONTENTS

I. INTRODUCTION

A. PURPOSE

The public, industry, and our own agency personnel expect the interagency wildland fire management agencies to implement appropriate and timely decisions which ultimately result in safe, efficient, and effective wildland fire management actions. This plan is intended to document a decision-making process for agency administrators, fire program managers, fire operations specialists, dispatchers, agency cooperators, and firefighters by establishing interagency planning and response levels using the best available scientific methods and historical weather/fire data.

An appropriate level of preparedness to meet wildland fire management objectives is based upon an assessment of vegetation, climate, and topography utilizing elements of the National Fire Danger Rating System (NFDRS). This plan was developed to assist with planning and operational decisions relative to fire danger, preparedness, resource needs, personnel briefing, situational awareness, and implementing fire restrictions.

B. OPERATING PLAN OBJECTIVES

- Provide a tool for agency administrators, fire managers, dispatchers, agency cooperators, and firefighters to correlate fire danger ratings with appropriate fire business decisions in fire danger planning area.
- Delineate fire danger rating areas (FDRAs) in [fire danger planning area] with similar climate, vegetation, and topography.
- Establish an interagency fire weather-monitoring network consisting of Remote Automated Weather Stations (RAWS) which comply with NFDRS Weather Station Standards (PMS 426-3).
- Determine climatological breakpoints and fire business thresholds using the Fire Environment Mapping System (FEMS), and National Fire Danger Rating System (NFDRS)using Receiver Operating Characteristic Curve (ROC) graphs to analyse and summarize an integrated database of historical fire weather and fire occurrence data.
- Define roles and responsibilities to make fire preparedness decisions, manage weather information, and brief fire suppression personnel regarding current and potential fire danger.

- Determine the most effective communication methods for fire managers to communicate potential fire danger to cooperating agencies, industry, and the public.
- Provide guidance to interagency personnel outlining specific daily actions and considerations at each preparedness level.
- Identify seasonal risk analysis criteria and establish general fire severity thresholds.
- Identify the development and distribution of fire danger pocket cards to all personnel involved with fire suppression within the [fire danger planning area].
- Identify program needs and suggest improvements for implementation of the Fire Danger Operating Plan.

SUPPLEMENTAL FIRE DANGER PLANS

Preparedness

a. Preparedness Plan

Preparedness plans provide management direction given identified levels of burning conditions, fire activity, and resource commitment, and are required at national, state/regional, and local levels. Preparedness Levels (1-5) are determined by incremental measures of burning conditions, fire activity, and resource commitment. Fire danger rating is a critical measure of burning conditions. The Preparedness Levels are identified and documented in the Boise Fire Danger Operating Plan; the associated decisions and planned actions are located in Appendix A.

b. Staffing Plan

The Staffing Plan describes escalating responses based on goals and objects from the Fire Management Plan (FMP). Mitigating actions are designed to enhance the unit's fire management capability during short periods (one burning period, Fourth of July or other pre-identified events) where normal staffing cannot meet initial attack, prevention, or detection needs. The decision points are identified and documented in the associated decisions and planned actions are in *Appendix B* (Staffing Plan).

c. Prevention Plan – Fire Danger Components

Prevention plans document the wildland fire problems identified by a prevention analysis. This analysis will not only examine human-caused fires, but also the risks, hazards, and values for the planning unit. Components of the plan include mitigation (actions initiated to reduce impacts of wildland

fire to communities), prevention (of unwanted human-caused fires), education (facilitating and promoting awareness and understanding of wildland fire), enforcement (actions necessary to establish and carry out regulations, restrictions, and closures), and administration of the prevention program. The analysis of fire problems and associated target groups in the Boise area are documented in this Fire Danger Operating Plan; the associated decisions and planned actions are in *Appendix C.*

d. Public Fire Restriction Plan

A Restriction Plan is an interagency document that outlines interagency coordination efforts regarding fire restrictions and closures. An interagency approach for initiating restrictions or closures helps provide consistency among the land management partners, while defining the restriction boundaries so they are easily distinguishable to the public. Based on the fire danger, managers may impose fire restrictions or emergency closures to public lands. Decision points when restrictions and/or closures should be considered are identified and documented in the Idaho Fire Restrictions Plan.

Wildfire Response

e. Response Plan

Initial response plans, also referred to as run cards or pre-planned response plans, specify the fire management response (e.g. number and type of suppression assets to dispatch) within a defined geographic area to an unplanned ignition, based on fire weather, fuel conditions, fire management objectives, and resource availability. Response levels are identified and documented in the Boise Fire Danger Operating Plan. The number and type of suppression resources dispatched to a reported fire is documented in the associated Dispatch Response Plan (*Appendix E*).

f. Local Mobilization Plan

The Boise Mobilization Plan identifies standard procedures, which guide the operations of multi-agency logistical support activity throughout the coordination system. The Mobilization Plan is intended to facilitate interagency dispatch coordination, ensuring the timeliest and most cost-effective incident support services available are provided. Communication between Units, GACCs, State, Regional Offices and other cooperative agencies are addressed. The Mobilization Plan can be located on the Dispatch Center web site (http://...)

g. Fuels management plans are intended to provide the framework for agency fuels management interests. Elements of fire weather, fire behavior, and fire danger are integral to the implementation of actions under each guiding document.

The NWCG Standards for Prescribed Fire Planning and Implementation, PMS 484 guides the actions of the National Interagency Fire Planning Operations and Reporting System and Forest Service Activity Tracking System.

C. POLICY AND GUIDANCE

Interagency policy and guidance regarding the development of Fire Danger Operating Plans can be found in the Interagency Standards for Fire & Aviation Operations (Red Book). Agency-specific direction can be found in:

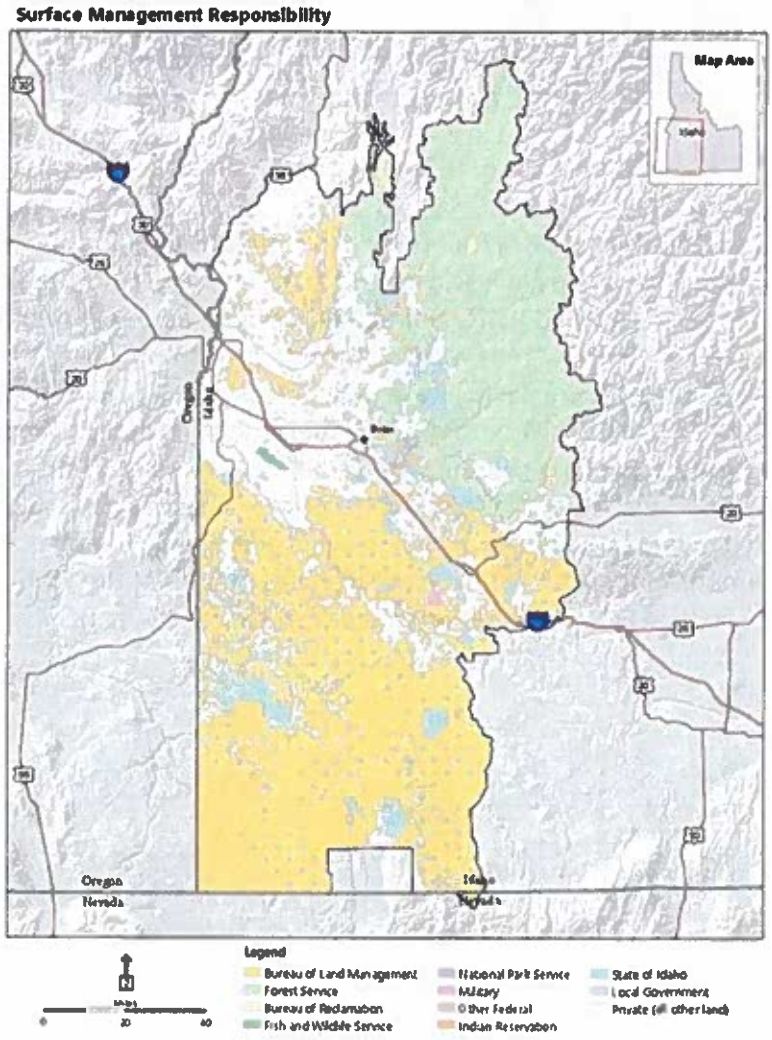
- U.S. Forest Service – Manual 5120 - Fire Management - Preparedness
- Bureau of Land Management – Manual 9211 - 1 - Fire Planning Handbook
- National Park Service – Manual 18, Chapter 5 – Preparedness
- Fish and Wildlife Service – Fire Management Handbook, Chapter 10 - Preparedness
- Bureau of Indian Affairs – Wildland Fire and Aviation Program Management Operations Guide

II. FIRE DANGER PLANNING AREA INVENTORY AND ANALYSIS

A. ADMINISTRATIVE UNITS

This document serves as an example of consistent and effective application of fire danger decisions applied across multiple jurisdictional boundaries. Wildland fire management and suppression responsibilities are shared among Federal, State, and local cooperators.

Overview Map



Map 1: Fire Danger Planning Area Overview

Ownership Table

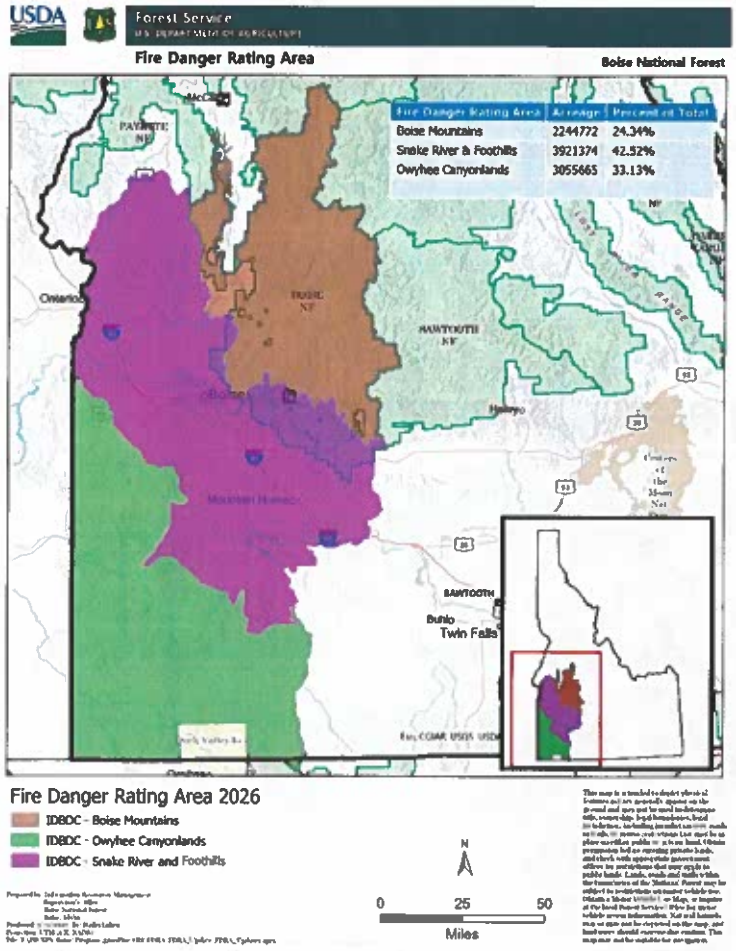
ID-BDC SURFACE MANAGEMENT RESPONSIBILITY ACRES	
BLM	3,816,059
BOR	123,703
HISTORIC WATER	30,444
LOCAL GOVERNMENT	41,175
MILITARY/USCOE	14,958
NATIONAL WILDLIFE REFUGE	11,352
PRIVATE	2,496,068
STATE	518,572
STATE FISH & GAME	26,917
STATE PARKS & REC	5,737
USFS	2,135,354
OTHER FEDERAL	233

Table 1: Ownership Table

B. FIRE DANGER RATING AREAS

A Fire Danger Rating Area (FDRA) is defined as a large geographic area relatively homogenous with respect to *climate*, *vegetation* and *topography*. Because of these similarities, it can be assumed that the fire danger within a FDRA is relatively uniform. Fire Danger Rating Areas were delineated based upon an analysis of these three factors: climate (Appendix H:), vegetation (Appendix G:), and topography (Appendix F:). After these environmental factors were considered, the draft FDRAs were *edge-matched* to existing administrative boundaries using Response Areas (Appendix A:). It is important that existing Response Areas are not split by FDRAs; a Response Area must not have two FDRAs to avoid additional workload and confusion for operational personnel. A detailed description of the FDRA is in *Appendix L*. The final FDRA delineation is depicted here:

Southwest Idaho FDRA Map



Map 2: Fire Danger Rating Areas (FDRAs)

FDRA Table

Fire Danger Rating Area	Acreage	% of Total
Boise Mountains	2244772	24.34%
Snake River and Foothills	3,916,405	42.52%
Owyhee Canyonlands	3,199,409	33.13%

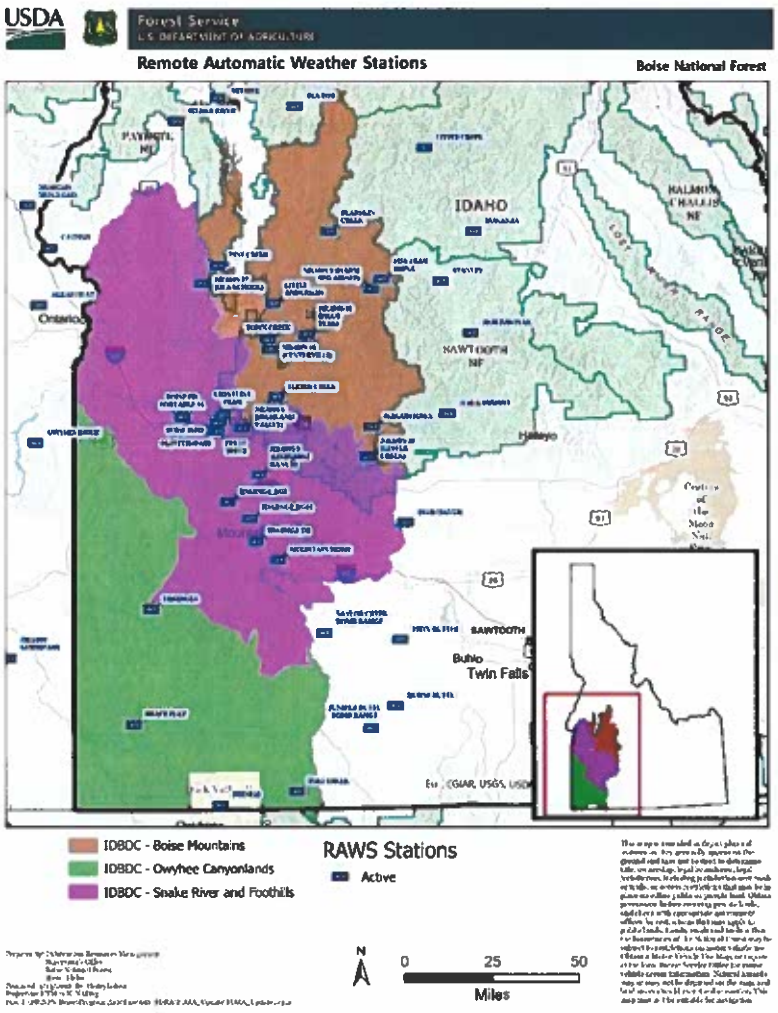
Table 2: Fire Danger Rating Areas (FDRAs)

C. WEATHER STATIONS

All Remote Automated Weather Stations (RAWS) comply with the National Wildfire Coordinating Group (NWCG) weather station standards.
https://www.nwcg.gov/publications/pms426-3

Each RAWS receives, at a minimum, one annual on-site maintenance visit by either the local user or contracted personnel to ensure sensors are within calibration standards and verify site and station conditions.

