Chapter 10
Preparedness

Preparedness Overview

Fire preparedness is the state of being ready to respond to wildfires based on identified objectives and is the result of activities that are planned and implemented prior to fire ignitions.

Preparedness requires:
- Identifying necessary firefighting capabilities;
- Implementing coordinated programs to develop those capabilities;
- A continuous process of developing and maintaining firefighting infrastructure;
- Predicting fire activity;
- Implementing prevention activities;
- Identifying values to be protected;
- Hiring, training, equipping, pre-positioning, and deploying firefighters and equipment;
- Evaluating performance;
- Correcting deficiencies; and
- Improving operations.

Preparedness activities should focus on developing interagency response capabilities that will result in safe, effective, and efficient fire operations aligned with risk-based fire management decisions.

Preparedness activities will be consistent with direction in the approved Land and Resource Management Plan (LRMP) and Fire Management Plan (FMP).

Preparedness Planning

At the local level, preparedness planning and the resultant activities begin with a Fire Danger Operating Plan (FDOP), which includes a number of other plans that result in coordinated actions based on the fire situation.
- ***BLM** – Districts can use a FDOP, or Fire Danger Analysis Document (FDAD), or Fire Weather and Fire Occurrence Analysis Document (FWOAD) depending on which format best meets their needs.*

References, templates, and other supporting materials pertaining to the FDOP process and related operationally-focused preparedness plans can be found at https://www.wfas.net/nfdrs2016.
- ***BLM** – References, templates, and other supporting materials pertaining to the FDAD/FWOAD process can be found at https://sites.google.com/a/firenet.gov/blm-fire-danger-site/.*

Outputs from a FDOP process are used to support decisions found in many components of preparedness plans. These actions will ensure a unit is appropriately prepared to react to new and emerging wildfire incidents.

Preparedness plans should include, but are not limited to:
- Fire Danger Operating Plan (as specified by agency requirements)
- Preparedness Level Plan
- Initial Response/Pre-planned Dispatch Plan
- Step-up/Staffing Plan
- Fire Prevention/Mitigation Plan (as specified by agency requirements)
- Closure/Restriction Plan (as specified by agency requirements)
- Geographic Area Mobilization Guide (updated annually)
- Geographic Area Draw-Down guidance (updated annually)

Fire Danger Rating

The National Fire Danger Rating System (NFDRS) and the Weather Information Management System (WIMS) are the principle applications used by the federal land management agencies to assess fire danger. At every scale, fire danger rating is a key consideration for staffing and prepositioning preparedness resources, regulating industrial activity, or placing restrictions on public lands. Because these assessments are used by and affect a wide variety of stake holders including federal and state agencies, local governments, industrial and other private entities, as well as the general public, participation in a recognized fire danger system and careful management of weather and fire data is vital to ensure accurate assessments and the consistent application of fire danger rating, especially for broader scale assessments.

The following requirements apply to all NFDRS-compliant weather stations managed in WIMS:
- For the primary fuel model (i.e., the first model listed in the WIMS station catalog):
  - Identify an appropriate Staffing index;
  - Identify the Staffing index breakpoints (i.e., the two highest breakpoint values and their associated percentiles*); and
  - Identify the number of Decision Classes (i.e., the number of Staffing Levels).
- If not already entered as the primary fuel model, also enter Fuel Model G:
  - Identify ERC as the Staffing index;
  - Identify the ERC breakpoints (i.e., the two highest ERC breakpoint values and their associated percentiles*); and
  - Identify the number of Decision Classes (i.e., the number of Staffing Levels).
    * For units that have not performed detailed analysis to identify Fire Business Thresholds or Climatological Breakpoints, it is recommended to use the 90th and 97th percentiles as default values for these Critical Percentiles.
    - ***BLM** – 80th and 95th percentiles*

Communication of Fire Danger

Daily Observed and Forecasted Fire Danger Outputs will be:

- Communicated daily to local fire personnel to aid in situational awareness; and
- Should include the Staffing index and/or index/component used.

