# Teton Interagency

## *Fire Danger Operating Plan*

May 2021

Coburn Creek Fire 2019

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# Contents

# I. Introduction

## A. Purpose

The Teton Interagency Fire Danger Operating Plan (FDOP) documents the decision-making process for agency administrators, fire managers, dispatchers, and firefighters by establishing interagency planning and response levels. The public, industry, and our agency personnel expect the wildland fire management agencies to implement appropriate and timely decisions which result in safe, efficient, and effective wildland fire management actions. An appropriate level of preparedness to meet wildland fire management objectives is based an assessment of vegetation, climate, and topography utilizing the National Fire Danger Rating System (NFDRS). This plan provides a science-based risk management "tool" used to inform interagency fire managers to make fire related decisions.

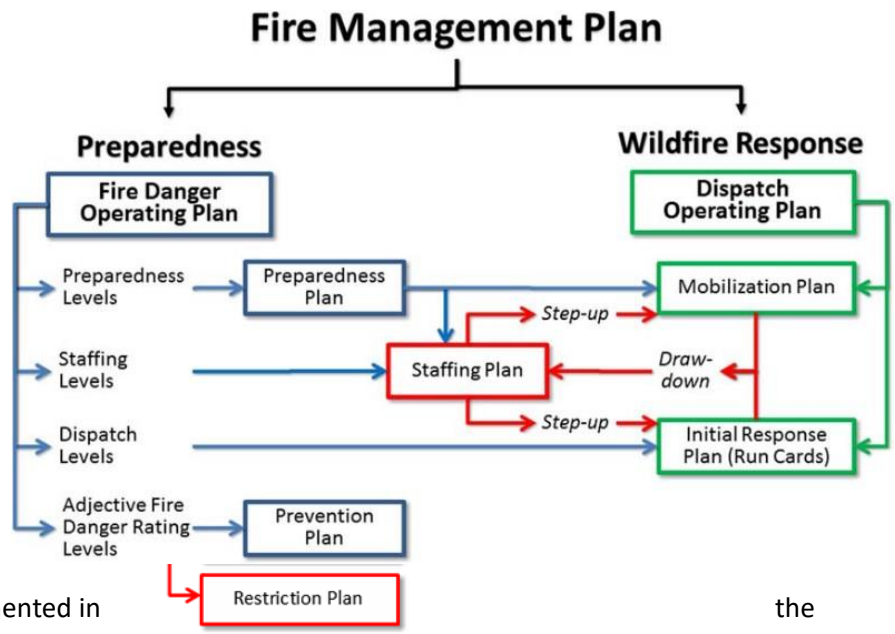
## B. Operating Plan Objectives

1. Provide a tool for agency administrators, fire managers, dispatchers, agency co-operators, and firefighters to correlate fire danger ratings with appropriate fire business decisions in a fire danger planning area.
2. Delineate fire danger rating areas (FDRAs) within the fire danger planning area with similar climate, vegetation, and topography.
3. Document the interagency fire weather-monitoring network consisting of Remote Automated Weather Stations (RAWS) that comply with the NWCG Interagency Wildland Fire Weather Station Standards & Guidelines (PMS 426-3).
4. Determine climatological breakpoints and fire business thresholds using the Weather Information Management System (WIMS), National Fire Danger Rating System (NFDRS), and FireFamilyPlus software to analyze and summarize an integrated database of relevant historical fire weather and fire occurrence data.
5. Define roles and responsibilities to make fire preparedness decisions, manage weather information, and brief fire personnel regarding current and potential fire danger.
6. Determine the most effective methods for fire managers to communicate the current and expected 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. Develop and distribute Fire Danger Pocket Cards to all personnel involved with fire management within the fire danger planning area.
10. Identify program needs and suggest improvements for implementation of the Fire Danger Operating Plan.

## C. Fire Danger Operating Plan

Interagency policy and guidance require 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 Grand Teton National Park's Fire Management Plan and Bridger-Teton National Forest's Fire Management Reference System; 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.




The decision points are identified and documented in the Teton Fire Danger Operating Plan.

### a. Staffing Plan

The Staffing Plan describes the expected daily resources needed and initial response actions based on expected risk (human and lightning) and predicted burning conditions.

Decision points are identified and documented in the Teton Fire Danger Operating Plan; the associated decisions and planned actions are located in the appendix.

### 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. The Preparedness Levels are identified and documented in the Teton Fire Danger Operating Plan; the associated decisions and planned actions are located in the appendix.

## Wildfire Response

### a. Initial Response Plan

Initial response plans, also referred to as run cards, specify the fire management response (e.g. number and type of assets to dispatch) within a defined geographic area to an unplanned ignition, based on fire weather, fuel conditions, fire management objectives, and resource availability. Three response levels are identified and documented in the Teton Fire Danger Operating Plan(Low,Moderate,High). The number and type of resources dispatched to a reported fire (Initial Response Plan) is incorporated into the Staffing Plan.

The Initial Response Plan outlines fire response actions to be taken for each response level. Those actions are to be considered guidelines as we want to encourage interaction with associated duty officers to inform initial response actions based on risk assessments and other pertinent information.

**b. Local Mobilization Plan**

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

### D. Policy and Guidance

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

- U.S. Forest Service – Manual 5120 - Fire Management - Preparedness
- National Park Service – Reference Manual 18, Chapter 5 – Preparedness

## II. Fire Danger Planning Area Inventory and Analysis

### A. 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. After these environmental factors were considered, the draft FDRAs were edge-matched to existing administrative boundaries using Response Areas. It is important that existing Response Areas are not split by FDRAs; a Response Area must not have two FDRAs to avoid additional workload and confusion for operational personnel. The final FDRA delineation is depicted here:

1. FDRA Map


*Figure 1 - Map of Fire Danger Rating Areas (FDRAs)*

2. FDRA Table

| Fire Danger Rating Area | Acreage | % of Total |
|---|---|---|
| Teton | 1,914,078 | 49 |
| Wind | 808,841 | 21 |
| Wyoming | 1,186,133 | 30 |

3. FDRA Descriptions

*Climate (Common to all)*

The climate in the Teton Interagency Area is characterized by a typical continental climate, with large daily and seasonal temperature changes. Summers are short with moderate daytime temperatures and cool nights. Winters are long and cold. High temperatures in the summer range from the low 70's at the higher elevations and mid 80's at the low elevations. Average low temperatures during winter months reach near zero. Freezing temperatures can occur at all elevations yearlong.

Summertime prevailing winds are generally from the southwest, except where modified by local topography. Strong wind events are normally associated with thunderstorms and cold front passages. Cold front passages are an important concern during late summer and early fall when fuels are at their driest and can have a dramatic effect on fire behavior. These winds were one of the significant factors in the growth of the large and widespread 1988 greater Yellowstone area fires. Other late season fires such as the 2018 Roosevelt and Martin fires were driven by several consecutive days or warm, dry and windy September weather.

*Specific Attributes*

**a. Teton**

- General Location:

  The Teton FDRA is approximately 1.9 million acres in size and includes Grand Teton NP, Blackrock RD, Jackson RD, small portion in the northeast corner Big Piney RD, and small portion in the northwest corner of the Pinedale RD. It covers parts of Sublette, Lincoln, Teton, Park, and Fremont Counties.

  The North Zone, BTNF and Grand Teton National Park are bordered on the north by Yellowstone National Park, on the west by the Caribou-Targhee NF, the Shoshone NF on the east, and the East and West Zones of the BTNF to the south.

- Vegetation:

  Predominant vegetation types are sagebrush and mixed conifer with brush understory. Riparian areas are frequent within each vegetation type. Lower elevation fuels also include a large component of annual and perennial grasses. Higher elevations are often above the “tree line”, where slopes of continuous stands of mixed conifer give way to high elevation meadows and isolated stands of whitebark pine.

  Vegetation in these areas is made up of perennial grasses, forbs and low brush. Typical of many areas in the Intermountain West, increasing evidence of insect infestations are showing up in mixed conifer forests. Particularly evident are pine beetle outbreaks affecting lodgepole and whitebark pine stands.

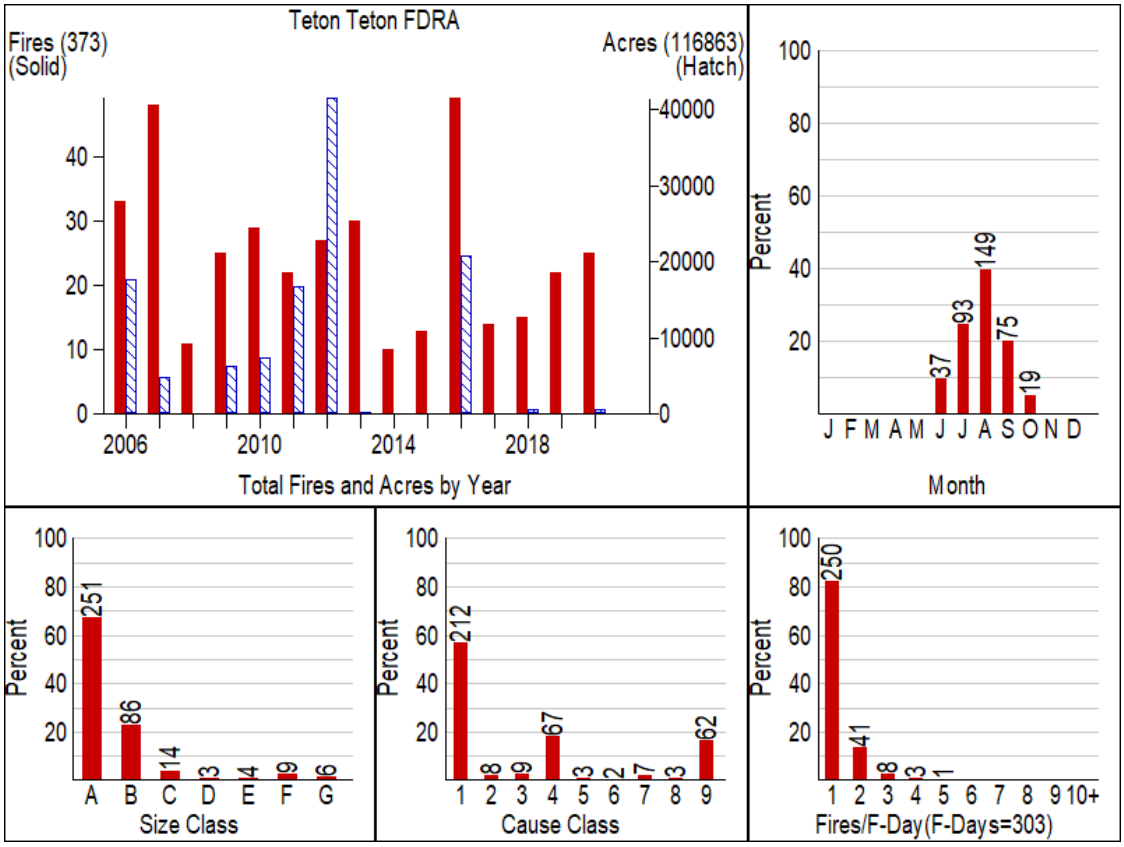
- Topography:

  The topography in the Teton FDRA typifies that of the northern Rocky Mountains, and contains a mix of moderate, rolling country and dramatic steep peaks and drainages. Elevations range from 5,620 feet at Palisades Reservoir to 13,775 feet at the summit of the Tetons.

  The northern end of the Forest – parts of the Teton Wilderness, and the area from the Mount Leidy Highlands to Union Pass – contain large areas of rolling topography with significant stands of continuous timber. Scattered meadows and bare ridges interrupt fuel continuity, but large fires like the 2012 North Buffalo and 2016 Berry are possible.

  The major geographic features that run through the FDRA include the Hoback Mountains, Gros Ventre Mountains, Jackson Hole Basin and the Teton Range.

**Teton – Fire Summary Graph 2006-2020**




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 | |

The Teton FDRA historically has the largest number of fires on average each year. The peak of the fire season runs from about mid-July thru early September. Lightning and campfire cause classes account for most of the fire starts.

**b. Wind**

- General Location:

  The Wind FDRA includes most of the Pinedale Ranger District, except for a portion of the District that is contained in the Teton FDRA. Lower elevation BLM lands intermixed with private lands abut much of the west side of the FDRA.

- Vegetation:

Large areas of sagebrush and grass occur along the “Pinedale Front” that borders the west side of the Wind Rivers. These large areas of the continuous grass/shrub fuels provide a receptive fuel bed for large and fast moving rangeland fires.

Moving further towards the Winds and higher elevation, there are more areas of Aspen and conifer. These mid elevation areas also include large meadows and deep canyons that may act as barriers to fire spread.

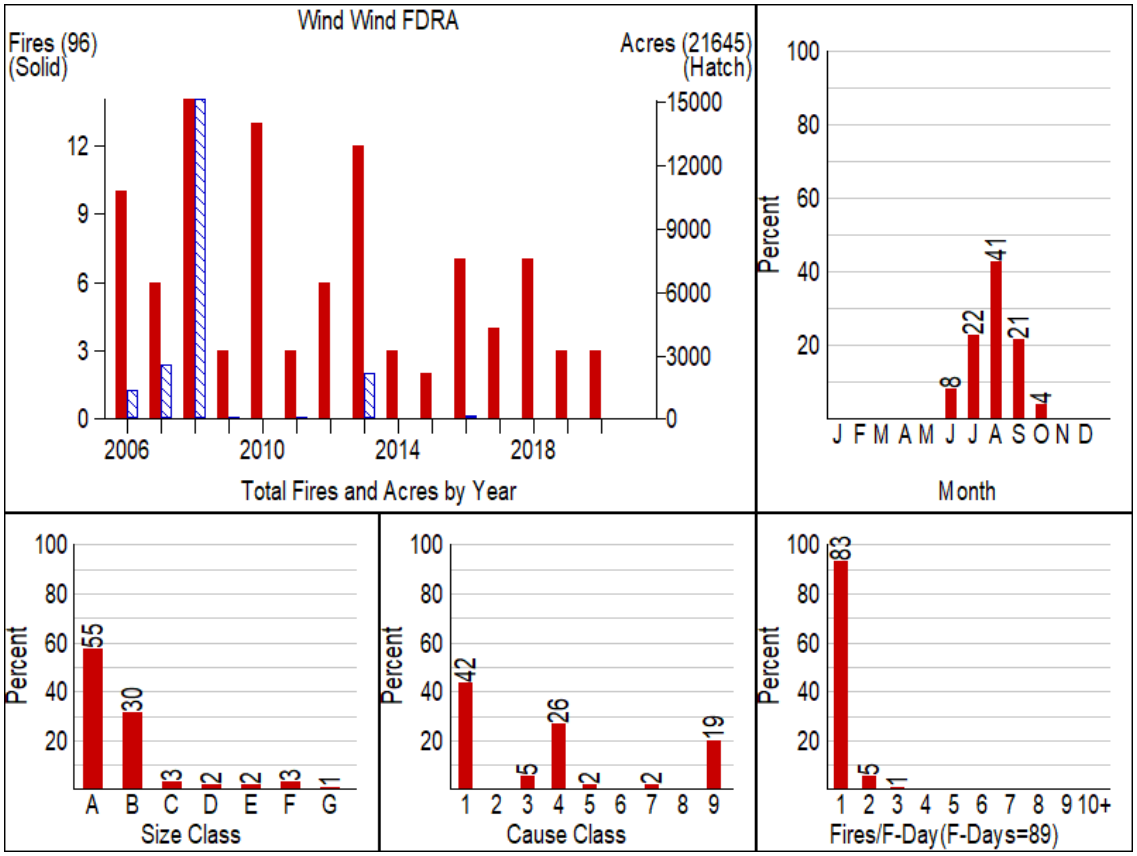
The higher elevations have only scattered trees as the vegetation approaches tree line.

- Topography:
  Topography in the Wind FDRA is dominated by the Wind River Mountains that run northwest to southwest. The continental divide defines the eastern boundary of the Pinedale District and the Wind FDRA. The headwaters of the Green River begin on the northwest end of the Wind Rivers, and define the upper Green River Valley that separates the Wind River Range and the Gros Ventre Range north of the Green.

  Elevations range from 5,600 feet on the valley floors to 13,800 feet on the Wind River crest.

  Because of the topography, most fires burn east/northeast up and into the Wind River Range. The Wind River Range provides substantial fuel breaks at the upper elevations, but the low- and mid-elevations have steep slopes and canyons that can encourage significant fire runs.

**Wind – Fire Summary Graph 2006-2020**



| Size Class: | | | | Cause Class: | |
|---|---|---|---|---|---|
| A = | 0 -- | .25 | acres | 1 = Lightning | 6 = Railroad |
| B = | .30 -- | 9 | acres | 2= Equipment | 7 = Arson |
| C = | 10 -- | 99 | acres | 3 = Smoking | 8 = Children |
| D = | 100 -- | 299 | acres | 4 = Campfire | 9 = Misc |
| E = | 300 -- | 999 | acres | 5 = Debris Burning | |
| F = | 1000 -- | 4999 | acres | | |
| G = | 5000 + | acres | | | |

The Wind FDRA historically has the fewest fires annually compared to the other FDRA's. There have been very few multiple fire days in this FDRA. The peak of the fire season is a bit shorter than the other FDRA's with August being the most active. Similar to the other FDRA's lightning and campfires account for the majority of the fire starts.

### c. Wyoming

- General Location:

  The Big Piney, Kemmerer, and Greys River Districts constitute this FDRA.

- Vegetation:

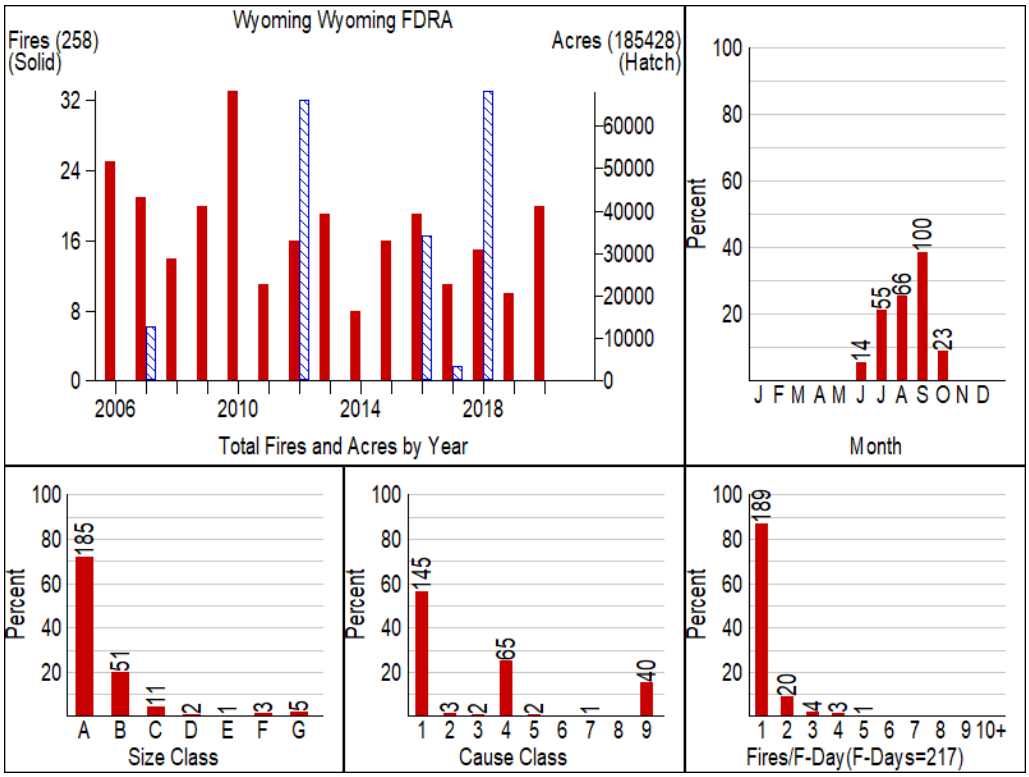
  Vegetation is similar to the rest of the Teton area. There are more areas of open sagebrush/ grass on the southern end, especially in the Hams Fork and La Barge areas. These areas also include large riparian and aspen/shrub communities. Mixed conifer, including lodgepole pine, subalpine fir, Engelmann Spruce and some Douglas-fir grow in substantial stands. Extensive past timber harvest units are evident at the mid to lower elevations.