RAWS Map



Map 3: Remote Automated Weather Station (RAWS)

RAWS Catalogue Table (Active Stations Only)

Table 3: RAWS Catalogue

STATION NAME	WIMS ID	NESDIS ID	AGENCY / OWNER	AVAIL DATA YEARS	ELEV	LATITUDE	LONGITUDE	REPORTING TIME	FDRA
Weiser River	101108	325E60D6	USFS / ID-PAF	1982-PRES	3900	44 50 50.4	116 25 39.6	12MST	N/A
Pine Creek	101222	3241DC86	USFS / ID-BOF	1984-PRES	5600	44 15 01	116 11 55	13MST	Boise Mountains
Ski Hill	101223	325E554C	USFS / ID-PAF	1987-PRES	5600	44 56 34.43	116 11 17.51	12MST	N/A
Town Creek	101708	3241CFF0	USFS / ID-BOF	1982-PRES	4500	43 56 22.5	115 54 41.5	13MST	Boise Mountains
Catfish	101402	3250B2D6	BLM / ID-BOD	1990-PRES	3750	44 19 34	117 10 10	12MST	N/A
Mountain Home	102709	3252C1B2	BLM / ID-BOD	1966-PRES	3350	43 01 42.1	115 52 16.4	12MST	Snake River and Foothills
Horse Butte	103205	32513638	BLM / ID-TFD	1983-PRES	5000	42 25 02	115 13 40	12MST	N/A
Twin Butte	103209	3252B722	BLM / ID-TFD	1990-PRES	3300	42 41 26	115 11 43	12MST	N/A
Brace Flat	103207	325034C2	BLM / ID-BOD	1990-PRES	4900	42 21 06	116 41 31	12MST	Owyhee Canyonlands
Triangle	103208	32523136	BLM / ID-BOD	1990-PRES	5270	42 49 43	116 35 19	12MST	Owyhee Canyonlands
Owyhee Ridge	353614	3252A454	BLM / OR-VAD	1985-PRES	4400	43 31 03.8	117 14 22.6	12MST	N/A
Teapot	101220	325E73A0	USFS / ID-PAF	1986-PRES	5152	44 54 15.6	115 44 18.9	12MST	N/A
Bearskin Creek	101221	3241D254	USFS / ID-BOF	1982-PRES	6700	44 23 08	115 33 01.8	13MST	Boise Mountains
Little Anderson	101710	326BE772	USFS / ID-BOF	2001-PRES	4560	44 05 28	115 52 50	13MST	Boise Mountains
Horton Peak	101812	325EA5C8	USFS / ID-STF	1982-PRES	8700	43 57 07.4	114 45 26.47	12MST	N/A
Deer Haven	102711	3250E2AA	BLM / ID-TFD	1990-PRES	5550	43 10 26.1	115 09 06.7	12MST	N/A
Wagontown	102712	3334578E	USFS / ID-BOF	2003-PRES	6200	43 34 19	115 19 39.1	13MST	Boise Mountains
Fleck Summit	102802	3267A5E4	USFS / ID-STF	1997-PRES	7100	43 37 11	114 54 01.3	12MST	N/A
Pole Creek	103210	3251B02C	USFS / ID-BOD	1990-PRES	5660	42 04 10	115 47 10	12MST	Owyhee Canyonlands

Special Interest Groups are not selectable in the FEMS system, so the data from the RAWS will be tracked individually. The RAWS stations selected are the series of RAWS that are selected using the ROC curve approach that show the highest correlation. ROC models run analysis on every combination of RAWS in the specific FDRA, from each single station to every combination up to 3 stations.

Special Interest Group (SIG):	Boise Mountains ERC/SFDI	
Station / WIMS Number	***Station Name***	***Weight***
102712	Wagontown	1.0
101710	Little Anderson	1.0
101221	Bearskin Creek	1.0

Table 4: FDRA #1 SIG

Special Interest Group (SIG):	Snake River and Foothills ERC/SFDI	
Station / WIMS Number	***Station Name***	***Weight***
102711	Deer Haven	1.0
102712	Wagontown	1.0
103208	Triangle	1.0

Table 5: FDRA #2 SIG

Special Interest Group (SIG):	Owyhee Canyonlands ERC/SFDI	
Station / WIMS Number	***Station Name***	***Weight***
103207	Brace Flat	1.0
103210	Pole Creek	1.0
103208	Triangle	1.0

Table 6: FDRA #3 SIG

III. FIRE DANGER WORKLOAD ANALYSIS

To apply fire danger rating as a viable decision support tool, fire managers must be able to associate fire suppression workload with a specific target group. An understanding of the specific target group from which the suppression workload originates will help determine the appropriate communication methods and deterrence measures which may effectively change the behaviour of the respective target group.

A. IDENTIFICATION / FRAMING OF THE FIRE OCCURRENCE WORKLOAD

The ability to regulate, educate, or control a target group will be based upon the interface method and how quickly they can react to the action taken. Consequently, the most appropriate decision tool would depend upon the sensitivity of the target

group to the implementation of the action. In addition, each action will result in positive and/or negative impacts to a target group.

Affected Target Group: The group of people commonly associated with the workload (Agency, Industry, or Public).

a. **Agency**: Employees of the federal, state, and local governments involved in the cooperative effort to suppress wildland fires. This includes Federal, State, Tribal, and County land management employees, along with volunteer fire departments who share a similar protection mission to manage wildland fires.

b. **Industry**: Employees affiliated with organizations which utilize natural resources and/or obtain permits or leases to conduct commercial activities on federal, state, tribal, or private lands. These entities or activities could include ranchers, wilderness camps, railroads, mines, timber harvesting, filming, building construction, oil and gas, electric generation, guiding services, etc.

c. **Public**: Individuals who use public lands for non-commercial purposes such as off-highway vehicle (OHV) use, camping, hiking, hunting, fishing, skiing, firewood gathering, agriculture, mountain biking, general travel and recreation. This group also includes those living within the wildland/urban interface (WUI).

Workload Description: This is the fire unit's suppression workload. Human-caused fires are usually described in terms of an ignition cause related to public and industrial target groups. Natural-caused (or lightning) fire workload is usually described relative to the Agency's workload. For example, lightning is not "the problem"; rather, the problem is the local unit's ability to respond to multiple ignitions, exceeding the staffing capabilities.

B. FIRE WORKLOAD ANALYSIS TABLE

The ability to regulate, educate, or control a target group will be based upon the interface method and how quickly they can react to the action taken. In addition, each action will result in positive and/or negative impacts to the user groups. Consequently, the decision tool which would be most appropriate would depend upon the sensitivity of the target group to the implementation of the action, and ultimately change their behavior. Table 12 illustrates the differences between target groups (Agency, Industry, and Public) and the associated fire cause.

Table 5: Planning Area Fire Workload Analysis

TARGET GROUP		IGNITION CAUSE		RELATIVE DEGREE OF CONTROL	COMMUNICATION METHODS	WORKLOAD DESCRIPTION
GENERAL	*SPECIFIC*	*GENERAL*	*SPECIFIC*			
Agency		1 - Lightning		High	Dispatch Red Flag Warnings and FWW, Staffing Levels, Morning Briefings, MAC Group	Amount of ignitions and complexity
Public	Overnight campers & day-use picnickers.	4 - Campfire	Unattended (and escaped) Campfires around developed and undeveloped recreation sites.	Moderate	Agency personnel implementation of Fire Restrictions. The intent is to raise the awareness of potential fire danger in simple, easy to communicate terms via local radio, TV, newspaper, "Smokey's Arm" sign at the entrance to developed recreation areas.	The unit is experiencing a sigificant number of escaped campfires at developed and undeveloped recreation sites. The campfires are abandoned by single-day or overnight campers when fuels are critically dry and high wind events.
Industry		9 - Miscellaneous	Powerlines	Moderate	Agreements, Training, Phone and Text	Wind Events, Structural Design Failure, and Wildlife
Public		9 - Miscellaneous	Shooting (Exploding Targets), Firework	Low	PSA, Signage at retailers and in wildland, patrolling, Enforcement of Order	Seasonality
Public	Vehicles	2 - Equipment	Improper Use or Maintence, Mechanical, Dragging Chains, Off Road Use	Low	PSA, Patrolling, Signage, Enforcement	Numerous starts caused by vehicles along travel corridors

IV. FIRE DANGER DECISION ANALYSIS

Decision points can be based upon either:

- Climatological Breakpoints, or
- Fire Business Thresholds.

The Decision Summary Table below provides a summary of the planning area's fire danger workload and concerns. In addition, each workload is associated with a specific target group whose activities can be influenced through effective communication and implementation of specific control measures.

This Fire Danger Operating Plan will be used to support preparedness, staffing and response decisions which are made at specific decision points. A "decision point" is a point along the range of possible output values where a decision shifts from one choice to another. When the combination of events and conditions signal that it is time to do something different, a "decision point" has been identified for each Fire Danger Rating Level within each Fire Danger Rating Area.

A. CLIMATOLOGICAL ANALYSIS

Climatological breakpoints are points on the cumulative distribution curve of one fire weather/danger index computed from climatology (weather) without regard for associated fire occurrence/business. For example, the value at the 90th percentile ERC is the climatological breakpoint at which only 10 percent of the ERC values are greater in value.

It is equally important to identify the period or range of data analysis used to determine the percentiles. The percentile values for the calendar year (Jan – Dec) will be different from the percentile values for the fire season (for example, April-October). Each agency will have specific (and perhaps different) direction for use of climatological percentiles.

The decision thresholds identified in this Fire Danger Operating Plan are based upon the statistical correlation of historical fire occurrence and weather data and, therefore, do not utilize climatological (percentiles) for decision points.

B. FIRE BUSINESS ANALYSIS

To apply a fire danger system which will assist managers with fire management decisions, ignition problems should be identified, quantified, framed, and associated with a target group to determine the most appropriate fire danger-based decision "tool" to mitigate any given issue.

C. DECISION SUMMARY TABLE

Target Group	Fire Danger Rating Area(s)	Statistical Cause	Climatological Breakpoints or Fire Business Thresholds	Index / Comp	NFDRSv4 Fuel Model	Management Tool	Number of Decision Points	Preparedness Plan(s) to Modify Target Group Behaviour
Agency	FDRAs 1 & 3 FDRA 2	Choose Statistical Cause Code	Fire Business Thresholds	SFDI	Y	Response Level	3	Response Plan
Agency	FDRAs 1 & 3 FDRA 2	1 - Lightning	Fire Business Thresholds	ERC	Y	Staffing Level	5	Staffing Plan
Public	FDRAs 1 & 3 FDRA 2	4 - Campfire	Fire Business Thresholds	ERC	Y	Adjective Fire Danger Rating Level	5	Public Restriction Plan
Industry	FDRAs 1 & 3 FDRA 2	9 - Miscellaneous	Fire Business Thresholds	ERC	Y	Adjective Fire Danger Rating Level	5	Prevention Plan
Public	FDRAs 1 & 3 FDRA 2	9 - Miscellaneous	Fire Business Thresholds	ERC	Y	Adjective Fire Danger Rating Level	5	Prevention Plan
Public	FDRAs 1 & 3 FDRA 2	2 - Equipment	Fire Business Thresholds	ERC	Y	Adjective Fire Danger Rating Level	5	Prevention Plan

Table 6: Decision Summary Table

V. FIRE DANGER RATING LEVELS

The NFDRS utilizes the FEMS application to manipulate weather data and forecasted data stored in the National Interagency Fire Management Integrated Database (NIFMID) to produce fire danger ratings for corresponding weather stations. NFDRS is designed to model worst-case or peak of the day fire danger scenarios. NFDRS (along with other decision support tools) will be utilized to produce levels (thresholds) of fire business to address local fire problems by targeting public, industrial, or agency groups.

A. RESPONSE (OR DISPATCH) LEVEL

Response (or Dispatch) Levels are pre-planned actions which identify the number and type of resources (engines, crews, aircraft, etc.) initially dispatched to a reported wildland fire based upon fire danger criteria.

Fire Danger Rating Area	Index/Component and Fuel Model			
Boise Mountains	SFDI Fuel Model Y	0-67	68-93	94+
Snake River & Foothills	SFDI Fuel Model Y	0-66	67-92	93+
Owyhee Canyonlands	SFDI Fuel Model Y	0-70	71-95	96+
DISPATCH LEVEL		LOW	MODERATE	HIGH

B. STAFFING LEVEL

Staffing Levels will be used as inputs to the Preparedness level. Staffing level in the Boise Dispatch area is calculated the same as Fire Danger Adjective rating. Step up and Draw down will be derived from the Dispatch area Preparedness levels.

C. PREPAREDNESS LEVEL

Preparedness Levels (1-5) are determined by incremental measures of burning conditions, fire activity, and resource commitment. Fire danger rating is a critical measure of burning conditions. Preparedness Levels will assist fire managers with more long-term (seasonal) decisions with respect to fire danger. Preparedness Levels incorporate stable variables (e.g. ERC, Live Fuel Moisture, 100-hr Fuel Moisture, etc.) to help with mid to long-term decisions, such as the need to request severity funding, activation of public-use restrictions, and resource drawdown levels.

Preparedness Level Worksheet

Boise Mountains ERC Fuel Model Y	0-14			15-28		29-56		57-62		63+	
Snake River and Foothills ERC Fuel Model Z	0-32			33-39		40-45		46-58		59+	
Owyhee Canyon Lands ERC Fuel Model Z	0-36			37-39		40-48		49-63		64+	
STAFFING LEVEL (ERC)	L			M		H		V		E	
LARGE OR MULTIPLE FIRES	NO		YES	NO	YES	NO	YES	NO	YES	NO	YES
7-DAY SIGNIFICANT FIRE POTENTIAL	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	
DISPATCH LEVEL HIGH (SFDI)	NO	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
HUMAN IGNITION RISK FACTOR	L	H	L	H	L	H	L	H	L	H	
PREPAREDNESS LEVEL	I			II		III		IV		V	

Large or Multiple Fire Activity can be defined as a certain number of wildland fires or acreage of wildland fires within the Boise Interagency Dispatch Area that requires a commitment of BDC suppression (ground or aviation) resources within the respective FDRA; Boise Mountains - 10 fires or 300 acres, Snake River & Foothills - 2 fires, 300 acres, and Owyhee Canyonlands – 2 fires, 300 acres.

Significant Fire Potential: The Predictive Service Area (PSA) 7-Day Fire Potential Outlooks combine forecasted fuel dryness with significant weather triggers to identify high risk areas. The 7-day Fire Potential Outlook is posted daily during fire season and forecasts significant fire potential for the next 7 days. Tomorrow's Significant Fire Potential can be found on the Predictive Services (Outlooks) page of the GBCC website.

Dispatch Level High: the actual or forecasted Dispatch Level at HIGH will be the fourth factor input to the Preparedness Level Worksheet.

Human Ignition Risk Factor: described as an event on our agency's jurisdiction (Independence Day Celebration, Fireworks display, Solar Eclipse, Rainbow Gathering, etc.) or the occurrence of fires (2 or more) due to suspected arson, or the noticeable uptick in abandoned campfires within the FRDAs.

D. FIRE DANGER ADJECTIVE RATING LEVEL

In 1974, the Forest Service, Bureau of Land Management and State Forestry organizations established five standard Adjective Fire Danger Rating Levels for communicating risk and explaining restrictions to the public. The conventional Adjective Fire Danger Rating is calculated based on climatological percentiles (90^{th} 97^{th}) with no regard to historical fire occurrence. Alternatively, the Adjective Fire Danger Rating can be calculated based on statistical correlation of weather observations AND fire occurrence. This FDOP will implement Adjective Fire Danger Rating based upon fire business thresholds, and climatological percentiles.

Adjective Fire Danger Rating Color Code and Descriptions

Low (L) (Green)	Fuels do not ignite readily from small firebrands although a more intense heat source, such as lightning, may start fires in duff or punky wood. Fires in open cured grasslands may burn freely a few hours after rain, but timber fires spread slowly by creeping or smoldering, and burn in irregular fingers. There is little danger of spotting.
Moderate (M) Blue	Fires can start from most accidental causes but, with the exception of lightning fires in some areas, the number of starts is generally low. Fires in open cured grasslands will burn briskly and spread rapidly on windy days. Timber fires spread slowly to moderately fast. The average fire is of moderate intensity, although heavy concentrations of fuel, especially draped fuel, may burn hot. Short-distance spotting may occur but is not persistent. Fires are not likely to become serious and control is relatively easy.
High (H) Yellow	All fine dead fuels ignite readily, and fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and short-distance spotting is common. High intensity burning may develop on slopes or in concentrations of fine fuels. Fires may become serious and their control difficult unless they are attacked successfully while small.
Very High (VH) Orange	Fires start easily from all causes and, immediately after ignition, spread rapidly and increase quickly in intensity. Spot fires are a constant danger. Fires burning in light fuels may quickly develop high intensity characteristics such as long-distance spotting and fire whirlwinds when they burn in heavier fuels.
Extreme (E) Red	Fires start quickly, spread furiously, and burn intensely. All fires are potentially serious. Development into high intensity burning will usually be faster and occur from smaller fires than in the very high fire danger class. Direct attack is rarely possible and may be dangerous except immediately after ignition. Fires that develop headway in heavy slash or in conifer stands may be unmanageable while the extreme burning condition lasts. Under these conditions the only effective and safe control action is on the flanks until the weather changes, or the fuel supply lessens.

Determination

The adjective rating for each FDRA will be calculated from the charts below. The actual determination of the daily adjective rating is based upon the current and forecasted value of a selected component (ERC).