Fire danger will be conveyed to the public using the five Adjective Fire Danger Rating classes: low, moderate, high, very high, and extreme.

Fire Danger Operating Plan

- ***BLM** – Districts can use a FDOP, or Fire Danger Analysis Document (FDAD), or a Fire Weather and Fire Occurrence Analysis Document (FWOAD) depending on which format best meets their needs.*

Ideally developed for interagency field-level operations (e.g., corresponding to the area within the jurisdiction of a third-tier dispatch center), a FDOP is an integral component of local fire management planning. A FDOP documents the analysis process and the development of decision points to be used for future weather and fire occurrence situations, based on an analysis of local conditions, historic weather, and historic fire occurrence. The analysis and decision points are developed using decision support tools such as the National Fire Danger Rating System (NFDRS), the Canadian Forest Fire Danger Rating System (CFFDRS), the Palmer Drought Index, live fuel moisture data, monthly or seasonal wildland fire outlooks, seasonal climate forecasts, and wildland fire risk analyses. The analysis of historic weather and fire occurrence is conducted utilizing a statistical software program, such as but not exclusive to FireFamily Plus (FFP), which calculates fire danger indices and can correlate them to historic fire occurrence. A FDOP process blends science, historical data, established processes, and local knowledge to provide a unified framework for local interagency unit managers/administrators to make informed decisions that result in safe, efficient, and effective responses to fire situations.

Every field-level unit with a fire program should be covered by a FDOP and should participate in the planning process. FDOP developers should attend Intermediate NFDRS (S-491) and preferably, the Advanced NFDRS level courses. Units are encouraged to seek the participation of and review by NFDRS or CFFDRS Subject Matter Experts when developing a FDOP. Established FDOPs should be monitored, reviewed annually, and updated as necessary to ensure they continue to meet the preparedness needs of the local units.

- ***BLM** – BLM offices are required to have a FDOP, a Fire Danger Analysis Document (FDAD), or a Fire Weather Occurrence Analysis Document (FWOAD) by May, 2020. BLM offices are required to complete and document their review every other year and updated every five years.*

In conjunction with the analysis noted above, a FDOP also describes:

- Processes, such as daily input and output monitoring of the Weather Information Management System (WIMS) at https://fam.nwcg.gov/fam-web/;
- Tools that will be utilized to communicate fire danger information, such as Fire Danger PocketCards, or seasonal trends analysis; and
- Related products, such as staffing, dispatch, and preparedness level plans (which can be included as components of a FDOP or linked, if presented as separate plans).

A FDOP template can be found at https://sites.google.com/firenet.gov/nfdrs/rollout-workshops/document-templates.

- ***BLM** – Reference templates and other supporting materials pertaining to the FDAD/FWOAD process can be found at https://sites.google.com/a/firenet.gov/blm-fire-danger-site/.*

Required minimum content for a FDOP includes the following components:

- **Roles and Responsibilities**
  This section of a FDOP defines the roles and responsibilities for those responsible for the development, maintenance and daily implementation of the plan, program management related to the plan, and associated training.
- **Fire Danger Area Inventory**
  This section of a FDOP presents the inventory of the basic components of a FDOP area, which will describe the general area, including the administrative units involved in the planning process. The fire danger area inventory will include:
  - Fire history, as well as identification of fire/ignition issues specific to the area;
  - Description of vegetation/fuels, topography, and weather/climatology resulting in the delineation of specific Fire Danger Rating Areas (FDRAs), which are broad landscapes (typically, on the scale of tens or hundreds of thousands of acres each) that are considered to have relatively homogeneous fire danger;
  - The existing weather station network and identification of any additional weather station system needs; and
  - Validation that each Remote Automated Weather Station (RAWS) meets the requirements of the *NWCG Standards for Fire Weather Stations* (PMS 426-3).
- **Operational Procedures**
  This section of a FDOP establishes the procedures used to gather and process data in order to integrate fire danger rating information into decision processes. The network of fire weather stations whose observations are used to determine fire danger ratings is identified. Station maintenance responsibilities and schedules are defined. Include:
  - Daily weather processing schedule and procedures;

- ○ Daily communication schedule and modes;
- ○ Seasonal station catalog adjustment schedule and responsible personnel;
- ○ Annual review of decision points and responsible personnel; and
- ○ Periodic review of PocketCards or other communication methodology and responsible personnel.

