

Elko Interagency Dispatch Center

FIRE DANGER OPERATING AND PREPAREDNESS PLAN

**BUREAU OF LAND MANAGEMENT
Elko District**

**USDA FOREST SERVICE
Humboldt Toiyabe National Forest
Ruby Mountain/Jarbidge/Mountain City Ranger Districts**

**U.S. FISH AND WILDLIFE SERVICE
Ruby Lake National Wildlife Refuge**

**NEVADA DIVISION OF FORESTRY
Northern Region**

**BUREAU OF INDIAN AFFAIRS
Eastern Nevada Agency**

**SHO-PAI TRIBE
Duck Valley Reservation**

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June 1, 2012**



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Acronyms

ACL	Access Control List (WIMS)
AFDR	Adjective Fire Danger Rating
AFMO	Assistant Fire Management Officer
BI	Burning Index
DL	Dispatch Level
BLM	Bureau of Land Management
WGBCC	Western Great Basin Coordination Center
ERC	Energy Release Component
FDOP	Fire Danger Operating Plan
FMO	Fire Management Officer
FWS	U.S. Fish and Wildlife Service
EIDC	Elko Interagency Dispatch Center
NDF	Nevada Division of Forestry
NFDRS	National Fire Danger Rating System
NIFC	National Interagency Fire Center
NWCG	National Wildfire Coordinating Group
NWS	National Weather Service
IPL	Interagency Planning Level
PL	Preparedness Level
RAWS	Remote Automated weather Station
SFMO	State Fire Management Officer
Sho-Pai	Shoshone-Paiute Tribes of Duck Valley
SI	Staffing Index
SL	Staffing Level
USFS	United States Forest Service (FS)
WIMS	Weather Information Management System
BIA	Bureau of Indian Affairs

Introduction

Each Agency is required to have a Fire Preparedness Plan. The *Interagency Standards for Fire and Fire Aviation Operations* requires federal agencies to have a Fire Danger Operation Plan (FDOP) (which includes the Preparedness Plan). Interagency partners are included in this plan.

This Fire Danger Operating Plan establishes the setup and implementation of the NFDRS fire danger modeling program for the Elko Interagency Dispatch Center as required in the *Interagency Standards for Fire and Fire Aviation Operations*.

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- Ruby Mountain, Jarbidge, and Mountain City 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

Fire danger is one of several factors used to determine preparedness levels and resulting operational decisions. Other factors include resource availability, current weather, and fire activity. The resulting decision matrix of action items described below (in Part 5) does not necessarily account for other factors such as training levels, political factors, mutual aid status, overriding budget constraints, and other pertinent factors.

This plan will help simplify the decision-making process for agency administrators, fire managers dispatchers, agency cooperators, and firefighters by setting interagency preparedness levels and dispatch levels using fire business break points (based on past fire history and weather). Adjective fire danger ratings (low, high, etc) will be determined using standard climatological break points.

This plan addresses fire danger levels and ratings, with emphasis on information and resource sharing between federal agencies, cooperating state and county agencies, private industry, and the public.

This plan is primarily for the time period of May through October.

Objectives

- A. Provide a tool for agency administrators, fire managers, dispatchers, agency cooperators, and firefighters to gauge fire danger ratings within the fire suppression areas.
- B. Define fire danger rating areas with similar weather, fuels, topography, and fire occurrence within existing dispatch area.
- C. Establish a fire weather monitoring network made up of Remote Automated Weather Station (RAWS).
- D. Determine fire business and adjective fire danger rating break points using the Weather Information Management System (WIMS), the National Fire Danger Rating System (NFDRS), Fire Family Plus software, and by analyzing historical climatologically data, and fire history.
- E. Define roles and responsibilities in order to make fire planning decisions, manage weather information, provide weather forecasts, and brief fire suppression personnel.

- F. Ensure that agency administrators, fire managers, and cooperating agencies, private industry (ranchers, land owners, railroad), and the public are notified of the adjective fire danger rating and local preparedness levels.
- G. Make recommendations to personnel outlining specific daily actions to take at each planning level.
- H. Develop and distribute fire danger pocket cards to all personnel involved with fire suppression activities.
- I. Suggest improvements annually for the Fire Danger Rating Operation Plan.

Roles and Responsibilities

- A. **Fire Danger Operating and Preparedness Plan:** This plan provides a method to calculate the interagency preparedness and dispatch levels and also provides guidelines for actions to be taken when specific preparedness levels are reached. It will not provide information regarding extenuating factors influencing fire management decisions. Annual updates to the plan will be approved by the Northeast Nevada Fire Operations Group (NNFOG). Interim updates can be approved by the FMO's. This plan is to be updated and reviewed annually by May 15.
- B. **Suppression Resources:** Each agency is responsible for determining suppression resources needed for their agency based on their fire management plan.
- C. **Elko MAC Group:** The Elko MAC group is chartered by the Northeast Nevada Interagency Fire Management Board.
- D. **Duty Officer:** For the purpose of this plan, a Duty Officer is usually defined as an operational lead designated by each agency who provides input and guidance regarding planning and dispatch levels. It is the decision of the Duty Officer to interpret and modify the daily preparedness and dispatch levels as required by factors not addressed by this plan. The Duty Officers will keep the EIDC Manager(s) updated as needed.
- E. **Fire Weather Forecasting:** At present the Elko, National Weather Service (NWS) Office provides Fire Weather Forecasts, Spot Weather Forecasts and a daily Trend Forecast used to generate forecasted fire danger indices for the EIDC dispatch area. The Elko NWS office forecasts Fire Weather Zones 468 (West), 469 (Central) and 470(East), and 454.

The Predictive Services program at the Western Great Basin Coordination Center (GACC) in Reno also employs fire weather meteorologists. Predictive Services combines Intelligence Specialists, Fuels Specialists and dedicated weather forecasters to "support the decision-making process of local, state, geographic area and national organizations whose job it is to efficiently allocate resources to existing and anticipated suppression, fire use and prescribed fire operations." Predictive Services is Nevada BLM's liaison to the NWS offices and provides training, specialized products and statistical studies to support the Fire Danger program.

NWS fire weather focal point(s) and BLM Predictive Service meteorologists are identified in the Contact List, Appendix A-2 at the end of this document.