Boise Mountains FDRA

ERC – Y	ADJECTIVE FIRE DANGER RATING
0-14	LOW
15-28	MODERATE
29-56	HIGH
57-62	VERY HIGH
63+	EXTREME

Snake River & Foothills FDRA

ERC – Y	ADJECTIVE FIRE DANGER RATING
0-32	LOW
33-39	MODERATE
40-45	HIGH
46-58	VERY HIGH
59+	EXTREME

Owyhee Canyonlands FDRA

ERC – Y	ADJECTIVE FIRE DANGER RATING
0-36	LOW
37-39	MODERATE
40-48	HIGH
49-63	VERY HIGH
64+	EXTREME

Boise Dispatch will be calculating the Adjective Fire Danger Rating daily, however, the website will only be changed once a week, on Sunday. If there is a need to change the Adjective level before Sunday, that message will be communicated through Duty Officers.

VI. FIRE DANGER OPERATING PROCEDURES

A. ROLES AND RESPONSIBILITIES

Agency Administrators

Agency Administrators will use this plan to coordinate with fire management officers on fire business related decisions.

Fire Program Managers

Fire program manager (FMO's/Fire Warden) will use this plan and NFDRS outputs as a tool to coordinate and make informed fire related decisions. The fire program manager is ultimately responsible for ensuring this plan is maintained, utilized, and coordinated yearly.

Fire Danger Technical Group

The Fire Danger Technical Group will monitor NFDRS/CFFDRS to ensure validity, coordinate any problems identified, review plan implementation, coordinate plan revisions, present the plan and be available for fire danger technical consultation. The group will coordinate with fire managers from their units for updates and additions to the plan. They will meet annually to review the plan implementation, decide if revisions are necessary and accomplish those revisions.

Ongoing tasks for the Technical Group include maintaining and revising this FDOP; monitoring station observations and modelled outputs in FEMS for missing or illogical values; tracking and communicating seasonal trends in FEMS; proposing new station locations as appropriate.

Fire Weather Station Owners/Managers

Each agency is responsible for the annual maintenance and calibration of their weather stations. The Remote Sensing Laboratory located at the National Interagency Fire Center (NIFC) maintains and calibrates the USFS RAWS stations on an annual basis.

Dispatch Center

The Boise Dispatch Center Manager will ensure that the daily fire weather forecast (including NFDRS indices) is retrieved and that the daily preparedness, dispatch, and adjective levels are calculated and distributed. Pocket Cards will be updated following a significant fire season, but otherwise the Boise Dispatch Center Manager and FMO/Fire Warden will ensure the pocket card is prepared at least every three years and follows NWCG and/or agency standards. The card will be distributed to all interagency, local, and incoming firefighters and overhead. The

pocket card will be posted on the Boise Interagency Dispatch Center and National Wildfire Coordinating Group (NWCG) web sites. Fire suppression supervisors will utilize the pocket card to train and brief suppression personnel and ensure that it is posted at their respective fire stations.

Duty Officers

For the purposes of this plan, a Duty Officer from each agency will be identified to the Boise Interagency Dispatch Center. The Duty Officer is a designated fire operations specialist, who provides input and guidance regarding preparedness and dispatch levels. It is the Duty Officer's role to interpret and modify the daily preparedness and dispatch levels as needed. Modifications of the preparedness (PL) and/or dispatch levels (DL) must be coordinated through the Dispatch Center Manager. The Duty Officer will keep their respective agency's fire and management staff updated. Decisions to modify PL or DL will be documented in standard Unit Logs (ICS 214) or daily Duty Officer Log and communicated to Boise Dispatch Center.

National Weather Service

Weather forecasts and products for the FDRAs are provided by the National Weather Service, Boise office. The annual Fire Weather Operating Plan is updated yearly in early December and is found at:

Boise Office:

https://www.weather.gov/wrh/fire?wfo=boi

B. SEASONAL SCHEDULE

Seasonal changes to the model (such as greenup, snow flag) are made automatically within NFDRSv4 and FEMS. Attention should be paid to ensure expected changes to modelled outputs are taking place.

Seasonal risk analysis is a comparison of the historic weather/fuels records with current and forecasted weather/fuels information. Seasonal risk analysis is an on-going responsibility for fire program managers. The most significant indicators of seasonal fire severity SFDI, BI, ERC, fine fuel loading, and Live Fuel Moisture will be graphically compared with historical maximums and average; this graph will be routinely updated and distributed to fire suppression personnel and dispatch. Seasonal risk analysis information will be used as a basis for pre-positioning critical resources, dispatching resources, and requesting fire severity funding. Specific indicators are most useful to predict fire season severity and duration in the three FDRAs.

Fire Activity: The presence (or absence) of fire activity can be tracked and compared to historical occurrences to anticipate severity conditions.

Live Fuel Moisture: Live woody moisture samples are taken every two weeks throughout the fire season. Conifer and shrubs are sampled at five sites within the Boise Mountains FDRA (Idaho City, Cascade, Lowman, Emmett, and Centerville). Sagebrush is sampled at four sites which include Wild West, Kuna, Hammett, and Triangle. Triangle is within the Owyhee Canyonlands FDRA and the other three are in the Snake River and Foothills FDRA. Also, within the Snake River and Foothills FDRA, conifer, shrub and grass are measured at Bogus Basin.

Fine Fuel Loading: Fine fuel loading is measured annually at four test plots near Kuna Butte, Wild West, Hammett, and Orchard. These sites fall within the Snake River and Foothills FDRA. These test plots are fenced in non-grazed areas. Additional data can be utilized from the Rangeland Analysis Platform (RAP) using each FDRA.

NFDRS Indicators: SFDI, BI, and ERC are used as the primary indicators to track seasonal trends of fire danger potential. NFDRS fuel model Y has been chosen to represent all 3 FDRAs.

Weather Trends: Seasonal weather assessments rely upon long-range (30-90 day) forecasts. This information is available in two formats: seasonal long-lead outlooks and 30-90 day outlooks. This information is provided by NOAA.

Drought Indicators: The Keetch-Byrum Drought Index (KBDI) and Palmer Drought Index track soil moisture and have been tailored to meet the needs of fire risk assessment personnel. Current KBDI information is located on the Wildfire Assessment System (WFAS) Internet site. Tracking and comparing 1,000-hour fuel moisture with Fire Family Plus is another method to assess drought conditions.

Normalized Difference Vegetation Index (NDVI): NDVI data is satellite imagery, which displays vegetative growth and curing rates of live fuels. The Great Basin website provides several different current and historical greenness images, which can be a significant contributor to seasonal risk assessments. The WFAS website provides several different ways to analyze greenness imagery.

Season Ending Event: Further study is needed to identify specific combinations of weather parameters that would signal the end of the fire season. Fuels and Fire Planners from the respective agencies will develop a plan to complete this assessment by December 2026.

C. DAILY SCHEDULE

Every morning dispatch will refresh the data at 0930. This data will include everything need to set the daily Dispatch Level, Adjective Rating, and Preparedness Level. The numbers will be the forecasted daily maximum each day. These numbers will be set for the following 24-hours. Dispatch Level will drop 1 level each night at 2400 until the following mornings readings. Adjective Levels will only be changed and posted to the BDC website weekly on Sunday. If fire activity, extreme weather or other situations warrant an Adjective level change before then, and the partners within that FDRA agree, that info will be messaged through the BDC website and to duty officers, as needed.

VII. FIRE DANGER PROGRAM NEEDS

A. WEATHER STATIONS

- Ensure RAWS site maintenance is completed/reviewed annually – Station Manager(s) and Fire/Fuels Management Staff for QA/QC

B. COMPUTER / EQUIPMENT

- More mountain top cameras for fire detection

C. TRAINING

- ROC training for someone in the program to recreate the thresholds for the future plans

D. SEASONAL FIRE DANGER RISK ASSESSMENTS

- Annual review of the FDOP per Board of Directors direction
- Ensure Fire and Fuels Planners are part of the editing committee
- Develop prescribed fire thresholds for future implementation
- Develop pocket cards with both ERC and SFDI on the same card for fire fighters in the field

APPENDICES

Appendix A **Preparedness Plan**

Refer to Boise Interagency Dispatch Center preparedness plan.

Boise Dispatch Area

Preparedness Plan

March 2026

Contents

Preparedness Plan

I. Introduction

A. Purpose

Preparedness plans provide management direction given identified levels of burning conditions, fire activity, and resource commitment, and are required at national, state/regional, and local levels. Preparedness Levels (1-5) are determined by incremental measures of burning conditions, fire activity, and resource commitment. Fire danger rating is a critical measure of burning conditions. The Preparedness Levels are identified and documented in the Boise Interagency Fire Danger Operating Plan; the associated decisions and recommended actions are in Appendix A.

B. Preparedness versus Staffing Levels

1. Preparedness Levels

Preparedness Levels incorporate stable variables (e.g. ERC, Live Fuel Moisture, 100-hr Fuel Moisture, etc.) to help with long-term decisions, such as the need to request severity funding or activation of public-use restrictions.

C. Policy and Guidance

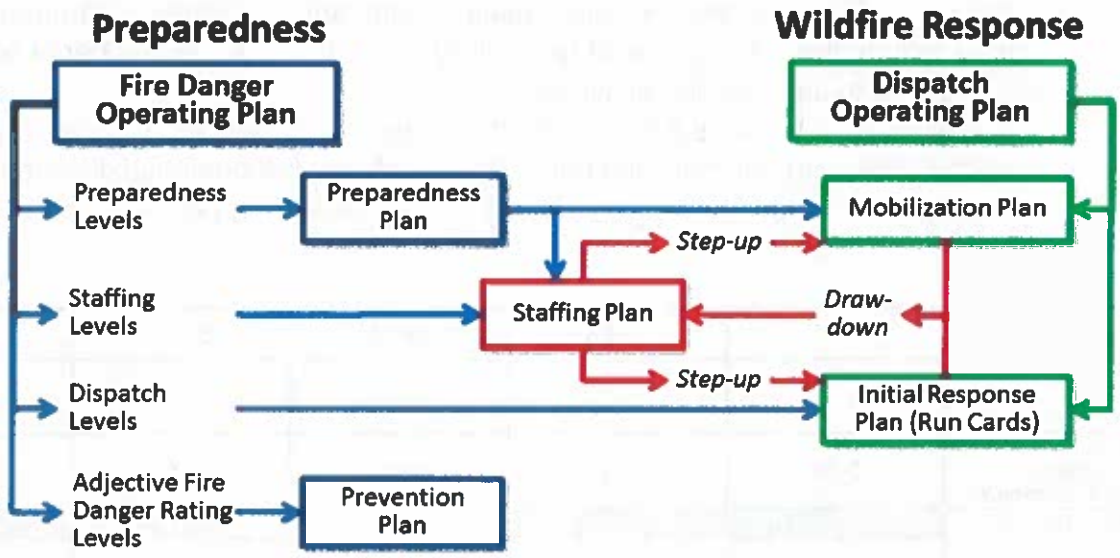
Policy and guidance regarding the development of Preparedness Level plans can be found in chapter 10 of the Interagency Standards for Fire & Aviation Operations (Red Book).
Preparedness Level Plans are required at the national, state/regional, and local levels. These plans address the five Preparedness Levels (1-5) and provide management direction based on identified levels of burning conditions (fire danger), fire activity, resource commitment/availability, such as incident management teams assigned, and other considerations. Preparedness Level Plans may be developed by a state/regional office for agency-specific use.
Supplemental preparedness actions to consider include, but are not limited to, the following items:

- Management briefings, direction, and considerations;
- Support function: consideration given to expanded dispatch activation and other support needs (procurement, supply, ground support, and communication);
- Support staff availability outside of fire organization;
- Fire danger/behavior assessment;
- Fire information – internal and external;
- Multi-agency coordination group/Area command activation; and
- Prescribed fire direction and considerations.

Refer to the National Interagency Mobilization Guide and GACC Mobilization Guides for more information on Preparedness Level Plans.

Specific agency directives and interagency guidance requires numerous unit plans and

guides to meet fire preparedness and wildfire response objectives. Some of these plans and guides are inter-related; one or more plans/guides provide the basis for other plans/guides. The Preparedness Plan is an operational plan tiered from the Fire Danger Operating Plan as shown below:



Preparedness Levels are established to assist fire managers with weekly or monthly planning decisions based upon seasonal fire danger elements. Receiver Operating Characteristic (ROC) curves are used to establish fire business thresholds. A statistical analysis of fire occurrence and historical weather needs to be completed for each FDRA. The correlation of various combinations of NFDRS outputs with weather records are listed in Appendix B. The final Preparedness Level determination may incorporate a measure of current and projected levels of resource commitment due to fire activity and a measure of ignition risk. Each agency will consider management actions identified in the FDOP appendix based upon the five local Preparedness Levels.

II. Local Preparedness Level Worksheet

A. Plinko Chart

The preparedness level is a five-tier fire danger rating system that is based on NFDRS components (i.e. ERC, SFDI, Live Fuel Moisture, etc.) and indicators of fire business. Fire business indicators used to help determine the preparedness level may include the current level of fire activity in the zone, or the number of resources committed to suppression activities.

The illustration below is a "plinko chart" that uses a combination of ERC values for each FDRA, large or multiple fires, 7-day significant fire potential, dispatch level (high or not), and human ignition risk factor (holiday weekends, etc.) for each FDRA.

Boise Mountains ERC Fuel Model Y	0-14			15-28		29-56		57-62		63+	
Snake River and Foothills ERC Fuel Model Y	0-32			33-39		40-45		46-58		59+	
Owyhee Canyonlands ERC Fuel Model Y	0-36			37-39		40-48		49-63		64+	
Staffing Level (ERC)	Low			Moderate		High		Very High		Extreme	
Large or Multiple Fires	No		Yes	No	Yes	No	Yes	No	Yes	No	Yes
7-Day Significant Fire Potential	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
Dispatch Level High (SFDI)	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Human Ignition Risk Factor	L	H	L	H	L	H	L	H	L	H	
Preparedness Level	I			II		III		IV		V	

Appendix A

Recommended Actions Guide

Preparedness Level (PL) Actions are guides for agency personnel to refer to when preparedness level thresholds are reached. If an agency doesn't have a specific position that is listed within the PL table, that agency will utilize discretion as to what position will assume those roles (see examples below). Refer to the GACC and local unit Mobilization Guides for more information on Preparedness Level Plans.

Agency Administrators

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Agency Administrator	Ensure Resource Advisors (READ) are designated and available for fire assignments.				X	X	Agency
	Evaluate work/rest needs of fire staff.				X	X	Agency
	Provide appropriate support to fire staffs regarding the implementation of preparedness level actions (i.e. severity requests, restrictions and closure planning).				X	X	Agency
	Issue guidance to staff indicating severity of the season and increased need and availability for fire support personnel (i.e. availability for large fire support).				X	X	Agency

Fire Management Officers

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
USFS Fire Staff, USWFS FMO	Evaluate season severity data (NFDRS indices for the season, fuel loading, fuel moisture, drought indices, long-term forecasts).		X	X	X	X	Agency
	Brief agency administrator on burning conditions and fire activity.			X	X	X	Agency
	Review geographical and national preparedness levels and evaluate need to suspend local Rx fire activities.			X	X	X	Agency
	Consider consulting with or ordering an FBAN or WFDSS Support.			X	X	X	Agency
	Ensure Prevention Officer has initiated media contacts and public education contacts.			X	X	X	Agency
	Ensure agency staff personnel are briefed on increasing fire activity.				X	X	Public Industry
	Consider fire severity request and pre-positioning of resources including: suppression resources, aerial support, aerial supervision, command positions, dispatch, logistical support, and prevention.				X	X	Agency
	If preparedness level is decreasing, consult with Duty Officer/Dispatch Center Manager				X	X	Agency

	and consider release of pre-positioned or detailed personnel.						Public Industry
	Evaluate crew and staff work/rest requirements.				X	X	Agency
	Coordinate with interagency partners the need for fire restrictions or closures.				X	X	Agency
	Communicate with Dispatch Center Manager on geographical conditions and resources availability.				X	X	Public Industry
	Request the agency administrator to issue guidance to agency staff regarding the need for increased availability in support positions.				X	X	Agency

Dispatch Center

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Dispatch Center	If preparedness level is decreasing, consider release of pre-positioned or detailed dispatchers and logistical support personnel.		X	X	X		Agency
	Begin weekly conference calls with Zone FMOs and Operations staff.				X	X	Agency
	Consider pre-positioning or detail of off-unit IA dispatchers and logistical support personnel.			X	X	X	Agency
	Evaluate work/rest needs of center staff.				X	X	Agency

Duty Officers

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Duty Officer	If preparedness level is decreasing, consider releasing pre-positioned and detailed resources.		X	X	X		Agency
	Ensure incoming pre-position or detailed personnel are briefed on local conditions.			X	X	X	Agency
	Evaluate work/rest needs of IA crews, dispatchers and aviation bases.			X	X	X	Agency
	Consider patrols and pre-positioning of local IA resources in high risk areas.				X	X	Agency
	Consider pre-positioning and/or detailing of additional IA resources from off-unit.				X	X	Agency
	Consider bringing in local resources from scheduled days off.				X	X	Agency

Prevention/Mitigation

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Fire Prevention/	Contact Public Information Officer, local media to inform of the start of fire season			X	X	X	Agency Public

Mitigation	and the potential for local fire danger to increase.						
	Provide public and industry with access to fire danger information, closures, restrictions and warnings.			X	X	X	Agency Public Industry
	Post signs and warnings in camping and recreation areas.			X	X	X	Public
	Consider need for increased fire prevention patrols.				X	X	Agency
	Notify local media if High/Extreme fire danger and the need for increased public caution.				X	X	Public
	Contact local fire chiefs and inform of increased fire danger.				X	X	Agency
	Consult with FMO regarding need for fire restrictions or closures.				X	X	Agency

Appendix B **Staffing Plan**

Refer to Boise Interagency Dispatch Center Staffing Plan.