- Topography:

  The FDRA is characterized by several north to south mountain ranges including the Wyoming and Salt Ranges on the northern half, and Porcupine, Absaroka, Commissary, and Deadline Ridges on the south end. The Upper Greys river runs north between the Wyoming and Salt Ranges towards the town of Alpine where it flows into the Snake River.

  The Salt River Range and the Wyoming Range provide substantial fuel breaks at the upper elevations, but the low- and mid-elevations have steep slopes and canyons that can encourage significant fire runs.

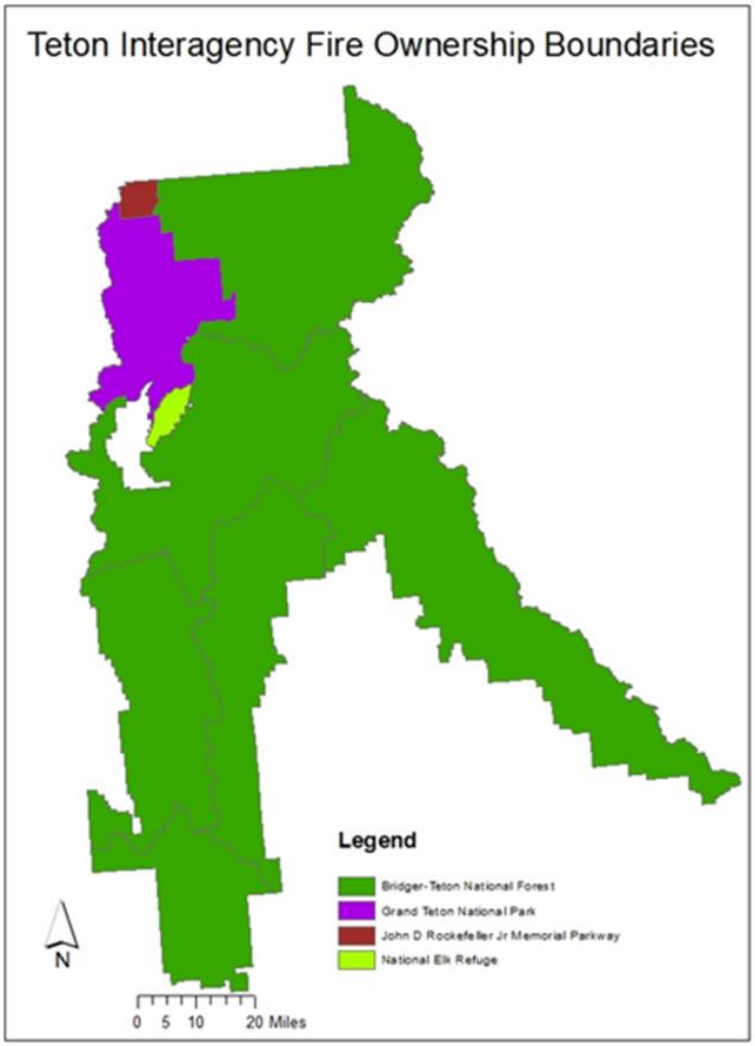
**Wyoming – Fire Summary Graph 2006-2020**




The Wyoming FDRA falls in between the Teton FDRA and Wind FDRA for number of fire starts and the numbers of multiple fire start days. The peak of the fire season is a bit later than the other FDRA's with more fires in September and October. Again, lightning and campfires account for the majority of fire starts.

## B. Administrative Units

The administrative units represented in this plan are Bridger-Teton and Grand Teton National Park. The National Elk Refuge is included within the analysis area but is not formally considered part of this plan. Additionally, state, private and several very small BLM parcels of land lie within or adjacent to the analysis area.



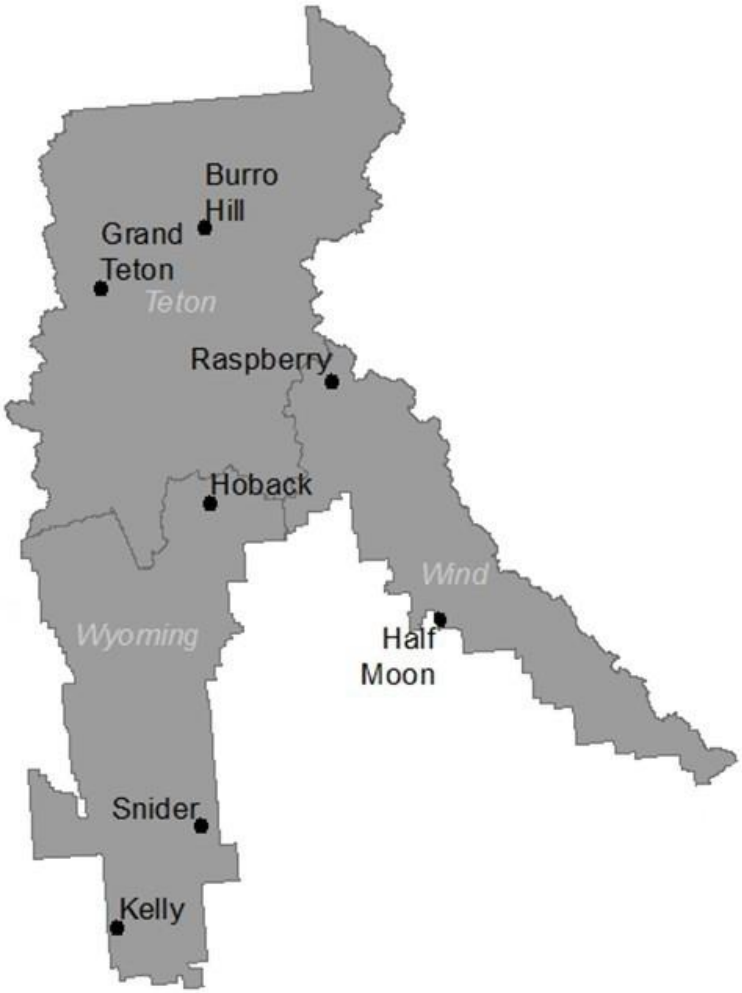

| Agency | Acreage |
|---|---|
| Grand Teton National Park | 333,772 |
| John D. Rockefeller Jr. Memorial Parkway | 24,000 |
| Bridger-Teton National Forest | 3,465,101 |
| FWS National Elk Refuge | 24,700 |

## 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.

There are seven permanent operational RAWS located in the Teton Interagency area. Each of the RAWS locations was selected to be representative of the primary fuel model used for inputs into NFDRS and representative of the general weather conditions

The BT and Grand Teton also maintain four portable RAWS stations with satellite transmission capability. The stations are located at the Interagency Fire Cache in Jackson.



RAWS Catalogue Table (Active Stations Only)

| STATION NAME | WIMS ID | AGENCY / OWNER | AVAIL DATA YEARS | ELEV | LATITUDE | LONGITUDE | REPORTING TIME |
|---|---|---|---|---|---|---|---|
| Hoback | 481302 | FS | 1964-2020 | 6726 | 43.2203 | -110.4231 | XX:51 |
| Snider | 481306 | FS | 1982-2020 | 8242 | 42.4908 | -110.5267 | XX:09 |
| Burro | 480707 | FS | 1989-2020 | 7166 | 43.897 | -110.3708 | XX:52 |
| Raspberry | 481307 | FS | 1982-2020 | 8800 | 43.4722 | -110.0183 | XX:10 |
| Half Moon | 481309 | FS | 1997-2020 | 8530 | 42.9136 | -109.7461 | XX:26 |
| Grand Teton | 480708 | NPS | 1989-2020 | 6710 | 43.7236 | -110.7103 | XX:58 |
| Kelly | 481208 | FS | 2005-2020 | 8180 | 42.2761 | -110.8061 | XX:00 |

1. Fire Danger Areas, Special Interest Groups (SIGs) and Analysis Inputs

**TETON FDRA and SIG**

| | |
|---|---|
| Large Fire Size (acres) | 10 |
| Multiple Fire Day (fires/day) | 2 |

| Weather Station Number → | RAWS #1 | RAWS #2 | RAWS #3 |
|---|---|---|---|
| Weather Station Name | Raspberry | Hoback | Grand Teton |
| | 481307 | 41302 | 480708 |
| Weight | 1.0 | 1.0 | 1.0 |
| NFDRS Fuel Model | Y | Y | Y |
| Data Years Used in Analysis | 2006-2020 | 2006-2020 | 2006-2020 |
| Slope Class | 03 | 03 | 03 |
| Climate Class | 03 | 03 | 03 |
| Herbaceous Type | perennial | perennial | perennial |
| Green-up Date (estimate) | June 1 | June 1 | June 1 |
| Freeze Date (estimate) | Sept. 15 | Sept 15 | Sept 15 |