- F. **NFDRS Outputs and Indices:** The EIDC Manager will ensure that the daily fire weather forecast (including NFDRS indices) is retrieved and that the daily interagency

preparedness and dispatch planning levels are determined and distributed or made available.

- G. Risk Analysis Information:** Each agency will assemble seasonal risk information such as live fuel moisture, 1,000 hour moisture, fuel loading, NFDRS (BI/ERC) trends, NDVI imagery, and other pertinent data.
- H. Weather Station Maintenance:** The Remote Sensing Laboratory located at the National Fire Center (NIFC) maintains and calibrates the RAWS stations on an annual basis for the BLM.

The EIDC Manager is the RAWS coordinator for the Elko Interagency Dispatch Center. Bureau of Land Management stations are maintained in accordance with the BLM RAWS Strategic Plan (1997). The Automated Sorting, Conversion, and Distribution System (ASCADS) are used to track RAWS maintenance and station status.

- I. WIMS Access and Station Catalog Editing:** The EIDC Manager maintains the WIMS Access Control List (ACL). EIDC will ensure appropriate editing of the RAWS catalogs for their stations. The EIDC Manager will ensure the timely editing of daily 1300 weather observations.
- J. Preparedness and Dispatch Level Guidelines:** The NNFOG will be responsible for establishing and reviewing the interagency preparedness and dispatch level guidelines on an annual basis, at a minimum.
- K. Preparedness Levels Notifications:** The EIDC Manager will ensure that all initial agency notifications are based on the planning and preparedness level procedures, as well as direction provided by the Duty Officers.
- L. Public and Industrial Awareness:** Awareness and prevention programs will be implemented based on Interagency Preparedness Level guidelines and direction provided by Duty Officers.
- M. NFDRS and Adjective Fire Danger Break Points:** Weather and fire data will be analyzed on an annual basis and each agency will ensure that the break points reflect the most accurate information.
- N. Fire Danger Pocket Cards:** Each agency will ensure that pocket cards are prepared on an annual basis at a minimum. The cards will be distributed to all local and incoming firefighters as well as overhead. The pocket cards will be posted on the National Wildfire Coordinating Group (NWCG) pocket card web site. Duty Officers will ensure pocket cards are used to train and brief suppression personnel.
- O. Action Items:** Various personnel assigned to the NNFOG are responsible for establishing appropriate actions for each preparedness level. Actions include fire use, fire prevention/education, suppression, information, and others.
- P. By December 1,** all areas and weather station catalogs will be checked for appropriate freeze dates. **By April 1,** all areas and weather station catalogs will be checked for appropriate green-up dates.

Fire Danger Rating

The National Fire Danger Rating System (NFDRS) utilizes the WIMS processor to manipulate weather data and forecasts stored in the NIFMID database to produce fire danger rating within a pre-determined Fire Danger Rating Area (FDRA). The system is designed to calculate worst-case scenario fire danger. NFDRS will be utilized in four ways for the purposes of this plan. The **Interagency Planning Level** is used by fire managers on a daily basis to plan for initial attack and support staffing needs. The **Dispatch Level** is a decision tool for dispatchers to utilize when assigning initial attack resources to new fire starts. The **Preparedness Level** is used by dispatch and fire managers to determine staffing levels, support needed from outside the dispatch zone, specific fire management actions, and drawdown levels. The fourth utilization of NFDRS is to complete the **Adjective Fire Danger** rating for the purpose of communicating fire danger to public and industrial interests.

Although publicizing fire danger ratings will not prevent all human-caused fires, a strong effort should be made to communicate the fire danger as it changes throughout the fire season. The social, political, and financial resources can potentially be associated with any wildfire. As the fire danger fluctuates, agency personnel need to have pre-planned responses. The actions should not only focus on fire suppression, but also in fire prevention.

A. Rating Systems

- 1. Interagency Planning Level:** Interagency planning levels are based upon the association of the BI and ERC values with the records of fires occurring in each of the three Fire Danger Rating Areas within the EIDC dispatch area. A five-level chart determines the Interagency Planning Level. Break points for the planning levels are set using a historical analysis from Fire Family Plus, of fire business and its relationship to 1300 RAWs observations entered into the NIFMID database and processed by WIMS, which calculates the staffing index values (BI, ERC, etc). The Interagency Planning Level will be communicated to all personnel in conjunction with the daily weather and staffing report.
- 2. Dispatch Level:** The Dispatch Level guides dispatchers when assigning resources to initial attack fire responses. Dispatch levels are based on BI's for each Fire Danger Rating Area, with modifiers for Haines index and Red Flag Warnings for all Three FDRAs. Three dispatch levels are used; low, moderate and high. The Dispatch Level determines the initial response to fire ignitions as indicated in dispatch run cards. The breakpoints for the dispatch levels are set using a historical analysis from Fire Family Plus of fire business and its relationship to 1300 RAWs observations entered into the NIFMID database and processed by WIMS, which calculates the staffing index values (BI, ERC, etc). The daily indices from WIMS will be combined into a five day average to prevent "spiking" of the level.
- 3. Preparedness Level:** The preparedness level is a five tier (1-5) fire danger rating system based on agency planning levels and fire business indicators. The fire business indicators used to calculate the preparedness level are large/multiple fire activity, fire potential, and availability of resources. Several procedures and guidelines are to be followed once the Preparedness Level has been determined, and a chart guides personnel through the process. These procedures affect staffing levels, draw down levels, required support from outside the dispatch zone, and management/oversight functions.

4. **Adjective Fire Danger Rating:** This rating is used by agency personnel to inform public and industrial interests about the fire danger in specific geographical areas (FDRA's). It will be based on the agency planning levels. There are five classes (1-5) that correspond to low, moderate, high, very high, and extreme levels of adjective fire danger. The Adjective Fire Danger Rating will be communicated to all personnel in conjunction with the daily weather and staffing report.