- **Decision Point Analysis**

  This section of a FDOP describes the analysis of climatological breakpoints and fire business thresholds that trigger changes in fire danger-related decisions within an FDRA. Decision points are identified using statistical analysis software such as but not limited to FFP. Distinct selections of fuel model and fire danger index/component (NFDRS or CFFDRS) are appropriate for different management decisions (such as staffing, initial response, or industrial and public restrictions). Because Fire Business Thresholds correlate periods of historical fire danger <u>and</u> fire occurrence, they generally provide the best decision support and are appropriate for identifying Staffing Levels, Dispatch Levels, fire restrictions, Preparedness Levels, fire prevention activities, and other specific readiness actions. Climatological Breakpoints, which are expressed as percentiles, may be appropriate as decision points for longer term decisions and general preparedness activities, such as seasonal staffing start/end dates or contract aircraft availability periods.

  Note: WIMS relies exclusively on Climatological Breakpoints to compute Staffing Level and Adjective Rating. If Fire Business Thresholds are used as decision points, Staffing Level and Adjective Rating must be computed outside of WIMS.

- **Fire Danger-based Decisions**

  This section of a FDOP describes the decision points used in Step-up/Staffing Plans, Initial Response/Pre-planned Dispatch Plans, Preparedness Level Plans, Prevention Plans (which include how Adjective Fire Danger Ratings are determined and will be applied), Closure/Restriction Plans, etc. It should include the rationale for the fuel model and index/component selection and the corresponding decision points for each of those plans. The plans may be included in a FDOP or be stand-alone plans.

Preparedness Level Plans

Preparedness Level Plans are required at the national, state/regional, and local levels. These plans address the five Preparedness Levels (1-5) and provide management direction based on identified levels of burning conditions (fire danger), fire activity, resource commitment/availability, such as incident management teams assigned, and other considerations (in contrast to Staffing Levels, which typically only consider fire danger, as described below). Preparedness Level Plans may be developed by a state/regional office for agency-specific use.

Supplemental preparedness actions to consider include, but are not limited to, the following items:

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

Refer to the *National Interagency Mobilization Guide* and GACC mobilization guides for more information on Preparedness Level plans.

Step-up/Staffing Plans

Step-up/Staffing Plans are designed to direct incremental preparedness actions at the local level in response to changing fire danger. Each plan should address the unit's chosen number of Staffing Levels, and the corresponding actions to consider for those changing fire danger conditions, as reviewed annually. The Step-up/Staffing Plan should be based on analysis completed as part of the unit's FDOP and the analysis rationale, if not the entire plan, should be included as part of a FDOP.

Staffing Level

The Staffing Level should be used to guide daily internal fire operational decisions at the local level. The Staffing Level specifies appropriate daily staffing for initial response resources, such as when to implement 7-day coverage and adjusted work schedules, and the number of personnel committed to initial attack resources (in contrast to the Initial Response/Pre-planned Dispatch Plan – described below – that specifies the number of resources dispatched to an incident). Staffing Level helps define "How ready to be today?" A unit can operate with 3 to 9 levels of staffing. Most units typically use 5 (1, 2, 3, 4, 5) or 6 (1, 2, 3L, 3H, 4, 5) levels. The use of Fire Business Thresholds to determine Staffing Levels is encouraged; however, they must be computed outside of the WIMS.

The Step-up/Staffing Plan describes pre-identified escalating responses at fire business or climatological thresholds analyzed in a FDOP and FMP. A Step-up/Staffing Plan should also include recurring supplemental preparedness actions designed to enhance the unit's fire management capability during short periods (Fourth of July, or other pre-identified events) where staffing normally needs to be increased to meet initial attack, prevention, or detection needs.

