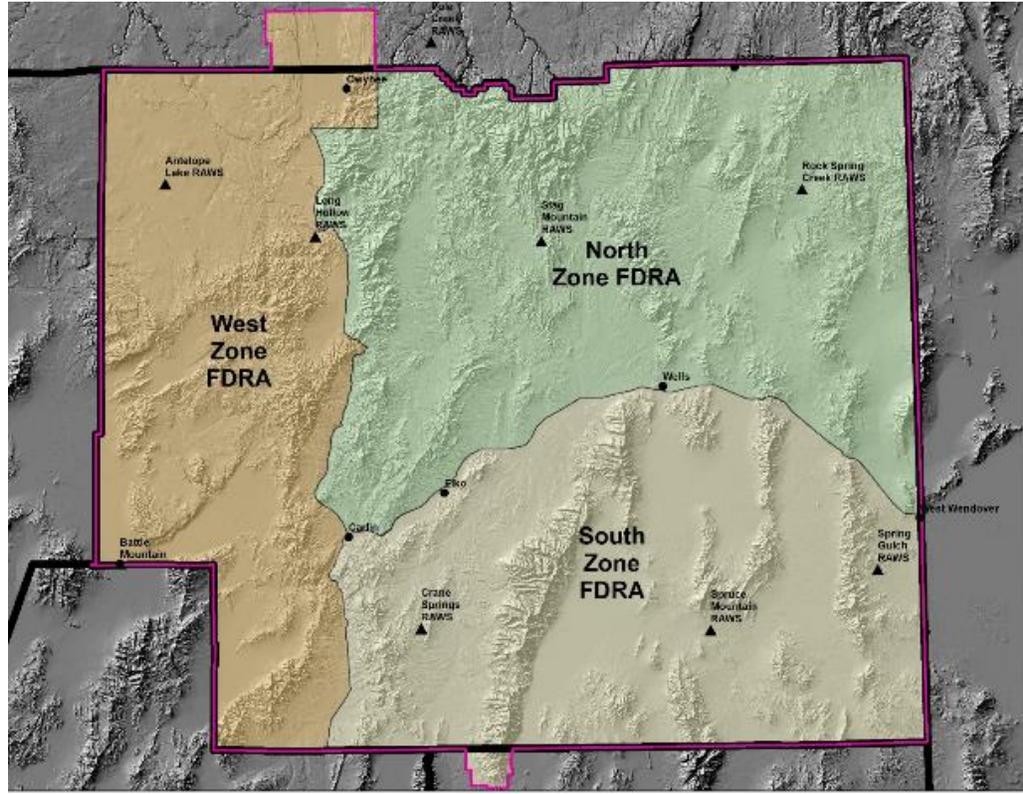


ELKO INTERAGENCY DISPATCH CENTER

Interagency Fire Danger Operating Plan



February 2021

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ELKO INTERAGENCY DISPATCH CENTER

Interagency Fire Danger Operating Plan

Recommended By: ~~Fire Management Officers~~

**MATTHEW
MURPHY**

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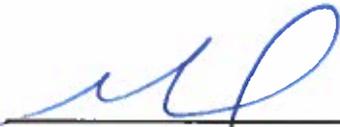
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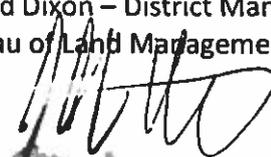
ELKO INTERAGENCY DISPATCH CENTER

Interagency Fire Danger Operating Plan

Approved By: **Line Officers**

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ELKO INTERAGENCY DISPATCH CENTER

Interagency Fire Danger Operating Plan

Approved By: **Line Officers**

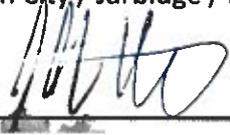
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I. INTRODUCTION

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 the National Fire Danger Rating System (NFDRS). This plan provides a science-based “tool” for interagency fire managers to incorporate a measure of risk associated with decisions which have the potential to significantly compromise safety and control of wildland fires.

The Elko Interagency Dispatch Center (EIDC), dispatches for the following:

- Bureau of Land Management- Elko District
- Bureau of Indian Affairs- Eastern Nevada Agency
- U.S. Forest Service- Mountain City, Ruby Mountains, and Jarbidge Ranger Districts
- U.S. Fish and Wildlife Service- Ruby Lake National Wildlife Refuge
- Nevada Division of Forestry- Northern Region
- Shoshone-Paiute Tribes of the Duck Valley Indian Reservation

1. Fire Danger Operating Plan

Interagency policy and guidance requires numerous unit plans and guides in order to meet preparedness objectives. Some of these plans and guides are inter-related; some plans and guides provide the basis for other plans/guides as shown in this schematic.

This Fire Danger Operating Plan (FDOP) guides the application of information from decision support tools (such as NFDRS) at the local level. This FDOP is supplemental to the Fire Management Plan; it documents the establishment and

management of a fire weather station network and describes how fire danger ratings will be applied to local unit fire management decisions. The actual implementation of the fire business thresholds is described in the following supplemental action plans.



a. Staffing Plan

The Staffing Plan describes escalating responses that are usually noted in the 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 ELKO INTERAGENCY DISPATCH CENTER Fire Danger Operating Plan; the associated decisions and planned actions are in the [APPENDIX](#) in the combined Staffing / Draw Down / Preparedness Level Plan. The decision points are identified and documented in the ELKO INTERAGENCY DISPATCH CENTER Fire Danger Operating Plan.

b. 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.

c. Prevention Plan

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 ELKO INTERAGENCY DISPATCH CENTER are documented in this Fire Danger Operating Plan; the associated decisions and planned actions are in the [APPENDIX](#).

d. 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 EIDC Preparedness Level Plan but no specific Restriction Plan is in place for the interagency zone.

2. **Wildfire Response**

a. Initial Response Plan (need updated Run Cards in Sharepoint)

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 ELKO INTERAGENCY DISPATCH CENTER Fire Danger Operating Plan. The number and type of suppression resources dispatched to a reported fire is documented in the associated initial Dispatch / Response Plan ([APPENDIX](#)).

b. Local Annual Operating Plan

The ELKO INTERAGENCY DISPATCH CENTER Annual Operating Plan identifies standard procedures, which guide the operations of multi-agency logistical support activity throughout the coordination system. The LAOP is intended to facilitate interagency dispatch coordination, ensuring the timeliest and most cost-effective incident support services available are provided. Communication between Units, Geographic Area Coordination Centers, State, Regional Offices and other cooperative agencies are addressed.

B. 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 – [H-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

C. OPERATING PLAN OBJECTIVES

1. 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.
2. Delineate fire danger rating areas (FDRAs) in fire danger planning area with similar climate, vegetation, and topography.
3. Establish an interagency fire weather-monitoring network consisting of Remote Automated Weather Stations (RAWS) which comply with *NFDRS Weather Station Standards (PMS 426-3)*.
4. Determine climatological breakpoints and fire business thresholds using the Weather Information Management System (WIMS), National Fire Danger Rating System (NFDRS), FireFamilyPlus software to analyse and summarize an integrated database of historical fire weather and fire occurrence data.
5. Define roles and responsibilities to make fire preparedness decisions, manage weather information, and brief fire suppression personnel regarding current and potential fire danger.
6. Determine the most effective communication methods for fire managers to communicate potential fire danger to cooperating agencies, industry, and the public.
7. Provide guidance to interagency personnel outlining specific daily actions and considerations at each preparedness level.
8. Identify seasonal risk analysis criteria and establish general fire severity thresholds.
9. Identify the development and distribution of fire danger pocket cards to all personnel involved with fire suppression within the fire danger planning area.
10. Identify program needs and suggest improvements for implementation of the Fire Danger Operating Plan.

II. FIRE DANGER PLANNING AREA INVENTORY AND ANALYSIS

A. ADMINISTRATIVE UNITS

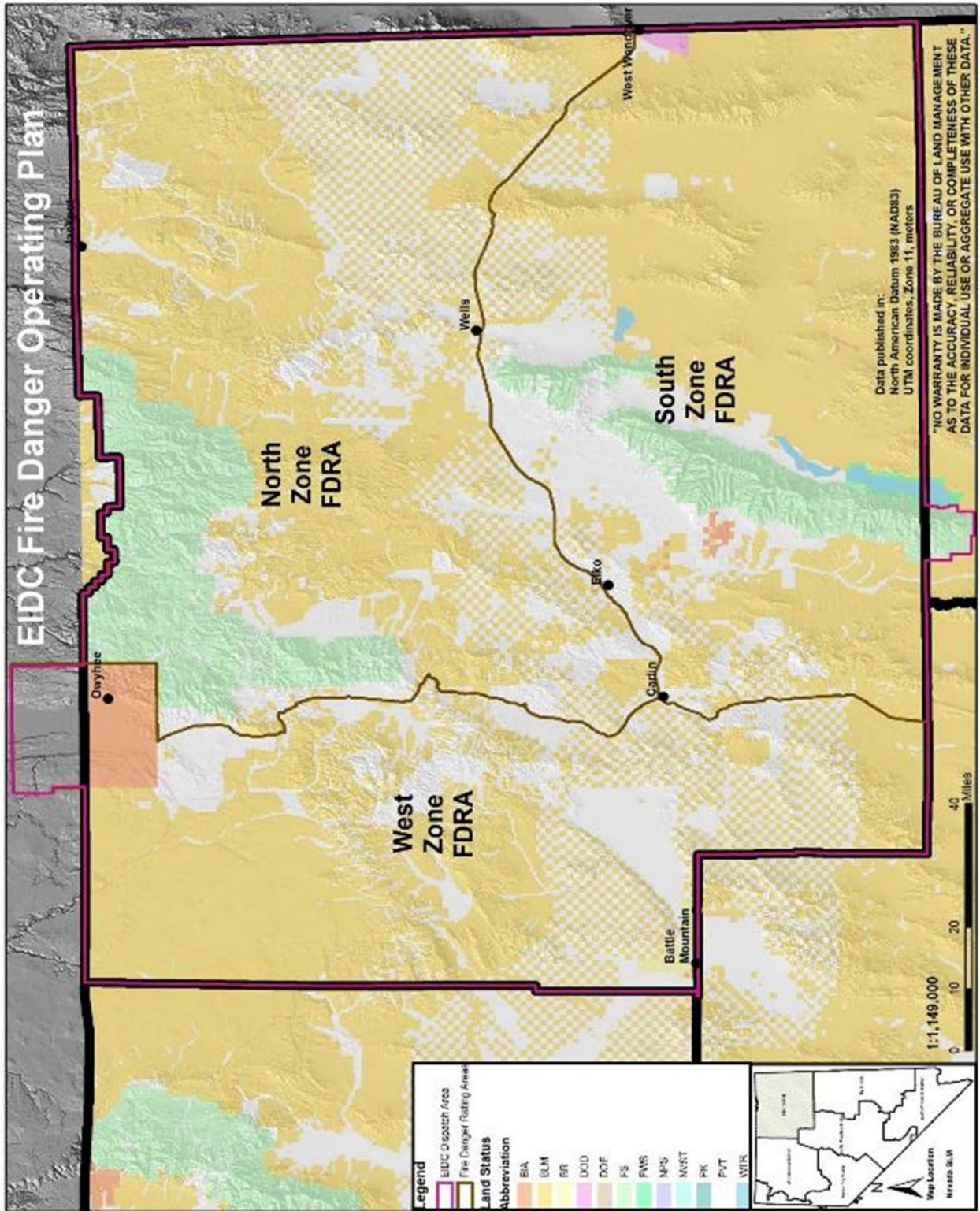
This document serves as an *interagency* example of consistent and effective application of fire danger decisions is applied across multiple jurisdictional boundaries. Wildland fire management and suppression responsibilities are shared among Federal, State, and local cooperators. This plan encompasses an area of approximately 12.4 million acres in northeastern Nevada, with wildland fire management and suppression responsibilities primarily shared among the U.S. Department of Agriculture (USDA), Forest Service (USFS); U.S. Department of the Interior (USDI), Bureau of Land Management (BLM), Nevada Division of Forestry (NDF); USDI, U.S. Fish & Wildlife Service (USFWS); USDI, Bureau of Indian Affairs (BIA); Shoshone-Paiute Tribes of the Duck Valley Indian Reservation (DVT); and other local cooperators. Northeastern Nevada has a diverse landscape ranging from high desert to mountain peaks that are over 11,500 feet in elevation.

1. Jurisdiction Table

Agency	Office	Estimated Acreage
BIA	Eastern Nevada Agency	161,855
BIA	Duck Valley Tribe	293,805
BLM	Elko District Office BLM	7,439,100
STATE	State Owned Lands	15,241
PRIVATE	Privately Owned Lands	3,462,196
USFWS	Ruby Lake National Wildlife Refuge	39,926
USFS	Humboldt-Toiyabe National Forest	1,065,926

Table 1: Fire Danger Planning Area Landownership Overview

2. Landownership Map



Map 1: Fire Danger Planning Area Overview

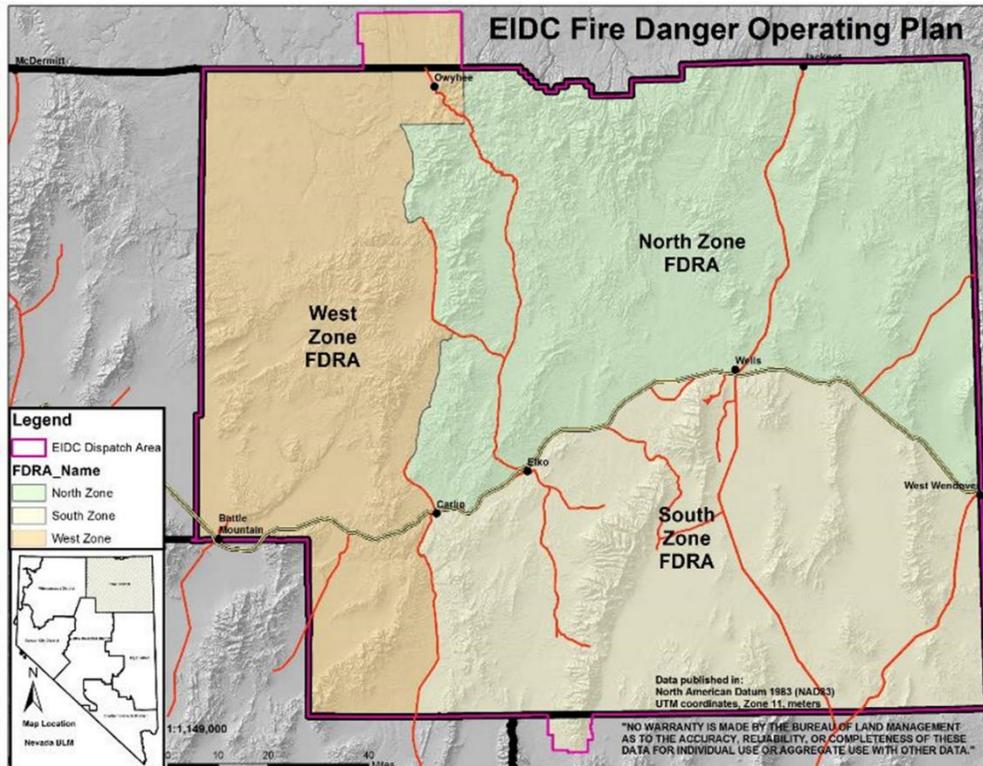
B. FIRE DANGER RATING AREAS

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, vegetation, and topography ([APPENDIX](#)). After these environmental factors were considered, the draft FDRAs were *edge-matched* to existing administrative boundaries using Response Areas. Although existing Response Areas are split by FDRAs; a Response Area is able to have multiple FDRAs as all indices / levels used are calculated for the entire dispatch zone rather than single FDRAs to avoid additional workload and confusion for operational personnel.

FDRA Table

Fire Danger Rating Area	Acreage	% of Total
West Zone FDRA	3,421,668	28%
North Zone FDRA	4,881,556	39%
South Zone FDRA	4,103,387	33%

Table 2: Fire Danger Rating Areas (FDRAs) acreage breakout.



Map 2: Fire Danger Rating Areas (FDRAs)

C. WEATHER STATIONS

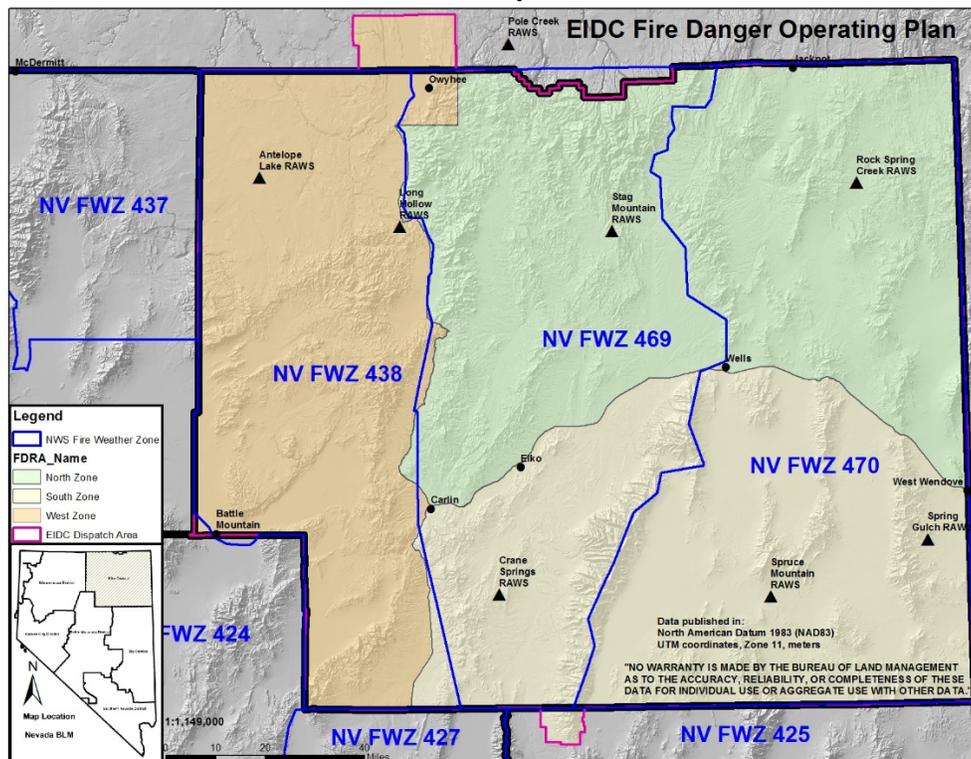
All Remote Automated Weather Stations (RAWS) comply with the National Wildfire Coordinating Group (NWCG) weather station standards.