Fire Danger Inventory

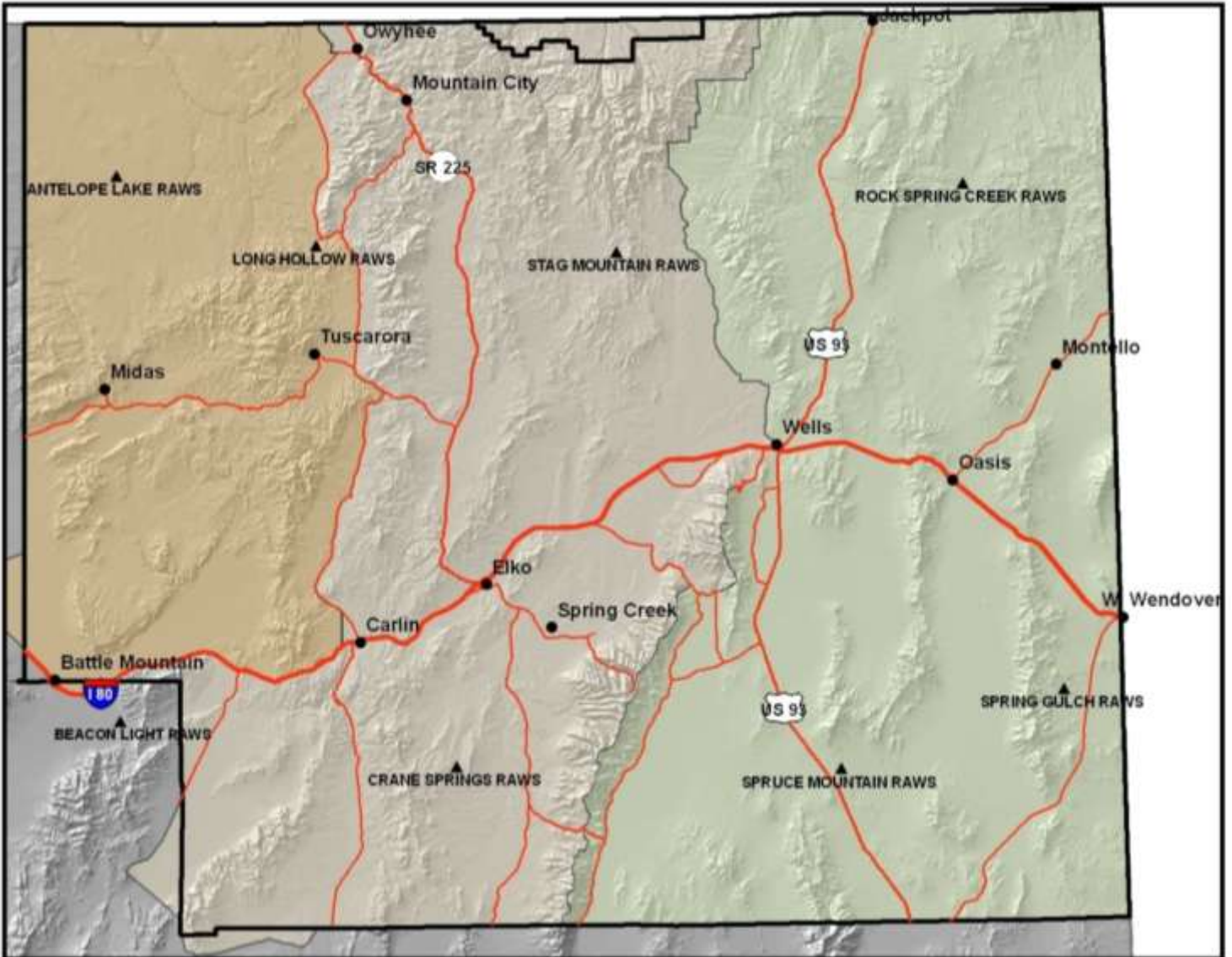
A. Fire Danger Rating Areas

Three Fire Danger Rating Areas (FDRAs) have been defined; they are identified as the West, Central and East FDRAs. These areas are defined by their fuel, topography, fire history characteristics, RAWS station locations and National Weather Service break points for weather reporting (Table 1).

FDRA Characteristics Table 1.

	West FDRA	Central FDRA	East FDRA
NFDRS Fuel Models	Primary A,L,T	Primary A, H, C, F	Primary A,T,L
Slope Class	1(0-25%)	2 (26-40%)	1(0-25%)
Climate Class	1 (Arid)	1 (Arid)	1 (Arid)
Annual Precipitation	6-10 inches	6-10 inches	6-10 inches
Top Elevation ft.	8601'	11386'	11306'
Bottom Elevation ft.	4506'	4650'	4309'
Acres	2,684,069	4,627,447	5,127,022

EIDC Fire Danger Rating Areas and Associated RAWS Sites



Legend

- Cities
- ▲ RAWS Sites
- Major Roads
- EIDC Zone Boundary
- East Zone FDRA
- Central Zone FDRA
- West Zone FDRA



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."

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1. West FDRA

- a. **Location:** This includes lands administered by the BLM and NDF. This FDRA is identified as the eastern 1/3 of FWZ 468 within the EIDC zone. The western boundary is the Elko/Humboldt County lines to Battle Mountain. The southern border follows I-80 from Battle Mountain to Carlin. The Eastern Border is From Carlin North along SR 766 to the intersection with SR 736, proceeding north along SR 736 to SR 226, and then tying in with SR 728 to the Idaho Border. The northern boundary follows the Idaho/Nevada border heading west, connecting to the Elko/Humboldt County lines.
These lands are primarily administered by the BLM and NDF, and with scattered tracts of private and state lands.
- b. **Fuels:** The fuels of the West 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. Fuel models that best depict the vegetative state are NFDRS Fuel Models A, T and L. Burning Index (BI) will be used to calculate Agency Planning Levels. Fires of concern typically occur in steep and remote country where access is a problem.
- c. **Weather:** Hot and dry weather typically dominates the West 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.
- d. **Topography:** The West 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.
- e. **Fire Occurrence:** The West FDRA has an average of 40 fires per year.