The Staffing Plan should also consider supplemental staffing actions such as, but not limited to, the following items:

- Fire prevention actions, including closures/restrictions, media messages, signing, and patrolling;
- Prepositioning or augmentation of suppression resources;
- Cooperator discussion and/or involvement;
- Safety considerations: safety messages, safety officer;
- Increased initial attack dispatch staffing; and
- Increased detection activities.

In contrast to staffing actions established for the normal range of conditions, severity is a longer duration condition that cannot be adequately dealt with under normal staffing, such as a killing frost converting live fuel to dead fuel or drought conditions. Severity is discussed later in this chapter.

Initial Response/Pre-planned Dispatch Plans

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

Fire Management Officers will ensure that Initial Response/Pre-planned Dispatch Plans are in place, utilized, and provide for initial response commensurate with guidance provided in the FMP and/or LRMP. Initial Response/Pre-planned Dispatch Plans will reflect agreements and operating plans, and will be reviewed annually prior to fire season. These plans may be modified as needed during fire season to reflect the availability of national, prepositioned, and/or severity resources.

Fire Prevention/Mitigation Plans

Unit-level Fire Prevention/Mitigation Plans may be required and completed by conducting a wildland fire prevention/mitigation assessment. The purpose of the plan is to develop a strategy that will identify actions to reduce unwanted human-caused ignitions, thereby reducing wildland fire damages and losses, unnecessary risks to firefighters, and suppression costs. As fire danger moves from low to extreme, as defined in a FDOP, and/or human activity increases, prevention and mitigation activities must be increased to maintain effectiveness.

The Prevention/Mitigation Plan outlines how the Adjective Fire Danger Ratings are communicated to the public, and applied, in terms of responsible personnel and assigned activities. Prevention activities are intended to reduce the occurrence of unwanted human-caused fires and include, but are not limited to:
- Education (signage, school programs, radio and news releases, recreation contacts, local business contacts, exhibits);
- Engineering (public utility company, government agency/cooperator coordination);

- Enforcement/industrial program monitoring (patrol, permitting, inspections including firewood cutting, logging, mining, power line maintenance, and area closures); and
- Administration (patrol, communication, FDOP, sign and other plans and planning activities).
  - ○ **BLM –** *Refer to BLM MS-9212 – Fire Prevention.*
  - ○ **NPS –** *Only units that experience more than an average of 26 human-caused fires per ten-year period are required to develop a fire prevention plan.*
  - ○ **FWS –** *Prevention assessment determines requirement for prevention plan. Refer to Fire Management Handbook Chapter 10.*
  - ○ **FS –** *Refer to FSM 5110.*
  - ○ **BIA** *– Refer to 90IAM 1.4C (6) – H, BIA National Wildfire Prevention Handbook for guidance, available at https://www.bia.gov/bia/ots/dfwfm/bwfm/wildfire-prevention-and-education/prevention-resource-library.*

National Fire Prevention Education Teams

National Fire Prevention and Education Teams (NFPETs) provide unit and agency managers with skilled and mobile personnel which have the ability to supplement or enhance ongoing local wildfire prevention and education activities, where hazard or risk is, or is expected to be, elevated above normal.

Teams are highly effective in their ability to reduce unwanted human-caused wildland ignitions and are equipped to rapidly complete on-site prevention assessments and plans, initiate implementation of such plans, and to begin immediate prevention and education activities.

A basic team is composed of three personnel with these minimum qualifications:
- 1 PETL – Prevention and Education Team Leader;
- 1 PETM – Prevention and Education Team Member; and
- 1 PIO2 – Public Information Officer Type 2.

Actual team composition may include additional support positions, as determined jointly by the team leader and the ordering unit, on a case-by-case basis, based on the team's anticipated tasking. The use of trainees is encouraged.