<http://www.nwcg.gov/pms/pubs/PMS426-3.pdf>.

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.

Remote Automated Weather Stations (RAWS) located in different geographical locations with common sensitivity to NFDRS model inputs can be grouped together to form a special interest group (SIG). Of the 10 RAWS in the EIDC Dispatch Area, two were not included due to variability which influences the seasonal ERC and BI averages (Ruby Lake National Wildlife Refuge and Sho-Pai RAWS) or the stations in question did not have at least 10 years of data (Ruby Valley and Pole Creek USFS RAWS). The Beacon Light RAWS, which is located near Battle Mountain and just south of the EIDC Dispatch Area, was also not included due to having a higher variability of temperatures and relative humidity's that skewed the ERC and BI averages. Idaho's Pole Creek RAWS was included in the North Zone FDRA as it had similar statistical similarities to the other North Zone FDRA RAWS.

1. RAWS and FWZ Boundaries Map



Map 3: Remote Automated Weather Station (RAWS) and Fire Weather Zones.

2. **RAWS Catalogue Table (Active Stations Only) /
Special Interest Groups (SIGs)**

FDRA	Station ID	Station Name	Status	Agency/Owner	Data Years Available	Elevation	Data Years Used
West Zone	260310	Antelope Lake	Active	BLM-NV-EKD	1990-Present	5460	2005-2020
	260305	Long Hollow	Active	BLM-NV-EKD	1986-Present	5820	2005-2020
	260315	Stag MTN	Active	BLM-NV-EKD	1997-Present	6790	2005-2020
North Zone	103210	Pole Creek	Active	BLM-ID-BOD	1990-2017	5660	2005-2017
	260315	Stag MTN	Active	BLM-NV-EKD	1997-Present	6790	2005-2020
	260309	Rock Spring Creek	Active	BLM-NV-EKD	1990-Present	5380	2005-2020
South Zone	260314	Crane Springs	Active	BLM-NV-EKD	1997-Present	6400	2005-2020
	260306	Spruce MTN	Active	BLM-NV-EKD	1986-Present	6100	2005-2020
	260308	Spring Gulch	Active	BLM-NV-EKD	1990-Present	5500	2005-2020

Table 3: RAWS Catalogue

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 groups. 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 / DEFINITION OF THE FIRE WORKLOAD

The ability to regulate, educate, or control a user 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 user group. In selecting a component and/or index, several factors must be considered:

1. **Affected Target Group:** The group of people commonly associated with the problem (Agency, Industry, or Public).
 - Agency: Employees of the federal, state, and local governments involved in the cooperative effort to suppress wildland fires. This includes Federal, State, and County land management employees, along with volunteer

fire departments who share a similar protection mission to manage wildland fires.

- Industry: Employees affiliated with organizations which utilize natural resources and/or obtain permits or leases to conduct commercial activities on federal, state, 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.
 - 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).
2. **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 as 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 user 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 behaviour. The following table illustrates the differences between target groups (Agency, Industry, and Public) and the associated fire cause.

The Problem Definition is the problem specific to the area of concern and includes ignition causes. The problem is “framed” to focus on the wildland fire management issue associated with a specific target group. Degree of Control is how much control the fire management agencies have over the target group (High to Low). This is a measure of how quickly the affected target group can respond to changing fire danger level. Various methods of communication are utilized to influence an affected target group to change their behavior. Depending upon the specific target group, communication with the target group may include face-to-face verbal conversations, radio, telephone, email, newspaper, television, signing/posting, text-messaging, etc.

The potential impacts on the target group and the likely consequences of a bad or unfortunate decision are considered as the sensitivity of the NFDRS outputs should be commensurate with the ability to react (or communicate) to the target group. Memory and variability of the selected component or index must be understood to appropriately match the task and user group. If a situation where control and ability to communicate with the target group is high, the component and/or index which would be most appropriate should also be highly reactive to changing conditions (i.e., Ignition Component, Spread Component). If the situation was reversed where the control and ability to communicate with the target group is low, the appropriate component and/or index should not vary significantly over time (i.e., Energy Release Component). The intent is to minimize the risk of a fire ignition problem by controlling or influencing a specific target group (Agency, Public, and Industry).

Problem / Issue	Affected Target Group			Degree Of Control	Anticipated Communication with Target Group	Potential Impacts	Index / Component	Management Action
	Agency	Public	Industrial					
Unattended and/or escaped campfires in developed recreation sites	USFS, BLM, ENA, USFWS, Shoshone Paiute Duck Valley Tribe, and State of Nevada	Campers; Recreational Users		Moderate	Communicated by dispatch center daily to agency personnel for implementation. The intent is to raise awareness of potential fire danger in simple, easy to communicate terms via local radio, TV, newspaper, and Adjective Fire Danger Rating Signs.	Public anger and resistance; LEO, recreation, and fire patrol workload; prevention workload; reduction in suppression costs	Energy Release Component	Fire restrictions (web, radio, TV, newspaper). Roadside prevention signs based on Adjective Rating Level.
Unattended and/or escaped campfires in wilderness, roadless, or undeveloped areas	USFS, BLM, ENA, USFWS, Shoshone Paiute Duck Valley Tribe, and State of Nevada	Backcountry Hikers / Campers		Low	Communicated by Dispatch Center daily to agency personnel for implementation. Patrols should be considered to conduct face-to-face awareness of fire danger	Public anger and resistance; Prevention workload; LEO, recreation, and fire patrol workload; reduction in suppression costs	ERC	Fire restrictions (web, radio, TV, newspaper). Wilderness Patrols Roadside prevention signs based on Adjective Rating Level.
Fires caused by power infrastructure			Power Companies	Moderate	Power line easements will be updated to address requirements fire danger and other fire management considerations. Dispatch center to communicate Adjective Rating daily during fire season. Agency personnel should communicate annually with power companies.	Loss of productivity; socio-economic; reduced ignitions; reduced suppression workload.	ERC	Adjective Rating Rights of Way Fire Management Stipulations
Suppression resources committed to multiple fires	Dispatch Center			High	Dispatch Center orders/releases resources based upon each agencies staffing plan. Preposition resources and extend or supplement staffing.	Agency mob/demob costs vs. suppression costs; reduced response time and efficiency of resources.	Burning Index ERC	Staffing Plan Dispatch Response Plan

Problem / Issue	Affected Target Group			Degree Of Control	Anticipated Communication with Target Group	Potential Impacts	Index / Component	Management Action
	Agency	Public	Industrial					
Suppression resources unavailable after work hours and/or on scheduled days off	Dispatch Center			High	Duty Officer extends staffing as needed based on forecasted conditions or increased fire potential due to anticipated public activities.	Agency Costs vs. suppression costs; improved readiness.	BI/ERC Fire Weather Forecast	Staffing Plan
Fires caused by target shooting	Agency Personnel	Recreationists; Target Shooters	Retailers	Low	Communicated by Dispatch Center daily to agency personnel for implementation. Increase level of public awareness of fire danger via local radio, TV, newspaper, and signs. Ensure agency personnel are aware of fire danger potential prior to engaging in use of firearms.	Public anger and resistance; loss of agency credibility; LEO/fire patrol workload	ERC	Adjective Rating Preparedness Plan
Fires resulting from debris burning		Property Owners	Agriculture	Low	Communication through permit stipulations. Post adjective fire danger via web, newspaper, radio, and signs. Fire prevention patrolling for face-to-face communication and enforcement.	Public Anger; loss of credibility; agency costs (false alarms)	ERC	Regulated by Elko County but coordinated through Adjective Rating
Fires resulting from equipment (e.g., chainsaws, vehicles, heavy equipment, welders)	Agency Personnel	Visitors; Property Owners	Contractors; Permittees	Moderate	Communication through permit stipulations. Post adjective fire danger via web, newspaper, radio and signs. Fire prevention patrolling for face-to-face communication and enforcement.	Public anger; loss of credibility; LEO recreation, and fire patrol workload	ERC	Prevention / Restriction Plan
Fires in Greater Sage-Grouse Habitat	USFS, BLM, ENA, USFWS, Shoshone Paiute Duck Valley Tribe, and State of Nevada			High	Awareness of priority suppression areas in critical Greater Sage-Grouse Habitat.	Public anger; political ramifications; greater need for suppression resources, increased habitat loss.	BI ERC	Dispatch Response Plan Staffing Plan

Problem / Issue	Affected Target Group			Degree Of Control	Anticipated Communication with Target Group	Potential Impacts	Index / Component	Management Action
	Agency	Public	Industrial					
Fire within WUI	Local Government Cooperators and State of Nevada	Home Owners; Property Owners;	Utility Companies	Low	Increase level of public awareness of fire danger via local radio, TV, newspaper, and signs. Defensible Space awareness through Living with Fire Program.	Public anger; code enforcement; political ramifications; Intensive operational resource needs.	ERC	Prevention Plan
Railroad Fire Starts			Union Pacific	Low	Communication between railroad companies and dispatch regarding activity and fire danger.	Increased fire starts and risk to transportation corridors.	ERC	Prevention Plan
Fireworks		Public	Retailers	Low	Increase level of public awareness of fire danger via local radio, TV, newspaper, and signs.	Increased risk to public safety, increased habitat loss, intensive operational resource needs. Intergovernmental conflicts with local tribe.	ERC	Prevention Plan

Table 4: Planning Area Fire Workload Analysis

IV. FIRE DANGER DECISION ANALYSIS

Decision points can be based upon either:

- Climatological Breakpoints, or
- Fire Business Thresholds.

The preceding table provides a summary of the planning area's fire danger problems and concerns. In addition, each problem 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 agency percentiles. The percentile values for the calendar year (Jan – Dec) will be different from the percentile values for the fire season (Jun – Sept). 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. Climatological breakpoints for each RAWS / SIG are included in Table 5 for reference and use in WIMS.

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.

Using the Fire Family Plus software, NFDRS thresholds have been identified where changes in fire business should occur. A Probability Analysis was used for finding a NFDRS index or component that gives meaningful information about fire business in each Fire Danger Rating Area. The analysis takes every historical weather day (date and index value) and assigns each day as a fire day, large fire-day, or multiple fire-day. The analysis performs logistical regression to provide charts and Goodness of Fit statistics.

For this analysis equal emphasis was placed on large fire-day and multiple fire-day. Local experience has shown that large fire-days pose a fire problem when a limited number of initial attack resources are available. Multiple fire-days have a greater statistical correlation and are a greater threat due to completely exhausting suppression resources. Multiple fire days is also when it is more likely for large fires to consume high value habitat because resources are limited and during lightning events it is common for resources to be depleted.

C. DECISION SUMMARY TABLE FOR CLIMATOLOGICAL PERCENTILES

RAWS STATION	FUEL					
	MODEL	INDEX	80%	90%	95%	97%
Antelope Lake	16Y	BI	37	43	48	54
	16Y	ERC	60	70	75	78
Long Hollow	16Y	BI	36	43	46	51
	16Y	ERC	60	69	74	77
Stag Mountain	16Y	BI	37	42	48	53
	16Y	ERC	55	62	67	70
Pole Creek	16Y	BI	32	37	41	44
	16Y	ERC	54	64	68	70
Rock Spring Creek	16Y	BI	34	39	44	48
	16Y	ERC	52	61	66	70
Crane Springs	16Y	BI	37	44	49	53
	16Y	ERC	61	70	75	77
Spruce Mountain	16Y	BI	42	49	53	58
	16Y	ERC	62	71	76	79
Spring Gulch	16Y	BI	42	46	49	53
	16Y	ERC	67	75	79	81

Table 5: Decision Summary Table showing 12 Month Climatological Percentiles.

V. FIRE DANGER RATING LEVELS

The NFDRS utilizes the WIMS processor 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. The NFDRS outputs from the WIMS processor can be used to determine various levels of fire danger rating to address the fire problems identified previously in the *Fire Problem Analysis Chart*. The system is designed to model worst-case fire danger scenario. The 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. The analysis used in the plan has been converted to NFDRS 2016 to meet BLM and NWCG Policy for adoption of NFDRS 2016 by 2021.

NFDRS will be utilized to produce outputs to assist fire management with four sets of decisions.

- Dispatch Response Levels: decision tool for dispatchers to assign initial attack resources to a fire reported in a specific dispatch zone.
- Staffing Levels: appropriate day-to-day suppression resource staffing.
- Preparedness Levels: Seasonal decisions with respect to fire danger.
- Fire Danger Adjective Rating Levels: intended to communicate fire danger to the public (ie. fire danger signs).

A. RESPONSE (OR DISPATCH) LEVEL

Dispatch Response 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. Dispatch Response Levels 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. The FireFamilyPlus software has been used to establish the Dispatch 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 2016 outputs with weather records is listed in the previous section. Each agency will utilize the same Dispatch Response Levels calculated for by FDRA for the entire Dispatch Zone in response to wildland fires in the Elko Interagency Dispatch Center Zone.

Agency personnel use the Dispatch Response Level to assign initial attack resources based on pre-planned interagency “Run Cards.” Combined with predefined Dispatch Zones, the Dispatch Response Level is used to assign an appropriate mix of suppression resources to a reported wildland fire based upon fire danger potential. The Dispatch Response Levels are derived from the most appropriate NFDRS index and/or component

that correlate to fire occurrence. Burning Index (BI) with NFDRS16 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 BI to reflect the most current fire danger potential, and the Dispatch Center's ability to track agency personnel throughout the course of any given day, BI will be computed and implemented for initial attack response levels until a qualified Incident Commander evaluates the need for the dispatched resources.

Staffing Level

Staffing Levels will be used to make daily internal fire preparedness and operational decision. At the protection unit level, the staffing level can form a basis for decisions regarding the "degree of readiness" for initial attack resources and support resources. Specific preparedness actions are defined at each staffing level. Although Staffing Level can be a direct output in WIMS, the WIMS output is only based upon weather observations and climatological percentiles. The use of climatological percentiles for daily staffing decisions is optional. The preferred methods to delineate Staffing Level thresholds are based on statistical correlation of weather and fire occurrence.

Staffing Levels are established to assist fire managers with internal/agency staffing decisions. Staffing Levels will be a function of Dispatch Response Level, current fire activity, and the potential for ignitions in the next 24-hour period. The EIDC process for determining local Staffing Levels is not the same as Staffing Level calculated directly from WIMS. WIMS calculates Staffing Level on climatological breakpoints; EIDC will calculate Staffing Level on fire business thresholds. Each agency will develop their respective management actions based upon five Staffing Levels.

The Staffing Level forms the basis for decisions regarding the "degree of readiness" of initial attack (IA) resources and support resources. The Staffing Level is based on an analysis of cumulative frequency of occurrence of Burning Index and Energy Release Component (ERC) with NFDRS16 Fuel Model Y. Staffing Levels are expressed as numeric values where 1 represents the low end of the fire danger continuum and 5 the high end. Staffing Level is intended to provide fire managers with day-to-day decision support regarding staffing of suppression resources. Staffing Level will be used to determine staffing which requires employee overtime associated with working people beyond their normal schedules (i.e., days off, after hours). In addition, the extended staffing of shared resources such as air tankers, helicopters, hotshot crews and other large fire support resources will be a function of the Staffing Level.

B. PREPAREDNESS LEVEL

The Preparedness Level is a five-tier (1-5) fire danger rating decision tool that is based on NFDRS output(s) and other indicators of fire business (such as projected levels of resource commitment). Preparedness Levels will assist fire managers with more long-term (seasonal) decisions with respect to fire danger.

Preparedness Levels are established to assist fire managers with weekly or monthly planning decisions based upon seasonal fire danger elements. The FireFamilyPlus software has been used to establish the fire business 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 the previous section. The final Preparedness Level determination also incorporates a measure of current and projected levels of resource commitment due to fire activity and a measure of Ignition risk.

C. 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 descriptions for public information and signing. As with Staffing Level, the Adjective Fire Danger Rating Level can be obtained as a direct output in WIMS; however, the Adjective Rating from WIMS is strictly based on weather and climatological percentiles (80th / 95th) with no regard to historical fire occurrence. The use of agency-specific climatological percentiles is not mandatory. Actually, the preferred method to determine Adjective Fire Danger Rating thresholds based on statistical correlation of weather observations AND fire occurrence. This FDOP will implement Adjective Fire Danger Rating based upon fire business thresholds; not climatological percentiles.

Although NFDRS processors (e.g., WIMS) will automatically calculate the adjective class rating, Elko Interagency Dispatch Center will manually determine Adjective Fire Danger Rating based upon fire business thresholds. The daily adjective rating is based on the current or forecasted ERC (16Y).