**WIND FDRA and SIG**

| | |
|---|---|
| Large Fire Size (acres) | 10 |
| Multiple Fire Day (fires/day) | 2 |

| Weather Station Number → | RAWS #1 | RAWS #2 |
|---|---|---|
| Weather Station Name | Raspberry | Half Moon |
| | 481307 | 481309 |
| Weight | 1.0 | 1.0 |
| NFDRS Fuel Model | Y | Y |
| Data Years Used in Analysis | 2006-2020 | 2006-2020 |
| Slope Class | 03 | 03 |
| Climate Class | 03 | 03 |
| Herbaceous Type | perennial | perennial |
| Green-up Date (estimate) | June 1 | June 1 |
| Freeze Date (estimate) | Sept 15 | Sept 15 |

**WYOMING FDRA and SIG**

| | |
|---|---|
| Large Fire Size (acres) | 10 |
| Multiple Fire Day (fires/day) | 2 |

| Weather Station Number → | RAWS #1 | RAWS #2 | RAWS #3 |
|---|---|---|---|
| Weather Station Name | Kelly | Snider | Hoback |
| | 481208 | 481306 | 481302 |
| Weight* | 1.7 | 1.0 | 1.0 |
| NFDRS Fuel Model | Y | Y | Y |
| Data Years Used in Analysis | 2006-2020 | 2006-2020 | 2006-2020 |
| Slope Class | 03 | 03 | 03 |
| Climate Class | 03 | 03 | 03 |
| Herbaceous Type | perennial | perennial | perennial |
| Green-up Date (estimate) | June 1 | June 1 | June 1 |
| Freeze Date (estimate) | Sept 15 | Sept 15 | Sept 15 |

# III. Fire Danger Analysis

In order to apply a fire danger system to assist managers with fire management decisions, ignition risks need to be identified, and associated with a specific target group to determine the most appropriate fire danger-based decision "tool" to mitigate the given issue.

## A. Fire Cause Identification

The most appropriate prevention 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 manage wildland fires. This includes Federal, State, and County land management employees, along with volunteer fire departments who share a similar 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, lodges, campgrounds, 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).

## B. Fire Cause Analysis

Fire occurrence data was analyzed for each FDRA and the following fire causes were identified. Based on these fire causes, the underlying problems were identified as well as the target group to communicate with to identify potential solutions.

The following statistical data was considered for the 15-year time period from 2006-2020.

*Table 1 Planning Area Fire Causes*

| FDRA | Total # of fires | Lightning Cause | Campfire Cause | Other Cause Classes |
|---|---|---|---|---|
| Teton | 373 | 212 | 67 | 62 |
| Wind | 96 | 42 | 26 | 19 |
| Wyoming | 258 | 145 | 65 | 40 |
| Totals | 727 | 399 | 158 | 121 |

Lightning and campfires combine for the majority of fires for each planning area. The remaining causes are distributed randomly across the other classifications and include equipment, smoking, debris burning, arson, children and miscellaneous causes.

Lightning caused fires require that Agencies prepare themselves for predicted storms. Agency personnel become the target group where fire preparedness and proper staffing are essential. Lightning has the potential to start multiple fires in challenging terrain. The majority of our multiple fire days are a result of lightning.

Campfire caused fires requires interactions with the public and recreation personnel as well as other entities. The public and agency personnel are the target groups. Campfires are less predictable especially in this area where recreational activity is very busy from Memorial Day weekend through hunting season in October.

# IV. Fire Danger Decision Analysis

Decision points can be based upon either:

- Climatological Breakpoints, or
- Fire Business Thresholds.
- Combination of both

The Fire Decision Summary, Sec. D, provides a summary of the planning area's fire danger problems and how each problem is addressed. 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.

The following are the calculated climatological thresholds by FDRA:

Analysis period = June 1 – Oct 31, 2006-2020,

Green- up June 1

**Teton FDRA**
**90th ERC = 44 (43.54)**
**97th ERC = 48 (48.11)**

**Wind FDRA**
**90th ERC = 44 (44.37)**
**97th ERC = 49 (48.96)**

**Wyoming**
**90th ERC = 47 (46.99)**
**97th ERC = 52 (51.70)**

## B. Fire Business Analysis

The main fire causes are lightning and abandoned/unattended campfires.

The decision tools require a slower responding fire danger indicator to inform the agency for preparedness and prevention purposes and the public for information purposes. The agency also requires more rapidly responding indicators to inform day to day staffing and initial dispatch response to new fire starts/smoke reports.

Large fire day and multiple fire day thresholds were determined based on a fire business analysis using ERC and BI with a NFDRS Y fuel model. Fuel model Y was determined to be most representative of the fire danger response in this area and ERC and BI were determined to meet the needs and time frames of the target groups.

A large fire day was determined to 10 acres for each FDRA. A 10-acre timber fire is approximately the break point where a fire would go beyond initial attack and potentially require additional resources from off unit. A multiple fire day was set at 2 for the analysis. This worked best for the analysis, as the unit does not experience multiple fire days often.

## C. Correlation with Fire Occurrence

The analysis using the above parameters provided an adequate correlation with fire occurrence. Fire business decisions can be made with confidence utilizing the identified breakpoints for associated plans.

### D. Decision Summary Narrative

The FDOP utilizes ERC and Fuel Model Y with five breakpoints to determine preparedness levels and adjective ratings. The Staffing plan also utilizes ERC and Fuel Model Y with five breakpoints to determine staffing levels. Additionally other factors such as 7 day outlook, fire activity, etc. will inform preparedness and staffing levels. A combination of climatological breakpoints and fire business thresholds were taken into account when determining breakpoints for staffing.

NFDRS Fuel Model Y (Timber) has proven to be best fit for the majority of the Teton Interagency Fire area The FDOP will transition to the 2016 fuel models in 2021.

To address human-caused fires, the prevention plan incorporates communication methods for reaching out to the public, industry and other entities to ensure awareness of fire danger and to provide educational tools to help deter future human caused fires for this highly active recreational area.

A key distinction for the Teton Interagency Fire program is that not all wildland fires are problems. Human-caused fires are considered unwanted fires. Lightning caused fires that occur under certain weather and fire behavior conditions and meet Land Management Plan goals may be managed for resource benefit. Dispatch run cards address these considerations as defined by response zones.

The FDOP also is used as a tool to provide broad level intelligence for prescribed burn planning and scheduling.

## V. Fire Danger Rating Levels

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. 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 discussion. The system is designed to model worst-case fire danger scenario. 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.

Refer to the Staffing, Initial Response, and Preparedness Plans in the Appendices for more information

### A. Initial Response Plan

Responses are planned actions which identify the number and type of resources (engines, crews, aircraft, etc.) initially dispatched to a reported wildland fire based upon staffing level and location.

The Initial Response Plan defines Response Levels based on a combination of BI and ERC for each FDRA along with the new start location within the FDRA. Duty officers may adjust initial response actions based on risk assessments and other pertinent information.

## B. Staffing Levels

Staffing Levels will be used to make daily internal fire preparedness and operational decisions. At the local level, the staffing level forms a basis for decisions regarding the "degree of readiness" for initial attack and support resources. Specific 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. Local staffing levels for the Teton Interagency Zone (1-5) are initially determined from climatological breakpoints, then adjusted based on local experience tied to an analysis of fire business.

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | 49+ | |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | 49+ | |
| Wyoming | 0-12 | | 13-29 | | 30-43 | | 44-52 | 53+ | |
| | ↓ | | ↓ | | ↓ | | ↓ | ↓ | |
| High Risk Triggers Defined by Great Basin 7 Day Outlook | N | Y | N | Y | N | Y | N | Y | |
| Staffing Level | I | II | | III | | IV | | V | |

**Duty Officers have the discretion to "step up" staffing for increased human caused risk, such as 4th of July, Pioneer Days, or opening of hunting season.**

## C. 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.

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | | 49+ |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | | 49+ |
| Wyoming | 0-12 | | 13-29 | | 30-43 | | 44-52 | | 53+ |
| | ⇩ | | ⇩ | | ⇩ | | ⇩ | | ⇩ |
| Local Fire Activity | NO | YES | NO | YES | NO | YES | NO | YES | |
| Preparedness Level | I | II | | III | | IV | | V | |

**Local Fire Activity Guideline is defined as 2 or more Type 3 fires, or 1 or more type 1 or 2 fires or multiple initial attack fires**

**When FDRAs indicate different Preparedness Levels, Duty Officers will determine Preparedness Levels by consensus.**

## D. Fire Danger Adjective Rating Level

In 1974, the Forest Service, Bureau of Land Management and State Forestry organizations established five standard Adjective Fire Danger Rating Levels descriptions for public information and signing. Adjective Ratings are a public information description of the relative severity of the current fire danger situation in a general area. Adjective Ratings are generally posted on signs as visitor enter public lands or at agency offices. Many people associate these signs as "Smokey Bear signs" The TIF plan uses climatological breakpoints to determine adjective ratings

WIMs calculates Adjective Ratings using Staffing Level (SL) and Ignition Component (IC). The TIF plan currently uses ERC and does not incorporate IC.

| Station | Low | Moderate | High | Very High | Extreme |
|---|---|---|---|---|---|
| Teton ERC | 0-11 | 12-28 | 29-40 | 41-48 | 49+ |
| Wind ERC | 0-11 | 12-28 | 29-42 | 43-48 | 49+ |
| Wyoming ERC | 0-12 | 13-29 | 30-43 | 44-52 | 53+ |

# VI. Fire Danger Operating Procedures

## A. Roles and Responsibilities

Assure that all local fire resources and other unit staff are aware of fire danger and planning levels.