2. Central FDRA

- a. **Location:** This includes lands administered by BLM, NDF, BIA, Sho-Pai, and USFS. This includes Southwest Elko county and a portion of the Northern quarter of Eureka County (some of which is in FDRA 454), and north to the Jarbidge Wilderness. It is bordered on the north by the Idaho/Nevada state line and to the east by the eastern boundary of the Humboldt -Toiyabe National Forest Jarbidge Wilderness, through FS Road 309 bearing south on SR 753 and SR 754 to Wells, south over the crests of the East Humboldt Range and Ruby Mountains on south to the White Pine county line, extending directly west to SR 306 in northern Eureka County. It is bordered on the west by a line following SR 306, north to I-80, then East along I-80 to Carlin. The western border is from Carlin north along SR 766 to the intersection with SR 736, proceeding north along SR 736 to SR 226, then tying in with SR 728 to the Idaho

border. These lands are primarily administered by the BLM, NDF, Sho-Pai and USFS with scattered tracts of private and state lands.

- b. **Fuels:** The fuels complexes of the Central 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 semi-arid salt desert shrub community with some sub alpine stands along the north, west and east boundaries. NFDRS fuel models that best represent the vegetative state are Models T, G, A, F, H and C. Burning Index (BI) will be used to calculate Interagency Planning Levels. Fires of concern typically occur in steep and remote country where access is a problem.
- c. **Weather:** Hot and Dry weather typically dominates the Central 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. Heavy snowfall amounts are typical for the sub-alpine terrain.
- d. **Topography:** The Central 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.
- e. **Fire Occurrence:** The Central FDRA has an average of 40 fires per year.

3. East FDRA

- a. **Location:** The East FDRA covers lands administered by the BLM, NDF, BIA, and USFS. The north and east borders start out along the Idaho/Utah/Elko county lines. The south border is the Elko/White Pine county line from Utah to the Ruby Mountains, then north along the crest of the East Humboldt mountains to Wells. The boundary continues north from Wells along SR 754 converging with SR 753 proceeding north to FS Road 309, and continues on FS Road 309 to forest boundary continuing along Forest Boundary north to the Idaho state line. These lands are primarily administered by the BLM, NDF, and Forest Service with scattered tracts of private and state lands.
- a. **Fuels:** The fuels of the East 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. Fuel models that best predict the vegetative state is NFDRS Fuel Model. A, T, and L. Burning Index (BI) will be used to calculate Interagency Planning Levels. Fires of

concern typically occur in steep and remote country where access is a problem.

- b. **Weather:** Hot and dry weather typically dominates the East 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. 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
- c. **Topography:** The East FDRA transitions from the higher-elevation based Central FDRA with its north-south trending ranges to a mixture of flats, deserts, mesas, and canyons.
- d. **Fire Occurrence:** The East FDRA has an average of 10-15 fires per year.

B. Weather Stations

1. Description

The following remote automatic weather stations (RAWS) are located within the areas covered by this plan (Map 1):

West FDRA	NWS ID	Elevation
<i>LONG HOLLOW*</i>	260305	5820'
<i>ANTELOPE LAKE*</i>	260310	5460'

Central FDRA	NWS ID	Elevation
<i>STAG MOUNTAIN*</i>	260313	6790'
<i>CRANE SPRINGS*</i>	260314	6400'

East FDRA	NWS ID	Elevation
<i>SPRUCE MOUNTAIN*</i>	260306	6100'
<i>SPRING GULCH*</i>	260308	5470'
<i>ROCK SPRING CREEK*</i>	260309	5400'

* Denotes S.I.G.

C. Fire Business

In order to define dispatch planning levels, fire business break points need to be set. A break point is a threshold at which an index such as the Burning Index (BI) or a component such as the Energy Release Component (ERC) correlates to a change in historical fire activity. Dispatch planning differs from adjective fire danger ratings because they take fire history and weather data into account.

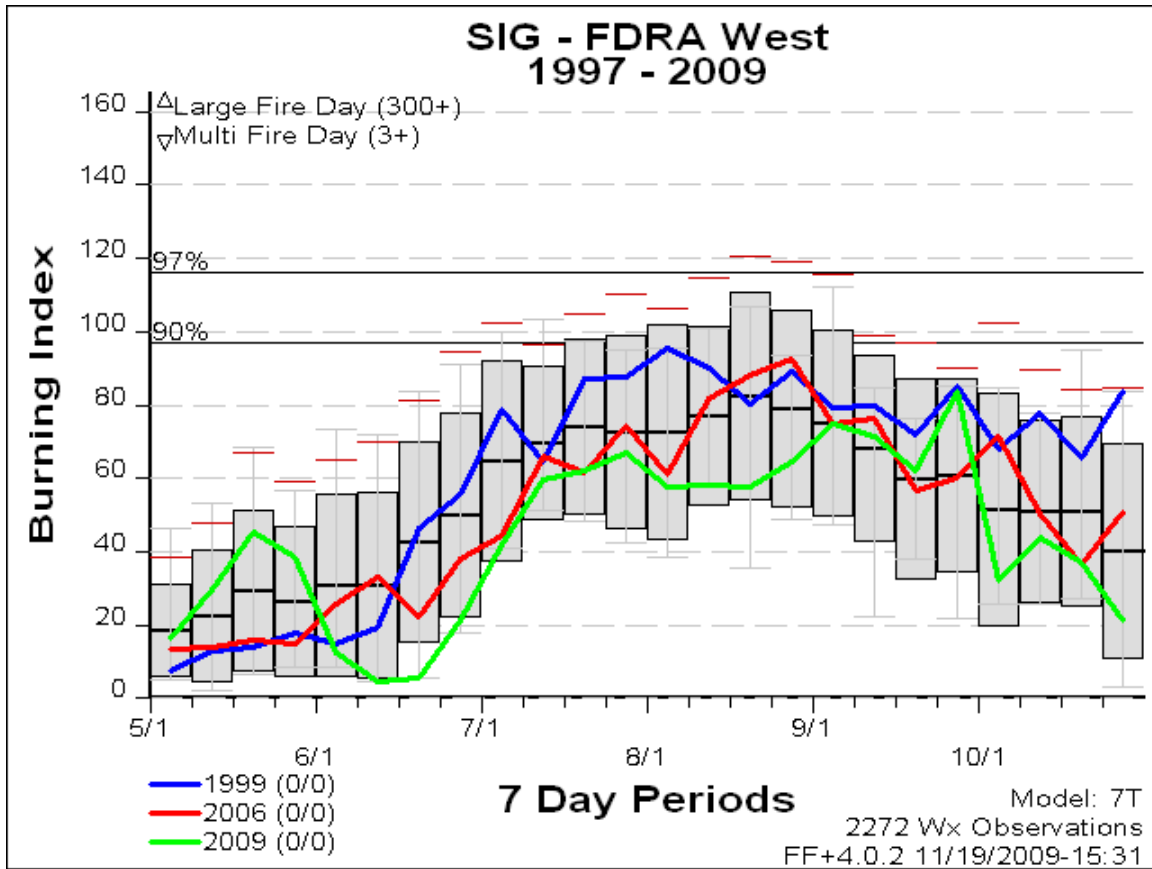
The Fire Family Plus software package is used to establish the fire break points. A statistical analysis based on historical weather and fire activity determines the appropriate index and associated break points for each of the FDRAS.