Fire Danger Class and Color Code	Description
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 woods 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 hit hard and fast 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.

Table 6: Description of Fire Danger Rating Classes and Color Codes

VI. FIRE DANGER OPERATING PROCEDURES

A. ROLES AND RESPONSIBILITIES

1. Agency Administrators / Line Officers

The District Manager is responsible to the State Director for the safe and efficient implementation of fire management activities within their unit. This includes cooperative activities with other agencies or landowners in accordance with delegations of authorities.

2. Fire Program Managers

During periods when local preparedness levels are High to Extreme, the Fire Management Officers (FMO) from each agency will strive to achieve the most efficient and effective organization to meet Fire Management Plan (FMP) objectives. This may require the pre-positioning of suppression resources. The FMO and/or Assistant FMO (AFMO) from each agency will also determine the need to request/release off unit resources or support personnel throughout the fire season. The USFS Forest Fire Management Officer, BLM Elko District FMO, Elko and / or Eureka/Lander County, and Northern Region Nevada Division of Forestry FMO will use this FDOP and NFDRS outputs as a tool to coordinate and to make informed fire related decisions. The program manager/agency administrator is ultimately responsible for ensuring this plan is maintained, utilized, and communicated. The FMO from each agency will ensure that seasonal risk assessments are conducted monthly during the fire season. The risk analysis will include information such as live fuel moisture, 1000-hour fuel moisture, fuel loading, NFDRS (BI/IC/ERC) trends, NDVI imagery, and other pertinent data. This information will be distributed to agency staff and the EIDC Manager. The EIDC Manager, AFMOs, and FMOs will ensure information is posted at fire suppression duty stations. The FMOs will ensure that the pocket cards are prepared at least every three years and are in compliance with NWCG standards or BLM Seasonal Trend Assessments can also be used. If used, Pocket Cards will be distributed to all interagency, local and incoming

firefighters and Incident Management Teams (IMTs). The pocket cards will be posted on the National Wildfire Coordinating Group (NWCG) [pocket card web site](#). Fire suppression supervisors will utilize pocket cards to train and brief suppression personnel ensuring that they are posted at their respective fire stations.

3. Fire Danger Technical Group

Members of the NENV Fire Operations Group will monitor NFDRS to ensure validity, coordinate/communicate any problems identified, review plan implementation, coordinate plan revisions, present the plan, and be available for NFDRS technical consultation through the maintenance, review, and update of this plan. Some specific elements to monitor and coordinate are ensuring observations are selected appropriately, station management in WIMS, and RAWS station maintenance. The group will meet annually to review plan implementation, decide if revisions are necessary, and accomplish revisions.

4. Fire Weather Station Owners/Managers

The EIDC Center Manager is listed as the station owner for the BLM RAWS. The USFS District Fire Management Officer is listed as the station owner for the Humboldt-Toiyabe National Forest RAWS within the EIDC Dispatch Zone. The owner maintains the WIMS Access Control List (ACL). The station owner will ensure appropriate editing of the RAWS catalogs. The Remote Sensing Laboratory located at the National Interagency Fire Center (NIFC) maintains and calibrates the BLM RAWS stations on an annual basis. The USFS is responsible for maintaining USFS RAWS stations and calibrating the USFS RAWS stations on an annual basis. The BLM Fuels Program Manager is the point of contact for all BLM RAWS sites for Elko District.

5. Dispatch/Communication Center

The Elko District BLM Fire Planner will ensure that the Fire Danger Operating Plan along with all necessary amendments /updates to this plan are completed and submitted for approval through the NENV Fire Operations Group. Updates to this plan will be made at least every five years and approved by the NENV Fire Operations Group. Additional subordinate plan development and updates will be delegated by the Interagency FMO. Revised copies will be distributed to the individuals on the primary distribution list as identified. The dispatch center manager will ensure that the daily fire weather forecast (including NFDRS indices) is retrieved and that the daily staffing, preparedness, dispatch, and adjective levels are calculated and communicated to the appropriate target group and posted on the internet.

6. Duty Officers

Duty Officer(s) from each agency will be identified to EIDC. The Duty Officer is designated to provide input and guidance regarding staffing, preparedness and Dispatch Response Levels. It is the Duty Officer's role to interpret and modify the

daily staffing, preparedness, and/or Dispatch Response Levels (if warranted) by extenuating factors not addressed by this plan. Modifications of the staffing, preparedness and/or Dispatch Response Levels must be coordinated through the Dispatch Center Manager or Floor Supervisor when specified. The Duty Officer will keep their respective agency's fire and management staff updated (as needed). The BLM, USFS, and Nevada Division of Forestry will ensure EIDC is aware of their respective Duty Officer(s) at all times.

7. GIS Specialists

GIS Specialists from respective agencies may be asked to provide technical support to the Fire Danger Operating Plan. Specific GIS data such as FDRA boundaries, fire occurrence data, and other information may require assistance from GIS Specialists.

8. National Weather Service

Weather forecasts and products for the Elko Dispatch Zone area are provided by the National Weather Service, Elko, NV office. The annual Fire Weather Operating Plan with contact information and product listing (including NFDRS point and trend forecast products) can be found at:

<https://gacc.nifc.gov/gbcc/predictive/docs/AOP.pdf>

9. Geographic Area Predictive Service / Meteorologist

Provide support and expertise in fire weather data modeling and Fire Family Plus databases.

10. Education / Mitigation / Prevention Specialists

Education and mitigation programs will be implemented by the agency Fire Education/Mitigation Specialists with support from Public Information Officers, Law Enforcement Officers, FMOs, AFMOs, and other fire staff. Programs will be based on Preparedness Level Guidelines and direction provided by each agency's FMO and Prevention Plan.

B. SEASONAL SCHEDULE

Seasonal risk escalation in fuel complexes of north-eastern Nevada relies upon a combination of factors, which will ultimately trigger an extreme state of fuel volatility and a high potential for large fire growth or multiple ignition scenarios. 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 reliable indicators of seasonal fire severity have been measurements of fine fuel loading, live fuel moisture, 1000-hour (dead) fuel moisture, BI, and ERC. These levels will be compared graphically to historical maximum values and the average; these graphs 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. Each of the following variables are addressed in the dispatch planning worksheets found in the [Appendix Link](#).

Fire Activity: The occurrence of large/multiple fires is the reliable indicator of severity conditions. Any one incident reaching type one or two complexity would be an indicator of severity. Two or more type three complexity incidents within a two week period would also be a strong indicator. Three or more initial attack fires in the same day indicate a point where resources may be limited. A progressive approach to assessing seasonal risk will prepare the local unit for these occurrences and the necessary resources will already be in place.

Live Fuel Moisture: Herbaceous (Basin big sagebrush) fuel moisture plots were established in the vicinity of the Wells Fire Station (1992), Adobe Creek (1984), and Palisade (1984). Since that time, valuable data has been collected and a direct correlation has been drawn between fire intensity (controllability) and live fuel moisture levels. Additional sample sites have also been established across the area to provide better data as well. Consequently, fire severity is determined by comparing current trends to historical averages. Comparison of fuel moisture to historical conditions at various locations within Elko Interagency Dispatch Center Zone and surrounding areas can be located on the [National Fuel Moisture Database](#). The range of herbaceous fuel moisture for Basin big sagebrush and Wyoming sagebrush in the EIDC Dispatch Zone fluctuates between 200% (June) and 50% (August). Readings below 125% indicate increased risk of large fire growth and severity conditions. Below average readings may indicate an early or extended fire season.

Fine Fuel Loading: Fuel load determinations are made on an annual basis and compared to historical ten-year averages in order to determine the potential intensity of wildfires. Fuel loading over .5 tons/acre indicates a fire control problem. If significant amounts of carry-over fuel and/or matted grass are observed, control problems and increased fireline intensity could be expected. Fuels Program Manager or FMO will notify EIDC Center Manager when Fine Fuel Loading meets criteria as stated in Dispatch Response

Level and Local Preparedness Level worksheet. Once that criteria is met, it will remain in place for the rest of the strength of force season. Once conditions require dropping from High to Moderate Dispatch Response Levels the value will be adjusted back to 0.

NFDRS Thresholds: ERC, BI, and Sagebrush Live Fuel Moisture are used as the primary indicators to track seasonal trends of fire danger potential. NFDRS16 Fuel Model Y (16Y) have been chosen due to its good “fit” with the BI and ERC models and general agreement that it correlates best with extreme fire danger incides within NFDRS16. Other fuel models which might seem to be more appropriate due to their classification (grass/brush) historically did not correlate very well statistically with the NFDRS models. It has been statistically proven that large fire events will occur more often when these thresholds are exceeded. Early and late-season BI and ERC values that trend above average may indicate an extension of the normal fire season. Future FDOPs and analysis should consider all NFDRS16 fuel models as other live fuel models may develop into a better “fit” with calibration of indicators such as Growing Season Index or Nelson Model.

Weather Thresholds: 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 Climate Prediction Center. The observable weather factors that contribute to large fires and the potential for extreme fire behavior can be determined from the same percentiles determined from NFDRS thresholds.

Any of these factors significantly increase the potential for extreme fire behavior and large fire growth and are addressed in the dispatch planning worksheets: Red Flag Watch or Warning in FWX Zones 438/469/470, or winds (greater than 10 mph), or Haines Index (4 or more), or lightning (LAL 2 or more) forecasted.

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. Significant Fire Potential can be found on the Predictive Services (Outlooks) page of the GBCC website.

Historical fire records were examined for all FDRAs to determine the combination of weather parameters which would indicate the end of the fire season (or season ending event). The following season-ending events have been identified for West Zone / North Zone / South Zone FDRAs (EIDC Dispatch Area): 5 inches or greater precipitation over a 10 day period with low temperatures less than 32 degrees for 5 straight days.

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 1000-hour fuel moisture is another method to assess drought conditions. Palmer Drought Index graphics display current drought conditions while KBDI values of 500-800 indicate the potential for rapid curing and drying of the fine fuels and potential for live fuel moisture to drop. Values between below 10 percent indicate the potential risk for extreme burning conditions.

Normalized Difference Vegetation Index (NDVI): NDVI data is satellite imagery, which displays vegetative growth and curing rates of live fuels. The WFAS Internet site provides several different ways to analyze current and historical greenness imagery, which can be a significant contributor to seasonal risk assessments. An analysis of this imagery will assist in the assessment of current fuel moisture conditions and provide historical as well as average greenness comparisons.

C. DAILY SCHEDULE

Dispatch Response Level (ALL ONCE DAILY)

Effective from 0800 hours (today) to 0759 hours (tomorrow).

- Inputs will be taken from the following:
 - Actual Burning Index (Fuel Model 16Y) in WIMS.
 - Average Live Fuel Moisture for the EIDC Dispatch Zone.

Staffing Level

Effective from 0800 hours (today) to 0759 hours (tomorrow).

- Inputs will be taken from the following:
 - Forecasted Dispatch Response Level Issued for that day.
 - Actual Fire Activity and Forecasted Weather events (see Worksheet).

Daily Preparedness Level

Effective from 0800 hours (today) to 0759 hours (tomorrow).

- Inputs will be taken from the following:
 - Forecasted Energy Release Component (ERC-Fuel Model 16Y)
 - Average Live Fuel Moisture for the EIDC Dispatch Zone.
 - Actual Fire Activity.

Adjective Rating Level

Effective from 0800 hours (today) to 0759 hours (tomorrow).

- Inputs will be taken from the following:
 - Forecasted ERC issued for that day and available in WIMS.
 - Forecasted Energy Release Component Energy Release Component (ERC-Fuel Model 16Y) issued for that day and available in WIMS.

Daily Indices: To be completed by 1030 and posted to [Daily Resource Status Report](#). All EIDC FDOP Worksheet Calculations will be completed and tracked using the Dispatch NENVDO GDrive Sheet, link can be provided by EIDC Floor Supervisor. [EIDC Observations and Daily Calculated Indices](#) are available at the link.

D. WEATHER STATION MONITORING AND MAINTENANCE

Each agency is responsible for the annual maintenance and calibration of their RAWS. The Remote Sensing Laboratory located at the National Interagency Fire Center (NIFC) maintains and calibrates the BLM RAWS annually.

The Elko Interagency Dispatch Center utilizes data from eight (8) active Remote Automated Weather Stations (RAWS) at the following locations: Antelope Lake, Long Hollow, Pole Creek (BLM), Stag Mountain, Rock Springs Creek, Crane Springs, Spruce Mountain, and Spring Gulch.

The Remote Automatic Weather Stations (RAWS) listed in the noncompliance report listed below are overdue for annual service based on current WFMI information. If any of the SIG RAWS used in this FDOP the corrective actions required will be taken immediately.

<https://raws.nifc.gov/standards-guidelines>

VII. FIRE DANGER PROGRAM NEEDS

A. WEATHER STATIONS

- Weather data used in analysis was cursory reviewed for anomalies but in depth QAQC would be beneficial for additional analysis.
- Perform an in-depth analysis of data from USFS weather stations that were excluded from this analysis due to data quality. Compare weather station data to other data sources to determine usefulness of data.
- Analyze the effect of weighting RAWS within each SIG to better represent the potential fire danger for each FDRA.
- Determine if Pole Creek (IDAHO) RAWS station will continue to be supported.

B. COMPUTER / EQUIPMENT

- Improve the EIDC Internet Site for displaying seasonal trend assessments.

C. TRAINING

- Provide FDOP training to cooperators including county fire chiefs, cooperating dispatch centers, and other cooperators.

- Provide refresher training on fire danger applications and Pocket Cards, emphasizing the differences between BI, ERC, Daily Staffing/Staffing Index/ Dispatch Response / Preparedness Levels, Adjective Fire Danger Rating Levels.
- Emphasize NFDRS training (S-491) for mid-level fire management personnel and Advanced NFDRS for upper-level fire management personnel.
- Consider utilization of WildfireSAFE application for relating FDOP Indices to observed conditions for firefighters.

D. SEASONAL FIRE DANGER RISK ASSESSMENTS

- Create Pocket Cards that are updated with appropriate fires and use BI and ERC / Fuel Model 16Y for the EIDC Zone.
- Confirm validity of Fire Occurrence datasets used for analysis and provide updates.
- In future FDOPs, consider and compare use of other NFDRS Fuel Models / Growing Season Index as calibration will continue to refine these models.

APPENDICES

Linked Subordinate Plans (links require DOI Network / VPN access):

[Dispatch Response Plan \(Run Cards\)](#) / [EIDC Local Annual Operating Plan](#)

[Prevention Plan](#)

Appendices:

[Appendix A](#): EIDC Daily Dispatch Indices Worksheet

[Appendix B](#): Pocket Cards / Season Trend Analysis

[Appendix C](#): FDRA Topography Map

[Appendix D](#): FDRA Vegetation Map

[Appendix E](#): FDRA Climate - Precipitation Map / Temperature Map

[Appendix F](#): FDRA Fire Occurrence Map

[Appendix G](#): FDRA Fire Perimeter Map

[Appendix H](#): Fire Family Plus Analysis Inputs

[Appendix I](#): Fire Danger Rating Area Details

[Appendix J](#): FDOP Distribution List

[Appendix K](#): Staffing Level / Draw-Down / Preparedness Level Plan

Appendix A: ***EIDC DAILY DISPATCH INDICES WORKSHEET***

Actual Dispatch Response Level Worksheet –

10-Day Average **BI** for Fuel Model 16Y for **all SIG RAWS Stations** _____

Average Live Fuel Moisture for EIDC Dispatch Zone **149-125%** (5pts) _____

Average Live Fuel Moisture for EIDC Dispatch Zone **< 125%** (10 pts) _____

- [Live Fuel Moisture Sites](#) includes most recent data for all sagebrush live fuel sites.

Above Average Fine Fuel Loading Cured and Available to Burn (15 pts) _____

- Consult Fuels Program Manager or FMO to determine when criteria is met.

Index Value	0-30	30-38	38+
Dispatch Level	Low	Moderate	High

Final Index Value / Dispatch Response Level - _____

Staffing Level Worksheet <i>Elko Interagency Dispatch Center</i>								
Dispatch Response Level →		LOW	MODERATE		HIGH			
Fire Activity (Y/N)	N	1	2	2	3	3	4	
	Y	2	3	3	4	4	5	
		N	Y	N	Y	N	Y	
		Significant Fire Potential from Forecasted High Risk Day / Event (Y/N)						
Daily Staffing Level (circle one):		1	2	3	4	5		
10-Day Average ERC for Fuel Model 16Y for all SIG RAWS Stations:								
Use table below to calculate Staffing Index per Appendix K. Staffing Index calculated solely from ERC decision points.								
EIDC Dispatch Zone 10 Day Average ERC		0	30	42	60	69 +		
Staffing Index		1	2	3	4	5		

West Zone FDRA Adjective Fire Danger Rating Worksheet	
ERC Rating Index	Adjective Fire Danger Rating
0 – 24	LOW
24 – 36	MODERATE
36 – 58	HIGH
58 – 68	VERY HIGH
68 +	EXTREME

WEST ZONE FDRA ADJECTIVE FIRE RATING (CIRCLE ONE):

LOW MODERATE HIGH VERY HIGH EXTREME

North Zone FDRA Adjective Fire Danger Rating Worksheet	
ERC Rating Index	Adjective Fire Danger Rating
0 – 25	LOW
25 – 36	MODERATE
36 – 54	HIGH
54 – 63	VERY HIGH
63 +	EXTREME

NORTH ZONE FDRA ADJECTIVE FIRE RATING (CIRCLE ONE):

LOW MODERATE HIGH VERY HIGH EXTREME

South Zone FDRA Adjective Fire Danger Rating Worksheet	
ERC Rating Index	Adjective Fire Danger Rating
0 – 40	LOW
40 – 55	MODERATE
55 – 67	HIGH
67 – 75	VERY HIGH
75 +	EXTREME

SOUTH ZONE FDRA ADJECTIVE FIRE RATING:

LOW MODERATE HIGH VERY HIGH EXTREME

EIDC DAILY DISPATCH INDICES WORKSHEET INSTRUCTIONS:
 FOLLOWING TABLES ARE FOR REFERENCE ONLY

Dispatch Response Level Elko Interagency Dispatch Center			
Fire Danger Rating Area (FDRA)	Burning Index (Model 16Y)		
West Zone FDRA 10 Day Average	0 - 30	30 - 37	37 +
North Zone FDRA 10 Day Average	0 - 29	29 - 37	37 +
South Zone FDRA 10 Day Average	0 - 30	30 - 38	40 +
EIDC Dispatch Zone 10 Day Average BI	0-30	30-38	38+
Pre-Worksheet Dispatch Response Level	LOW	MODERATE	HIGH

Staffing Index Level Thresholds Elko Interagency Dispatch Center					
Fire Danger Rating Area (FDRA)	ERC (Model 16Y)				
West Zone FDRA	0	24	36	58	68
North Zone FDRA	0	25	36	54	63
South Zone FDRA	0	40	55	67	75
EIDC Dispatch Zone 10 Day Average ERC	0	30	42	60	69 +
Staffing Index Level :	1	2	3	4	5

Dispatch Response Level / Daily Staffing Level Instructions

The Dispatch Response Level will be the first factor input to the Staffing Level Worksheet based on the index value inputs. The daily BI used for calculations will be the previous day's 1300 observation.