**1. Local RAWS technicians**

RAWS technicians will be responsible for yearly maintenance of stations. Yearly maintenance will be completed by the established due date in WFMI.

Technicians will be available during the field season as appropriate to troubleshoot any RAWS problems.

Technicians will be trained and available as appropriate to set-up the portable RAWS stations.

**2. Teton Interagency Dispatch Center**

Ensures timely editing/archiving of daily weather observations, monitors actual weather data and fire danger indices and alerts unit fire staff of potential problems or issues.

Broadcasts daily fire weather forecasts issued by the National Weather Service, Riverton, WY. Dissemination includes daily radio broadcasts at 1100 and 1600 hours during the established fire season with additional forecast “warnings” when necessary.

Broadcasts daily NFDRS indices (actual and forecasted) and posts the indices on the Teton Interagency Fire website in a timely manner.

**3. Zone Fuels Personnel**

Collects and posts actual fuel moistures from Teton area established fuels sites and posts to the National Fuels Moisture Database. The current established fuels collection sites are located in the appendix. Fuels sampling will start by mid- June and collected every

**4. Interagency Fire Planner**

Fire data steward. The fire planner will support FMO’s to ensure agency fire occurrence data is submitted annually to appropriate personnel and will help provide technical rep/subject matter expertise for the following systems; WFDSS, InFORM, WFMI data and WildCAD.

Assists fire managers in preparation of severity requests, providing data and analysis of current situation in support of request.

Coordinate the overall weather station management and supervise maintenance of network RAWS. The following zones will assign a primary technician to each station for maintenance.

| | |
|---|---|
| Hoback | East Zone |
| Half Moon | East Zone |
| Raspberry | East Zone |
| Snyder | East Zone |
| Burro | North Zone |
| Kelly | West Zone |
| Grand Teton | Grand Teton NP |
| Portables 1-4 | North Zone |

Ensure that pocket cards are prepared on a bi-annual basis and updated per NFDRS standards. The cards will be distributed to all local and incoming firefighters as well as overhead.

5. **National Weather Service**
   Our dispatch area falls within the Riverton NWS coverage. A fire weather forecaster is available upon request to participate in our weekly coordination calls. Forecast are prepared daily during fire season late May to October.

6. **Geographic Area Predictive Service / Meteorologist**
   Great Basin Predictive Services will provide input to this plan through the 7 day outlook and as requested to provide other technical expertise.

7. **Education / Mitigation / Prevention Specialists**
   Changes in adjective rating will be communicated to agency PIO's for press releases and communicated with the public through appropriate channels; website, signs, contacts, etc.

   Zone prevention personnel will be responsible for assuring that fire danger signs are changed out.

   Zone prevention personnel will be involved with updates/revisions to the prevention and restriction plans.

8. **Fire Danger Technical Group**
   Review the plan annually and update as necessary. The group should be comprised of unit FMO's, Interagency Fire Planner, Dispatch, Interagency Fire Ecologist, Fuels Specialists, and Prevention personnel.

## B. Seasonal Schedule

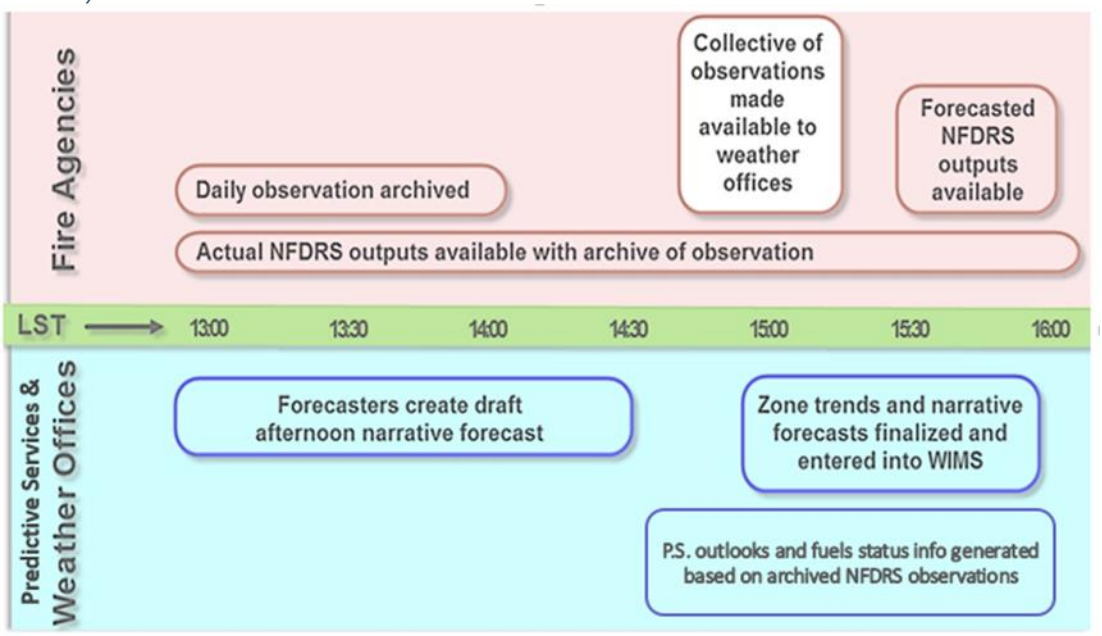
| | |
|---|---|
| April 1 (if snow is still present, snow flag stays on until snow melts) | Begin entering daily weather observations for area RAWS<br><br>Determine if 1,000 fuel default start-up of 25 is appropriate |

| | |
|---|---|
| Approximately May 20 to June 10 | Green-up of individual stations as indicated by local conditions |
| After September 1, when 3 days of consecutive < 28 degree minimum temperatures | Freeze-up individual stations as indicated by local conditions |

**Table 2 - Seasonal Schedule **

### C. Daily Schedule

*Figure 2 – Daily Timeline*




### D. Weather Station Monitoring and Maintenance

Each agency is responsible for the annual maintenance and calibration of their RAWS.

## VII. Fire Danger Program Needs

### A. Weather Stations

- Utilize the NFDRS weather station handbook to ensure weather station annual maintenance and general up keep is properly completed. Zone RAWS Technicians will be responsible.
- Create a one page list of best management practices for portable RAWS.
- Ensure data from weather stations is accurate prior to posting.

### B. Training

- Identify and train new RAWS technicians. Each Zone will have an identified RAWS technician to cover their respective stations. Alternates can be identified to build depth and to provide for training.

- Support development of employees and provide opportunities to attend S-491 and Advanced NFDRS and WIMS.
- Train fire dispatchers on WIMS and the importance of quality control of the data.
- Come up with simple SOP's on posting data for dispatchers that may be responsible for pulling WIMS data.
- Provide refreshers on WIMS and NFDRS as necessary to keep up with changes in technology and respective programs.
- Raise awareness of updated Fire Danger Operating Plan and three pocket cards.

## C. Seasonal Fire Danger Risk Assessments

- Continue pre-season and monthly outlooks.
- Evaluate conditions for prescribed burning as well.

## D. Other Program Needs

- Assess fire data and create working database for large fire growth days for our managed fires.
- Revise/integrate an interagency fuel moisture sampling protocol.
- Ensure fuel moisture samples are collected and posted appropriately for our monitoring sites for the area.
- Update Prevention Plan to include explanation of new criteria used to determine fire danger rating adjectives.
- Establish Interagency Restriction/Closure Plan.

# VIII. APPENDICES

All appendices and the FDOP are located on the Teton Interagency Web Site

Analysis Data is located on the Forest Service Pinyon Folder: https://usfs.app.box.com/folder/109786610185

Appendix A: **PREPAREDNESS PLAN**

# Teton Interagency Fire Preparedness Plan

**Preparedness Levels and Recommended Actions Guide** – These Preparedness Level Actions are guidelines, and as such are discretionary in nature, for agency personnel to refer to when preparedness level thresholds are reached. If an agency doesn't have a specific position that is listed within the table, that agency will utilize discretion as to what position will assume those roles.

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | | 49+ |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | | 49+ |
| Wyoming | 0-12 | | 13-29 | | 30-43 | | 44-52 | | 53+ |
| Local Fire Activity | NO | YES | NO | YES | NO | YES | NO | YES | |
| **Preparedness Level** | **I** | **II** | | **III** | | **IV** | | **V** | |

**Local Fire Activity Guideline is defined as 2 or more Type 3 fires, or 1 or more type 1 or 2 fires or multiple initial attack fires**

**When FDRAs indicate different Preparedness Levels, Duty Officers will determine Preparedness Levels by consensus.**

## Agency Administrators (Forest Supervisor, Park Superintendent, FS District Rangers)

| Suggested Action | PL 1 | PL 2 | PL 3 | PL 4 | PL 5 | Affected Entity |
|---|---|---|---|---|---|---|
| Ensure Resource Advisors (READ) are designated and available for fire assignments. | | | X | X | X | Agency |
| Ensure Public Affairs staff are identified and available as needed for coordination of fire program and incident information needs. | | | X | X | X | Agency |
| Ensure fire program retains capacity to implement full range of potential management strategies allowed for unit. | | | X | X | X | Agency |
| Evaluate work/rest needs of fire staff and crews. | | | | X | X | Agency |
| Consider need for fire restrictions or area closures. | | | | X | X | Public / Industry |
| Provide appropriate support to fire staffs regarding the implementation of preparedness level actions. | | | | X | X | Agency |
| Issue guidance to staff indicating severity of the season and increased need and availability for fire support personnel. | | | | X | X | Agency |
| Ensure administrative staff is stepped up equivalent with fire activity needs to include fire business support. | | | X | X | X | Agency |