NFPETs can assist the local unit in preventing unwanted human-caused wildfires in several ways. They can assist the local unit to:
- Complete fire risk assessments;
- Determine the severity of the situation;
- Facilitate community awareness and education in fire prevention including prescribed burning;
- Coordinate announcement of interagency restrictions and closures;
- Coordinate fire prevention efforts with the public, special target groups, state and local agencies, and elected officials;

1 • Promote public and personal responsibility regarding fire prevention in the
2   wildland/urban interface; and
3 • Assist Incident Management Teams in accomplishing their objectives in
4   working with the public to develop fire protection plans.

5 To order an NFPET, place the order with the regional GACCs. See the National
6 Interagency Mobilization Guide for additional information on ordering and
7 using NFPETs.

8 **Fire Danger PocketCard for Firefighter Safety**

9 Fire Danger PocketCards provide, through a graphical interpretation of historic
10 fire danger, a means for firefighters to understand the fire potential for a given
11 local area during any day of the fire season. PocketCards apply to areas of
12 uniform fire danger rating, known as FDRAs, which should be developed
13 through an interagency FDOP process (if FDRAs aren't defined, PocketCards
14 may be developed based on other areas of like fire danger). The PocketCard can
15 also be an ideal tool for local seasonal tracking of fire season severity with the
16 addition of daily indices (see "Local Unit Seasonal Tracking" section). The Fire
17 Danger PocketCards must adhere to the NWCG standard located at
18 https://famit.nwcg.gov/applications/WIMS/PocketCards.

19 PocketCards should be updated following a significant fire season but;
20 otherwise, based on the length of the station or Special Interest Group (SIG)
21 dataset:
22 • 10 years or less of historic weather data, update PocketCard annually;
23 • 11-14 years, update every other year;
24 • 15 years or more, update every 3 years.

25 In all cases, a high quality database should be used; i.e., 5 years of poor data and
26 10 years of good data does not equal 15 years of quality data.

27 Compliance with the standard, including quality, currency, and application of
28 the PocketCard, is the responsibility of the local fire management unit.
29 • **BLM** – *Seasonal trend analysis (updated and posted at least every two*
30   *weeks) is the only requirement for communication of fire danger, although*
31   *offices may use PocketCards in addition to a seasonal trend analysis if they*
32   *choose to. Seasonal trend analyses will be prepared at the Predictive*
33   *Service Area scale or smaller. Predictive Service Area scale analyses are*
34   *typically developed and posted online by the Geographic Area*
35   *Coordination Center while smaller scales are typically developed by the*
36   *local unit. Hard copies should be made available in areas with limited*
37   *internet connectivity. Fire management officers should ensure incoming and*
38   *local resources are briefed on the seasonal trend analysis for their area*
39   *(See FA IM-2018-022). Final approval for seasonal trend analyses and*
40   *PocketCards will be obtained from the BLM representative to the NWCG*

Fire Danger Subcommittee (https://www.nwcg.gov/committees/fire-danger-subcommittee/roster).

- **FS** – *Obtain Regional certification for Fire Danger PocketCards. Distribute PocketCards to each fireline supervisor on Type 3, 4, and 5 wildfires. Units have the option to do more frequent updates if they choose to do so.*
- **BIA** – *Field-level units will identify the NWCG-compliant Fire Danger PocketCard(s) that represent its lands and ensure they are available to all firefighters and fire management personnel.*

The NWCG standards for updating and posting the cards can be found at https://famit.nwcg.gov/applications/WIMS/PocketCards.

Managing Weather Data in WIMS

Fire danger requires continual management in order to produce accurate results that are applied in a timely manner. Some daily weather observation variables (such as state of the weather) must be manually validated and published daily. This procedure is essential for the calculation of daily and forecasted fire danger outputs in WIMS and ensures weather data storage in the National Fire and Aviation Management (FAMWeb) Database. These efforts are coordinated with local National Weather Service fire weather meteorologists to provide timely forecasted fire danger outputs.

In addition to daily weather management, certain WIMS data requires periodic adjustment. The following should be adjusted seasonally or as appropriate:
- Live fuel moisture model inputs, including herbaceous vegetation stage, green-up and freeze date, season codes, greenness factors.
- Dead fuel moisture model inputs, including the snow flag and starting 1000 hour and X1000 fuel moisture and KBDI values.