Fire Activity: can be defined as any wildland fire (including prescribed fire) within the Elko Interagency Dispatch Area (regardless of FDRA) that requires a commitment of EIDC suppression (ground or aviation) resources. For example, if an EIDC suppression resource is committed to a local incident, Fire Activity is "YES".

Significant Fire Potential: If a High Risk Event in FWX Zone 438, 469, 470 for Red Flag Watch or Warning, or winds (greater than 10 mph), or Haines Index (4 or more), or lightning (LAL 2 or more) is forecasted for today or tomorrow, Significant Fire Potential is a "Y" input; otherwise, it is an "N" input.

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. Significant Fire Potential can be found on the Predictive Services (Outlooks) page of the GBCC website. Use of this rating can also provide the "Y" input.

Daily Staffing Level is then recorded using the ERC thresholds on the worksheet. The ERC decision points on the chart are utilized to determine Staffing Index which is used to determine targeted resource draw down percentages as found in [APPENDIX](#).

Preparedness Level Worksheet Instructions:

ERC: Energy Release Component, Fuel Model 16Y. These indices are based on the previous days 1300 RAWs observations. Value is equal to the average ERC for all three FDRA SIG RAWs Stations over the previous 10-day period.

Average Fine Fuel Loading: Place a checkmark in Row Two indicating the district wide amount of fine fuel loading and whether or not it is cured and available to burn. The Fuels Program Manager or FMO will notify EIDC Center Manager when Fine Fuel Loading meets criteria as stated in Dispatch Response Level and Local Preparedness Level worksheet. Once that criteria is met, it will remain in place for the rest of the strength of force season. Once conditions require dropping from High to Moderate Dispatch Response Levels the value should be adjusted back to 0.

Large Fire Activity or Multiple Small Fires: Multiple large fire activity will be defined when one or more Incident Status Summaries (ICS-209s) have been (or will be) submitted within the next 12 hour period for incidents managed within the EIDC Dispatch Zone (regardless of FDRA). Incident Status Summaries submitted for fires in "monitor" status will not be included; only ICS-209s submitted for incidents which are utilizing local resources will be included in the count.

Preparedness Level Value: Place a checkmark in Row Three indicating the appropriate Preparedness Level (Energy Release Component, Fuel Model G). These indices are based on the 1300 RAWs observations which are input to the WIMS processor by EIDC personnel and determined through the use of the following chart values (Table 9).

Appendix B: ***POCKET CARDS / SEASONAL TREND ANALYSIS***

The Fire Danger Pocket Card is a tool, which can aid fire suppression personnel to interpret NFDRS outputs and understand local fire danger thresholds for a local area. Pocket cards relate current NFDRS outputs with the historical average and worst-case values in a specific geographic location. Visiting resources can use the pocket card to familiarize themselves with local fire danger conditions.

EIDC Pocket Cards will meet NWCG guidelines for content and analysis and will be posted to the [NWCG FAM-IT Portal](#) as they are updated. Pocket Cards will be created using the following:

- Burning Index – Fuel Model 16Y – Elko Interagency Dispatch Zone.
- Energy Release Component – Fuel Model 16Y – Elko Interagency Dispatch Zone.

Seasonal trend analysis (updated and posted at least every two weeks) is the only requirement for communication of fire danger, although offices may use Pocket Cards in addition to a seasonal trend analysis if they choose to. Seasonal trend analyses will be prepared at the Predictive Service Area scale or smaller. Predictive Service Area scale analyses are typically developed and posted online by the Geographic Area Coordination Center while smaller scales are typically developed by the local unit. Hard copies should be made available in areas with limited internet connectivity. Fire management officers should ensure incoming and local resources are briefed on the seasonal trend analysis for their area. Final approval for seasonal trend analyses and Pocket Cards will be obtained from the BLM representative to the NWCG Fire Danger Subcommittee.

Seasonal Trend Analysis Products:

[EIDC Observations and Daily Calculated Indices](#) (view only)

[Great Basin Coordination Center Fuels and Fire Danger Site](#)

[Great Basin Predictive Service Area ERC / 100 HR / 1000 HR Graphs](#)

[Great Basin Predictive Service Area RAWS ERC Percentile Trends](#)

[National Fuel Moisture Database](#)

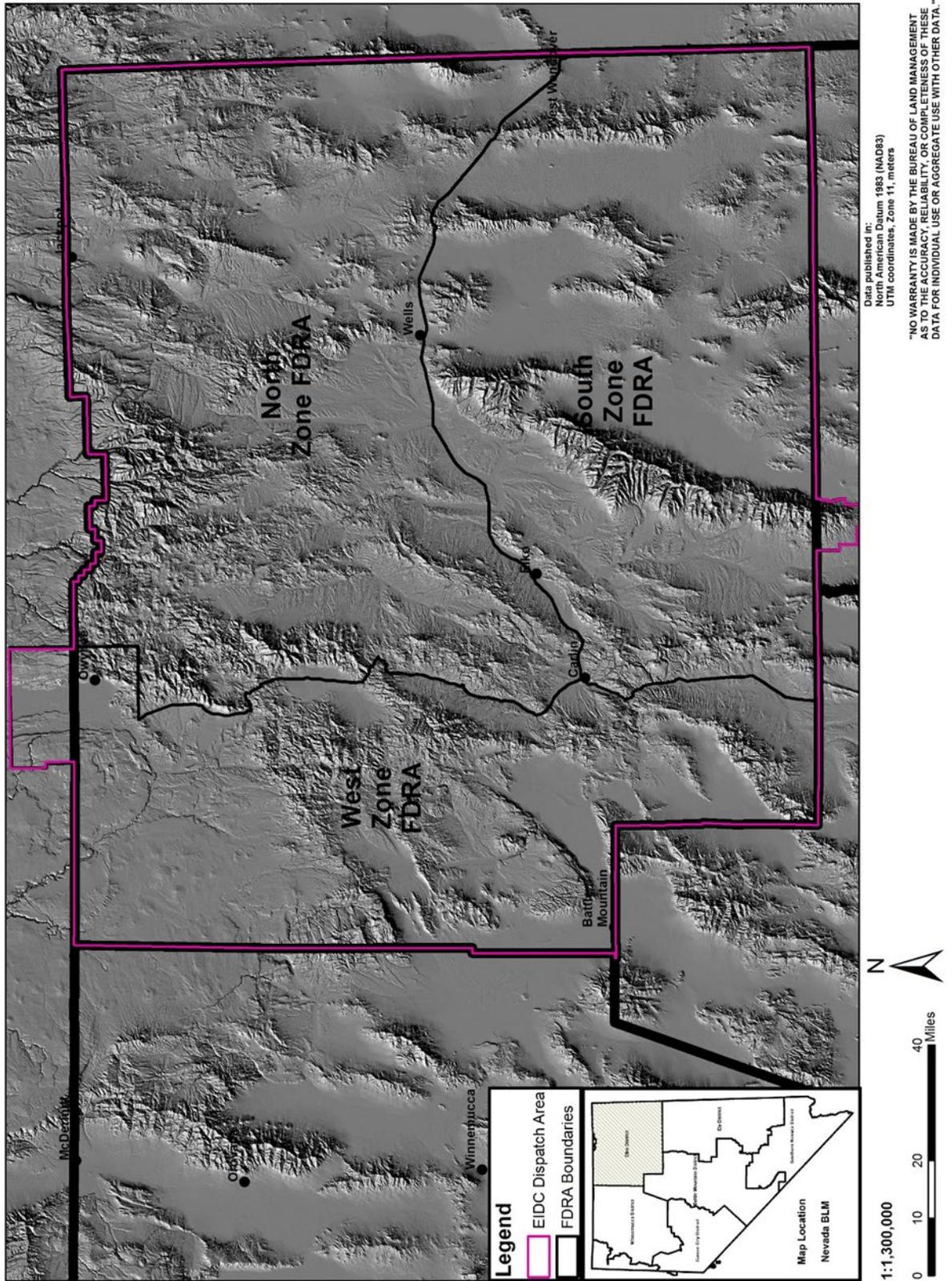
[Great Basin Critical Fuels Status Page](#)

[WildfireSAFE Fire Weather and Fire Potential](#)

[The Hot-Dry-Windy Index \(HDWI\)](#)