## Prevention/Mitigation

| Suggested Action | PL 1 | PL 2 | PL 3 | PL 4 | PL 5 | Affected Entity |
|---|---|---|---|---|---|---|
| Contact Public Information Officer, local media to inform of the start of fire season and the potential for local fire danger to increase. | X | X | X | X | X | Agency / Public |
| Provide public and industry with access to fire danger information, closures, restrictions and warnings. | X | X | X | X | X | Agency / Public / Industry |
| Contact local industrial entities to inform of hazard and risk. | X | X | X | X | X | Public / Industry |
| Post signs and warnings in camping and recreation areas. | X | X | X | X | X | Public |
| Consider need for increased fire prevention patrols ,including ordering additional prevention resources | | | | X | X | Agency |
| Notify local media if High/Extreme fire danger and the need for increased public caution. | | | | X | X | Public |
| Consider ordering additional fire investigators (INVF) | | | | X | X | Agency |
| Consult with FMO regarding need for fire restrictions or closures. | | | | X | X | Agency |
| Consider ordering a fire prevention team | | | | X | X | Agency |

## Fire Management Officers

| Suggested Action | PL 1 | PL 2 | PL 3 | PL 4 | PL 5 | Affected Entity |
|---|---|---|---|---|---|---|
| Evaluate season severity data (NFDRS indices for the season, fuel moisture, drought indices, long-term forecasts). | X | X | X | X | X | Agency |
| Brief agency administrator on burning conditions and fire activity. | | | X | X | X | Agency |
| Review geographical and national preparedness levels and evaluate need to suspend local Rx fire activities. | | | X | X | X | Agency |
| Consider consulting with or ordering an FBAN or WFDSS Support for ongoing fire activity. | | | X | X | X | Agency |
| Consider ordering SOPL or LTAN personnel to ensure local capacity to support long-term fires. | | | X | X | X | Agency |
| Ensure Prevention Technicians have initiated media contacts and public education contacts. | | | X | X | X | Public Industry |
| Communicate with TIDC Manager and GBCC Manager on geographical conditions and resource availability. | | | X | X | X | Agency |
| Consider fire severity request and pre- positioning of resources including: operational resources, aerial support/supervision, command positions, dispatch, logistical support, information and prevention. | | | X | X | X | Agency / Public / Industry |
| Work with AA's to ensure associated AA actions are being addressed. | | | X | X | X | Agency |
| Dedicated Interagency Aviation Officer should be in place. | | | | X | X | Agency |
| Evaluate crew and staff work/rest requirements. | | | | X | X | Agency |
| Initiate weekly calls with partners/cooperators regarding the need for restrictions and/or closures. | | | X | X | X | Public / Industry |
| Request the agency administrator to issue guidance to office staff regarding the need for increased availability from militia for operational and support positions. | | | | X | X | Agency |
| Contact local fire chiefs and inform of increased fire danger. | | | | X | X | Agency |
| Consider dedicated expanded dispatch and buying team. | | | X | X | X | Agency |
| Ensure there is a dedicated expanded dispatch and buying team in place. | | | | | X | Agency |
| If preparedness level is decreasing, consult with Duty Officers/TIDC Manager and consider release of pre-positioned or detailed personnel. | | | | X | X | Agency |
| | | | | | | |

## Teton Interagency Dispatch

| Suggested Action | PL 1 | PL 2 | PL 3 | PL 4 | PL 5 | Affected Entity |
|---|---|---|---|---|---|---|
| Begin weekly conference calls with TIDC FMOs and Operations staff. | X | X | X | X | X | Agency |
| Consider pre-positioning or detail of off-unit IA dispatchers and logistical support personnel. | | | X | X | X | Agency |
| Evaluate work/rest needs of center staff. | | | X | X | X | Agency |
| Consider dedicated expanded dispatch and buying team. | | | X | X | X | Agency |
| Dedicated Floor Manager should be in place. | | | X | X | X | Agency |
| Ensure there is a dedicated expanded dispatch and buying team in place. | | | | | X | Agency |
| If preparedness level is decreasing, consider release of pre-positioned or detailed dispatchers and logistical support personnel. | | | X | X | X | Agency |

## Duty Officers (Unit and/or Zone)

| Suggested Action | PL 1 | PL 2 | PL 3 | PL 4 | PL 5 | Affected Entity |
|---|---|---|---|---|---|---|
| Ensure incoming pre-position or detailed personnel are briefed on local conditions. | | | X | X | X | Agency |
| Evaluate work/rest needs of IA crews. | | | X | X | X | Agency |
| Coordinate with adjoining agencies on available resources | | | X | X | X | Agency |
| Consider patrols and pre-positioning of local IA resources in high risk areas. | | | | X | X | Agency |
| Keep WY T3 IMT on local dispatch only | | | | X | X | Agency |
| Consider pre-positioning and/or detailing of additional IA resources from off-unit. | | | | X | X | Agency |
| Consider bringing in local resources from scheduled days off. | | | | X | X | Agency |
| Consider suspending Rx fire operations. | | | | X | X | Agency |
| If preparedness level is decreasing, consider releasing pre-positioned and detailed resources. | | | X | X | X | Agency |

# Appendix B: **STAFFING PLAN**

## Purpose

This Staffing Plan is intended to provide day-to-day guidance for decisions regarding the "degree of readiness" of fire management resources. The staffing plan is designed to address both Initial Attack readiness and to ensure resources are also available to staff fires that may be managed for multiple objectives or expected to be of long-duration. The Staffing Level (SL) is used as a basis to make daily internal fire operations decisions affecting our agency personnel.

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.

## A. Definitions

**Staffing Index**

The Staffing Index is the selection of an NFDRS output (ERC, BI, IC, SC) to provide the basis to calculate the Staffing Level.

**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.

Staffing Level is intended to provide fire managers with day-to-day (short-term) decision support regarding staffing of 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.

The addition of a "high risk trigger" forecast for the day will elevate the staffing level one increment. High risk triggers are defined by the Great Basin Predictive Services 7 day significant fire potential outlook for our Predictive Services Area (PSA), GB-10.

# Local Staffing Worksheet

This worksheet is used to determine staffing levels.

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | | 49+ |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | | 49+ |
| Wyoming | 0-11 | | 13-29 | | 30-43 | | 44-52 | | 53+ |
| | ⇩ | | ⇩ | | ⇩ | | ⇩ | | ⇩ |
| High Risk Triggers Defined by GBCC 7 Day Outlook | N | Y | N | Y | N | Y | N | Y | |
| **Staffing Level** | I | | II | | III | | IV | | V |

**Duty Officers have the discretion to "step up" staffing for increased human caused risk, such as 4th of July, Pioneer Days, or opening of hunting season.**

**Draw Down**

The term draw-down is generally used to describe the level of commitment of an agency's resources at a certain point in time. Most importantly, it defines the agency's ability to perform its basic service levels. Once a level has been reached where basic service levels cannot be provided, actions should be taken to "step up" the capacity to a level sufficient to provide anticipated service

Draw-down resources are considered unavailable outside the local area for which they have been identified. Staffing level planning is intended to monitor draw-down levels on to:

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

5-day versus 7-day Resource Staffing

Teton Interagency Fire staff wildland engines and T3 helicopters with personnel to maintain 7-day staffing through the majority of the fire season.

Seven-day staffing will begin no later than the July 4th holiday period. If indices indicate an early fire season, then Duty Officers will request and schedule appropriate seven-day staffing (as budget allows) in June.

Similarly, in the late summer or fall, FMO's will make the decision to go back to 5-day staffing based on the waning fire potential as well as the lack of personnel due to reduction in critical seasonal staffing. Regardless of the staffing schedules, the expectation is that the minimum draw down

levels will be maintained throughout the fire season

Staffing Levels have a direct effect on the ability to send pre-determined resources to wildland fires. 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, then agencies capabilities can be affected.

The base funded Initial Attack organization for Teton Interagency Fire is:

**3 Type 6 engines**
**3 Type 4 engines**
**1 Type 3 engine**
**2 Type 3 Helicopters**
**1 Wildland Fire Module**

For staffing, an IA Module is defined as a minimum of 3 personnel, one of which is a Type 5 IC. This may be met by a squad from an established crew, a fully staffed engine module, or an IA load from Teton Helitack. Duty Officer will have discretion to substitute an IA module for an engine if the engine is unavailable for mechanical reasons.