Boise Dispatch Area

Staffing Plan

March 2026

Contents

Boise Dispatch Area

Staffing Plan

Introduction

A. Purpose

This Staffing Plan is intended to provide day-to-day guidance for decisions regarding the "degree of readiness" of initial attack (IA) resources. The Staffing Level (SL) is used as a basis to make daily internal fire operations decisions affecting our agency personnel. At each SL, this plan identifies:

- *Daily staffing*
- *Draw-down levels*
- *Step-up actions*

This Plan will function most effectively when decisions are made in preparation for escalating fire danger and potential fire activity. Waiting until the day of a critical event during extreme fire danger will prove this plan ineffective.
"You need a fire danger system that will help you make a judgment decision today on what kind and number of fires you can expect tomorrow." (Lancaster, 2004)

B. Terminology

1. **Staffing Index**

   Energy Release Component (ERC) was used in all three Fire Danger Rating Areas (FDRAs).

2. **Staffing Level**

   Staffing Level is the bottom line of fire-danger rating and can be thought of as a "readiness" level. Staffing Levels are expressed as Low to Extreme.
   Staffing Level is intended to provide fire managers with day-to-day (short-term) decision support regarding staffing of suppression resources. Staffing Level can be used to determine when additional workforce and resources may be necessary to ensure appropriate staffing in response to escalating fire danger.

3. **Preparedness Level**

   Staffing Levels are intended to help with short-term decisions, while Preparedness Levels incorporate stable variables to help with mid to long-term decisions, such as the need to request severity funding or activation of public-use restrictions.

4. **Step-up Plan**

   A Step-up Plan includes supplemental preparedness actions designed to enhance the unit's fire management capability during short periods (usually one burn period in anticipation of wind events, dry cold fronts, and lightning events) where normal

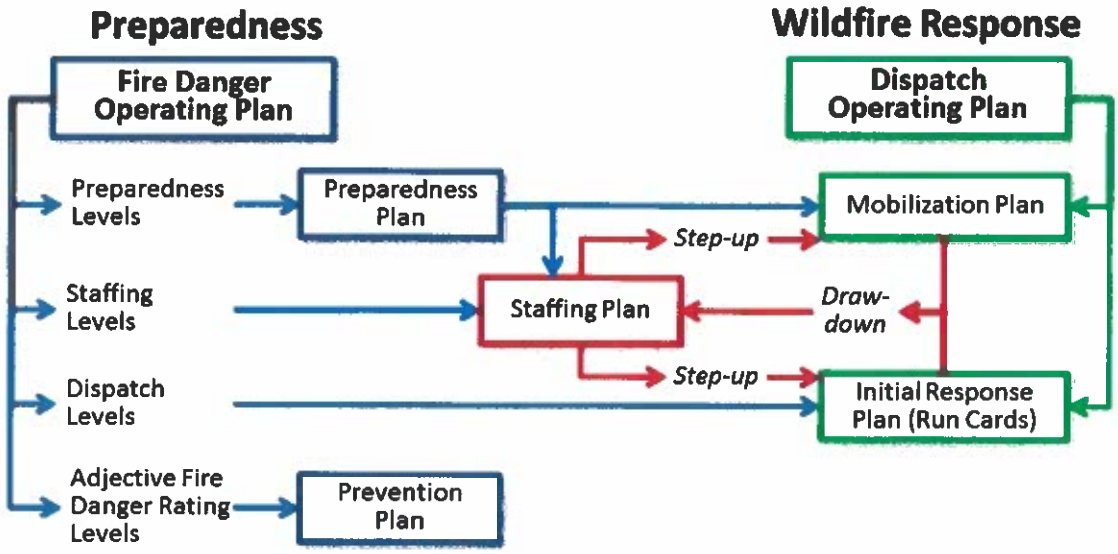
staffing cannot foreseeably meet initial attack, prevention, or detection needs.

5. **Draw-Down Level**

   "Draw-Down" is the degree of response capabilities of an agency due to the impact of emergency activity within their home jurisdiction and/or their commitment of resources to the mutual aid system for incident response outside of their jurisdiction. Draw-down is expressed as either (1) the predetermined number/type of suppression resources, or (2) the percentage of remaining capacity of suppression resources that are required to maintain viable initial attack (IA) capability.

C. Policy and Guidance

Policy and guidance regarding the development of Staffing Plans can be found in chapter 10 of the *Interagency Standards for Fire & Aviation Operations* (Red Book). Agency directives and interagency guidance may require numerous unit plans and guides to meet fire preparedness and wildfire response objectives. Some of these plans and guides are inter-related; one or more plans/guides provide the basis for other plans/guides. The Staffing Plan is an operational plan tiered from the Fire Danger Operating Plan as shown below:



Staffing Levels

Staffing Levels can be derived directly from the Fire Environment Mapping System (FEMS), or preferably, from an analysis of historical weather observations and fire occurrence data using the Receiver Operating Characteristics (ROC) software to determine fire business thresholds.

A. Staffing Index

This plan is based upon the following Staffing Index: Energy Release Component

B. Determination of Staffing Levels

Boise Mountains ERC Fuel Model Y	0-14		15-28		29-56		57-62		63+	
Snake River and Foothills ERC Fuel Model Y	0-32		33-39		40-45		46-58		59+	
Owyhee Canyonlands ERC Fuel Model Y	0-36		37-39		40-48		49-63		64+	
Staffing Level (ERC)	Low		Moderate		High		Very High		Extreme	
Large or Multiple Fires	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
7-Day Significant Fire Potential	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Dispatch Level High (SFDI)	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Human Ignition Risk Factor	L	H	L	H	L	H	L	H	L	H
Preparedness Level	I		II		III		IV		V	

Table 1: Preparedness Level will be used to determine local Draw-down and Step-up Needs.

Draw-Down

Draw-down is the predetermined number and type of suppression resources that are recommended to maintain viable initial attack (IA) capability at either the local or geographic area. The probability of initial attack success is contingent upon the availability of suppression resources during periods of high fire danger. Drawdown resources are considered unavailable outside the local or geographic area for which they have been identified. Drawdown is intended to:

- *Ensure adequate fire suppression capability for local and/or geographic area managers; and*
- *Enable sound planning and preparedness at all management levels.*

A. Factors Affecting Draw-Down

Draw-down levels can change dramatically in a short period of time. A few factors which can affect staffing and resource commitment/availability include the following:

1. **Response (or Dispatch) Level**

   Staffing Levels have a direct effect on the ability to send pre-determined suppression resources to wildland fires, depending upon the Response Level (and vice versa). Even under normal threat levels, a routine call for service can deplete the availability of a unit's resources and result in a degree of drawdown. If an incident becomes prolonged or requires the commitment of resources beyond the initial response, the agencies capabilities can be affected.

2. **Unit Size**

   The size of an agency has a direct impact on its ability to manage its drawdown

status. The deeper resource pool allows more flexibility for maintaining adequate coverage within the home jurisdiction. Agencies of medium to smaller size can be challenged to maintain geographical coverage at times of increased emergency activity. In the case of some smaller agencies, a single resource committed to an incident can result in extreme drawdown and challenge their ability to meet their basic jurisdictional coverage responsibilities.

3. **5-day Versus 7-day Resource Staffing**

When considering the full capacity of a unit, we include all personnel and resources. For ground resources (engines, dozers, water tenders) and overhead (FOS, ICs, Dispatchers, FMOs, AFMOs, Duty Officers, Resources Advisors, etc.), the daily operating capacity is typically a fraction of the full capacity due to staffing limitations and scheduling days off. Therefore, the "daily" capacity is used as the benchmark for draw-down levels unless a unit has sufficient personnel to keep a resource operational 7 days per week.

The Boise District Bureau of Land Management (BLM) will not plan to staff individual resources on 7-day staffing. The BLM will stagger resources for 7-day coverage. This will be done by splitting resources into 1 of 3 groups, working five 8s schedule. Group 1 will have Fridays and Saturdays off, Group 2 will have Sundays and Mondays off, and Group 3 will have Tuesdays and Wednesdays off.

The Boise National Forest will strive for 7-day staffing on all engines late June through September. When unable to staff 7 days they will stagger with neighboring engines to keep a maximum number of engines available for fire response. Crews will be 5-day effective and will stagger staffing with other crews on the Forest to keep a maximum of crews available for fire response from mid-June – September.

The 5-day staffing is usually 65% to 75% of the full 7-day staffing (at 100%). For purposes of this plan, a base-line of 70% will be used for daily staffing of ground resources and overhead.

Aviation resources are typically under contract during the fire season to be available 7-days per week. Aviation resources are highly mobile and will respond to fire activity with the greatest need; often, outside the local jurisdiction. Therefore, aviation resources are not included in the determination of staffing levels in this plan.

4. **Geographic Prioritization and Political Influences**

A larger jurisdictional footprint can allow for an internal ability to reassign resources from geographical areas that may not be affected by immediate threat or demand to others that may be in critical need of resources to address increased threat or activity levels. With calculated pre-planning and policy decisions, these agencies may opt to allow one area or region to operate in a low level of drawdown while it reinforces the available resource pool in another area where an increased level of activity is anticipated. These agencies typically employ a predetermined matrix of acceptable resource adjustments to balance real or anticipated response requirements. The complexities of political interaction between jurisdictions need to be managed in a manner that is beneficial to all agencies.

5. **Interagency Cooperation & Commitment**

   Most wildland fire emergency communication centers provide dispatch services to multiple agencies. When multiple agencies respond to incidents on each other's jurisdiction – usually based on the closest available resource(s) –coordination amongst the affected agencies is essential to maintain interagency relationships and provide effective and efficient response to incidents.

6. **Multiple Fires**

   Maintaining capacity to respond to a reported incident is the intended outcome of a Staffing Plan. However, when more than one incident occurs concurrently within the respective unit's response area, a unit's capacity is certainly diminished or exhausted.

B. Determination of Draw-down Levels

Local drawdown is established by the local unit and implemented by the local interagency dispatch office. The local dispatch office will notify the Geographic Area Coordination Center (GACC) of local drawdown decisions and actions.

1. **Draw-down Resources**
   - Applicable to all draw-down resources
     1. Available to respond to any wildland fire within the local Dispatch Area
     2. Enroute within 30-minutes from base location
   - Engines - Definition of a Draw-down Resource
     1. Type-3, Type-4, Type-5 or Type-6 Wildland Fire Engines
     2. NWCG Engine Standards
   - Squads – Definition of Draw-down Resource
     1. Squad – Minimum of 5 including one FFT1

C. Draw-down Actions

The term draw-down is generally used to describe the level of commitment of an agency's resources at a certain point in time. Most importantly, it defines the agency's ability to perform its basic service levels. Once a level has been reached where basic service levels cannot be provided, actions should be taken to "step up" the capacity to a level sufficient to provide anticipated services. The following table of supplemental preparedness actions and authorized funding provides this unit direction to make decisions in response to fluctuating draw-down levels.

TABLE 1: Draw-Down Levels

Boise Dispatch Area has established resource drawdown levels as a tool to assist with strategic level decision making. Resource drawdown levels can be used to summarize resource availability, allocate resources in the Region, or statewide, and provide guidance to Duty Officers when considering Cover Behind, Move Up, or Preposition of resources, and/or Staffing Patterns.

Only Boise Dispatch Area resources shall be considered for drawdown levels. The levels indicated in the following chart reflect the availability of a resource (engine, dozer, crew) for the Boise Dispatch Area. Resources are considered to be at normal operating levels when the number of available resources is between seventy-five and one hundred percent.

TABLE 2: Step-Up Actions

DOI

Staffing Level	Overhead	Engines	Aviation	Dozers	Authorized Actions	Funding
1	0	2	0	0	1-a Manage daily staffing to ensure resources are available within 10% of *TARGET CAPACITY* 1-b Unit fire manager notifies state/regional manager: • If unable to staff resources as per 1-a (above) • Prior to making a ground resource available out-of-state 1-c Extended Staffing Not Authorized 1-d AD Hiring Not Authorized for local needs 1-e No Detection authorized 1-f Normal tour of duty, no extended hours 1-g Routine readiness standards apply to all personal and equipment 1-h Preposition of Resources Not Authorized	Preparedness Budget Best practices tend to be funding staffing for levels 1-3 out of base level preparedness funding
2	1	6	0	DZ 1 WT 1	2-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY	Preparedness Budget

					2-b Unit fire manager notifies state/regional manager: • If unable to staff resources as per 2-a (above) • Prior to making a ground resource available out-of-state 2-c Extended Staffing Authorized 2-d AD Hiring Not Authorized 2-e Detection: • Ground Resources Authorized • Fixed-wing Not Authorized • Rotor-wing Not Authorized 2-f Preposition of Resources Not Authorized 2-g Field going personal may need to alter activities during the afternoon hours to increase readiness	Best practices tend to be funding staffing for levels 1-3 out of base level preparedness funding
3	3	8	0	DZ 2 WT 2	3-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY 3-b Unit fire manager notifies state/regional manager: • If unable to staff resources as per 3-a (above) • Prior to making a ground resource available out-of-state 3-c Extended staffing Authorized 3-d Field going personal and project activities may be limited to increase readiness 3-e AD Hiring Not Authorized for local needs 3-f Detection: • Ground Resources are Authorized • Fixed-wing Resources are recommended • Rotor-wind Resources are Authorized 3-g Preposition Resources Authorized (for 1 operational period when Local Preparedness Level is 4 or 5):	Preparedness Budget Best practices tend to be funding staffing for levels 1-3 out of base level preparedness funding

					• To areas of Critical Habitat / FIAT	
4	4	10	Heli – 1 (any) AA – 1 (local)	DZ 3 WT 2	4-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY 4-b Unit fire manager notifies state/regional manager: • If unable to staff resources as per 4-a (above) • Prior to making a ground resource available off-unit (at Local Preparedness Level 4 or 5) 4-c Extended staffing authorized 4-d AD Hiring Authorized for short-term assignments (to boost capacity and mitigate draw-down levels) 4-e Field going personal and project activities should be limited to insure readiness 4-f Personal should be ready for extended staffing 4-g Detection: • Ground Resources - Authorized • Fixed-wing Resources – recommended • Rotor-wind Resources – recommended 4-h Preposition Resources Authorized (for up to 2 operational periods when Local Preparedness Level is 3 or higher): • To areas of Critical Habitat / FIAT • To areas likely to have ignitions / lightning	Funding for extended staff or boosting capacity may come from local support codes (FS), state director (BLM) severity funds or other regional DOI discretionary funds. If extended time occurs in SL 4 or 5, long term severity funds should be requested.
5	5	12	Heli – 1 (any) AA – 1 (local)	DZ 4 WT 3	5-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY 5-b Unit fire manager notifies state/regional manager: • If unable to staff resources as per 5-a (above)	Funding for extended staff or boosting capacity may come from local support codes (FS), state director (BLM) severity funds or other regional DOI

					• Prior to making a ground resource available off-unit (at Local Preparedness Level 4 or 5) 5-c Extended staffing authorized if Local Preparedness Level is 3 or higher 5-d AD Hiring Authorized for short-term assignments (to boost draw-down levels) 5-e Field going personal and project activities should be limited to insure readiness 5-f Personal should be ready for extended staffing and IA activity 5-g All qualified personal should be available to support wildfire activity. 5-h Detection: • Ground Resources - recommended • Fixed-wing Resources – recommended • Rotor-wing Resources - recommended 5-i Preposition Resources Authorized: • To areas of Critical Habitat / FIAT • To areas likely to have ignitions / lightning	discretionary funds. If extended time occurs in SL 4 or 5, long term severity funds should be requested.