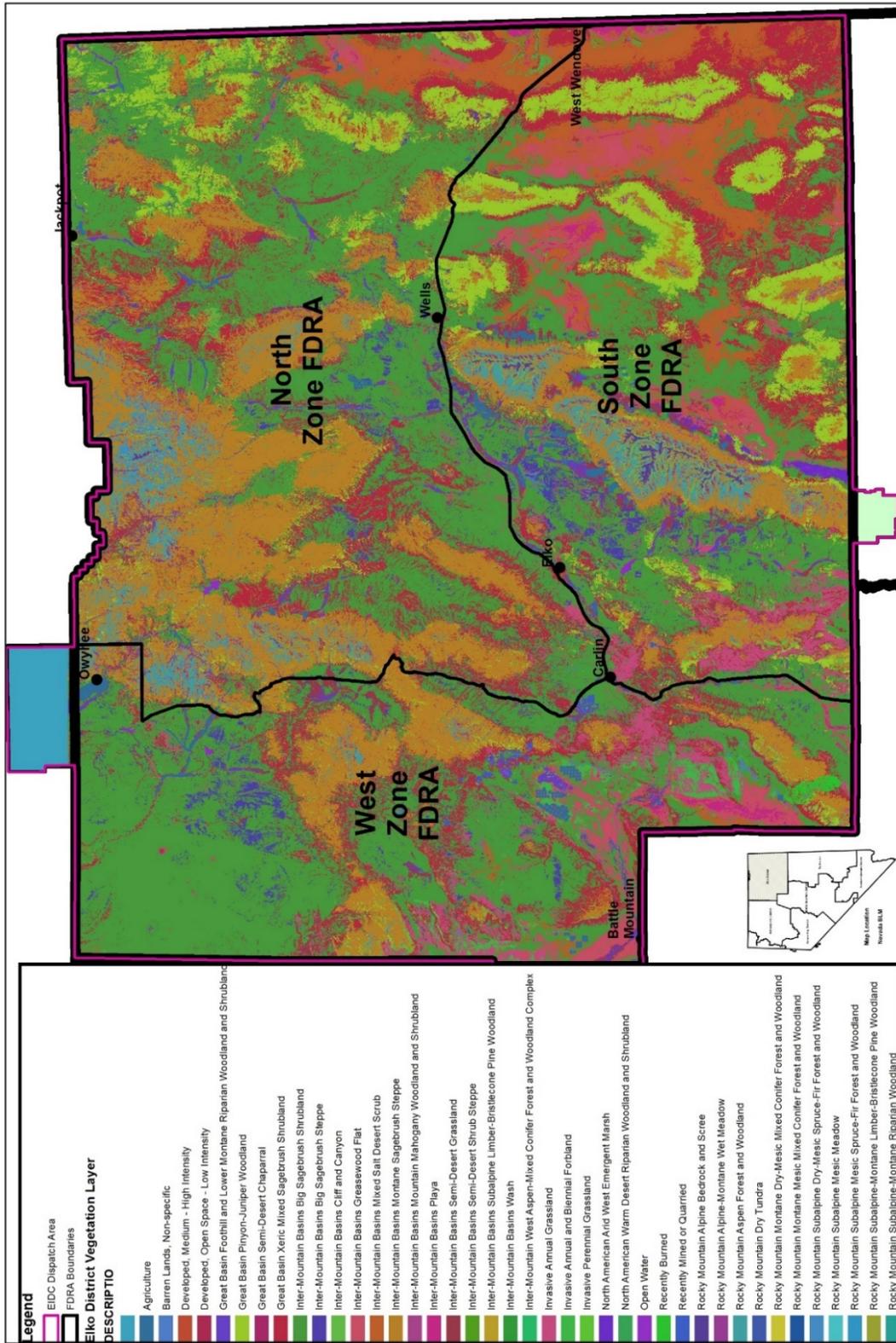
Appendix C: **FDRA TOPOGRAPHY**

Elko Fire Danger Operating Plan - Topography



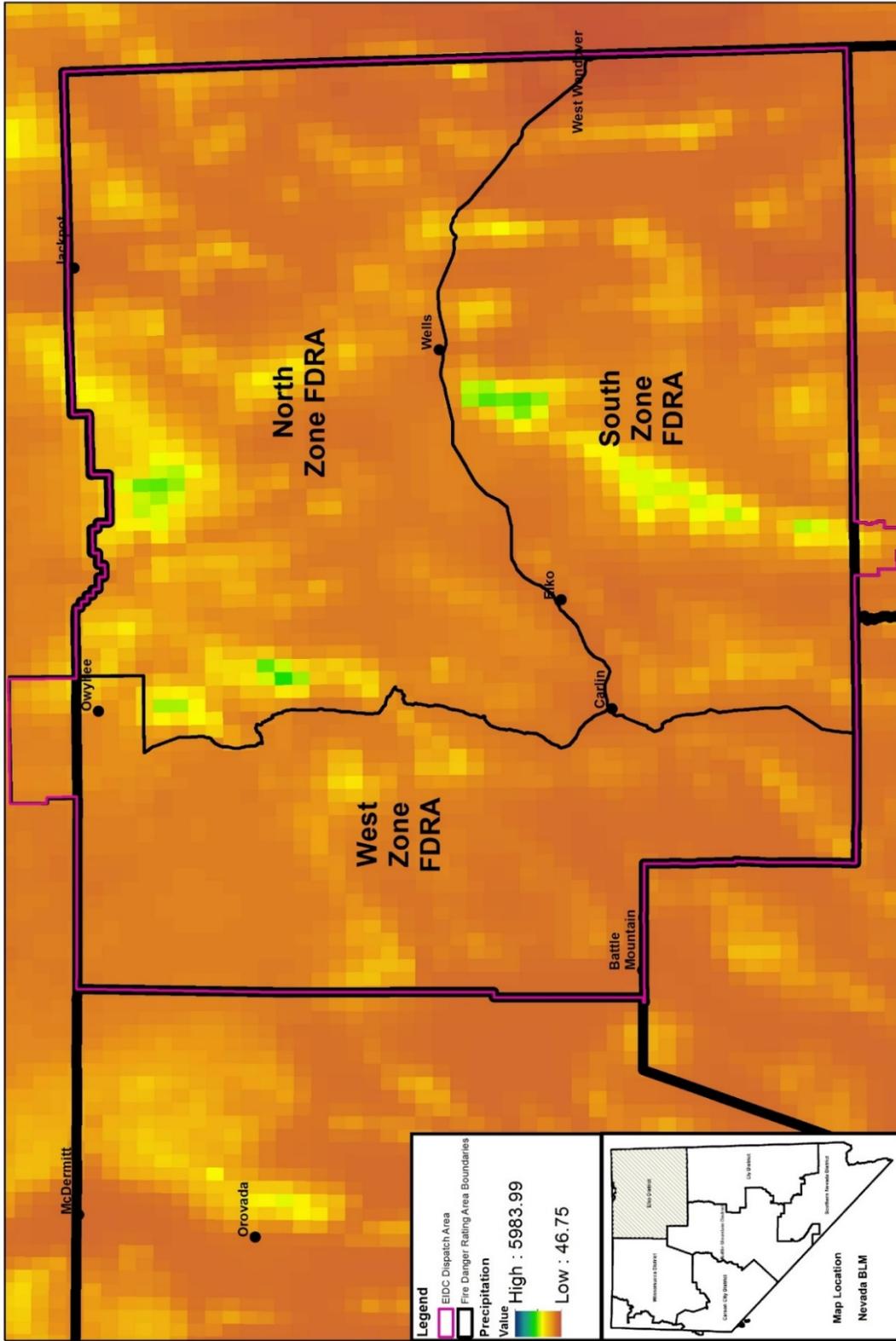
Appendix D: FDRA VEGETATION

Elko Fire Danger Operating Plan - Vegetation



Appendix E: **FDRA CLIMATE**

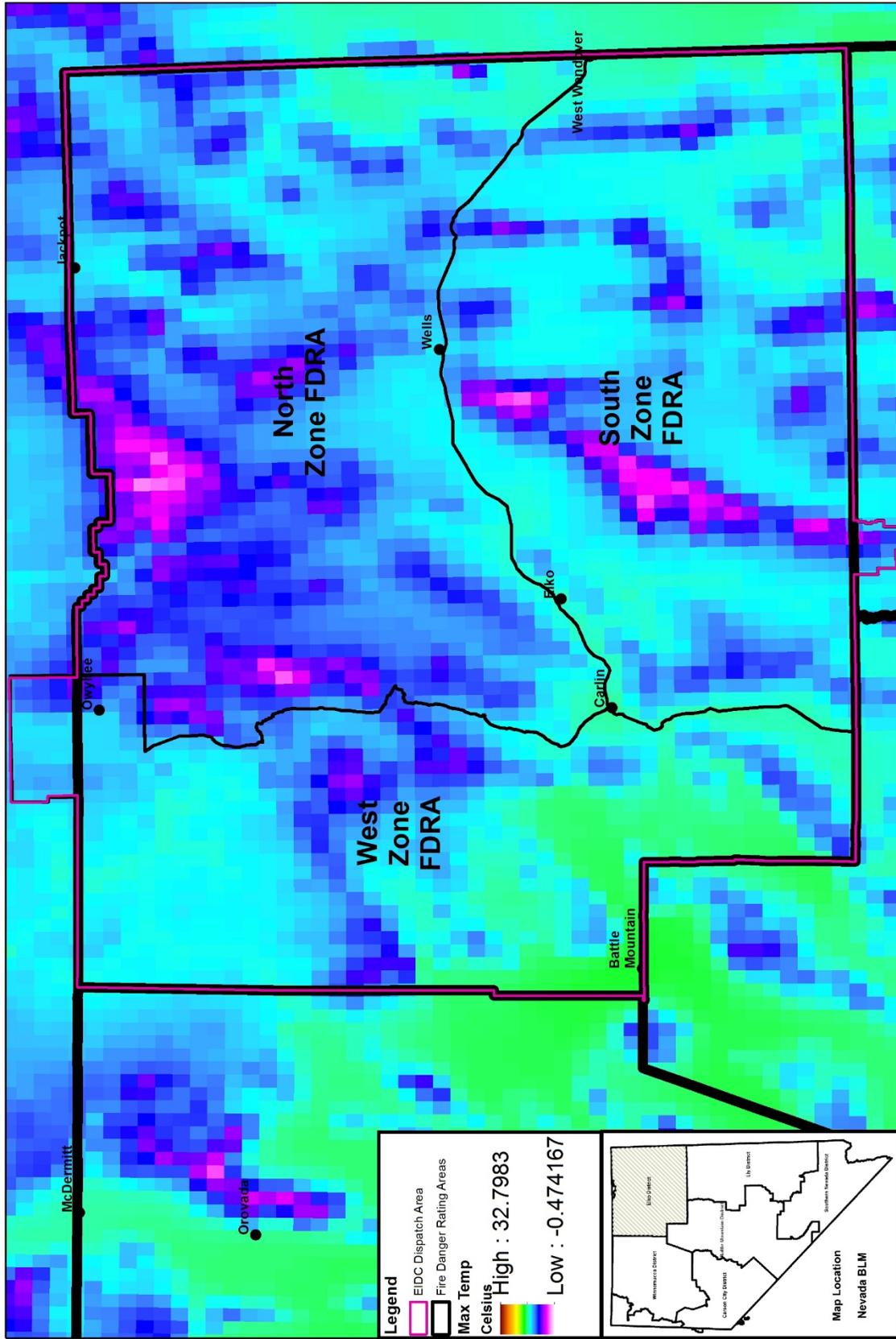
Elko Fire Danger Operating Plan - Climate (Precipitation)



Data published in:
 North American Datum 1983 (NAD83)
 UTM coordinates, Zone 11, meters

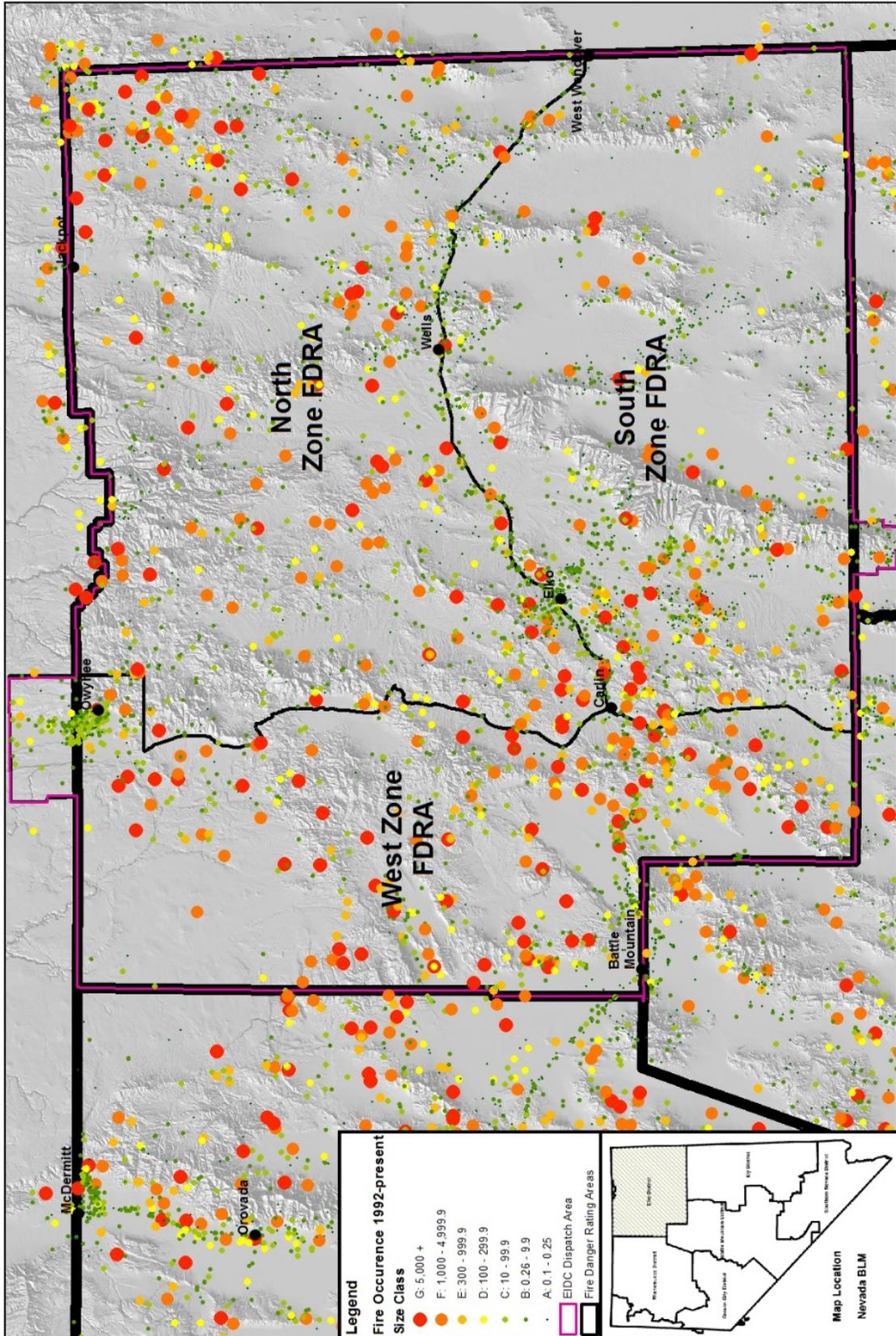
"NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL USE OR AGGREGATE USE WITH OTHER DATA."

Elko Fire Danger Operating Plan - Climate (Max Temperature)



Appendix F: **FIRE OCCURRENCE**

Elko Fire Danger Operating Plan - Fire Occurrence 1992 - Present



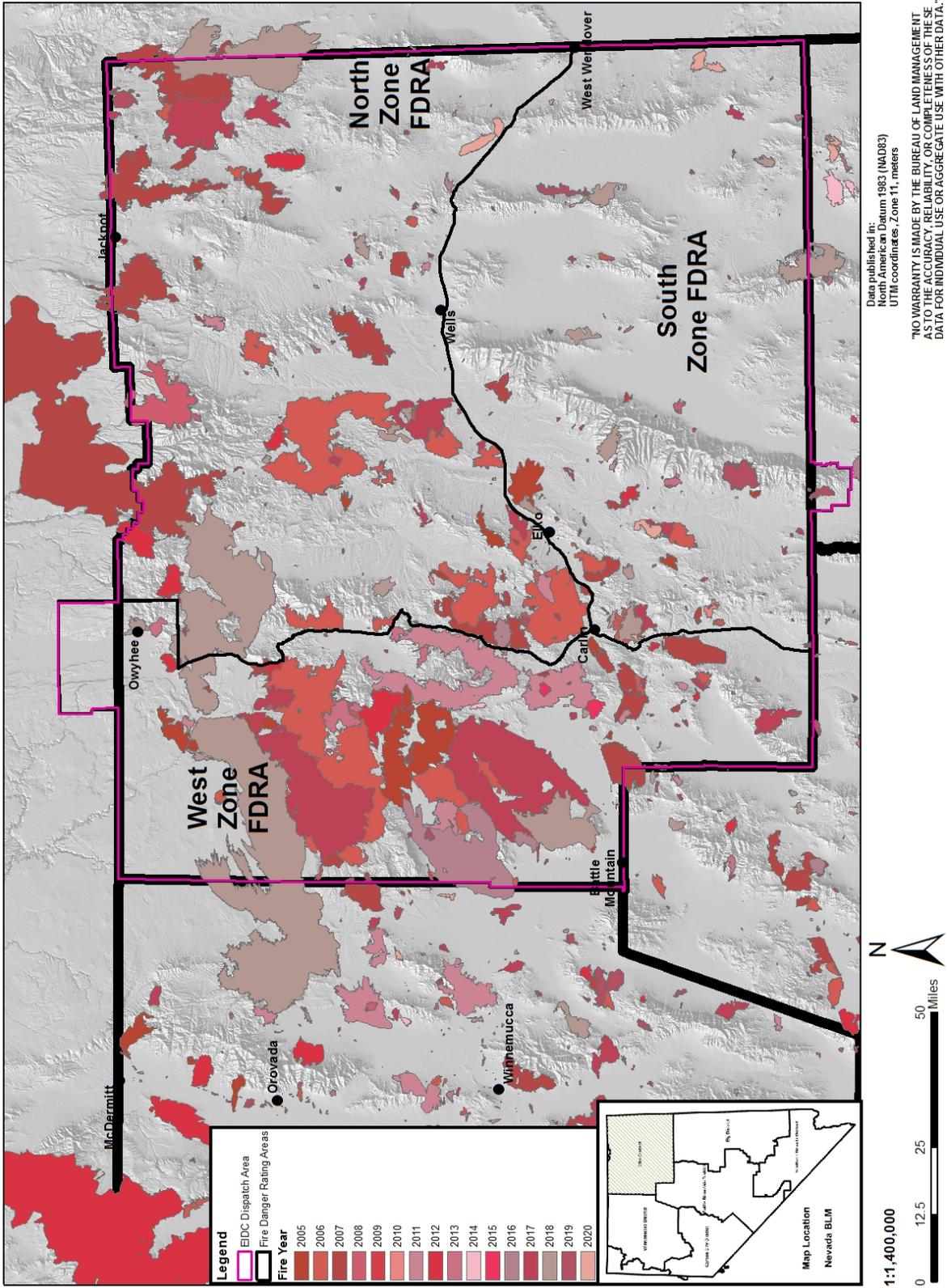
Data published in:
North American Datum 1983 (NAD83)
UTM coordinates, Zone 11, meters

NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL USE OR AGGREGATE USE WITH OTHER DATA.

1:1,300,000
0 10 20 40 Miles

Appendix G: *Fire Perimeter History*

Elko Fire Danger Operating Plan - Fire Perimeter History 2005 - 2020

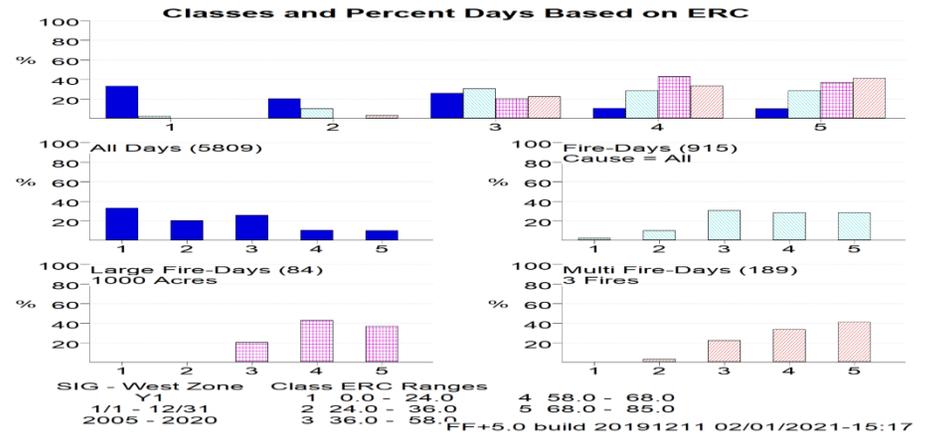
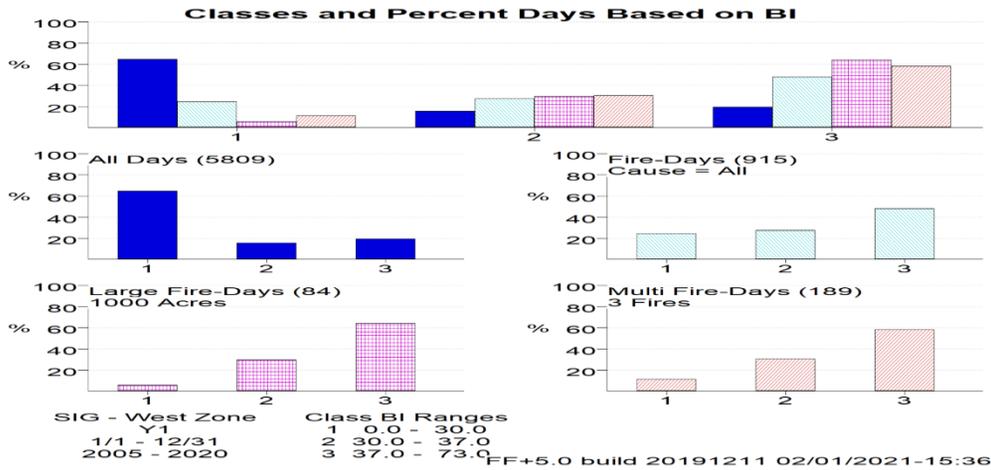


Appendix H: *FireFamilyPlus Analysis Inputs*

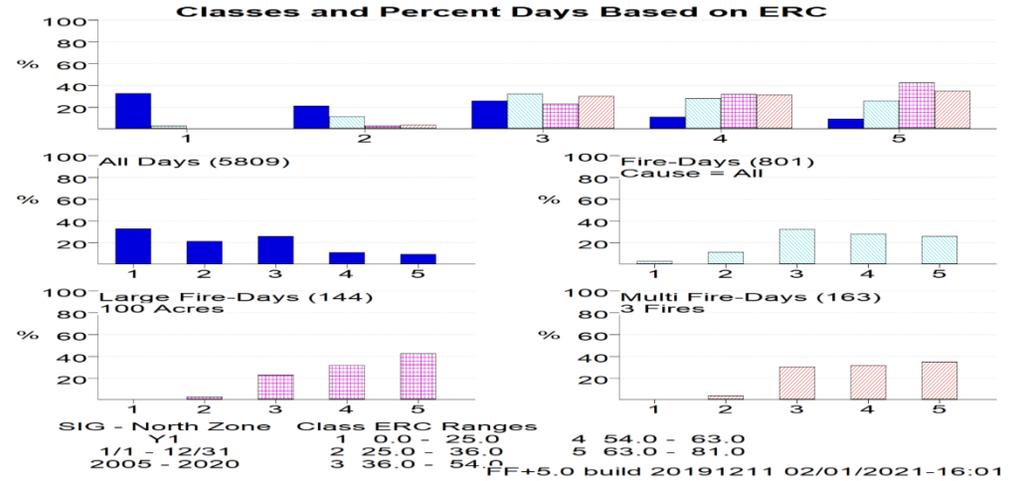
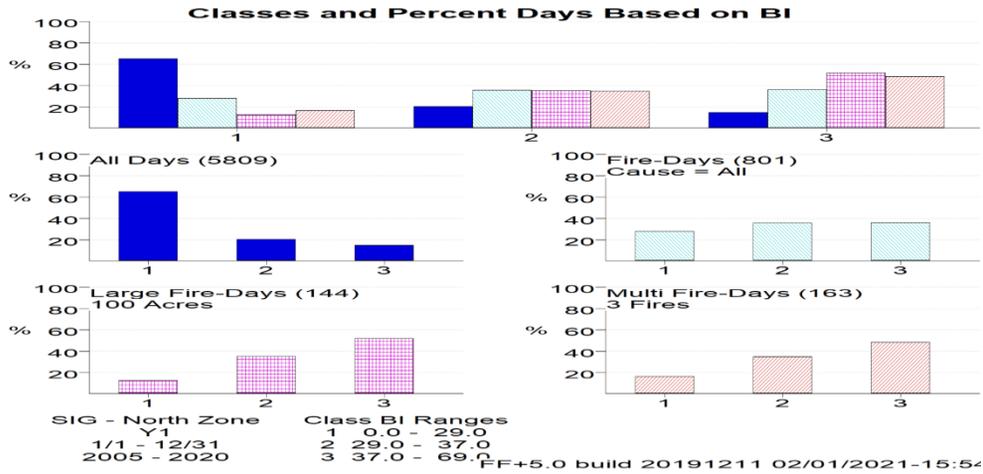
FDRA	RAWS		Data Years Used	Annual Filter	Fuel Model	NFDRS Index	Class (3 DPs)	SIG Decision Points	NFDRS Index	Class (5 DPs)	SIG Decision Points
	NWS #	Name									
West Zone	260310	Antelope Lake	2005-2020	1/1-12/31	16Y	BI	Low Mod High	0 - 30 30 - 37 37 +	ERC	Low Mod High Very High Extreme	0-24 24-36 36-58 58-68 68+
	260305	Long Hollow	2005-2020								
	260315	Stag Mountain	2005-2020								
North Zone	103210	Pole Creek	2005-2020	1/1-12/31	16Y	BI	Low Mod High	0 - 29 29 - 37 37 +	ERC	Low Mod High Very High Extreme	0-25 25-36 36-54 54-63 63 +
	260315	Stag Mountain	2005-2020								
	260309	Rock Spring Creek	2005-2020								
South Zone	260314	Crane Springs	2005-2020	1/1-12/31	16Y	BI	Low Mod High	0 - 30 30 - 40 40 +	ERC	Low Mod High Very High Extreme	0-40 40-55 55-67 67-75 75 +
	260306	Spruce Mountain	2005-2020								
	260308	Spring Gulch	2005-2020								