**Additional Direction**

**In the event that local resources are unavailable to meet minimum staffing, Unit and Zone Duty Officers will allocate available resources to meet current and predicated resource needs. Additional resources to bring TIF above Draw-Down will be ordered.**

**When individual FDRAs indicate different staffing levels the agency duty officers will negotiate a consensus level for area wide resources such as helicopters and the fire module.**

**Fire managers will maintain the discretion to increase staffing level based on other high-risk factors such as July 4$^{th}$ activities, Boy Scout functions, Pioneer days, arson issues and hunting season.**

## Initial Attack Resources

| Unit/FDRA | SL I | SL II | SL III | SL IV | SL V |
|---|---|---|---|---|---|
| TIF Area Wide Resources Stage as appropriate | 0** Helicopter | 1 T3 Helicopter | 1 T3 Helicopter (2 loads) | 2 T3 Helicopter (3 loads)<br><br>1 WFM or T2IA Handcrew<br><br>2 ICT3s<br><br>Consider Air Attack Preposition | 2 T3 Helicopter (3 loads)<br><br>1 WFM or T2IA Handcrew<br><br>2 ICT3s<br><br>Consider Air Attack Preposition |
| | Two IA Modules TIF wide | | | | |
| Teton | | | 1 Engine any type | 2 modules at least one is an engine | 2 modules, at least one is an engine |
| Wind | | | 1 Engine any type | 2 modules at least one is an engine | 2 modules, at least one is an engine |
| Wyoming | | | 1 Engine any type | 2 modules, at least one must be an engine | 3 modules, at least two are engines |

## Management Staffing

| Unit | SL I | SL II | SL III | SL IV | SL V |
|---|---|---|---|---|---|
| Unit wide | Forest, Park Superintendent and Rangers (or acting) notify Dispatch | | | | |
| | Unit Duty Officer | | Unit Duty Officer | Unit Duty Officer | Unit Duty Officer Consider extra position |
| Zone | | | 1 Duty Officer each Zone | 1 Duty Officer each Zone | Consider 2 Duty Officers each Zone |
| Cache | Fire Cache on call schedule for weekends | | Fire Cache on call schedule for weekends | 7-day staffing | 7-day staffing |
| Dispatch | Daily Fire Weather Forecasts | | Consider Aviation Desk staffing | 2 IA Dispatchers Aviation Desk staffed daily | |

# Appendix C: ***RESPONSE PLAN***

# I. Introduction

## A. Purpose

Local-level Initial 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.

## B. Terminology

### 1. Response Level

Response levels (e.g. “Low”, “Moderate”, “High”) are established to assist fire managers with decisions regarding the most appropriate response to an initial fire report until a qualified Incident Commander arrives at the incident. FireFamily Plus software is used to establish the Response Level thresholds. A statistical analysis of fire occurrence and historical weather has been completed for each FDRA.

### 2. Response Zone

Response zones may be based on various criteria such as: common management objectives, land use, fire load, dispatch locations, estimated response times, WUI locations, topographical features, vegetation communities, etc.

### 3. Dispatch Center

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

### 4. Response Plan

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

## II. Response Level Matrix

TIDC to use the day's forecast index level for BI and ERC, using the FDRAs respective SIG to compute the Response Level set for the day for each Fire Danger Rating Area.

| BI | Teton FDRA | | | | |
|---|---|---|---|---|---|
| 33+ | LOW | MODERATE | HIGH | HIGH | HIGH |
| 23-32 | LOW | LOW | MODERATE | MODERATE | HIGH |
| 0-22 | LOW | LOW | LOW | MODERATE | MODERATE |
| **ERC** | 0-11 | 12-28 | 29-40 | 41-48 | 49+ |

| BI | Wind FDRA | | | | |
|---|---|---|---|---|---|
| 33+ | LOW | MODERATE | HIGH | HIGH | HIGH |
| 23-32 | LOW | LOW | MODERATE | MODERATE | HIGH |
| 0-22 | LOW | LOW | LOW | MODERATE | MODERATE |
| **ERC** | 0-11 | 12-28 | 29-42 | 43-48 | 49+ |

| BI | Wyoming FDRA | | | | |
|---|---|---|---|---|---|
| 36+ | LOW | MODERATE | HIGH | HIGH | HIGH |
| 25-35 | LOW | LOW | MODERATE | MODERATE | HIGH |
| 0-24 | LOW | LOW | LOW | MODERATE | MODERATE |
| **ERC** | 0-12 | 13-29 | 30-43 | 44-52 | 53+ |

The Response Level is used in the Run Card along with the reported fires location information (Response Area (FS) or Fire Management Unit (NPS)) to determine the initial resources to be dispatched to the report.

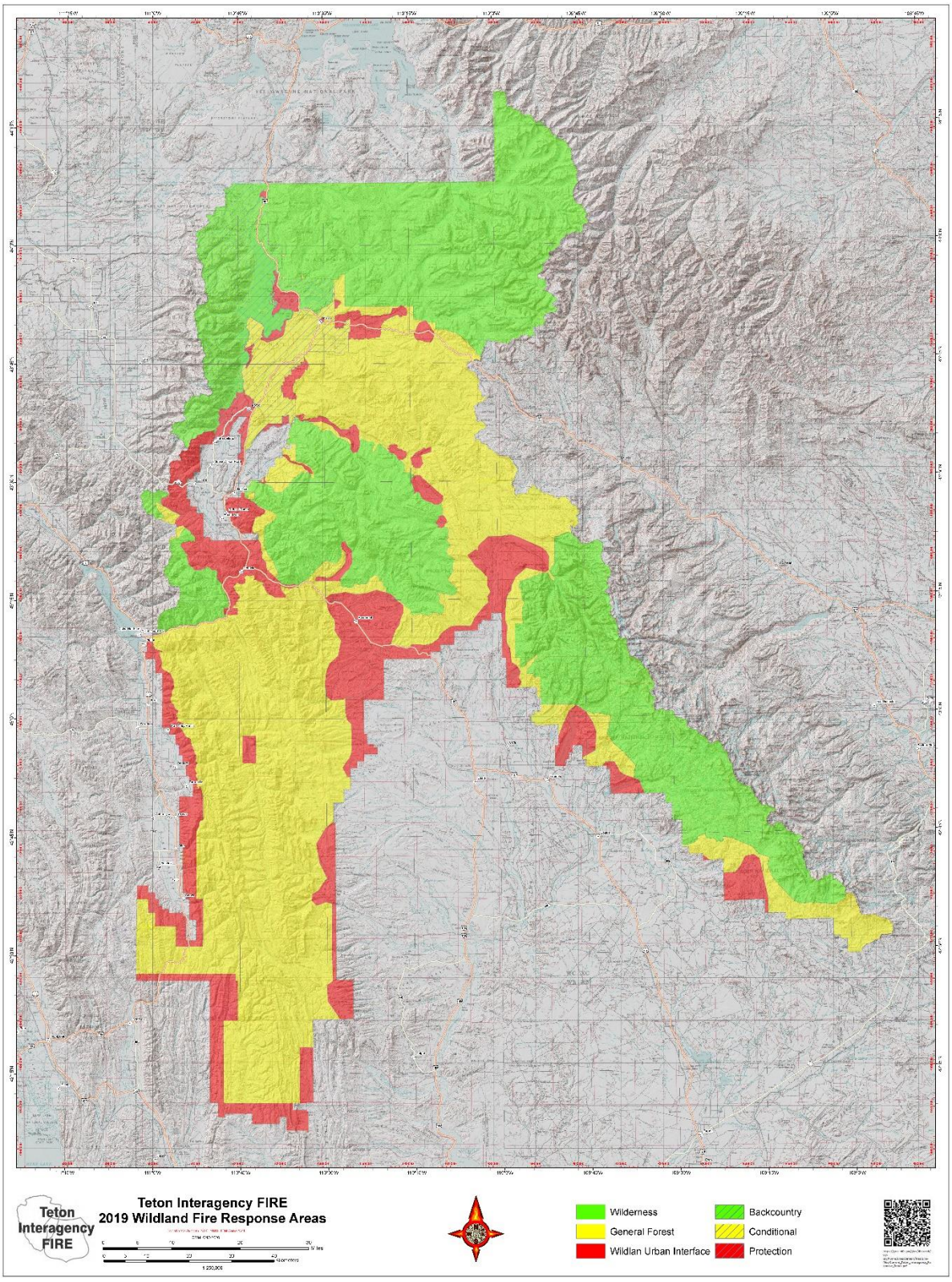
General Guidance

- Run cards are guidelines for initial response actions and are based on TIF mapped response zones.
- Dispatchers will notify resources for dispatch immediately, then notify the Zone Duty Officer
- Closest Resources will be dispatched
- Dispatch/Duty Officers may request county engines as part of the initial response if they meet closest force criteria.

**Notifications following initial dispatch of resources:**

First Priority - Zone Duty Officer by phone or radio
Second Priority- Everbridge
Third Priority …. Appropriate Park or Forest DO by phone or radio

# Teton Area Response Zones



## Initial Response Plan – Run Cards TETON FDRA

| Teton FDRA | Response Level | | |
|---|---|---|---|
| Wilderness / Backcountry FMU | LOW | MODERATE | HIGH |
| | Notify DO | Helicopter recon | Helicopter or Fixed Wing recon |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

| Teton FDRA | Response Level | | |
|---|---|---|---|
| General Forest / Conditional FMU | LOW | MODERATE | HIGH |
| | 1 Engine/ground resource | 1 Engine Helicopter | 2 Engines Helicopter ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

| Teton FDRA | Response Level | | |
|---|---|---|---|
| Protection FMU | LOW | MODERATE | HIGH |
| | 1 Engine | 2 Engines Helicopter | 2 Engines Helicopter ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

**Notifications:** Notify Zone DO via phone, send text notification of response to BTF and/or GRTE Wildfire notification group
Check with Sheriff's Office for local burn permits issued

**Special Needs/Hazards**: Retardant avoidance areas within Jackson Ranger District including Snake River near Camp Creek and southwest of Granite Hot Springs; Grand Teton National Park retardant avoidance areas include all bodies of water.