D. Fire Business Break Point Tables

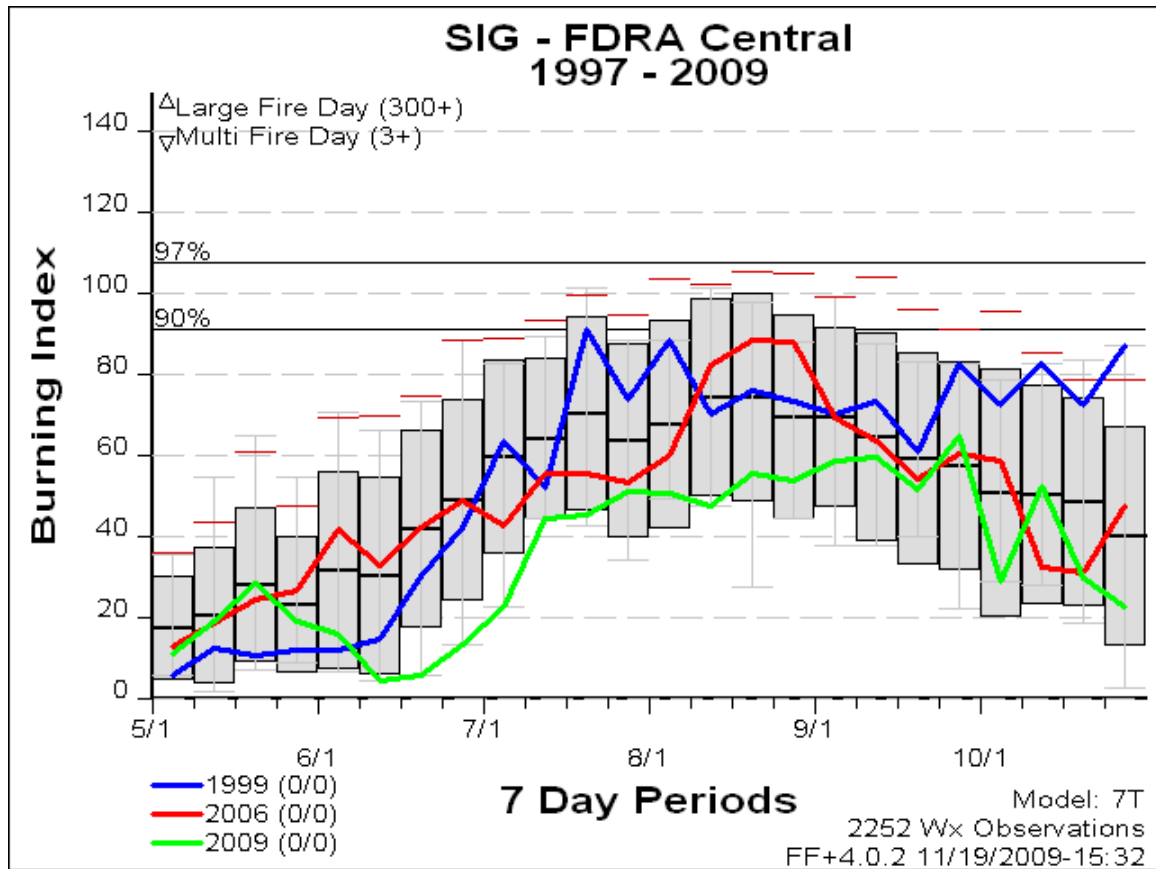
1. West Fire Danger Rating Area

Rating Area	RAWS	Start Date	Weighting Factor	Fuel Model	Staffing Index	Fire Business Break Point Ranges
West	Long Hollow Antelope Lake	1995 1995		T T	BI BI	IPL1 0-34
						IPL2 35-60
						IPL3 61-75
						IPL4 76-92
						IPL5 93+