	West Zone FDRA	North Zone FDRA	South Zone FDRA
RAWS	Long Hollow, Antelope Lake, and Stag Mountain	Pole Creek (ID), Rock Spring Creek, and Stag Mountain	Crane Springs, Spruce Mountain, and Spring Gulch
NFDRS Fuel Models	16Y	16Y	16Y
Average Slope Class	1 (0%-25%)	2 (26%-40%)	2 (26%-40%)
Herbaceous Type	Annual	Annual	Annual
Annual Precipitation (inches)	12-16 inches	12-15 inches	10-12 inches
Elevation Range (feet)	4,500-8,600	5,000-10,800	4,200-11,350
Acres	3,534,220	4,881,556	4,103,387
Fire Cause	All	All	All
Large Fire Size	1000	100	500
Multiple Fire Day	3	3	3

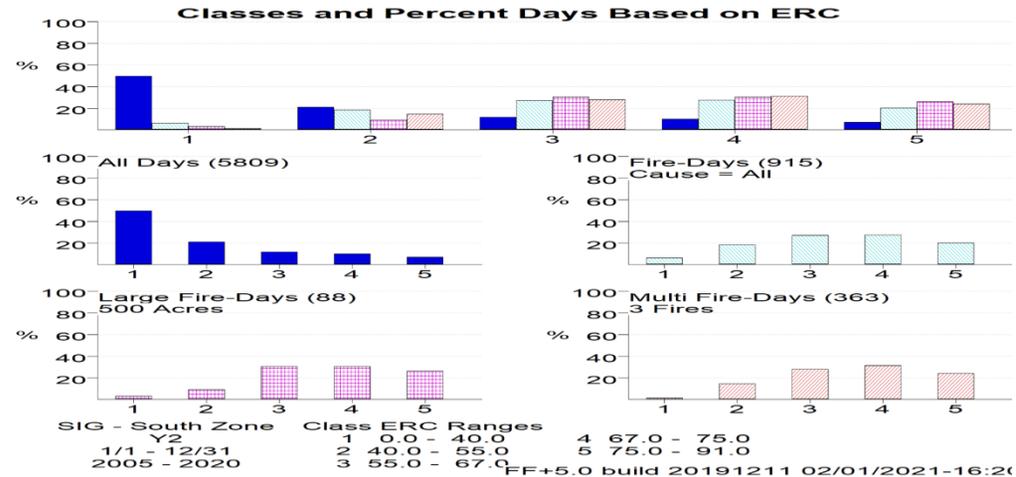
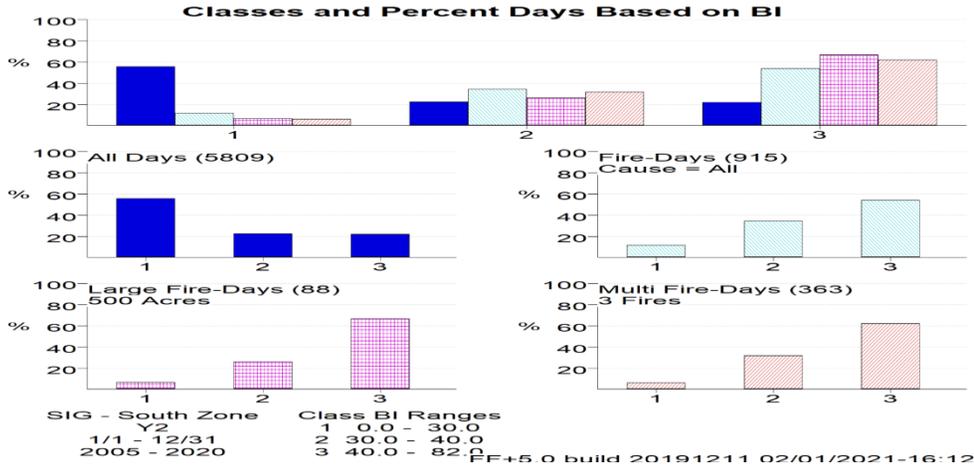
WEST ZONE FDRA FIRE ANALYSIS DECISION POINTS (BI / ERC)



NORTH ZONE FDRA FIRE ANALYSIS DECISION POINTS (BI / ERC)



SOUTH ZONE FDRA FIRE ANALYSIS DECISION POINTS (BI / ERC)



Appendix I: ***FIRE DANGER RATING AREA DETAILS***

1. **WEST ZONE FDRA**

- **General Location:**

This FDRA is identified as FWZ 438. The western boundary is the Elko/Humboldt County lines south to the Elko District and Battle Mountain District boundary. The southern border follows the Battle Mountain BLM District boundary to SR-278. The eastern border is from Battle Mountain BLM District boundary along SR-278 to Carlin, proceeding north along SR-766 to SR-226, and then tying in with SR-728 to the Idaho border and includes Elko, Eureka, and Lander Counties. The northern boundary follows the Idaho/Nevada border heading west, connecting to the Elko/Humboldt County lines. The West Zone FDRA encompasses 3,421,668 acres.

- **Vegetation:**

The fuels of the West Zone FDRA consist of Forbes, Perennial Grasses, Western Annual Grasses, Salt Desert Shrub, Sagebrush, and intermixed Pinyon-Juniper. The vegetation is described as an arid desert plant community. Fires of concern typically occur in steep and remote country where access is a problem.

- **Climate:**

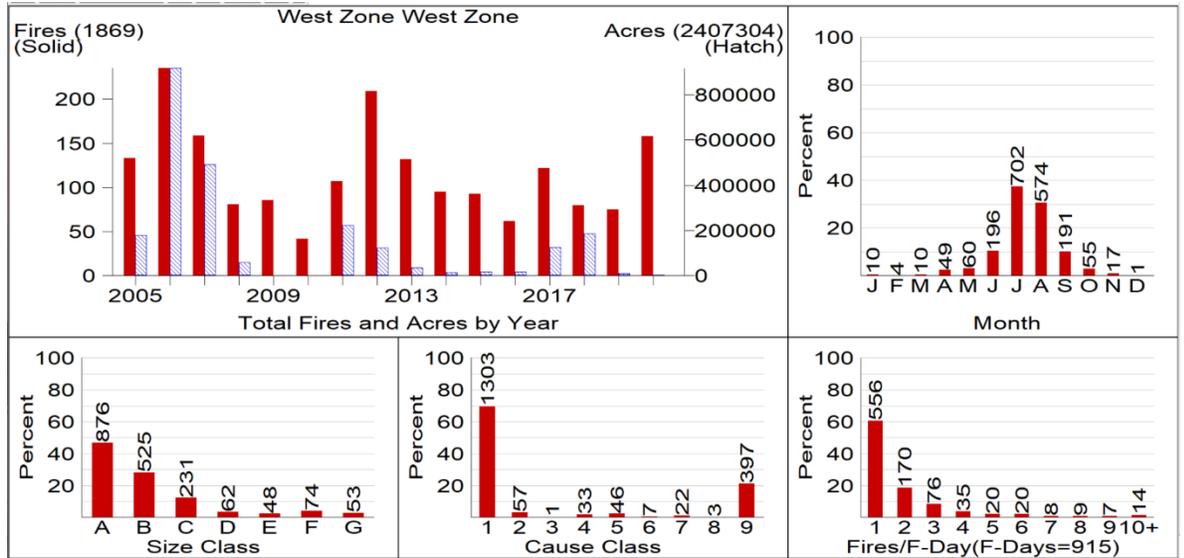
Hot and dry weather typically dominates the West Zone FDRA during the fire season; Nevada is the driest state in the nation. The temperatures rise into the 100's, relative humidity drops to the single digits, and wetting rains are scarce. Summer weather patterns that effect the areas are westerly and south westerly flows. Westerly flows generally bring hot and dry air into the region with little to no precipitation. The main concern is when low pressure systems or upper level disturbances pass the area with enough energy and moisture to initiate thunderstorm activity and erratic winds. Fire activity may be infrequent, but the potential for large fire growth is usually quite high. Southwesterly flows typically bring monsoonal moisture into the region. Fire frequency may increase due to additional thunderstorm activity, but large fire growth potential may be lower due to increased moisture.

- **Topography:**

The West Zone FDRA is a mixture of flats, deserts, and mesas, with some mountainous terrain. The remoteness of many of these areas hinders radio and cellular communications. The West Zone FDRA transitions from the lower-elevation Central Basin to the Northern Great Basin ecoregion. Elevations range from 4,500 feet along the Humboldt River drainage to the

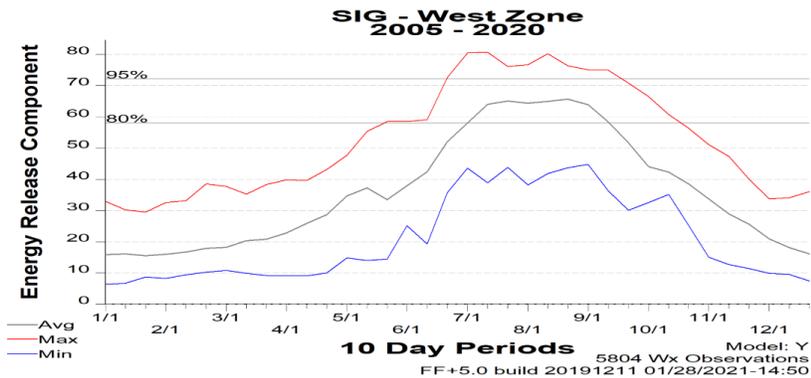
8,791 foot Beaver Peak in the Tuscarora Mountain Range.

● WEST ZONE FDRA – Fire Summary Graph and NFDRS Charts



Size Class:
 A = 0 – .25 acres
 B = .30 – .9 acres
 C = 10 – 99 acres
 D = 100 – 299 acres
 E = 300 – 999 acres
 F = 1000 – 4999 acres
 G = 5000 + acres

Cause Class:
 1 = Lightning 6 = Railroad
 2 = Equipment 7 = Arson
 3 = Smoking 8 = Children
 4 = Campfire 9 = Misc
 5 = Debris Burning



2. NORTH ZONE FDRA

- General Location

The North Zone FDRA western boundary is geographically defined as SR-226 to SR-766 to Carlin. The southern boundary is I-80 running east to Wendover and the Utah State Line. The eastern edge follows the Utah/Nevada State line north to the Idaho border. The northern border follows the Idaho/Nevada border back to the west boundary excluding the Nevada tract that is located north of Jarbidge. The North Zone FDRA encompasses 4,881,556 acres.

- Vegetation:

The fuels complexes of the North Zone FDRA are similar to the West FDRA except that the area has a greater concentration of 100 and 1000-hour time lag fuels. The vegetation is best described as a sage-brush steppe community with some montane vegetation communities along the northern and western boundaries. Fires of concern typically occur in steep and remote country where access is a problem.

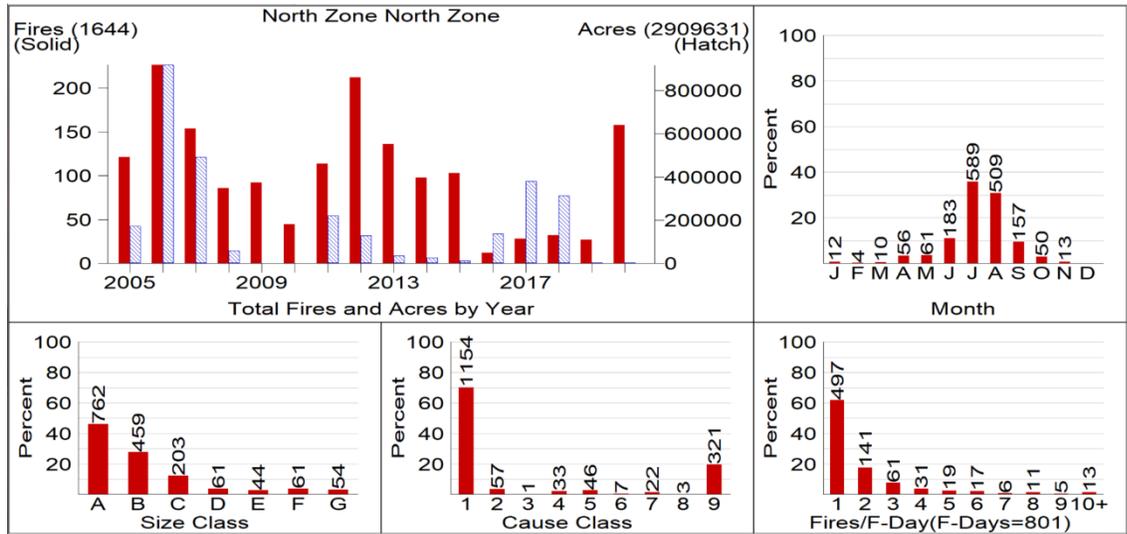
- Climate:

Hot and dry weather typically dominates the North Zone FDRA during the fire season; Nevada is the driest state in the nation. The temperatures rise into the 100's, relative humidity drops to the single digits, and wetting rains are scarce. Summer weather patterns that effect the areas are westerly and south westerly flows. Westerly flows generally bring hot and dry air into the region with little to no precipitation. The main concern is when low pressure systems or upper level disturbances pass the area with enough energy and moisture to initiate thunderstorm activity and erratic winds. Fire activity may be infrequent, but the potential for large fire growth is usually quite high. Southwesterly flows typically bring monsoonal moisture into the region. Fire frequency may increase due to additional thunderstorm activity, but large fire growth potential may be lower due to increased moisture.

- Topography:

The North Zone FDRA includes the multiple north to south trending mountain ranges throughout Northeastern Nevada, separated by wide, lower elevation valleys. The drainages are steep, rocky, and often inaccessible. The remoteness of many of these areas hinders radio and cellular communications. The North Zone FDRA transitions from the lower-elevation based West Zone FDRA with its north-south trending ranges to a mixture of flats, deserts, mesas, and canyons. Elevations range from 4,900 feet in the eastern basins to 10,838 feet atop Matterhorn Peak in the Jarbidge Range.

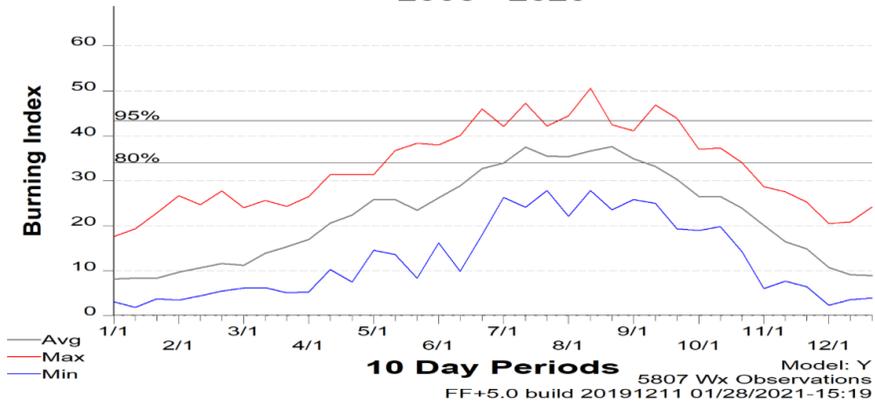
● NORTH ZONE FDRA – Fire Summary Graph and NFDRS Charts



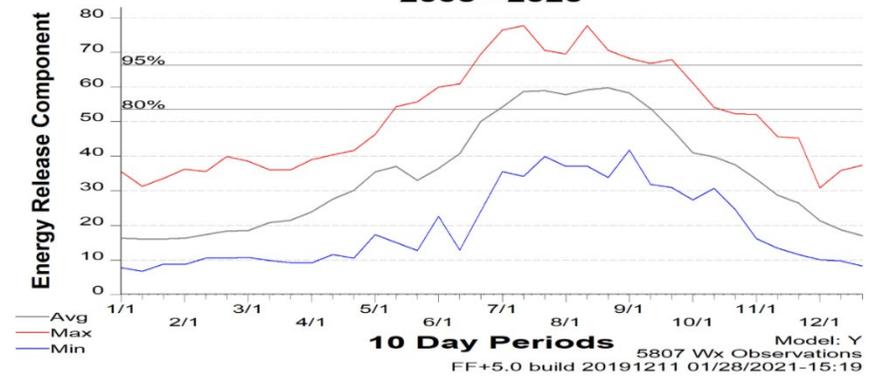
Size Class:
 A = 0 – .25 acres
 B = .30 – .9 acres
 C = 10 – 99 acres
 D = 100 – 299 acres
 E = 300 – 999 acres
 F = 1000 – 4999 acres
 G = 5000 + acres

Cause Class:
 1 = Lightning
 2 = Equipment
 3 = Smoking
 4 = Campfire
 5 = Debris Burning
 6 = Railroad
 7 = Arson
 8 = Children
 9 = Misc

SIG - North Zone 2005 - 2020



SIG - North Zone 2005 - 2020



3. SOUTH ZONE FDRA

- General Location:

The western boundary of the South Zone FDRA is geographically defined as SR-278 from the Battle Mountain District BLM / Elko District BLM boundary north to the town of Carlin and I-80. The northern boundary of the South Zone FDRA is I-80 from Carlin to West Wendover and the Utah / Nevada State Line. The eastern boundary follows the Utah / Nevada State Line running south to the boundary between Elko District BLM and Ely District BLM. The southern boundary of the zone runs east to west along the Elko County / White Pine County line, which is also the Elko District BLM and Ely District BLM boundary with the exception of following the southern boundary of the USFS Ruby Mountains Ranger District. Here it extends into White Pine County at the southernmost portion of the FDRA. The South Zone FDRA encompasses 4,103,387 acres.