**Frequencies:**

| Assign Command Rpt | | Assign A/G |
|---|---|---|
| Rendezvous | General coverage Jackson Dist | A/G 10 |
| Bacon Ridge | Gros Ventre drainage | A/G 19 |
| Park Primary | Gen coverage of Park | A/G 12 |
| Lava Mtn | Blackrock Dist | |
| Gravel | Blackrock Dist | |
| Hawks Rest | Blackrock Dist | |
| Ramshorn | Snake River Canyon | |

## Initial Response Plan – Run Cards WIND FDRA

| Wind FDRA | Response Level | | |
|---|---|---|---|
| Wilderness Response Area | LOW | MODERATE | HIGH |
| | Notify DO | Helicopter recon | Helicopter or Fixed Wing recon |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

| Wind FDRA | Response Level | | |
|---|---|---|---|
| General Forest Response Area | LOW | MODERATE | HIGH |
| | 1 Engine/ground resource | 1 Engine<br>Helicopter | 2 Engines<br>Helicopter<br>ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

| Wind FDRA | Response Level | | |
|---|---|---|---|
| Protection Response Area | LOW | MODERATE | HIGH |
| | 1 Engine | 2 Engines<br>Helicopter | 2 Engines<br>Helicopter<br>ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

**Notifications:** Notify Zone DO via phone, send text notification of response to BTF Wildfire notification group
Check with Sheriff's Office for local burn permits issued

**Special Needs/Hazards**: Retardant avoidance area north of Kendall GS near Stinky Spring

**Frequencies:**

| Assign Command Rpt | | Assign A/G |
|---|---|---|
| Ramshorn | Bondurant / Hoback Area | A/G 10 |
| Elkhart | N Winds | A/G 19 |
| Muddy Ridge | S Winds | A/G 12 |
| Pinyon | Upper Green | |
| Bacon | Upper Green | |

## Initial Response Plan – Run Cards WYOMING FDRA

| Wyoming FDRA | Response Level | | |
|---|---|---|---|
| General Forest Response Area | LOW | MODERATE | HIGH |
| | 1 Engine/ground resource | 1 Engine Helicopter | 2 Engines Helicopter ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

| Wyoming FDRA | Response Level | | |
|---|---|---|---|
| Protection FMU | LOW | MODERATE | HIGH |
| | 1 Engine | 2 Engine Helicopter | 2 Engines Helicopter ICT4 |
| | | | |

**ALWAYS DISPATCH CLOSEST RESOURCE** **USE FIRE ALERT TONE**

**Notifications:** Notify Zone DO via phone, send text notification of response to BTF Wildfire notification group
Check with Sheriff's Office for local burn permits issued

**Special Needs/Hazards**: Advise responding resources to activate H2S monitors near H2S Sour Gas wells in the Big Piney Ranger District east of Deadline Ridge, near Soda Lake, near Little Cliff Creek, etc. Retardant avoidance areas throughout Big Piney and Greys River Ranger Districts particularly near water.

**Frequencies:**

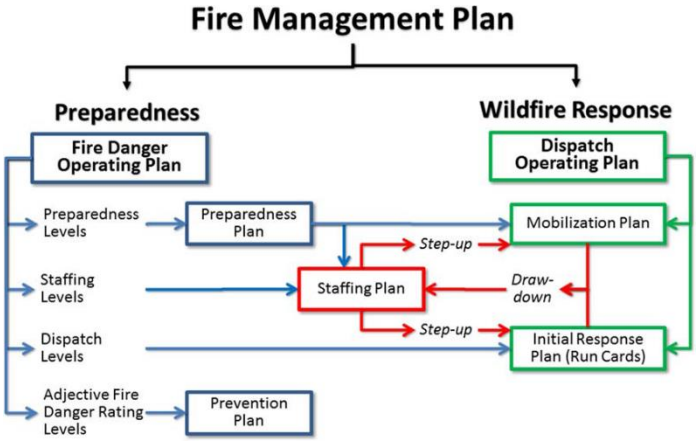
| Assign Command Rpt | | Assign A/G |
|---|---|---|
| Bradley | Alpine/Greys River Rd | A/G 10 |
| Deadline | Big Piney/LaBarge | A/G 19 |
| Green Knoll | Cokeville area | A/G 12 |
| Sage Point | Afton/southern Greys River Rd | |
| Ramshorn | Snake River Canyon | |

# APPENDIX D: QUICK REFERENCE

The Teton Interagency Fire Danger Operating Plan (FDOP) is intended to document a decision-making process for agency administrators, fire managers, dispatchers, and firefighters by establishing interagency planning and response levels.

The Fire Danger Rating Areas are the Teton, Wind, and Wyoming FDRA for Grand Teton Park and the Bridger-Teton Forest.

The components of the Plan are organized in the diagram to the right in how they relate to local fire response.




**Definitions**

**Preparedness Plan** provides 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

**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. We have identified 5 staffing levels.

**Preparedness Levels often get confused with Staffing Levels. 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.**

Initial Response Plan includes run cards that are guidelines for initial response actions and are based on TIF mapped FDRAs and FMUs. Responses vary by Response Level (Low, Moderate and High) and location within the FDRA.

Adjective Ratings are a public information description of the relative severity of the current fire danger situation in a general area. Adjective Ratings are generally posted on signs as visitor enter public lands or at agency offices. Many people associate these signs as "Smokey Bear signs"

Staffing Level Work Sheet

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | | 49+ |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | | 49+ |
| Wyoming | 0-11 | | 13-29 | | 30-43 | | 44-52 | | 53+ |
| | ↓ | | ↓ | | ↓ | | ↓ | | ↓ |
| High Risk Triggers Defined by GBCC 7 Day Outlook | N | Y | N | Y | N | Y | N | Y | |
| **Staffing Level** | I | | II | | III | | IV | | V |

**Duty Officers have the discretion to "step up" staffing for increased human caused risk, such as 4th of July, Pioneer Days, or opening of hunting season.**

## Initial Attack Resources

| Unit/FDRA | SL I | SL II | SL III | SL IV | SL V |
|---|---|---|---|---|---|
| TIF Area Wide Resources Stage as appropriate | 0** Helicopter | 1 T3 Helicopter | 1 T3 Helicopter (2 loads) | 2 T3 Helicopter (3 loads)<br><br>1 WFM or T2IA Handcrew<br><br>2 ICT3s<br><br>Consider Air Attack Preposition | 2 T3 Helicopter (3 loads)<br><br>1 WFM or T2IA Handcrew<br><br>2 ICT3s<br><br>Consider Air Attack Preposition |
| | Two IA Modules TIF wide | | | | |
| Teton | | | 1 Engine any type | 2 modules at least one is an engine | 2 modules, at least one is an engine |
| Wind | | | 1 Engine any type | 2 modules at least one is an engine | 2 modules, at least one is an engine |
| Wyoming | | | 1 Engine any type | 2 modules, at least one must be an engine | 3 modules, at least two are engines |

## Management Staffing

| Unit | SL I | SL II | SL III | SL IV | SL V |
|---|---|---|---|---|---|
| Unit wide | Forest, Park Superintendent and Rangers (or acting) notify Dispatch | | | | |
| | Unit Duty Officer | | Unit Duty Officer | Unit Duty Officer | Unit Duty Officer Consider extra position |
| Zone | | | 1 Duty Officer each Zone | 1 Duty Officer each Zone | Consider 2 Duty Officers each Zone |
| Cache | Fire Cache on call schedule for weekends | | Fire Cache on call schedule for weekends | 7-day staffing | 7-day staffing |
| Dispatch | Daily Fire Weather Forecasts | | Consider Aviation Desk staffing | 2 IA Dispatchers Aviation Desk staffed daily | |

Preparedness Levels

| Energy Release Component Model Y | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Teton | 0-11 | | 12-28 | | 29-40 | | 41-48 | | 49+ |
| Wind | 0-11 | | 12-28 | | 29-42 | | 43-48 | | 49+ |
| Wyoming | 0-12 | | 13-29 | | 30-43 | | 44-52 | | 53+ |
| | ↓ | | ↓ | | ↓ | | ↓ | | ↓ |
| Local Fire Activity | NO | YES | NO | YES | NO | YES | NO | YES | |
| **Preparedness Level** | **I** | **II** | | **III** | | **IV** | | **V** | |

**Local Fire Activity Guideline is defined as 2 or more Type 3 fires, or 1 or more type 1 or 2 fires or multiple initial attack fires**

**When FDRAs indicate different Preparedness Levels, Duty Officers will determine Preparedness Levels by consensus.**

# APPENDIX E: FUELS MONITORING SITE

| Fuel Monitoring Site | Lat DMS | Long DMS | Elevation | Aspect | Fuel Model |
|---|---|---|---|---|---|
| **Grand Teton National Park** | | | | | |
| Flagg Ranch | 44° 6' 35.8668" | 110° 41' 8.0946" | 6850 | Flat | G |
| Lost Creek | 43° 44' 54.9204" | 110° 37' 26.4324" | 6770 | Flat | T |
| Moran | 43° 50' 18.7836" | 110° 30' 8.1498" | 6800 | SW | G |
| RKO Road | 43° 49' 14.4114" | 110° 35' 28.4964" | 6960 | Flat | T |
| Signal Mountain | 43° 51' 4.8204" | 110° 33' 53.46" | 7600 | N | G |
| Timbered Island | 43° 42' 25.6386" | 110° 43' 11.1318" | 6570 | Flat | G/T |
| Whitegrass Ranch | 43° 38' 22.6566" | 110° 46' 0.516" | 6500 | Flat | G |
| **Bridger-Teton National Forest** | | | | | |
| **West Zone** | | | | | |
| Hams #1 | 42° 12' 53" | 110° 43' 48" | 7,910 | SW | G |
| Hams #2 | 42° 15' 22" | 110° 44' 37" | 8,346 | N | G |
| **East Zone** | | | | | |
| Half Moon | 42° 54' 47" | 109° 44' 44" | 8,419 | Flat | G/T |
| Snyder Basin | 42° 29' 26" | 110° 31' 36" | 8,200 | Flat | G |
| Hoback | 43° 13' 13" | 110° 25' 23" | 6,726 | East | G |
| **North Zone** | | | | | |
| Burro | 43° 50' 39" | 110° 21' 20" | 7,004 | N | G |
| Cache | 43° 27' 53" | 110° 43’ 58" | 6,475 | NE | G |
| | | | | | |