Decision points should be reviewed annually and adjusted, as appropriate, based on statistical analysis. If decision points are adjusted, PocketCards should also be validated and updated as necessary.

Management Actions for Remote Automated Weather Stations (RAWS)

Noncompliance Report
A weekly report from Wildland Fire Management Information (WFMI) weather module displays RAWS that are more than 1 year and 45 days past their annual maintenance date. Fire weather stations are to be maintained annually per *NWCG Standards for Fire Weather Stations* (PMS 426-3). The report is widely distributed by email and available at https://raws.nifc.gov/standards-guidelines. If a RAWS is on the report, it has either not had annual maintenance, or the documentation for annual maintenance has not been completed in WFMI. Data from these RAWS should not be used or used with caution.

Portable RAWS

Fire managers should ensure that locally held portable RAWS are maintained prior to use. Non-maintained portable RAWS will not be activated for data processing through WFMI weather.

- **BLM** – *Refer to Chapter 2 for more guidance.*

Predictive Service Areas

Predictive Service Areas (PSA) are sub-geographic areas of similar climate, fuels and topography defined by Geographic Area Coordination Center (GACC) meteorologists generally for forecasting purposes. The PSAs are also used to display current and forecasted conditions at the national and Geographic Area level, such as maps showing 7-day Significant Fire Potential and statistics graphs of select indices and fuel moistures. While PSAs are defined using similar criteria as Fire Danger Rating Areas (FDRAs), the PSA-based products are intended for longer range prediction purposes and strategic planning at the sub-geographic scale, and FDRA-based products are intended to guide daily operational decisions at the unit level.

National Predictive Services Fire Potential Outlooks and Advisories

National Significant Wildland Fire Potential Outlook

The National Significant Wildland Fire Potential Outlook is prepared and distributed by NICC Predictive Services on the first day of each month. The Outlook is a composite of outlooks prepared by the individual Geographic Area Predictive Services units and national discussions prepared by NICC Predictive Services. It provides fire managers at all levels with the information needed to make long range decisions concerning resource staffing and allocation. The Outlook identifies areas where significant wildland fire activity is expected to be above or below normal levels.

The Outlook covers a four-month period. Maps for each period display areas of below normal, normal, and above normal significant wildland fire potential. A brief synopsis of the current and predicted national and GACC situation is included in the report. Specific guidance on issuance and requirements for the National Significant Wildland Fire Potential Outlook can be found in the *National Interagency Mobilization Guide* at https://www.nifc.gov/nicc/mobguide/index.html.

National 7-day Significant Fire Potential Outlook

The National 7-day Significant Fire Potential Outlook is a composite of outlooks produced by each of the Geographic Area Predictive Services units. The 7-day provides a week-long projection of fuel dryness, weather, and fire potential. The 7-day depicts a nationwide view of the significant fire potential for the next seven days with links to the individual Geographic Area 7-day outlooks. The system is database-driven and is updated periodically as each Geographic Area Predictive Services unit posts its outlook. Each Geographic Area Predictive

Services unit will determine whether to routinely produce a morning or afternoon product. Issuance times for each Area's outlook can be found in the Geographic Area Mobilization Guide and/or in its National Weather Service/Predictive Services Operating Plan. Guidance on issuance and requirements for National 7-day Significant Fire Potential Outlook can be found in the *National Interagency Mobilization Guide* at https://www.nifc.gov/nicc/mobguide/index.html.