Fire Family Plus Analysis Factors and Determinations



2. Central Fire Danger Rating Area

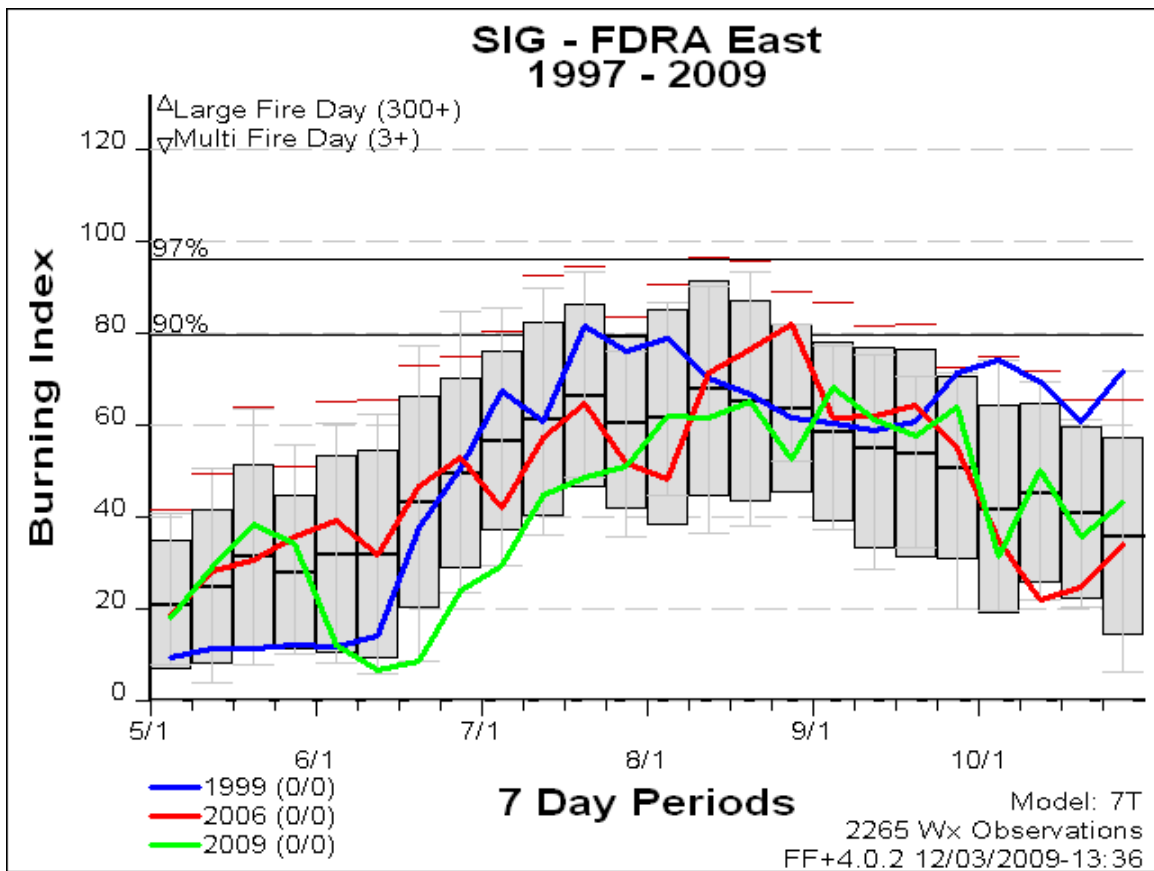


Rating Area	RAWS	Start Date	Weighting Factor	Fuel Model	Staffing Index	Fire Business Break Point Ranges
Central	Stag Mountain Crane Springs	1995 1995		T T	BI	IPL1 0-34 IPL2 35-60 IPL3 61-75 IPL4 76-92 IPL5 93+

3. East Fire Danger Rating Area

Rating Area	RAWS	Start Date	Weighting Factor	Fuel Model	Staffing Index	Fire Business Break Point Ranges
East	Rock Spring Creek	1995		T	BI	IPL1 0-34
	Spring Gulch	1995		T	BI	IPL2 35-60 IPL3 61-75 IPL4 76-92 IPL5 93+

Fire Family Plus Analysis factors and Determinations



Interagency Planning Levels and Preparedness Levels

A worksheet will be used to set daily levels. Interagency Planning Levels are separately determined for each fire danger rating area. The Interagency Planning Levels will be broadcast in conjunction with the morning information report and documented on the Morning Intelligence Report. Actual Interagency Planning Levels will be broadcast with the afternoon weather report. Adjective fire danger ratings will also be broadcast and documented in the same manner. Interagency Planning Levels are then combined in a flow chart for a final Preparedness level.

A. Interagency Planning Level Worksheet Instructions

1. **Index Value:** Determine the average index value (use forecasted or actual BI for all FDRAs) based on the weather stations for each fire danger rating area. These indices are forecasted by the National Weather Service based on the previous days 1300 RAWs observations, which are entered into WIMS by the EIDC Intelligence dispatcher.
2. **Action:** After the Interagency Planning Level is set, daily procedures are followed and suggested actions can be taken.

B. Dispatch Level Worksheet Instruction

1. **Index Value:** Determine the average index value (use 5-day averaged BI for all FDRAs to eliminate spiking of the data) based on the weather stations for each fire danger area. These indices are forecasted by National Weather Service based on the previous days 1300 RAWs observations, which are entered into WIMS by the EIDC Intelligence Dispatcher. Modifiers (list below) are then added to determine the dispatch level for the day.
2. **Red Flag Warning:** If a Red Flag Warning is forecasted, increase the index value as indicated in the worksheet.
3. **Haines Index:** If the Haines index is forecasted to be a six, increase the index value as indicated in the worksheet.
4. **Run Card:** Once the dispatch level of Low, Moderate, or High is determined, run cards from the Wildcad system are used to determine the response of suppression forces to an incident.

C. Adjective Fire Danger Rating Break Points

1. AFDR Description

Adjective fire danger break points are based on staffing classes (divisions of fire danger) and a staffing index/component (BI). Rather than use the standard 80-95% breakpoints for BI and 90-97% breakpoints for ERC, break points for all FDRAs were analyzed statistically to produce breakpoints that were well correlated with large fire (over 300 acres) occurrence. The procedure was to compute BI using Fuel Model T for the years 1989-2009, and then associate these values with records of BLM fires occurring in each FDRA.

There are five levels of adjective fire danger: low, moderate, high, very high, and extreme.

The resultant adjective fire danger information will be determined as part of the Agency Planning Level calculations.

D. Planning Level Worksheet – All Fire Danger Rating Areas

1. Interagency Planning level – Forecasted or Actual BI for the Fuel Model T _____

Forecasted or Actual BI	0-34	35-60	61-75	76-92	93+
Interagency Planning Level	1	2	3	4	5
Adjective Rating	Low	Moderate	High	Very High	Extreme

2. Dispatch Level Worksheet –

a. 5-day average **BI** for Fuel Model T - _____

b. Red Flag Warning – if one has been issued – add 20 points _____

c. Haines Index – if predicted to be a six – add 10 points _____

Final Index Value - _____

Index Value	0-34	35-75	76+
Dispatch Level	Low	Moderate	High

Interagency Planning Level: _____ Adjective Rating: _____ Dispatch Level: _____

E. Interagency Planning Level (IPL) Actions

Interagency Planning Level actions are guidelines, and as such are discretionary in nature, for agency personnel to refer to when planning level thresholds are reached. If an agency doesn't have a specific position that is listed within the IPL Table, that agency will utilize discretion as to what position will assume those roles.