- Vegetation:

The fuels of the South Zone FDRA consist of forbes, perennial grasses, western annual grasses, salt desert shrub, sagebrush, and heavy stands of intermixed Pinyon-Juniper. The vegetation is best described as an arid desert plant community.

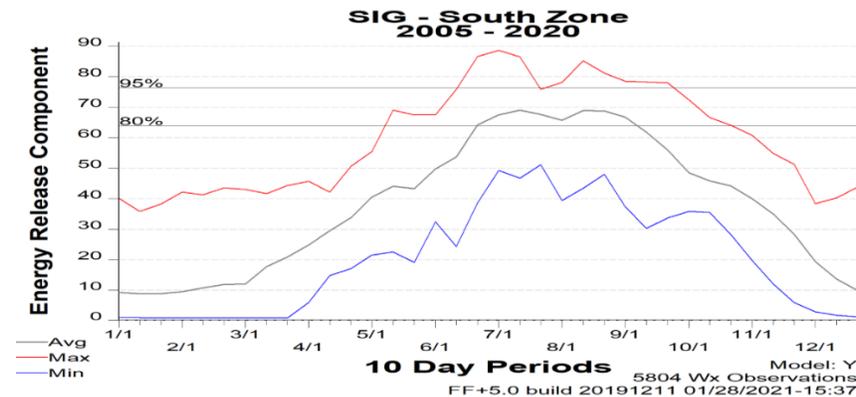
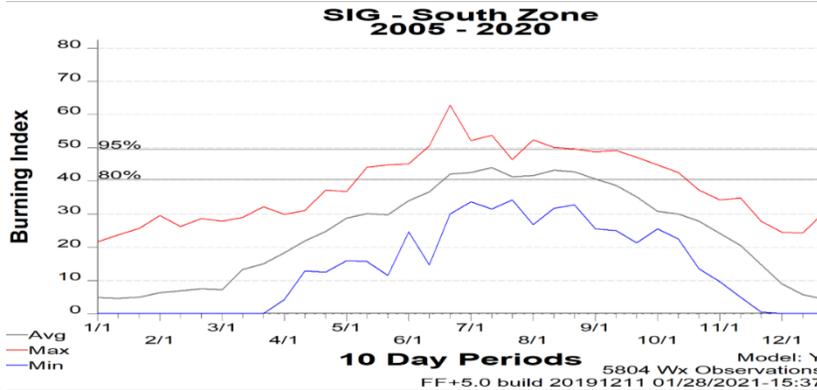
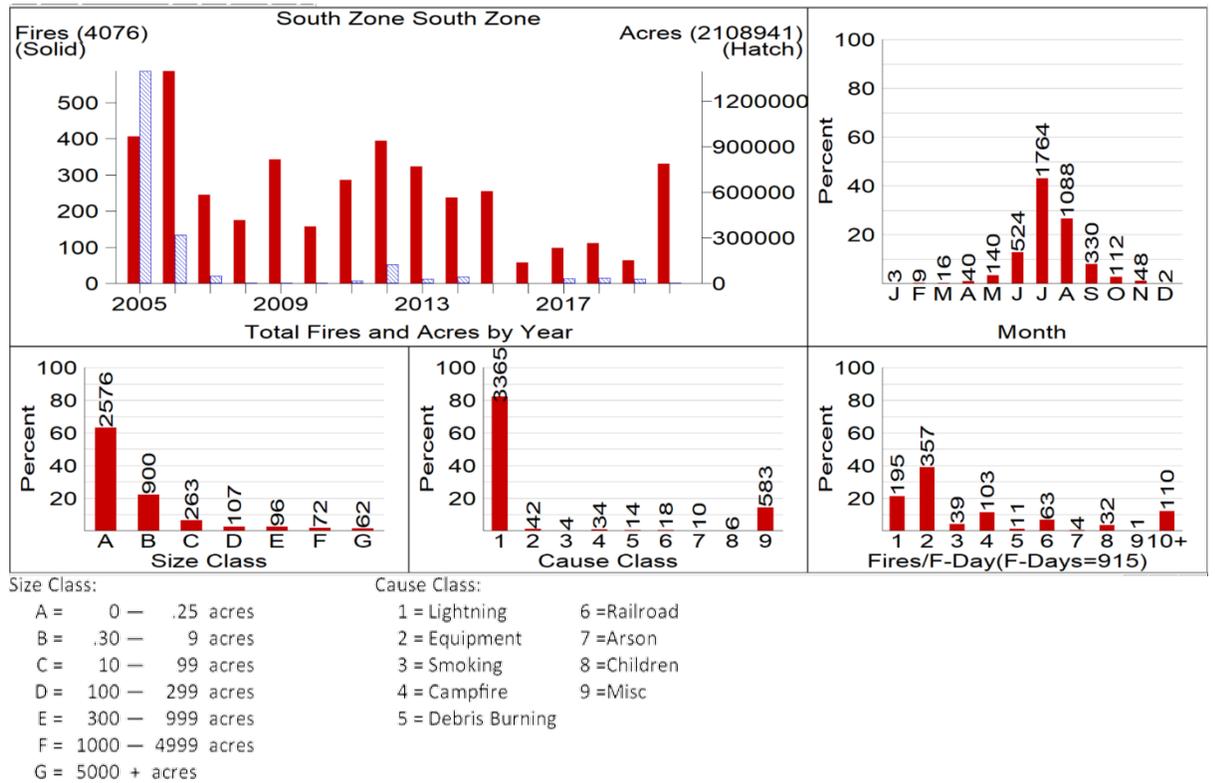
- Climate:

Hot and dry weather typically dominates the South Zone FDRA during the fire season. The temperatures rise into the 100's, relative humidity drops to the single digits, and wetting rains are scarce. Summer weather patterns that affect the areas are westerly and south westerly flows. Westerly flows generally bring hot and dry air into the region with little to no precipitation. The main concern is when low pressure systems or upper level disturbances pass the area with enough energy and moisture to initiate thunderstorm activity and erratic winds. Fire activity may be infrequent, but the potential for large fire growth is usually quite high. South westerly flows typically bring monsoonal moisture into the region. Fire frequency may increase due to additional thunderstorm activity, but large fire growth potential may be lower due to increased moisture. The Ruby Mountains create a rain shadow effect over many of the eastern valleys.

- Topography:

The South Zone FDRA transitions from the higher-elevation based Northern Zone FDRA with its north-south trending ranges to a mixture of flats, deserts, mesas, and canyons. Elevations range from 4,200 feet in the lower basins to 11,387 feet atop the Ruby Mountains and Ruby Dome. Ridges divide the area into large basins; many ridges rise abruptly several thousand feet above the basins.

● SOUTH ZONE FDRA – Fire Summary Graph and NFDRS Charts



Appendix J: *FDOP FIRE DANGER TECHNICAL TEAM AND DISTRIBUTION LIST*

Title	Agency / Office	E-Mail
Elko BLM Interagency Fire Management Officer	BLM, Elko District BIA, Eastern NV Agency	mmurphy@blm.gov
Northern Region Fire Management Officer	State of Nevada, Division of Forestry	mlesbo@forestry.nv.gov
Forest Fire Management Officer	USFS, Humboldt-Toiyabe National Forest	Gwen.Sanchez@usda.gov
District Fire Management Officer	USFS, Humboldt-Toiyabe National Forest	jeffrey.liday@usda.gov
Fire Management Officer	Duck Valley Tribe of the Shoshone Paiute Tribe	jack.melby@shopai.org
Fire Management Officer	Ruby Lake National Wildlife Refuge, Nevada Zone FMO	ross_wise@fws.gov
EIDC Center Manager	BLM, Elko District	smcintos@blm.gov
Elko County Fire Chief	Elko County	mpetersen@elkocountynv.net
Elko BLM Fuels Program Manager	Elko BLM	tgripp@blm.gov
Elko BLM Prevention Specialist	Elko BLM	cmothers@blm.gov
Fire Ecologist	Western Regional Office BIA	richardr.johnson@bia.gov
Fire Planner	USFS HTF SO	justin.nash@usda.gov

EIDC FDOP – Staffing / Draw Down / Preparedness Level Plan

Introduction

A. Purpose

This 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
- Preparedness Level (Step-Up) Actions
- Draw-Down Levels

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.

B. Definitions

1. Staffing Index

The Staffing Index is the selection of an NFDRS output (ERC-16Y) to provide the basis to calculate the Staffing Index found in Table 1. All of the considerations contained in this subordinate plan are based on the Staffing Index.

2. Daily 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 numeric values where 1 represents the low end of the fire danger continuum and 5 at the high end. It is an extension of the Response Level NFDRS output (BI-16Y) with additional inputs for potential fire weather and current fire activity. 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

Preparedness Levels often get confused with Staffing Levels. Staffing Levels consider fire danger, current fire activity, and significant fire weather potential while Preparedness Levels incorporate additional information such as number of fires, live fuel moisture, and on-going resource commitment. Additionally, Staffing Levels are intended to help with short-term decisions, while Preparedness Levels incorporate stable variables to help with 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) and the *BLM Fire Planning Handbook (9211-1)*.

BLM directives and interagency guidance requires numerous unit plans and guides in order 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:

D. Scope and Interagency Collaboration

Decisions executed from this plan apply specifically to the interagency resources located within the boundaries of the Elko Interagency Dispatch Center. The participating agencies in this plan understand that budget, timekeeping, and other administrative differences make a combine staffing plan difficult to devise

and follow. This plan has been devised to meet the desired intent for resource staffing within the dispatch area and IA resource concerns, providing greater flexibility for the interagency programs and their respective initial attack resources. This plan recognizes that many factors affect staffing needs, which are based upon interagency procedures. Interagency draw-down considerations will be incorporated in this Staffing Plan.

Staffing Levels

Staffing Levels can be derived directly from the Weather Management Information System (WIMS), or preferably, from an analysis of historical weather observations and fire occurrence data using the FireFamilyPlus software to determine fire business thresholds.

The Staffing Level forms the basis for decisions regarding the “degree of readiness” of initial attack (IA) resources and support resources. Staffing Level is intended to provide fire managers with day-to-day decision support regarding staffing of suppression resources. The EIDC FDOP Staffing Level is based on an analysis of cumulative frequency of occurrence of Energy Release Component (ERC) as they relate to a Dispatch Response Levels.

Staffing Levels are expressed as numeric values where 1 represents the low end of the fire danger continuum and 5 the high end. Staffing Levels will be a function of Dispatch Level, current fire activity, and the potential for ignitions in the next 24-hour period. *EIDC’s process for determining local Staffing Levels is not the same as Staffing Level calculated directly from WIMS.* WIMS calculates Staffing Level on climatological breakpoints; EIDC will calculate Staffing Level on fire business thresholds.

A. Staffing Index

This plan is based on the indices derived from Energy Release Component of Fuel Model 16Y from each FDRA’s SIG.

B. Determination of Daily Staffing Levels

Reference the EIDC Daily Dispatch Indices Worksheet in the [APPENDIX](#) for steps and instructions in completing the Staffing Level Matrix.

C. Staffing Worksheet Instructions

1. In the row labelled *CAPACITY – Max./7-Day*, shows the number of initial attack resources that the NENV Interagency Fire Organization has available during the fire season.
 - IA resources for BLM, USFS, and NDF (includes Engines, Dozers, and Crews / IA Modules) are included.

- This number represents full (100%) resource availability IF sufficient personnel were available to staff the resource 7 days-per-week.
2. In the row labelled *CAPACITY – Daily/5-Day*, shows “Ground Capacity (%)” and the percentage of average daily number of interagency initial attack resources that the NENV Interagency Fire Organization would expect to staff each day during the fire season. For ground resources, this would typically be about 70%.
- For example, if an organization had 10 engines with enough personnel for 5-day staffing on each engine, 3 engines would be out-of-service while their crews were taking days off. In other words, the total engine capacity for this organization is 10 (at 100%). If 7 out of 10 engines are working, this is 70%; 8 out of 10 engines is 80%. Hence, 70% is a reasonable percentage for 5-day staffing.
 - Percentages represents the proportion of resources typically staffed during the fire season on an average day, considering that the resource is staffed 5 days-per-week; not every day.
 - The bottom half of the table represents the number of resources at Target Capacity for each of the five Staffing Index levels.
 - Based on Staffing Index, maintain I.A. staffing within $\pm 10\%$ of Target Capacity (Draw-Down).

TABLE 1: Staffing Capacity / Targeted Draw Down

EIDC Initial Attack Resources

		Ground Resources	Aviation Resources	I.A. Overhead	Ground Capacity	Aviation Capacity	Overhead Capacity
Capacity	Max 7-Day	21	2	5	100%	100%	100%
	5-Day	15	2	4	70%	100%	70%
		Resources at Target Draw-Down			Target Draw-Down %		
Target Capacity	Staffing Index						
	1	2	0	1	10%	0%	10%
	2	4	0	1	20%	0%	20%
	3	6	1	2	30%	50%	30%
	4	11	2	3	50%	80%	50%
5	17	2	4	80%	100%	80%	

Ground Resources: Initial attack resources (engines, dozers, water tenders) for BLM, USFS, and NDF (crews are not included). Ground resources may be committed to local fires but are available for reassignment.

Aviation Resources: Only includes exclusive use Helitack and Air Attack platforms during normal availability period (CWN aircraft can be considered as long as operational control is under EIDC / Duty Officers).

IA Overhead: Includes all qualified ICT3 or DIVS overhead. All resources will be updated daily on [EIDC Daily Resource Status Summary Report](#).

Staffing Objective:

Based on Staffing Index, maintain I.A. staffing within ±10% of Target Draw-Down.

Resources assigned to IA fires that are available to be released and reassigned to new incidents are considered available.

D. Minimum and Extended Staffing

1. Minimum and extended staffing of initial attack resources are measures taken by local fire management in order to effectively respond to reported fires under specific fire weather and fire business parameters. Staffing decisions are made by the Duty Officer(s) and EIDC Center Manager based on Staffing Level (SL).
2. Minimum and extended staffing is contingent upon funding which may (or may not) be available to the fire management staff. Local work and rest policies supercede minimum and extended staffing guidelines.
3. Minimum staffing refers to suppression resource staffing levels which should be available during normal hours (0900- 1800); this may require an augmentation of regularly scheduled initial attack resources. Minimum staffing is based on the forecasted SL for the following day.
4. Extended staffing is an extension of normal staffing hours which typically occurs in two-hour increments. Extended staffing is based on the actual SL calculated by EIDC personnel. It is possible that the SL would increase before the end-of-shift due to additional fire occurrence after 1530 hrs.
5. These guidelines may be altered by fire management at any time in order to address unique situations encountered during the planning process

E. Lightning Plan

1. Description: Past fire occurrence demonstrates that multiple start days are common in Northeastern Nevada due to the combination of weather, fuels, and topography that are detailed in the FDRA descriptions. In addition, large fire growth on multiple fire days is also a common occurrence due to the limited number of suppression resources as compared to more populated urban areas. Due to these reasons, it may be necessary to adjust the Dispatch Levels for the Preplanned Response Plan (Run Cards) to ensure adequate resource coverage during forecasted or actual fire weather events such as dry lightning. This will normally involve adjusting Dispatch Levels from High to Low or Moderate and repositioning available resources to ensure adequate resource coverage for multiple incidents in an attempt to minimize large fire growth in high value resource areas. This Lightning Plan is intended to provide guidance to provide for rapid initial attack by redistributing initial attack resources when dry lightning is forecasted or an eminent threat.
2. Activation / Deactivation: This Lighting Plan will be activated at the direction of the Interagency Duty Officer when a Red Flag Warning or Fire Weather Watch for dry lightning has been issued for Fire Weather

Zones 438, 469, or 470. The Interagency Duty Officer will also have the discretion to activate this Lightning Plan when daily fire weather forecasts include forecasted LALs of 2-6 for any of the previous mentioned Fire Weather Zones or when lightning is not forecasted but occurring either on the district or threatening to track through the district.