Fuels and Fire Behavior Advisories

Fuels and Fire Behavior Advisories are alerts issued as needed to address an exceptional or extreme circumstance that could threaten firefighter or public safety. Conditions that could be reasonably expected normally do not warrant a Fuels and Fire Behavior Advisory. Advisories will focus on fuel conditions and fire behavior that have long term impacts, not atmospheric conditions that can be found in other Predictive Services products. Advisories will highlight and give specific examples of conditions that are currently on-going and have been experienced in the field. Advisories should be tailored so that firefighters at all experience levels can recognize the situation and act accordingly. Advisories should be coordinated with neighboring administrative units to ensure that all areas with similar conditions are being addressed. All Advisories that extend beyond a single local administrative unit or that will be posted on the national Advisory map must be coordinated with the NICC and GACC Predictive Service Units. Each Advisory must include a map of the affected area. Only one Advisory may be active at any time over any area. If multiple Advisory conditions are present incorporate them into one Advisory. Advisories will remain in effect for 14 days from issuance. If the Advisory conditions continue beyond the 14 days a new Advisory will need to be issued to update conditions and circumstances with more timely information. At the request of the issuer Advisories may be lifted before the 14 days has passed. For the Fuels and Fire Behavior Advisory Template and Protocols, see https://www.predictiveservices.nifc.gov/fuels_fire-danger/fuels_fire-danger.htm.

National Intelligence Products

See the *National Interagency Mobilization Guide*, Chapter 60.

Local Unit Seasonal Tracking

- **BLM –** *Districts can use a FDOP, or Fire Danger Analysis Document (FDAD), or a Fire Weather and Fire Occurrence Analysis Document (FWOAD) depending on which format best meets their needs.*

As identified in the FMP and/or FDOP, each unit selects and compares to normal, the current value and seasonal trend of one (or more) of the following indicators which are most useful in predicting fire season severity and duration in its area. By downloading daily weather observations and adding them to the database, FFP or similar statistical analysis software can be used to produce the

current NFDRS, CFFDRS, and fuel moisture products, including statistical graphs of various indices and components such as:

- NFDRS (or CFFDRS) index and/or component values;
- Palmer Drought or Keetch-Byram Drought Index;
- 1000-hour fuel moisture;
- 100-hour fuel moisture;
- Live fuel moisture; and/or
- Growing Season Index.

The seasonal trend of each selected indicator is graphically compared to normal and all-time worst (for the historical period analyzed). This comparison is updated regularly and posted in dispatch and crew areas. The mechanism that is recommended for comparing and displaying these items is a PocketCard and/or fire danger seasonal graphs, which have been developed and used at the local unit to inform and educate firefighters on local conditions. PocketCards and seasonal fire danger graphs should use the same index and fuel model to display information so that the two can be easily compared.

Any local seasonal trends of indices/components or fuel moisture values should be communicated to the GACC Predictive Services unit to augment their assessments. Trends should be monitored throughout the fire season and communication should be on-going, particularly when significant changes in key indicators occur.

Fire Severity Funding

Fire severity funding is the authorized use of suppression operations funds (normally used exclusively for suppression operations and distinct from preparedness funds) for extraordinary preparedness activities that are required due to:

- FMP, FDOP, or operating plan criteria that indicate the need for additional preparedness/suppression resources. The plan(s) should identify thresholds for severity needs.
- Anticipated fire activity will exceed the capabilities of local resources.
- Fire seasons that either start earlier or last longer than identified in a FDOP.
- An abnormal increase in fire potential or danger not planned for in existing preparedness plans.

Agency established decision points or thresholds will be used to determine severity funding needs.

The objective of fire severity funding is to appropriately manage risk and adjust planned specific actions and staffing in excess of the budgeted program to improve initial response capabilities and wildfire prevention activities, when extraordinary weather and fire conditions may result in the occurrence, or substantial threat of occurrence, of wildfires with significant damage potential.

Fire severity funding is not intended to:

- Raise preparedness funding levels to cover differences that may exist between funds actually appropriated and those identified in the fire planning process.
  - *BLM – Refer to Chapter 2 for more guidance.*
  - *NPS/FWS/FS – Mitigate threats to Threatened and Endangered Species habitat, wildland/urban interface, or other values identified in Land and Resource Management Plans.*

Typical Uses

Fire severity funds are typically used to:

- Increase prevention activities;
- Temporarily increase firefighting staffing;
- Pay for standby;
- Preposition initial attack suppression forces;
- Provide additional aerial reconnaissance; and
- Provide for standby aircraft availability.