Forest Service:

2026 – Boise National Forest (Preparedness and Staffing Guides)					
This preparedness plan identifies recommended minimum needs for the Boise NF during fire season. Fire season is defined as June 1st to October 1st. • All districts start 7-day staffing by the PP starting at end of June. • District duty officers will be in service when fire personnel are in service.					
STAFFING LEVEL GUIDE					
LOCAL PREPAREDNESS LEVEL	**I**	**II**	**III**	**IV**	**V**
EXTENDED STAFFING	**LIGHTNING**	**LIGHTNING**	**LIGHTNING FIRE SUPPORT**	**IMPLEMENT BASED ON IGNITION RISK**	**IMPLEMENT BASED ON IGNITION RISK**
GROUND RESOURCES					
ENGINES	**2 ON FOREST**	**3 ON FOREST**	**4 ON FOREST**	**6 ON FOREST**	**8 ON FOREST**
20 person IA Crew			**1 ON FOREST**	**2 ON FOREST**	**2 ON FOREST**
IA MOD/WFM			**1 ON FOREST**	**1 ON FOREST**	**2 ON FOREST**
ICT3			**2 on Forest**	**1 per zone**	**1 Per District**
PREVENTION PERSONNEL	**2 ON FOREST**	**3 ON FOREST**	**4 ON FOREST**	**8 ON FOREST**	**8 ON FOREST**
AIR RESOURCES AND DETECTION					
HELICOPTER-TYPE 3 or 2			**1 ON FOREST**	**2 ON FOREST**	**2 ON FOREST**
HELICOPTER –Heavy			**CONSIDER 1 ON FOREST**	**CONSIDER 1 ON FOREST**	**1 ON FOREST**

AIR PATROL			LIGHTNING	LIGHTNING/CONSIDER DAILY PATROL	LIGHTNING/CONSIDER DAILY PATROL
MANAGEMENT & DISPATCH PREPARENESS					
FOREST CONFERENCE CALLS	AS SCHEDULED	BI-WEEKLY	WEEKLY	2 PER WEEK (CONSIDER INCLUDING NWS)	DAILY (CONSIDER INCLUDING NWS)
SEVERITY			CONSIDER	REQUEST	REQUEST
FOREST DUTY OFFICER	1 ON FOREST	1 ON FOREST	5 DAY STAFFING (2 HR CALL)	7 DAY STAFFING	7 DAY STAFFING
District/Zone Duty Officer	1 On Forest	1 On Forest	1 Per Zone	1 Per Zone	1 Per Zone (Consider 1 Per District)
AVIATION OFFICER			5 DAY STAFFING (2 HR CALL)	5 DAY STAFFING (2 HR CALL)	7 DAY STAFFING
LINE OFFICER STAFFING			1 JOURNEY (8 HR CALL)	1 JOURNEY (2 HR CALL)	1 ADVANCE LO AUTHORITY & CONSIDER ADDITIONAL
WFDSS SUPPORT			ONE PER Zone IDENTIFIED	ADDITIONAL FOREST LEVEL SUPPORT	ADDITIONAL FOREST LEVEL SUPPORT

Appendix C **PREVENTION PLAN**

Refer to Boise Interagency Dispatch Center Prevention Plan.

Appendix D **PUBLIC FIRE RESTRICTION PLAN**

Refer to the statewide Idaho Fire Restrictions Plan. (https://www.idl.idaho.gov/wp-content/uploads/sites/2/2025/04/Final_2025-IDAHO-FIRE-RESTRICTIONS-PLAN-compressed.pdf)

Appendix E **RESPONSE PLAN**

Refer to the Boise Interagency Dispatch Center Response Plan.

Boise Dispatch Area

Response Plan

March 2026

Contents

Response Plan

I. Introduction

A. Purpose

Local-level Initial Pre-planned Response Plans, also referred to as "Run Cards", specify the fire management response (e.g., number and type of suppression assets to dispatch) within a defined geographic area to an unplanned ignition, based on fire weather, fuel conditions, fire management objectives, and resource availability.

B. Terminology

1. Response Level

Response levels (e.g. "Low", "Moderate", "High") are established to assist fire managers with decisions regarding the most appropriate response to an initial fire report until a qualified Incident Commander arrives at the incident. Receiver Operating Characteristic (ROC) software is used to establish the Response Level thresholds. A statistical analysis of fire occurrence and historical weather has been completed for each FDRA. The correlation of various combinations of NFDRS outputs with weather records is listed in Appendix A. Each agency will utilize the same Response Levels calculated for each FDRA in response to wildland fires in the Boise Interagency Dispatch Area.

2. Response Zone

Response Zones have been identified for the Boise Interagency Dispatch Area. Response zones may be based on various criteria such as: common management objectives, land use, fire load, dispatch locations, estimated response times, WUI locations, topographical features, vegetation communities, etc. [**NOTE:** ***It is the responsibility of the dispatch center to identify how response zones are identified. It is important to identify response zones prior to the creation of Fire Danger Rating Areas (FDRAs).***] A response zone map for the Boise Interagency Dispatch Center (BDC) is displayed in Appendix B. A table showing agency dispatch locations is displayed in Appendix C.

3. Dispatch Center

Each geographic area has established dispatch centers that mobilize and demobilize resources directly with the geographic area coordination center. The dispatch center is the focal point for mobilizing firefighting resources between units within the dispatch area responsibility, coordinating incoming resources into the dispatch area, dispatching resources mobilized out of the dispatch area, and collecting and disseminating fire intelligence information within dispatch area and with the geographic area coordination center.

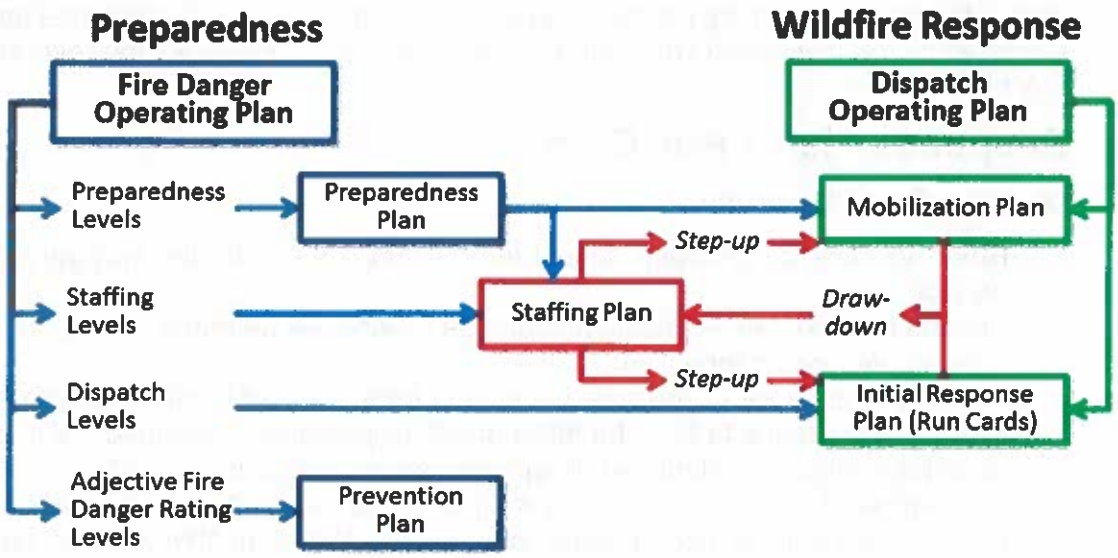
4. Pre-Planned Response Plan

Each dispatch center with the responsibility for initial response to wildland fires shall have a pre-planned response plan that allocates resources to new wildland fires in accordance with fire management direction, initial attack agreements, and established ordering procedures. The pre-planned response plan will be reviewed and updated annually prior to fire season.

C. Policy and Guidance

Policy and guidance regarding the development of Pre-Planned Response Plans can be found in chapter 19 of the Interagency Standards for Fire & Aviation Operations (Red Book).

Fire Management Officers will ensure that Pre-planned Response Plans are in place, utilized, and provide for initial response commensurate with guidance provided in the FMP and/or LRMP. Initial Pre-planned Response Plans will reflect agreements and annual operating plans and will be reviewed annually prior to fire season. These plans may be modified as needed during fire season to reflect the availability of national, prepositioned, and/or severity resources. Specific agency directives and interagency guidance requires numerous unit plans and guides to meet fire preparedness and wildfire response objectives. Some of these plans and guides are inter-related; one or more plans/guides provide the basis for other plans/guides. The Response Plan is an operational plan tiered from the Fire Danger Operating Plan as shown below:



II. Response Level Matrix

A. Response Level

Agency personnel use the response level (dispatch level) to assign an appropriate mix of suppression resources to a reported wildland fire based upon fire danger potential: "Low", "Moderate", "High" (Table 1). Response levels are derived from the most appropriate NFDRS index and/or component that have a high level of correlation to historical fire occurrence. Severe Fire Danger Index in Fuel Model Y has been determined to be the most appropriate NFDRS index that statistically correlates to the potential for large fires to occur. Due to the ability of SFDI to reflect the most current fire danger potential for their FDRA, and the BDC ability to track agency personnel throughout the course of any given day, SFDI will be computed

and implemented for initial attack response levels until a qualified Incident Commander evaluates the need for the dispatched resources.

Response Level/Dispatch Level Matrix
ID-Boise Interagency Dispatch Center

Fire Danger Rating Area (FDRA)	Index and Fuel Model			
Boise Mountains	SFDI Fuel Model Y	0-67	68-93	94+
Snake River and Foothills	SFDI Fuel Model Y	0-66	67-92	93+
Owyhee Canyonlands	SFDI Fuel Model Y	0-70	71-95	96+
Dispatch Level:		LOW	MODERATE	HIGH

Table 1. Fire Season Dispatch Level Analysis based on the **SFDI** index.

Response Levels will be established for each day utilizing the Response Level matrix (Table 1).
Duty Officers will retain the discretion to set their unit to a different response level than indicated by the calculated value for any given fire day, or to modify the response level for any given incident.

III. Response Plan – Run Card

A. Run Card Overview

Effective Dates: Generally, June 1 through September 30, but may vary depending on year.
Beyond these dates, notification of smoke reports will be made directly to the appropriate jurisdictional Duty Officer.
The Interagency Run Cards are developed by a group of interagency representatives to provide guidance to BDC for initial attack dispatching of wildland fire suppression resources within pre-identified geographic areas (response zones).
The run cards will be used when a wildfire is reported and doesn't meet the discretionary smoke report criteria listed below. When an NWCG qualified Incident Commander is on scene of the fire, they may adjust the pre-established initial attack response as identified on the run card by cancelling resources currently en-route (or about to be dispatched) or by ordering additional resources as needed. Until such time as an IC is on scene, the Duty Officer is responsible for the fire response and can modify the run card as necessary.
During periods of large/multiple fire activity, when there are not enough resources to fill the run cards, the Duty Officers from the cooperating agencies will be available to BDC to determine incident prioritization and response (see limited response plan).

B. Run Card Procedures:

- During working hours, BDC will dispatch the closest available resource according to the appropriate Fire Danger Rating Area (FDRA) Dispatch Level.
- After resource duty hours, dispatchers will contact the jurisdictional Duty Officer, who will determine the level of response.

- Volunteer fire departments (or any other resource not dispatched by BDC will not be considered as meeting the run card requirements for numbers of resources during the initial attack dispatch.

1. **Discretionary Smoke Reports:**

   When any of the following smoke reports are received, the run card will not be sent, and the jurisdictional Duty Officer will be contacted to determine the response.
   - Federal Aviation Administration (FAA) Report
   - Abandoned Campfires, when clearly stated that it is still within the ring
   - Incidents that local volunteer fire departments have responded to, or are on scene and are requesting no additional resources

2. **Limited Response Plan:**

   Periodically BDC dispatch zone gets widespread lightning activity resulting in numerous starts, many of these single tree lightning strikes. It is not possible to dispatch the number and type of resources called for in the run card plan to each of these fires. This plan is designed to provide guidance to BDC staff in order to coordinate an initial response under these multiple start conditions (generally considered 3 or more starts).
   Under circumstances where multiple starts are likely to occur (i.e. forecasted high chance of thunder) or are occurring and each FDRA is at a Dispatch Level of Moderate or higher, the BDC run card plan may be suspended and guidance provided by area Duty Officers for initial response to new starts. It is desired that the Duty Officer's meet at BDC to provide coordinated guidance to the floor supervisor whenever possible. A MAC call may be initiated if meeting in person is not possible.
   Duty Officers should consider using the following priorities for dispatching resources*:
   1. When there is a direct threat to human life
   2. When there is a direct threat to homes or communities
   3. When there is a direct threat to other high value infrastructure or improvements
   4. When the fire is in an identified sage grouse protection area
   5. All others

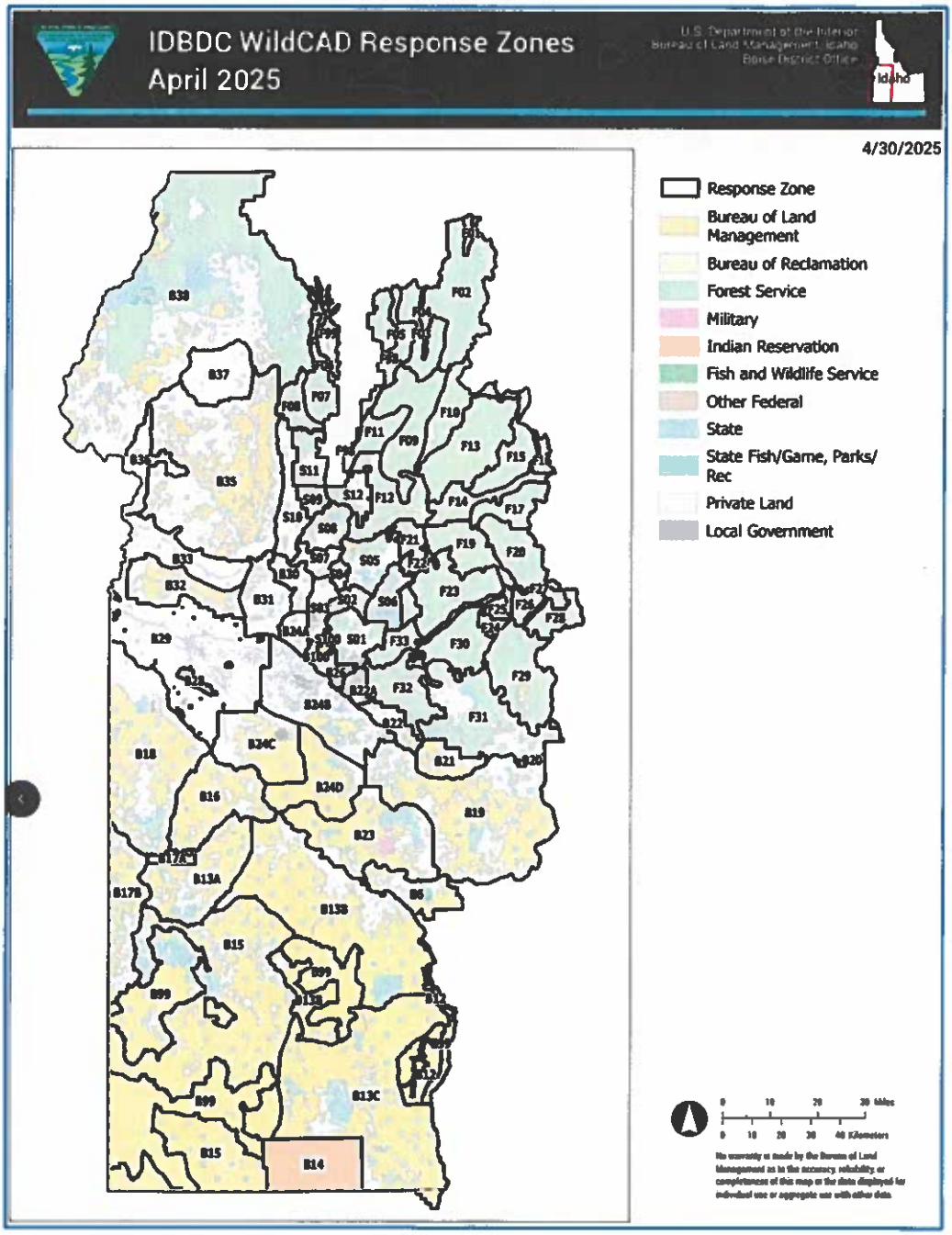
   Until such time as the Duty Officers are able to provide coordinated direction to BDC, the floor supervisor is authorized to determine the fire priorities based on given direction and make modifications to the established run card response during multiple start events.
   During circumstances where there are no longer resources available to be dispatched to a new smoke report, BDC staff will notify the Duty Officers of each new report and they will, considering the priorities mentioned above, make a determination of needed staffing adjustments and provide guidance to BDC staff as to what resources to dispatch to each new smoke report.
   *Additionally, if on any given day when all FDRAs are at a Dispatch Level of Moderate or higher and BDC recognizes the inability of daily staffed resources to fulfill a dispatch of any run card then the BDC Response Plan/run cards may be suspended, and any start would use the prioritization process as identified above.