- 3.** The Interagency Duty Officer will notify EIDC Center Manager to activate and deactivate the Lightning Plan. EIDC will tone across all repeaters via radio to notify all suppression resources and stations that the Lightning Plan is being activated.
- 4.** If dry lightning is not occurring or once the threat for dry lightning passes the Interagency Duty Officer will again notify the EIDC Center Manager. EIDC will tone across all repeater via radio that the lighting plan is being deactivated and all available resources will be returned to their respective stations.
- 5.** Prepositioning: Units can be preposition at these predetermined locations in the priority order below, as staffing allows.
 - a.** East Zone (Wells): Units may preposition at Wells Station, Spruce Mountain Road/Highway 93 South junction, Oasis, Ruby Lake Wildlife Refuge, and Wilkins.
 - b.** Central Zone (Elko): Units may preposition at Elko Station, Lone Mountain Station, and Ten-Mile VFD Station.
 - c.** West Zone (Carlin / Midas): Units may preposition at Carlin Station, Pine Valley VFD Station, and Immigrant Summit. Midas Fire Station: Units will preposition at Midas Station.
- 6.** Dispatching of Resources
 - a.** EIDC will update location of pre-positioned resources when resources arrive at Lightning Plan locations. EIDC will dispatch closest available forces to the incident, and the Interagency Duty Officer will be responsible for backfill of preposition locations or stations.
 - b.** To ensure adequate resource coverage for multiple events, EIDC will adjust the Dispatch Level Response to Low. As reported fires are located and confirmed additional suppression resources will be requested by the Incident Commander.
 - c.** Incident Commanders should use discretion to ensure that radio traffic does not become overwhelming for EIDC. For those fires where there is no threat or potential for spread (ie. Single Tree fires), size up reports should be called in through telephone if there are no critical resource needs or urgency.

- d. If additional IA resources are assigned, each Fire Operations Supervisor may form a group of off-unit resources with the intent of increasing initial response to each incident while preserving enough local resources to staff multiple fires. Other additional resources such as overhead, dozers, crews, and water tenders may be positioned by the Interagency Duty Officer.
- e. The Interagency Duty Officer should also ensure that Air Attack coverage is adequate to staff active incidents to ensure adequate aerial supervision. In addition, adequate recon / detection flights should be conducted, when resources are available, to ensure adequate intelligence is being gathered to determine number of fire starts and proper prioritization based on threats to life, property, or resource values.

Draw - Down

Draw-down is the predetermined number and type of suppression resources that are required to maintain viable initial attack (IA) capability at either the local or geographic area. 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.

E. Factors Affecting Draw - Down

Draw-down is dynamic; the various factors affecting staffing and resource commitment/availability can change

1. **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.
2. **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, watertenders) 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 5-day staffing is usually 70% 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. However, due to the mobility and demand at higher fire danger levels, not all of the aviation resources will be available all of the time. Therefore, a base-line of 80% will be used for aviation resources during normal exclusive use contract periods.

3. Dispatch Response 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 fairly 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.

F. 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.

G. Draw Down / Step Up Actions

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 Staffing Index (Funding Source is specific to BLM financial business management system).

TABLE 2: Draw Down / Step Up Actions

Staffing Index	Target Capacity*			Authorized Actions	Funding Source (BLM)
	Ground	Aviation	Overhead		
1	10%	0%	10%	1-a Manage daily staffing to ensure resources are available within 10% of <i>TARGET CAPACITY</i> 1-b Notify BLM State Duty Officer: <ul style="list-style-type: none"> • If unable to staff resources as per 1-a (above) and there is a potential need for resources. 1-c Extended Staffing Not Authorized 1-d AD Hiring Authorized 1-e Detection: <ul style="list-style-type: none"> • Ground Authorized • Fixed-wing Not Authorized • Rotor-wing Not Authorized 1-f Preposition of Resources Not Authorized	Preparedness Budget LF1000000.HT0000
2	20%	0%	20%	2-a Manage daily staffing to ensure resources are available within 10% of <i>TARGET CAPACITY</i> 2-b Notify BLM State Duty Officer: <ul style="list-style-type: none"> • If unable to staff resources as per 2-a (above) 2-c Extended Staffing Authorized (Preparedness Budget Only) 2-d Detection: <ul style="list-style-type: none"> • Ground Resources Authorized • Fixed-wing Not Authorized • Rotor-wing Not Authorized 2-e Preposition of Resources Not Authorized	Preparedness Budget LF1000000.HT0000

3	30%	50%	30%	<p>3-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY</p> <p>3-b Notify BLM State Duty Officer:</p> <ul style="list-style-type: none"> • If unable to staff resources as per 3-a (above) <p>3-c Extended staffing</p> <ul style="list-style-type: none"> • Authorized from Preparedness Budget if Severity is not available. • Authorized from Short-term (State Director) Severity if available. <p>3-d AD Hiring Authorized</p> <p>3-e Detection:</p> <ul style="list-style-type: none"> • Ground Resources are Authorized • Fixed-wing Resources are Authorized • Rotor-wing Resources are Authorized <p>3-f Preposition of Resources is Authorized :</p> <ul style="list-style-type: none"> • Prioritize areas of Critical Habitat / FIAT 	<p>Preparedness Budget</p> <p>LF1000000.HT0000</p> <p>Severity</p> <p>LF2100000.HT0000</p>
4	50%	80%	50%	<p>4-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY</p> <p>4-b Notify BLM State Duty Officer:</p> <ul style="list-style-type: none"> • If unable to staff resources as per 4-a (above) • Prior to making a ground resources available off-unit (at Local Preparedness Level 4 or 5 and available outside of GACC) <p>4-c Extended staffing authorized</p> <p>4-d AD Hiring Authorized</p> <p>4-e Detection:</p> <ul style="list-style-type: none"> • Ground Resources - Authorized • Fixed-wing Resources – Authorized • Rotor-wing Resources – Authorized <p>4-f Preposition of Resources is Authorized:</p> <ul style="list-style-type: none"> • To areas of Critical Habitat / FIAT • To areas likely to have ignitions / lightning 	<p>Preparedness Budget</p> <p>LF1000000.HT0000</p> <p>Severity</p> <p>LF2100000.HT0000</p>

				<ul style="list-style-type: none"> Consider suspension of project work away from station that increases fire response time. 	
5	80%	100%	80%	5-a Manage daily staffing to ensure resources are available within 10% of TARGET CAPACITY 5-b Notify BLM State Duty Officer: <ul style="list-style-type: none"> If unable to staff resources as per 5-a (above) Prior to making a ground resource available off-unit (at Local Preparedness Level 4 or 5 and available outside of GACC) 5-c Extended staffing authorized 5-d AD Hiring Authorized 5-e Detection: <ul style="list-style-type: none"> Ground Resources - Authorized Fixed-wing Resources – Authorized Rotor-wing Resources - Authorized 5-f Preposition of Resources is Authorized: <ul style="list-style-type: none"> To areas of Critical Habitat / FIAT To areas likely to have ignitions / lightning Consider suspension of project work away from station that increases fire response time. 	Preparedness Budget LF1000000.HT0000 Severity LF2100000.HT0000

Preparedness Levels

The Preparedness Level is a five-tier (1-5) fire danger rating decision tool that is based on NFDRS output(s) and other indicators of fire business (such as projected levels of resource commitment and fuel conditions). Preparedness Levels will assist fire managers with more long-term (seasonal) decisions with respect to fire danger.

Preparedness Levels are established to assist fire managers with weekly or monthly planning decisions based upon seasonal fire danger elements. The FireFamilyPlus software has been used to establish the fire business 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 the FDOP. The final Preparedness Level determination will also incorporate a measure of current and projected levels of resource commitment due to fire activity and a measure of ignition risk.

- Purpose of EIDC Local Preparedness Levels
 - To identify the level of wildland and prescribed fire activity, severity and resource commitment within the EIDC zone.
 - To identify actions to be taken by EIDC to ensure an appropriate level of preparedness/readiness for the existing and potential situation.
 - To guide, modify and direct NENV Fire Management activities when essential to ensure agency preparedness or response capabilities.
 - The EIDC Center Manager will monitor the area's wildland and prescribed fire activity and Geographic Area Preparedness Levels and determine Preparedness Levels based on NFDRS outputs using the method described below.
 - As levels increase, all management direction/considerations from each previous level will automatically be continued at the next higher level (Table 5).

- Preparedness Level Description Guide: The following information is meant as a descriptive guide for the conditions to be expected at each identified local Preparedness Level. The actual Preparedness Level will be calculated using the process identified in Appendix A.
 - **Preparedness Level 1:** No large fire activity in progress. All WIMS indices (adjective levels) indicate low to moderate NFDRS indices. Number and size of fires not to exceed two Class A or B fires per day. Fires do not exceed one burning period. There are adequate resources available for initial attack activities with a reserve of forces for additional activity.
 - **Preparedness Level 2:** No large fire activity in progress. 50% or more of the WIMS data indicates low to moderate fire danger, and some indicating up to high fire danger. Number and size of fires not to exceed three Class A and B or 1 Class C fire. Fires may extend into the second burning period. 30% of Initial Attack resources are committed to wildfires.
 - **Preparedness Level 3:** Most WIMS data indicate High to Very High with a few reporting Extreme. More than 3 fire exceeding Class B fires. Fires consistently escape initial attack efforts requiring additional support. Holding actions require increasing numbers of resources. 50% of initial attack resources are committed to wildfires.
 - **Preparedness Level 4:** Most WIMS data report Very High to Extreme fire dangers. Numerous escaped fires including at least one Class D/E fire. No break in weather expected for 48 hours. 90% of initial attack resources are committed to fires.
 - **Preparedness Level 5:** All WIMS data reporting Very High to Extreme indices. No change in weather predicted for the next 48 hours. Multiple escaped fires requiring the commitment of Type I or Type II teams. Possibility of new starts very likely; probability of containment unlikely. 100% of initial attack resources are committed to fires and off-district resources are being requested to fill agencies shortages.

TABLE 3: Preparedness Level Action Guidelines: The following Preparedness Level actions are discretionary guidelines for agency personnel.

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Agency Administrator	Ensure supervisors approve fire availability of staff and notify Duty Officer.	•	•	•	•	•	Agency
	Ensure resource advisors are designated and available for fire assignments.	•	•	•	•	•	Agency
	Evaluate work/rest needs of fire staff.		•	•	•	•	Agency
	Consider need for fire restriction or closures.				•	•	Public Industry
	Provide appropriate political support to fire staff regarding the implementation of preparedness level actions.			•	•	•	Agency
	Review and transmit severity requests to the appropriate level.				•	•	Agency
	Issue guidance to respective agency staff indicating severity of the season and increased need and availability for fire support personnel.				•	•	Agency
	Evaluate need for a Fire and Aviation Safety Team (FAST).				•	•	Agency
Fire Management Officer	Evaluate season severity data (BI and ERC trends for season, fuel loadings, live FM, drought indices, and long term forecasts).	•	•	•	•	•	Agency
	The FMO, or designated / qualified acting FMO, available and on unit.	•	•	•	•	•	Agency
	Evaluate fire staff work/rest requirements.		•	•	•	•	Agency
	Review geographical and national preparedness levels and evaluate need to suspend local prescribed fire activities.			•	•	•	Agency
	Consider activation of local MAC Group and daily MAC coordination.				•	•	Agency
	Ensure agency staff are briefed on increasing fire activity, consider daily coordination meetings for all zone Agency Administrators.				•	•	Agency
	Brief next higher level of fire management on increasing/decreasing fire activity.				•	•	Agency
	Consider fire severity request and pre-positioning of resources including: suppression resources, aerial support, aerial supervision, command positions, dispatch, logistical support, and prevention.				•	•	Agency
	Coordinate with interagency partners the need for fire restrictions or closures.					•	Public Industry
	Request that the Agency Administrator issue guidance to respective agency staff regarding the need for increased fire availability in support positions.				•	•	Agency
	Consider need to pre-position a Type 3 or Type 2 IMT.					•	Agency

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Duty Officer	Confirm or adjust the Preparedness and Dispatch Levels with the EIDC CM.	•	•	•	•	•	Agency
	Ensure incoming pre-position or detailed personnel are briefed on local conditions.	•	•	•	•	•	Agency
	If preparedness level is decreasing, consider releasing pre-positioned and detailed resources.	•	•	•			Agency
	At least one qualified ICT3 will be available on unit in all planning levels.	•	•	•	•	•	Agency
	Evaluate work/rest needs of IA crews and overhead.			•	•	•	Agency
	Consider aerial detection flight during potential fire weather events.				•	•	Agency
	Evaluate need to change or shift duty hours of IA resources.				•	•	Agency
	Evaluate draw-down levels for suppression, command, and oversight positions.				•	•	Agency
	Brief FMO on severity of conditions and consider severity request.				•	•	Agency
	Consider pre-positioning and/or detailing of additional IA resources including Smoke Jumpers or Type 1 Crews.				•	•	Agency
	Consider pre-positioning and automatic dispatch of ATGS and relief ATGS.				•	•	Agency
	Consider bringing in local IA resources from scheduled days off but ensure work rest requirements are adequate.				•	•	Agency
	Consider automatic dispatch of helicopter, SEAT and/or heavy air tankers for IA.				•	•	Agency
	Consider patrols in camping and recreation areas.				•	•	Agency
	In advance of critical fire weather, station additional fire suppression resources to optimize a quick and efficient response in high-risk areas prioritizing SFA, PHMA, and GHMA GRS habitat.			•	•	•	Agency
	Consider extending staffing beyond normal shift length.			•	•	•	Agency
Assess resource availability from neighboring units or agencies.			•	•	•	Agency	

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
EIDC Center Manager	Determine and broadcast the morning and afternoon preparedness, dispatch, and adjective fire danger levels to interagency fire personnel. Disseminate Daily Intelligence Report / Daily Resource Status Summary.	•	•	•	•	•	Agency
	The EIDC Center Manager or designated / qualified acting available and on unit at all Planning Levels. At PL4-PL5, the EIDC Center Manager or designated acting and EIDC Assistant Manager (or acting) will be available on unit.	•	•	•	•	•	Agency
	Evaluate work/rest needs of center staff.			•	•	•	Agency
	If preparedness level is decreasing, consider release of pre-positioned or detailed dispatchers and logistical support personnel.	•	•	•			Agency
	Consult with Duty Officer concerning potential for extended staffing beyond normal shift length.				•	•	Agency
	Consider pre-positioning or detail of off-unit IA dispatchers and logistical support personnel (Activation of Expanded Dispatch).				•	•	Agency
	Consult with duty officer and FMO regarding potential need for severity request.				•	•	Agency
	Consult with Great Basin Coordination Center (GBCC) regarding availability of resources at the geographical and national levels.				•	•	Agency
	Consider bringing additional dispatch personnel in from days off.				•	•	Agency
	Ensure availability and consider ordering local procurement team at PL3 or National Buying Team at PL4 or PL5.			•	•	•	Agency
	Ensure updated and accurate AD hire list is available.			•	•	•	Agency

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
AFMO and	Ensure IA crews are briefed on local preparedness level, burning conditions, and availability of IA resources and air support.	•	•	•	•	•	Agency
Fire Operations Supervisors	The AFMOs, or designated / qualified acting AFMO, available and on unit.				•	•	Agency
	Perform check-ins with EIDC including checking-in when moving location during the day or when assigned to project work.	•	•	•	•	•	Agency
	Ensure incoming pre-position or detailed personnel are briefed on local conditions and local daily briefings are adequate.	•	•	•	•	•	Agency
	Evaluate work/rest needs of crews and ensure days off are taken, request relief if needed, and communicate special circumstances to Duty Officer.	•	•	•	•	•	Agency
	Increase patrols in camping and recreation areas.				•	•	Public
	Consider suspension of project work away from station.					•	Agency
	Provide duty officer with feedback regarding unique/unexpected fire behavior and severity conditions and the need to increase IA capabilities.				•	•	Agency
	Daily morning staffing reports to be submitted to EIDC.	•	•	•	•	•	Agency

Responsible Party	Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
Fire Education & Mitigation	Ensure that roadside fire danger signs reflect the current adjective fire danger rating.	•	•	•	•	•	Public
	Initiate press release to inform public/industry of the potential fire danger including the start of fire season and potential for local fire danger to increase.		•	•	•	•	Public Industry
	Notify local media if High/Extreme fire danger and the need for increased public caution.				•	•	Public Industry
	Contact local industrial entities to inform of hazard and risk.				•	•	Public Industry
	Ensure the public and industrial entities are aware of the policy regarding fire trespass investigations for human-caused fires and cost recovery for suppression action.				•	•	Public Industry
	Consider need for increased prevention patrols and provide public and industrial entities with access to fire danger information, closures, restrictions, and warnings.				•	•	Public Industry
	Contact local fire chiefs to make them aware of fire danger.				•	•	Agency
	Consider door-to-door contacts in rural communities or ranch areas.					•	Public Industry
	Post signs and warnings in camp and recreation areas.				•	•	Public
	Consult with FMO regarding severity request and potential need for additional prevention personnel or Fire Prevention Team.				•	•	Public Industry
	Consult with FMO regarding need for fire restrictions and / or closures.				•	•	Agency Public Industry
Law Enforcement and Fire Investigators	Check-In and notify dispatch of daily availability for fire assignments and location for the day.	•	•	•	•	•	Agency
	Consider increased patrol in high fire danger rating areas, such as campgrounds, OHV areas, and shooting areas.				•	•	Agency
	Consider pre-positioning for detailing fire investigation personnel. Request additional INVFs through Duty Officer if needed or occurrence warrants.				•	•	Agency