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
Agency Administrator	Ensure resource advisors are designated and available for fire assignments.	✓	✓	✓	✓	✓	Agency
	Evaluate work/rest needs of fire staff and crews	✓	✓	✓	✓	✓	Agency
	Consider need for fire restrictions or closures			✓	✓	✓	Public Industry
	Provide appropriate political support to fire staffs regarding the implementation of planning level actions			✓	✓	✓	Agency
	If required, review severity requests submitted by each agency.				✓	✓	Agency
	Issue guidance to staff indicating severity of the season and increased need and availability for fire support personnel				✓	✓	Agency
	Evaluate need for a Fire and Aviation Team (FAST)				✓	✓	Agency

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
FMO	If planning level is decreasing, consult with Duty Officer/ EIDC Manager and consider release of pre-positioned or detailed personnel.	✓	✓	✓	✓	✓	Agency
	Evaluate season severity data (BI and ERC trends for season, fuel loading, live FM, drought indices, and long term forecasts).	✓	✓	✓	✓	✓	Agency
	Evaluate crew and staff work/rest requirements.	✓	✓	✓	✓	✓	Agency
	Brief agency administrator on burning conditions and fire activity	✓	✓	✓	✓	✓	Agency
	Review geographical and national preparedness levels and evaluate need to suspend local prescribe fire activities	✓	✓	✓	✓	✓	Agency
	Ensure Prevention Officer or PAO has initiated media contacts and public education contacts.	✓	✓	✓	✓	✓	Public Industry
	Ensure office staff are briefed on increasing fire activity	✓	✓	✓	✓	✓	Agency
	Brief Forest/State/Regional FMO on increasing 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 Public Industry
	Evaluate need for fire restrictions or closures.	✓	✓	✓	✓	✓	Public Industry
	Communicate with WGBCC Manager on geographical conditions and resources availability.	✓	✓	✓	✓	✓	Agency
	Request the Agency Administrator to issue guidance to office staff regarding the need for increased fire availability in support positions.	✓	✓	✓	✓	✓	Agency
	Consult with the State FMO/Forest Fire Staff Officer and agency administrators regarding potential need to pre-position a type 2 Team	✓	✓	✓	✓	✓	Agency

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5
EIDC Manager	Evaluate work/rest needs of the center staff	✓	✓	✓	✓	✓
	Input weather observations into WIMS	✓	✓	✓	✓	✓
	If preparedness level is decreasing, consider release of pre-positioned or detailed dispatchers and logistical support personnel	✓	✓	✓	✓	✓
	Begin tracking weekly conference calls with FMO's and Operations staff			✓	✓	✓
	Consult with Duty Officer concerning potential for extended staffing beyond normal shift length of IA staff			✓	✓	✓
	Consider pre-positioning or detail of off-unit IA dispatchers and logistical support personnel			✓	✓	✓
	Notify Local Procurement Team			✓	✓	✓
	Consider activation of local MAC Group			✓	✓	✓
	Consider ordering a Fire Behavior Analyst				✓	✓
	Consult with FMO's regarding need for severity request			✓	✓	✓
	Consider bringing additional dispatch personnel in from scheduled days off				✓	✓

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
Duty Officers	If planning level is decreasing, consider releasing pre-positioned and detailed resources	✓	✓	✓	✓	✓	Agency
	Ensure incoming pre-position or detailed personnel are briefed on local conditions.	✓	✓	✓	✓	✓	Agency
	Evaluate work/rest needs of IA crews	✓	✓	✓	✓	✓	Agency
	Consider aerial detection flight			✓	✓	✓	Agency
	Evaluate need to charge or shift duty hours of IA resources			✓	✓	✓	Agency
	Consider patrols and pre-positioning of local IA resources in high risk areas.			✓	✓	✓	Agency
	Consider extending staffing beyond normal shift length			✓	✓	✓	Agency
	Brief FMO on severity of conditions and consider severity requests.			✓	✓	✓	Agency
	Consider pre-positioning and/or detailing of additional IA resources from off-unit			✓	✓	✓	Agency
	Consider bringing in the local IA resources from scheduled days off.				✓	✓	Agency
	Consider patrols in camping and recreation areas.				✓	✓	Agency
	Consider suspending prescribed fire operations				✓	✓	Agency
	Consider automatic dispatch of heavy air tanker for IA				✓	✓	Agency

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
Fire Operation Supervisors	Ensure IA crews are briefed on local level, burning conditions, and availability of IA resources and air support	✓	✓	✓	✓	✓	Agency
	Evaluate work/rest needs of crew. Ensure days off are taken and request relief if needed	✓	✓	✓	✓	✓	Agency
	Ensure that an adequate daily briefing is provided	✓	✓	✓	✓	✓	Agency
	Ensure equipment and crew preparedness	✓	✓	✓	✓	✓	Agency
	Provide Duty Officer feedback regarding crew fatigue	✓	✓	✓	✓	✓	Agency
	Perform required check-ins-including checking-in when moving location during the day	✓	✓	✓	✓	✓	Agency
	Participate in prevention activities as required			✓	✓	✓	Agency
Provide duty officer with feedback regarding unique/unexpected fire behavior, severity conditions, and the need to increase IA capabilities				✓	✓	Agency	

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
Fire Prevention / Mitigation	Contact Public Information Officer / Local Media to inform of the start of the fire season and the potential for local fire danger to increase	✓	✓	✓	✓	✓	Agency
	Provide public and industrial entities with access to fire danger information, closures, restrictions, and warnings	✓	✓	✓	✓	✓	Agency
	Ensure the public and industrial entities are aware of the policy of fire investigation and potential consequences related with the incident cost recovery process	✓	✓	✓	✓	✓	Agency
	Consider need for increased fire prevention patrols			✓	✓	✓	Agency
	Contact local industrial entities to inform of hazard and risk.			✓	✓	✓	Agency
	Contact local fire chiefs and inform of increased fire danger.			✓	✓	✓	Agency
	Consider door to door contacts in rural communities.			✓	✓	✓	Agency
	Post signs and warning in camping and recreation areas.			✓	✓	✓	Agency
	Notify local media if High/Extreme fire danger and the need for increased public caution.			✓	✓	✓	Agency
	Consult FMO regarding severity request and the need for additional prevention personnel or fire prevention team.			✓	✓	✓	Agency
	Consult with FMO regarding need for fire restrictions or closures				✓	✓	Agency

Responsible Party	Suggested Action	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5	Affected Entity
Law Enforcement	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				✓	✓	Agency
	Consult with Fire Prevention Personnel and FMO regarding need for fire restrictions or closures.				✓	✓	Agency

F. Preparedness Plan

EIDC Preparedness Levels are established by the NNFOG MACG throughout the calendar year. Preparedness levels are dictated by burning conditions, fire activity and resource availability. Resource availability is the area of most concern. Situations and activities described within the preparedness levels consider wildland and prescribed fire.