C. Run Cards

- *Refer to IDBDC Run Cards in WildCAD-E*

Appendix B

Response Zones Map



Appendix C

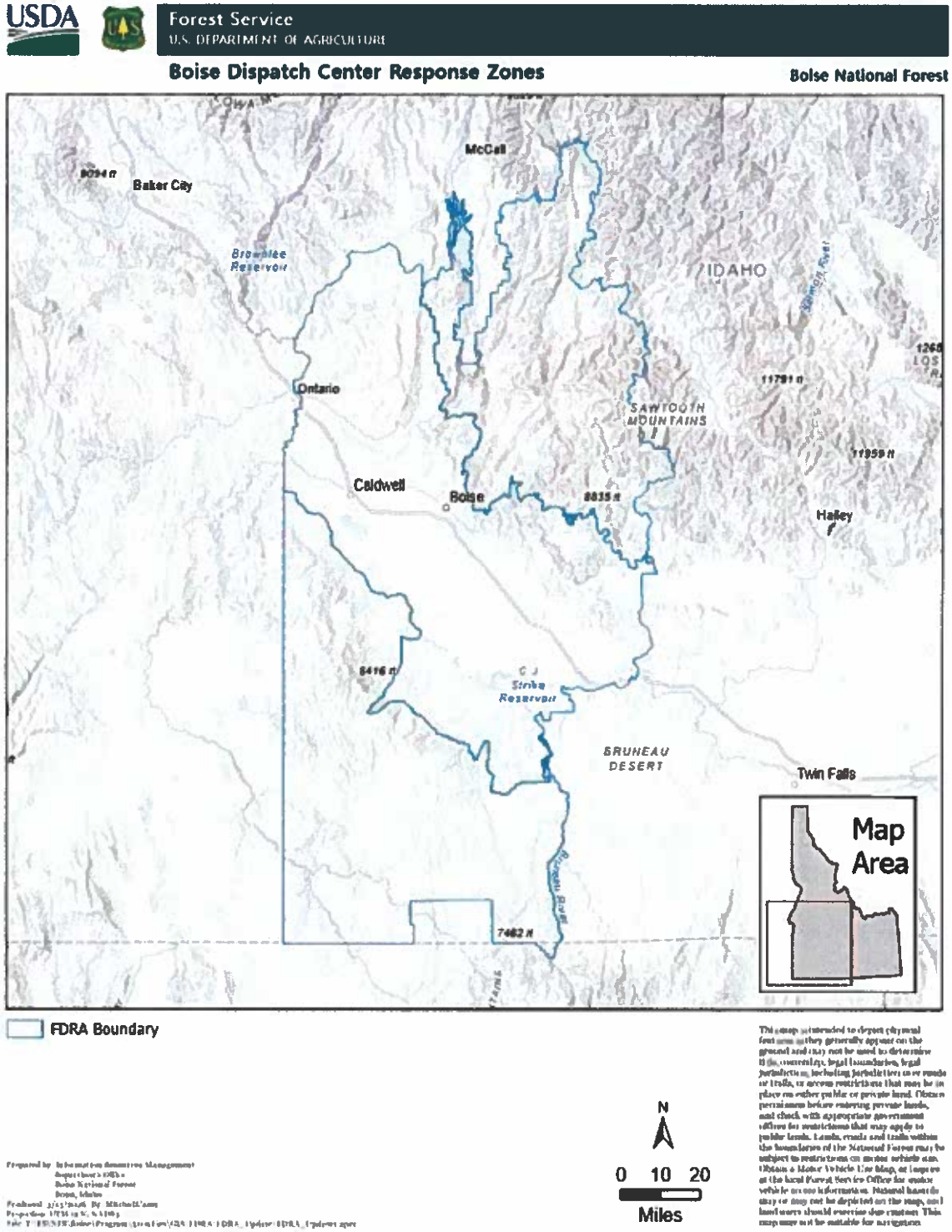
Dispatch Locations

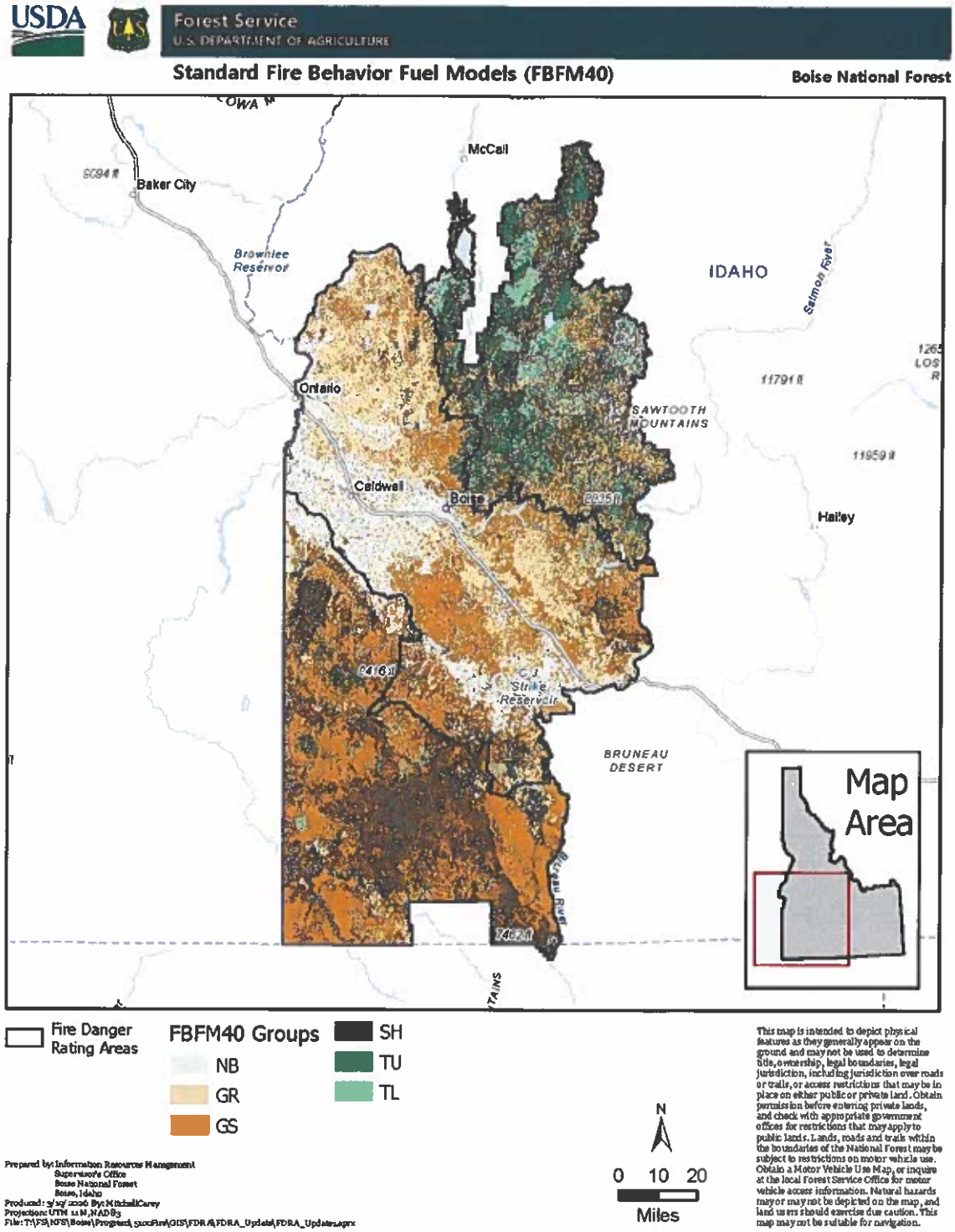
- *Refer to IDBDC Resource Status in WildCAD-E*

Appendix F **PRESCRIBED BURN APPROVAL PLAN**

Each prescribed burn will have an approved Prescribed Burn Plan. Refer to Boise National Forest or Boise District Fire and Fuels Programs for specific burn plans.

Appendix G **TOPOGRAPHY**

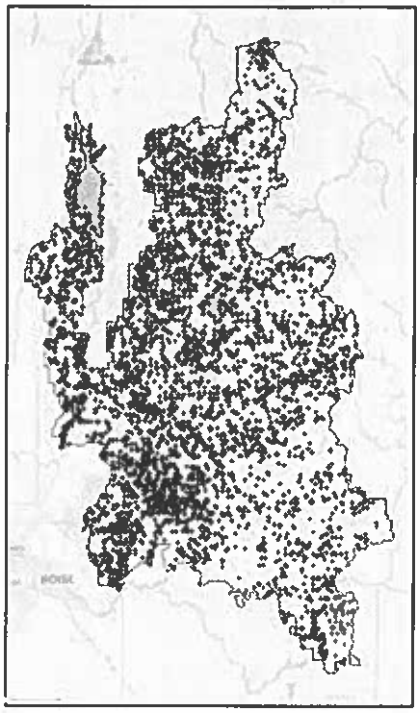



USDA
Forest Service
U.S. DEPARTMENT OF AGRICULTURE
Standard Fire Behavior Fuel Models (FBFM40)
Boise National Forest
McCall
Baker City
Brownlee Reservoir
IDAHO
Salmon River
Ontario
SAWTOOTH MOUNTAINS
11791 ft
11959 ft
Caldwell
Boise
Hailey
C.J. Strike Reservoir
BRUNEAU DESERT
Map Area
Fire Danger Rating Areas
FBFM40 Groups
NB
GR
GS
SH
TU
TL
N
0 10 20
Miles
Prepared by: Information Resource Management
Supervisor's Office
Boise National Forest
Boise, Idaho
Produced: 3/27/2026 By: MitchellCarey
Projection: UTM 11 N, NAD83
File: T:\FS\NFS\Boise\Program_100Fire\GIS\FDRA\FDRA_Update\FDRA_Update.aprx
This map is intended to depict physical features as they generally appear on the ground and may not be used to determine title, ownership, legal boundaries, legal jurisdiction, including jurisdiction over roads or trails, or access restrictions that may be in place on either public or private land. Obtain permission before entering private lands, and check with appropriate government offices for restrictions that may apply to public lands. Lands, roads and trails within the boundaries of the National Forest may be subject to restrictions on motor vehicle use. Obtain a Motor Vehicle Use Map, or inquire at the local Forest Service Office for motor vehicle access information. Natural hazards may or may not be depicted on the map, and land users should exercise due caution. This map may not be suitable for navigation.

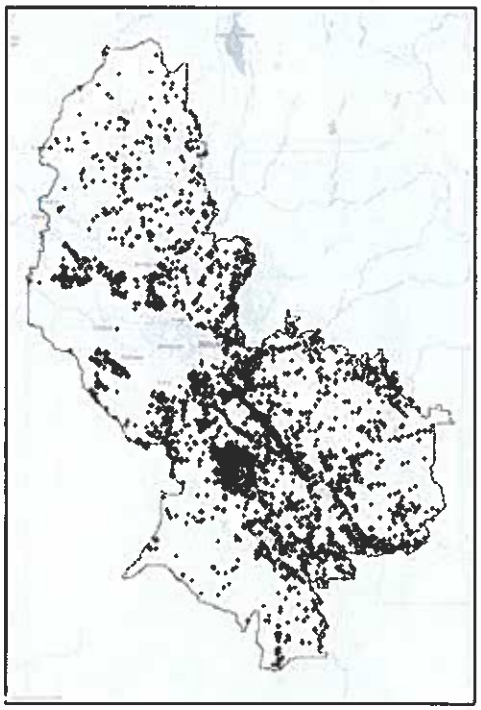
Appendix I **CLIMATE**

Appendix J **FIRE OCCURRENCE**

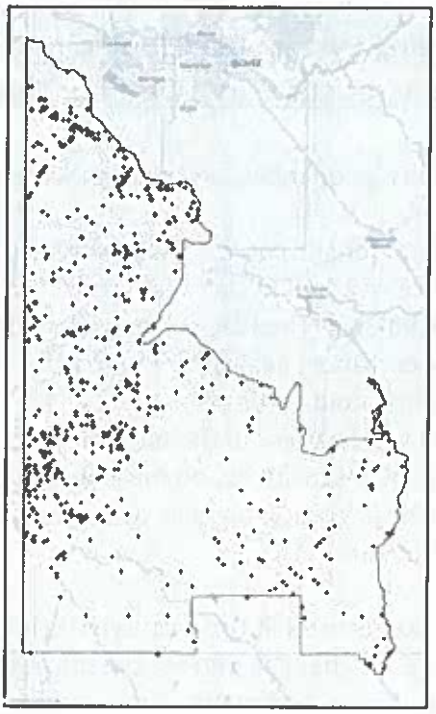
IDBDC Boise Mountains
Fires Used in ROC Analysis



IDBDC Snake River and Foothills
Fires Used in ROC Analysis



IDBDC Owyhee Canyonlands
Fires Used in ROC Analysis



Appendix K **ROC ANALYSIS**

National Fire Danger Rating System Decision Point Determination Using the Receiver Operating Characteristic Curve Optimal Threshold

The Python libraries pandas, geopandas, and sklearn were used for the ROC analysis.

"A receiver operating characteristic curve, or ROC curve, is a graphical plot that illustrates the performance of a binary classifier model [fire or no fire] at varying threshold values [ex. ERC values]. The ROC curve is the plot of the true positive rate [predicted fire and fire occurrence] against the false positive rate [predicted fire and no fire occurrence] at each threshold setting [ex. ERC 40, 41, 42]. The best possible prediction method would yield a point in the upper left corner or coordinate (0,1) of the ROC space, representing 100% sensitivity, no false negatives [predicted no fire and fire occurrence], and 100% specificity, no false positives. The (0,1) point is also called a perfect classification (Wikipedia)."

ROC generated decision points used in this plan are the index (ex. ERC or BI) value on the ROC curve that is closest to being a perfect classification, referred to in this document as the optimum value, and are the index values with the highest sensitivity and specificity to predicting target (fire) occurrence.

ROC curves and optimum value thresholds using fire occurrence were generated for each FDRA and possible station combination using the index chosen. Fire occurrences were limited to the FDRA, and station combinations limited to three or fewer for weather stations in the FDRA plus those within 5 miles of the boundary. FDRA fire size percentiles were used for target values in thresholding; thus, the analysis was conducted as a multiclass problem with each target (fire size) having its own ROC curve and optimal value. Decision points based on optimal values represent conditions during which fires of a certain size can be expected based on historical data.

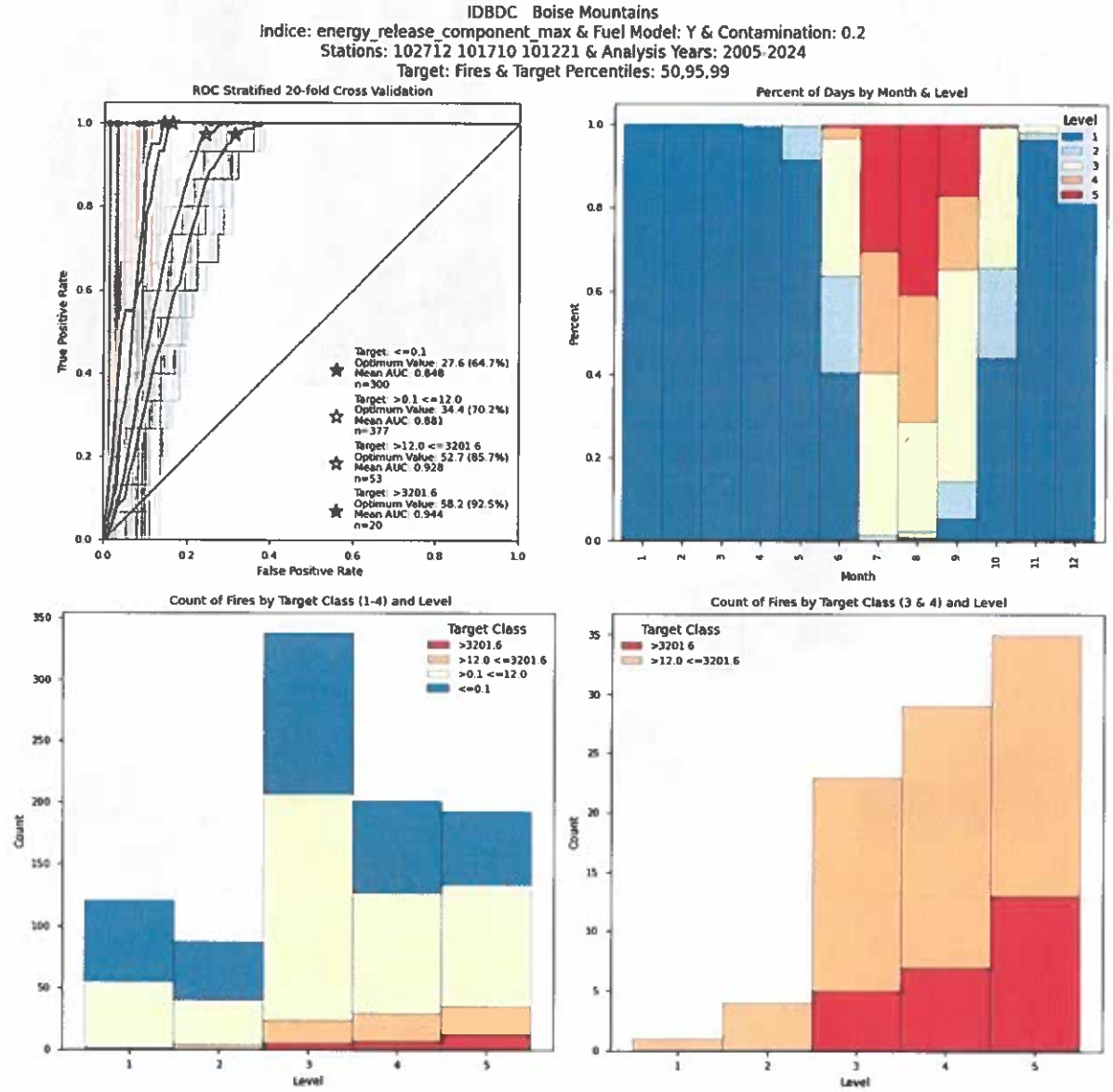
Several machine learning techniques were utilized to improve results including stratified k-fold cross validation and isolation forest outlier removal, both sklearn modules. The former was used on all analysis and generally had the effect of raising threshold values and increasing decision space while the latter was used when there were no good options using all the data and would sometimes produce acceptable results where none were previously available.

Final station and threshold selection were determined based on the spread between thresholds (decision space) and ROC metric Area Under the Curve (AUC) or the corresponding sorting of fire business across thresholds.

If neither fire business metric was acceptable, due to a lack of fire and/or weather data, climatological percentiles were utilized.

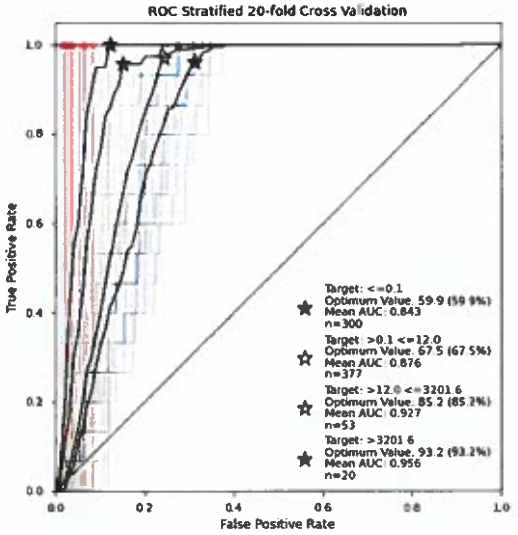
Boise Mountains FDRA

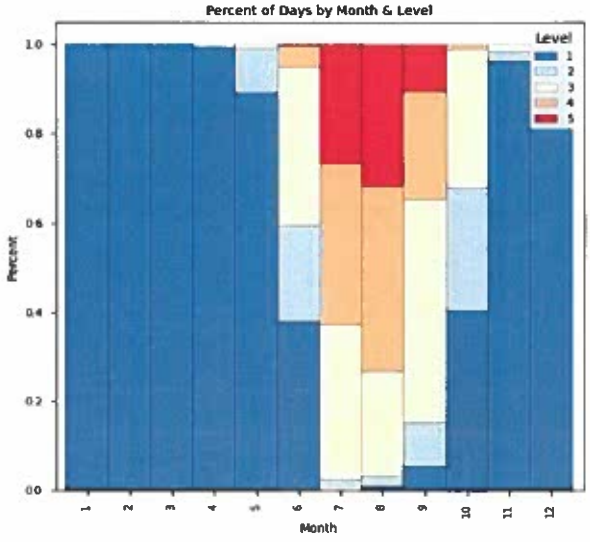
- **Energy Release Component**

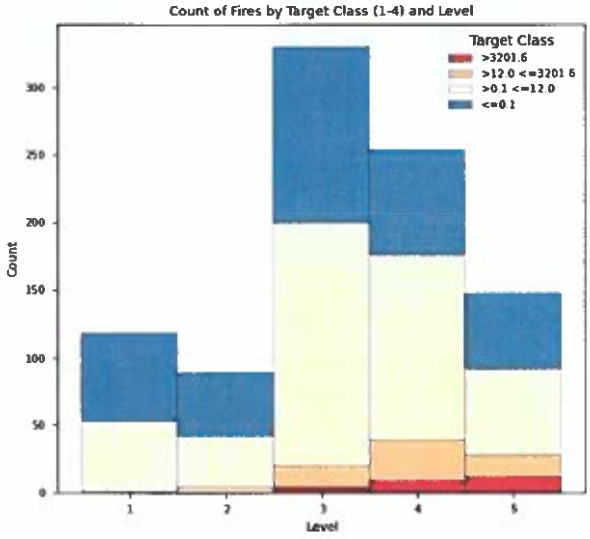


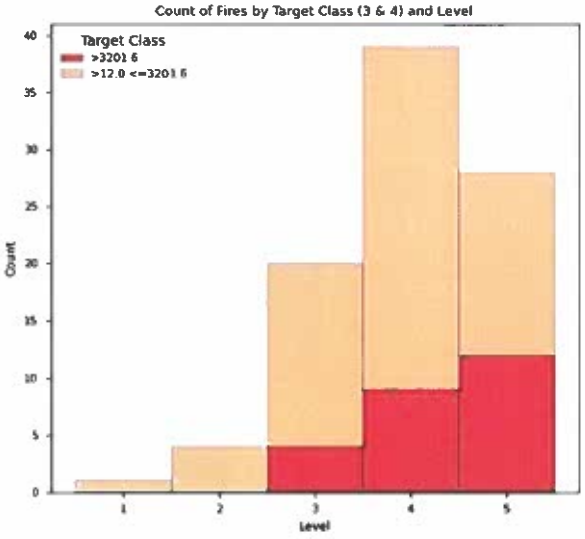
- **Severe Fire Danger Index**

IDBDC Boise Mountains
Indice: severe_fire_danger_index_max & Fuel Model: Y & Contamination: 0.2
Stations: 102712 101710 101221 & Analysis Years: 2005-2024
Target: Fires & Target Percentiles: 50,95,99





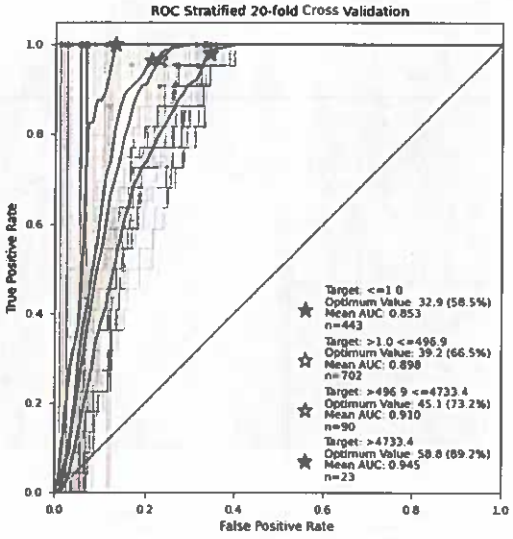


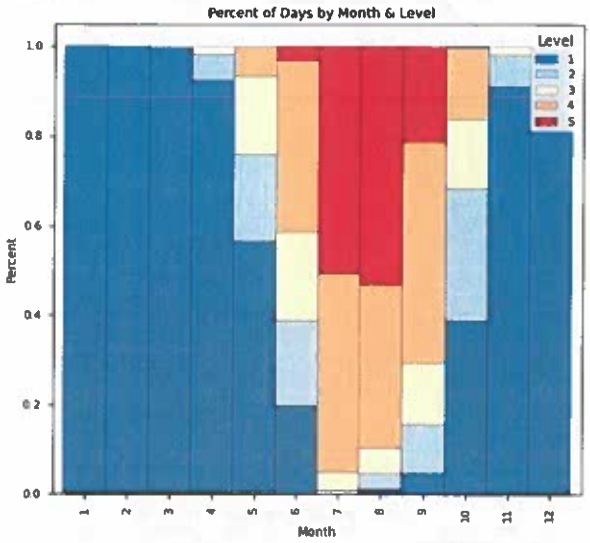


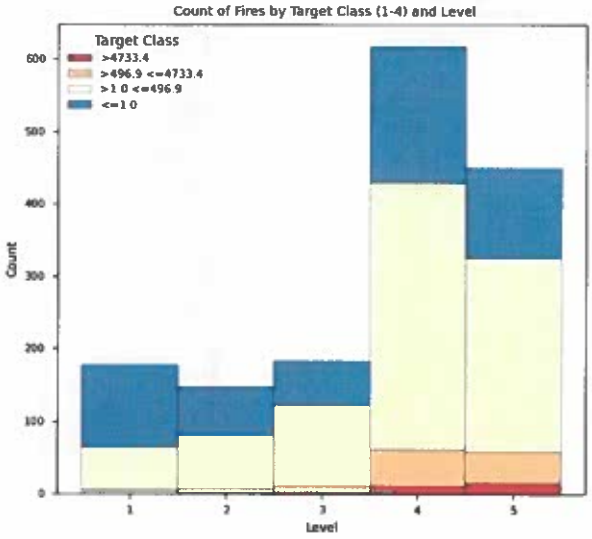
Snake River and Foothills FDRA

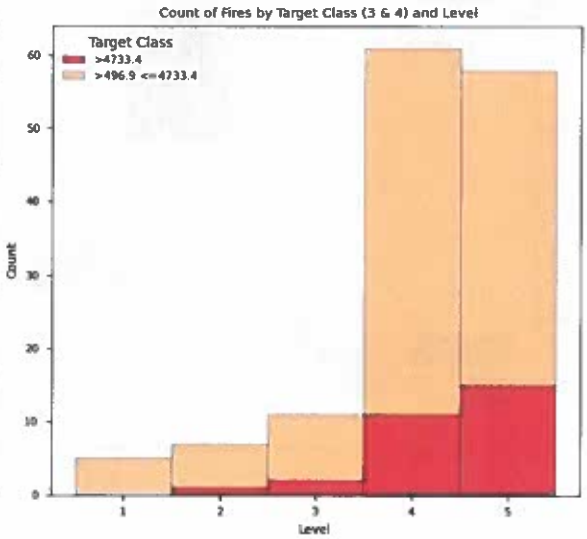
- **Energy Release Component**

IDBDC Snake River and Foothills
Indice: energy_release_component_max & Fuel Model: Y & Contamination: 0.2
Stations: 102711 102712 103208 & Analysis Years: 2005-2024
Target: Fires & Target Percentiles: 50,95,99



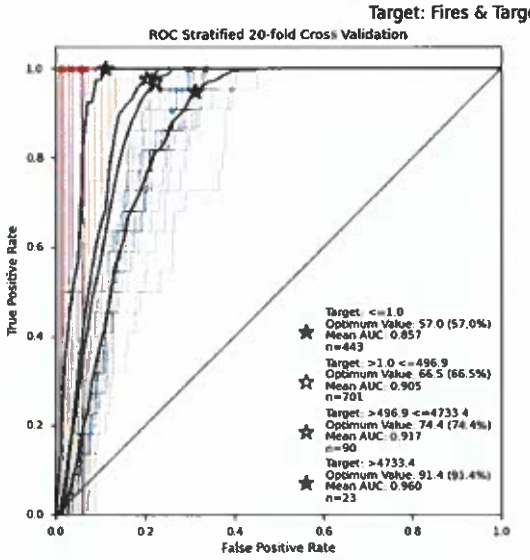


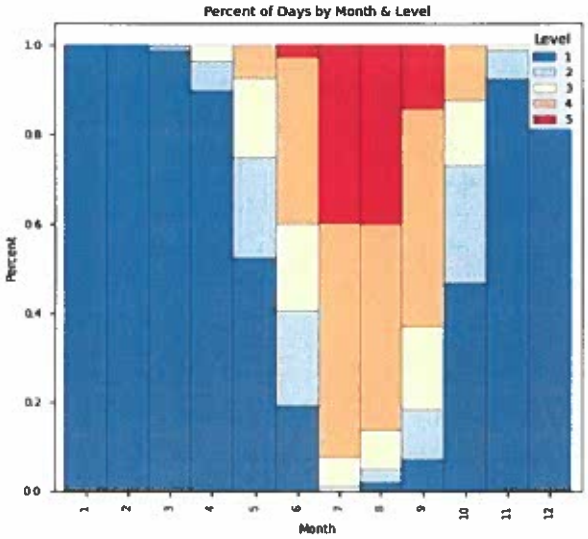


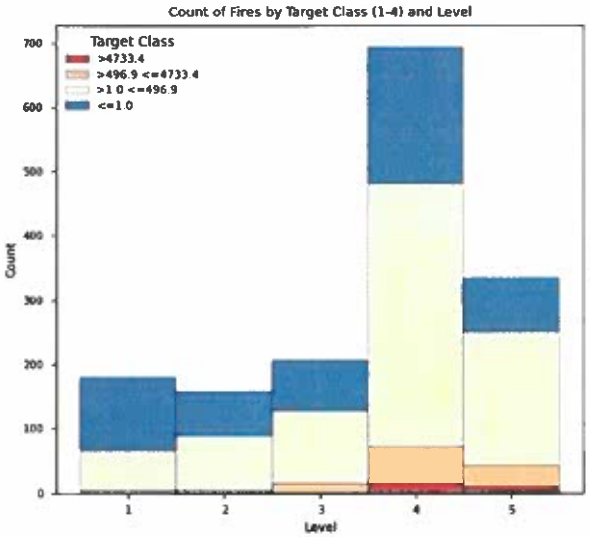


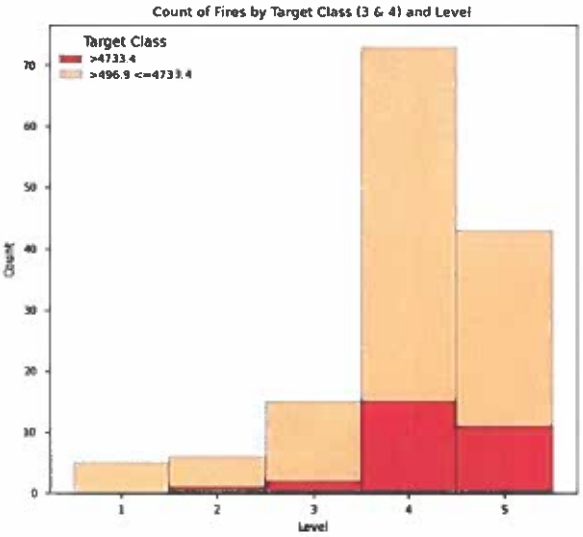
- **Severe Fire Danger Index**

IDBDC Snake River and Foothills
Indice: severe_fire_danger_index_max & Fuel Model: Y & Contamination: 0.2
Stations: 102711 102712 103208 & Analysis Years: 2005-2024
Target: Fires & Target Percentiles: 50,95,99