1. **Why Preparedness Levels Are Established--EIDC:**
 - A. To identify the level of wildland and prescribed fire activity, severity and resource commitment within the EIDC zone.
 - B. To identify actions to be taken by EIDC to ensure an appropriate level of preparedness/readiness for the existing and potential situation.
 - C. To guide, modify and direct EIDC Fire Management activities when essential to ensure agency preparedness or response capabilities.

The EIDC Manager will monitor the area's wildland and prescribed fire activity and Geographic Area Preparedness Levels and determine Preparedness Levels. **As levels increase, all management direction/considerations from each previous level will automatically be continued at the next higher level.**

2. Preparedness Level (PL) Descriptions:

<p>Preparedness Level 1</p>	<p>Description: No large fire activity in progress. All WIMS indices (adjective levels) indicate low to moderate fire 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.</p>
<p>Preparedness Level 2</p>	<p>Description: 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.</p>
<p>Preparedness Level 3</p>	<p>Description: 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.</p>
<p>Preparedness Level 4</p>	<p>Description: 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.</p>
<p>Preparedness Level 5</p>	<p>Description: 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.</p>

3. Preparedness Level Suggested Actions

Suggested Action	PL 1	PL 2	PL 3	PL 4	PL 5	Affected Entity
EIDC will report all status of all fires to WGBCC.	✓	✓	✓	✓	✓	EIDC Manager
Ensure all primary suppression forces are fire ready.		✓	✓	✓	✓	FMO's
EIDC will develop and disseminate a Daily Intelligence Report.		✓	✓	✓	✓	EIDC Manager/ Intelligence
EIDC will ensure updated and accurate AD hire list is available.			✓	✓	✓	EIDC Manager
Daily morning staffing reports to be submitted to EIDC by Duty Officers.		✓	✓	✓	✓	Duty Officers
Assess resource availability from neighboring agencies.			✓	✓	✓	FMO's
Consider pre-positioning Smoke Jumpers or Hot Shot Crews.			✓	✓	✓	FMO, AFMO, and Duty Officers
Consider ordering additional EIDC and Fire Program Managers, i.e. Leadership and Management Positions.			✓	✓	✓	Line Officer, FMO's and EIDC Manager
Coordinate pre-positioning of resources as may be appropriate.			✓	✓	✓	Duty Officer
Consider the need to extend daily staffing.			✓	✓	✓	Duty Officer
Coordinate wildland fire restrictions.			✓	✓	✓	FMO's, Line Officers
Establish daily or more frequent Elko MAC Group conference calls.			✓	✓	✓	Elko MAC Chair
Establish daily or weekly coordination meetings or conference calls for all zone Agency Administrators.			✓	✓	✓	
Line Officer will consider making all fire qualified individuals available for district assignments.				✓	✓	Line Officer and FMO's
Add Liaison Officer/ensure coordination with local Fire Departments or cooperators.					✓	FMO, AFMO and Duty Officers

4. Preparedness Level Step-down Criteria

a. Preparedness Level 5 to 4:

Description: Competition for resources has significantly decreased. No critical fire weather events are forecasted for the next 48 hours and moderating weather conditions are forecast for the next three to five days.

b. Preparedness Level 4 to 3:

Description: Significant demobilization is occurring. Crews are being released daily and sent to home units. Local Initial Attack resources are available for new fires. Moderating conditions are forecasted for the next 48 hours and higher humidity and lower temperatures are forecast for the area.

c. Preparedness Level 3 to 2:

Description: The majority of large fires are contained. All Initial Attack resources are again available. Large areas are expected to receive precipitation with associated higher humidity and lower temperatures.

d. Preparedness Level 2 to 1:

Description: No large fires are staffed, and minimal initial attack is occurring. Weather conditions have moderated so that the likelihood of multiple ignitions or large fires is small. No critical fire weather events are forecasted in the foreseeable future.

G. Draw-Down Levels

1. **Description:** The draw-down levels define the minimum number of firefighting resources available on unit at various Interagency Planning Levels.

A. These agencies do not have draw-down tables based upon management preference and number of resources. These agencies will make daily decisions regarding their respective draw-down and will communicate these decisions to EIDC.

2. **Northeast Nevada Interagency Fire Resources**

A. Extenuating circumstances (such as holidays) may necessitate staffing more resources than indicated below at Interagency Planning Levels 1 through 3. Ordering additional resources to meet minimum levels will occur on a case-by-case basis through consultation with FMO's or local MAC group. The following table establishes draw-down levels for NE NV Interagency Fire Management.

Resource	IPL 1	IPL 2	IPL 3	IPL 4	IPL 5
Type 3 Engine			1	1	1
Type 4 Engine	1	5	6	8	9
Type 6 Engine				1	1
Water Tender					1
Dozer					1
Helicopter		1	1	1	1
SEATs				1	1
Air Attack		1	1	1	1

At IPLs 4 and 5, off-unit resource requests will be considered on a case-by-case basis. For example, there may be a chance to get a trainee qualified or the manager may have strong indications that the Planning Level will drop.

4. **Program Leadership**

- A. The **FMO**, or designated acting FMO or will be available on unit in all Planning Levels.
- B. At Planning Levels 4 and 5 the **AFMOs**, or designated acting AFMO will be available on unit.
- C. At least one **qualified ICT3** will be available on unit in all planning levels. At Planning Levels 3, 4 and 5, fire leadership staffing levels will be adjusted as national / local fire situation warrants. The FMO and AFMO(s) will not be gone off unit at the same time.
- D. The **EIDC Manager** or designated acting will be available on unit at all Planning Levels. At Planning Levels 4 and 5, the **EIDC Manager** or designated acting and two EIDC Assistant Managers will be available on unit.