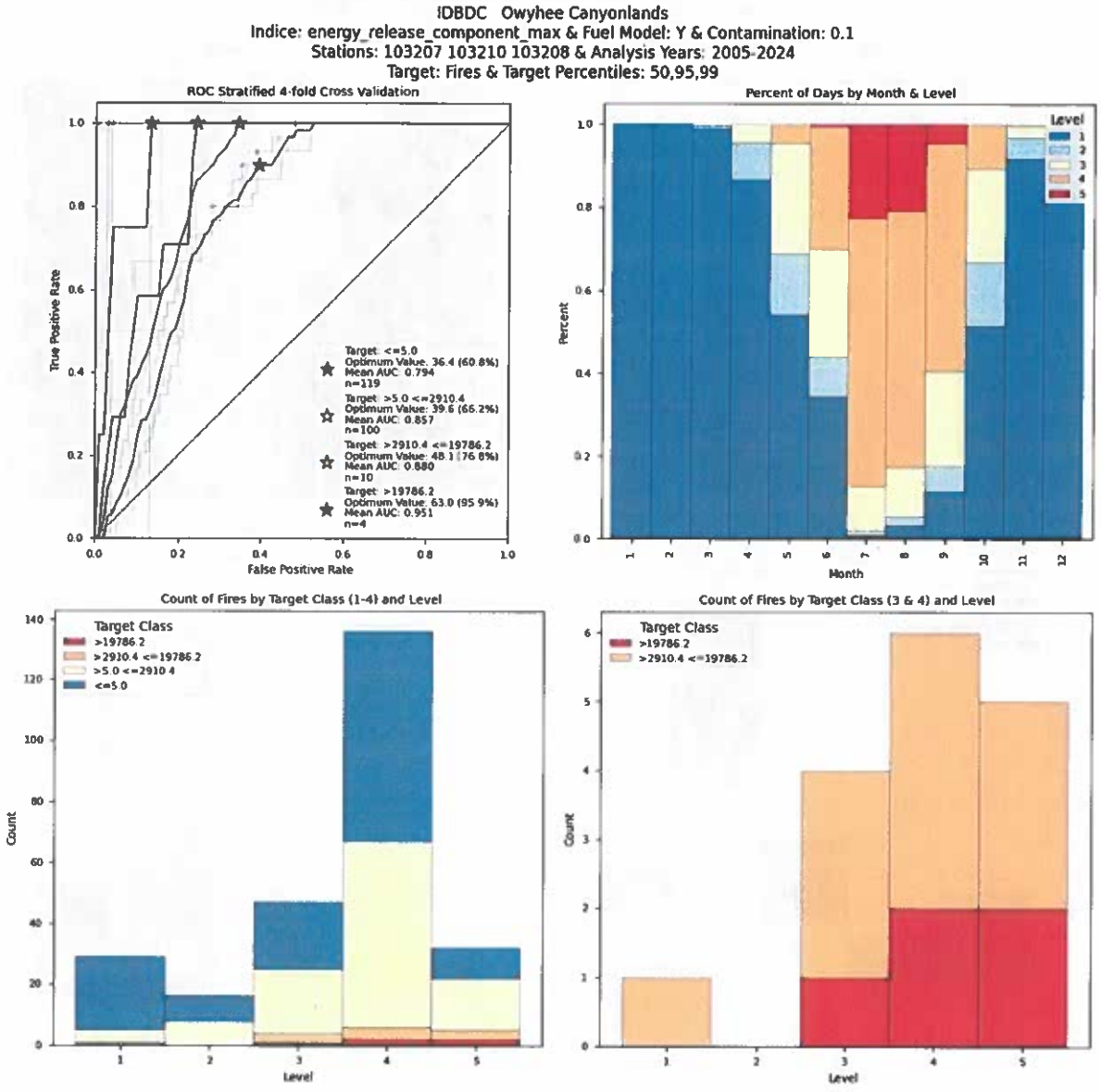






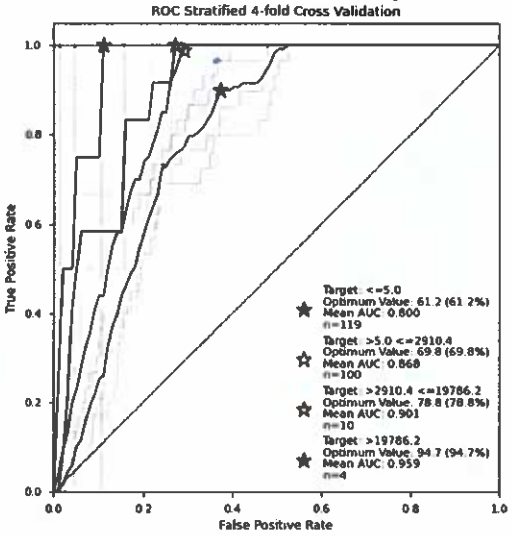
Owyhee Canyonlands FDRA

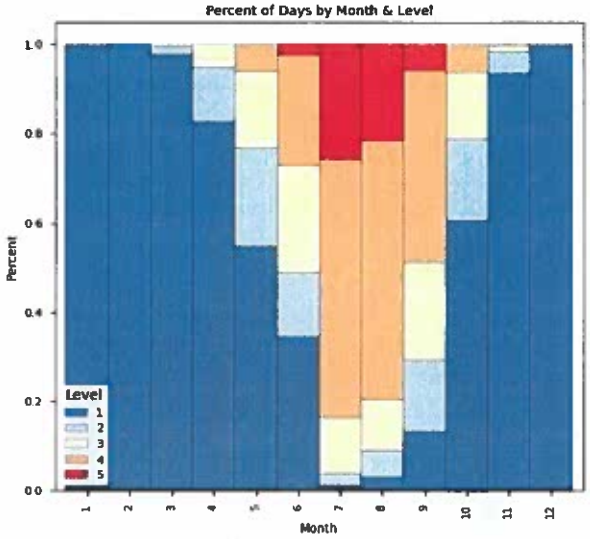
- **Energy Release Component**

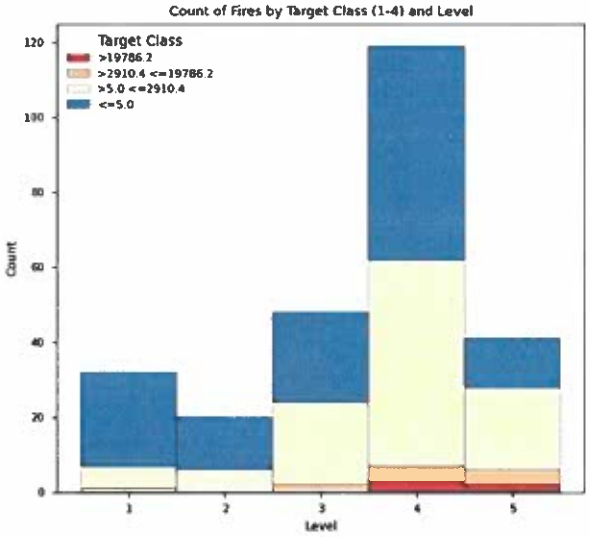


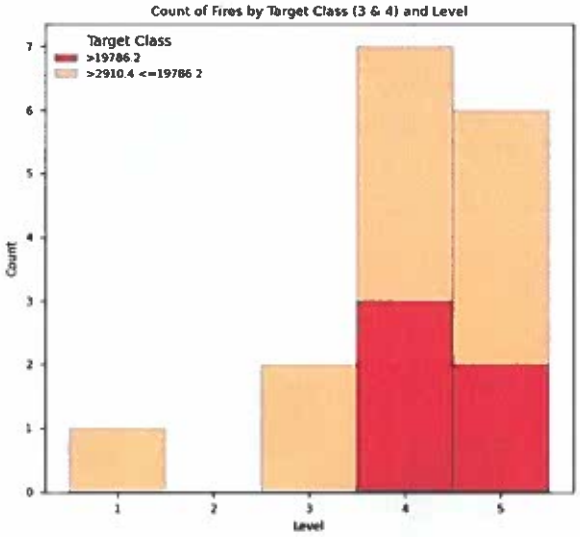
- **Severe Fire Dagner Index**

IDBDC Owyhee Canyonlands
Indice: severe_fire_danger_index_max & Fuel Model: Y & Contamination: 0.1
Stations: 103207 103210 103208 & Analysis Years: 2005-2024
Target: Fires & Target Percentiles: 50,95,99









Appendix L FIRE DANGER RATING AREA DETAILS

Boise Mountains

- General Location

  From the point where the Boise National Forest boundary intersects Idaho State highway 20 near Dixie following the Boise Forest boundary west and north along the ridge of the Danskin Mountains to Boise front foothills and extending north encompassing the Idaho Department of Lands jurisdictional boundary to its intersection back with the Boise National Forest boundary near Sagehen Reservoir. The far northern boundary includes all Boise national Forest lands excluding the Frank Church Wilderness. All lands north of Sagehen Reservoir including Tripod Mountain and West Mountain within the North Fork Payette River drainage north to near Tamarack Resort. This FDRA includes all lands within the Boise Forest boundary north to Yellowpine and south to Camas Reservoir which includes lands west of Pine and Featherville, which are Sawtooth National Forest lands protected by the Boise National Forest. This FDRA encompasses approximately 2.2 million acres.

- Vegetation

  Fuels within the Boise Mountains FDRA are highly variable and complex. They range from shrub-steppe communities at the lowest elevation to alpine communities at the highest. Low elevation shrub-steppe includes several subspecies of sagebrush along with perennial and non-native annual grasses. These areas are bordered by persistent aspen, ponderosa pine, and ponderosa pile/Douglas-fir forest communities which represent the warm, dry extreme of the forested zone. Douglas-fir becomes more prominent as elevation increase and can occur as a co-dominant species with lodgepole pine, grand fir, subalpine fir, and western larch. The lower elevation ponderosa pine/Douglas-fir communities were historically fire dependent and frequently exposed to low intensity non-lethal fire events. Aspen occurs as small inclusions in the forested zone but was likely more obvious on the landscape under the historical fire regimes. Fires were historically a mixed fire regime at mid to higher elevation sin dry Douglas-fir and warm subalpine fir-Engleman spruce communities. The mixed and lethal complexes were historically visited by fire more infrequently with the affected area being a mix of lethal and non-lethal events which maintained a mosaic of uneven-aged stands across the landscape.

- Climate

  Climate patterns are typically warm to hot and dry during the summer and fall. In the late spring and summer, moisture from the Gulf of America may move north and combine with warm seasonal temperatures and steep topography to create high-intensity, short duration thunderstorms. Late spring events generally have more

precipitation with 24-hour totals often greater than 0.5 inches. Dry lightning is more common during summer and fall and have potential to create frequent multi-fire events which can exceed local staffing capabilities. Maximum summer daytime temperatures can reach over 100 degrees at lower elevations, with higher elevations in the 80s to 90s. growing seasons vary greatly from 30 days in the alpine areas to over 150 days in the lower valleys.

- Topography

  The Boise Mountains FDRA is a landscape which varies greatly with elevations of 2,800 feet in the river canyons to 10,000 feet atop Steel Mountain. Key features include the Boise and Salmon River mountains which are characterized by forested slopes and steep river drainages. Three major landforms dominate this FDRA:

  - High elevation distinctive mountains and valleys formed from alpine glaciation
  - Lands with sharply defined drainage patterns formed by stream cutting action.
  - Lands formed by volcanic floss.

Snake River and Foothills

- General Location

  The Snake River and Foothills FDRA is bounded by the Idaho/Oregon border on the west. The southern boundary generally follows the Snake River from the Idaho/Oregon boundary to Oreana then follows the Bachman Grade to Triangle and continues east-northeast generally along the 4600-foot elevation line of the Owyhee Front to the Bruneau River. The northern boundary begins near Weiser, Idaho and follows Hwy 95 to Indian Valley, then generally follows the Little Weiser River to the Payette Forest and Boise Forest boundary line where it follows the southern boundary of the Boise Mountains FDRA to the dispatch center boundary. The eastern boundary is the district boundary between the Boise and Twin Falls BLM Districts. This FDRA encompasses approximately 3.2 million acres.

- Vegetation

  Historically, much of the Snake River and Foothills FDRA was covered by sagebrush steppe and salt desert shrublands. Principal shrub species include big and low sagebrush, rabbitbrush, antelope bitterbrush, winterfat, and various Atriplex. These vegetation communities are highly susceptible to invasion by annual grasses and other non-native species. A combination of factors in the early twentieth century caused the establishment of large areas, particularly within the Snake River Plain, to be dominated by annual grasses, such as cheatgrass and medusahead wildrye, and exotic annual forbes. The resulting reduction in the mean fire return interval led to their expansion

into adjacent shrublands. Further loss of sagebrush steppe is due to the conversion of private lands to agricultural cropland, residential development, and historic seeding practises (Southwestern Idaho FMP 2011). Annual grasses are dominated by cheatgrass and medusahead wildrye. Perennial grasses are dominated by perennial montane grasses such as fescues, meadow-grasses/bluegrasses, bromes, feathergrasses, and seeded grass species such as crested wheatgrass.

- Climate

  The Snake River and Foothills FDRA precipitation is generally 12 inches or less. The FDRA is typified by hot, dry fires seasons. The general air flow during fire season is westerly or south-westerly. However, the Snake River moves through the FDRA in a southeast to northeast direction, which can channel winds. Thunderstorms capable of producing strong and erratic winds are a threat throughout the FDRA during fire season Peak times for thunderstorms are mid-June through mid-August. Due to low elevation and dry conditions typical of the FDRA virga is a common occurrence with thunderstorms.

- Topography

  The Snake River and Foothills FDRA is characterized by flat and rolling terrain. Elevation ranges from a low of approximately 2100 feet on the Snake River near Weiser, to approximately 4000 feet on the higher bluffs within the FDRA. The Snake River Canyon is a major topographic feature of the FDRA. Much of the FDRA is accessible by vehicle because of the flat and rolling nature of terrain within this FDRA. It also includes the King Hill Creek Wilderness Study Area.

- Fire Occurrence

Owyhee Canyonlands

- General Location

  The Owyhee Canyonlands FDRA is bounded by the Idaho/Nevada border on the south; the Idaho/Oregon border on the west; and the Bruneau River on the east. The northern boundary generally follows the Snake River from the Idaho/Oregon boundary to Oreana then follows the Bachman Grad to Triangle and continues east-northeast generally along the 4600-foot elevation line on the Owyhee Front to the Bruneau River. The FDRA encompasses approximately 3.9 million acres. The FDRA includes approximately 146,000 acres of the Duck Valley Indian Reservation. Most of the remainder of land in this FDRA is owned by the BLM and IDL.

- Vegetation

The fuels complex of the Owyhee Canyonland FDRA is dominated by juniper woodlands and mid-elevation shrubs in the western portion. The eastern portion is dominated by shrubs (mid-elevation, low-elevation, and salt-desert). The juniper woodlands are dominated by western juniper. In some areas, "western juniper woodlands have expanded into mid-elevation shrub-steppe communities, forming dense seral stands, with a depauperate understory of shrubs, forbs, and grasses. In contrast to climax juniper stands, which tend to occur on shallow stony ridge top sites, seral stands occupy deep-soiled loamy sites in swales and valley bottoms". (Southwestern Idaho FMP 2011).

The mid-elevation shrub areas are dominated by mountain big sagebrush, low sagebrush, and curl-leaf mountain mahogany. The low elevation shrub areas are dominated Wyoming big sagebrush, basin big sagebrush, and antelope bitterbrush, winterfat, and green rabbitbrush. The salt desert shrub areas are dominated by budsage, cheatgrass, greasewood, horsebrush, saltbrush, and winterfat.

Other fuel types found in the FDRA in coverages of generally less than 5% in the represented Fire Planning Units include annual grasses, perennial grasses, aspen, dry conifers, riparian, and wet/cold conifers.

- Climate

The Owyhee Canyonlands FDRA is typified by arid to semi-arid desert and steppe country. The average annual precipitation at weather stations in the middle of the elevation represented in the FDRA is 15 inches. During fire season hot and dry conditions dominated. The general wind flow patterns during fire season are westerly or south-westerly. Thunderstorms capable of producing strong erratic winds are a threat throughout the FDRA during fire season. Large snow accumulations are possible in the higher elevations of the FDRA. However, melting generally occurs sooner in the Owyhee Mountains than other mountains in Idaho. The peak river flows usually occur in late May and June.

- Topography

The elevation of the Owyhee Canyonlands FDRA ranges from a low of generally 4000 feet to a hight of 8400 feet. The eastern and southern portions of the FDRA are characterized by deep river canyons and large plateau areas. The north-western portion of the FDRA is dominated by the Owyhee Mountain Range. The terrain throughout the FDRA is largely inaccessible by vehicles. The FDRA includes the following wilderness areas: North Fork Owyhee, Pole Creek, Owyhee River, and Bruneau-Jarbidge.