Authorization

Authorization to use severity funding is provided in writing based on a written request with supporting documentation. Authorization is on a line item basis and comes with a severity cost code. Agencies will follow their administrative procedures for issuing severity cost codes. Authorization is provided for a maximum of 30 days per request; however, regardless of the length of the authorization, use of severity funding must be terminated when abnormal conditions no longer exist. If the fire severity situation extends beyond the 30-day authorization, the Unit/State/Region/Agencies/Tribes must prepare a new severity request.

State/Regional-Level Fire Severity Funding

Each fiscal year the national office will provide each state/region with funding and a severity cost code for state/regional short-term severity needs (e.g., wind events, cold dry front passage, lightning events, and unexpected events such as off road rallies, cultural events) that are expected to last less than one week. Expenditure of these funds is authorized by the State/Regional Directors at the written request of the Agency Administrator. State/Regional Directors are responsible and accountable for ensuring that these funds are used only to meet severity funding objectives and that amounts are not exceeded. The national office will notify the State/Regional Director, State/Regional Budget Officer, and the State/Regional FMO when the severity cost code is provided.

- *BLM – Refer to Chapter 2 and the BLM Fire Operations website (http://web.blm.gov/internal/fire/fire_ops/policy.htm) for additional short-term severity guidance.*
- *NPS – Parks have the authority to approve "Step-up" actions only, as defined in their fire management plan. Regional offices approve severity (long term – up to 30 days) for parks up to $100,000 per severity event.*

- **FWS –** *Refer to the Fire Management Handbook Chapter 10 for additional short-term severity guidance.*
- **FS –** *Severity funding direction is found in FSM 5130 and current FY Program Direction.*
- **BIA –** *Regional offices will establish procedures for approval and monitoring short-term severity usage/funds within their respective regions.*

National-Level Fire Severity Funding

National agency fire directors or their delegates are authorized to allocate fire severity funding under specific conditions stated or referenced in this chapter. Expenditure of these funds is authorized by the appropriate approving official at the written request of the State/Regional Director. Approved severity funding will be used only for the preparedness activities and timeframes specifically outlined in the authorization, and only for the objectives stated above.

- **BLM –** *Refer to Chapter 2 and the BLM Fire Operations Website for additional national severity guidance.*
- **NPS –** *National office approves all single or cumulative requests exceeding $100,000.*
- **FWS –** *Additional information may be found on the FWS SharePoint site or the current US Fish and Wildlife Service Fire Business Guide.*
- **FS –** *Regional offices approve all severity requests.*
- **BIA –** *Refer to Chapter 6 for additional guidance.*

Appropriate Fire Severity Funding Charges and Activities

Severity funded personnel and resources will not use a severity cost code while assigned to wildfires. The wildfire FireCode number will be used instead.

Labor

Appropriate labor charges include:
- Regular pay for non-fire personnel;
- Regular pay for seasonal/temporary fire personnel outside their normal fire funded activation period; and
- Overtime pay for all fire and non-fire personnel.

Severity funded personnel and resources must be available for immediate initial attack regardless of the daily task assignment.

Vehicles and Equipment

Appropriate vehicle and equipment charges include:
- GSA lease rate and mileage;
- Hourly rate or mileage for Agency owned vehicles; and
- Commercial rentals and contracts.

Aviation

Appropriate aviation charges include:
- Contract extensions;

- The daily minimum cost for call when needed (CWN) aircraft;
- Preposition flight time; and
- Support expenses necessary for severity funded aircraft (facility rentals, utilities, telephones, etc.).

Travel and Per Diem

Severity funded personnel in travel status are fully subsisted by the government in accordance with their agency regulations. Costs covered include:

- Lodging;
- Government provided meals (in lieu of per diem);
- Airfare (including returning to their home base);
- Privately owned vehicle mileage (with prior approval); and
- Other miscellaneous travel and per diem expenses associated with the assignment.

Prevention Activities

Appropriate prevention activities include:

- Funding Prevention Teams (Prevention teams will be mobilized as referenced in the National Interagency Mobilization Guide, Chapter 20).
- Implementing local prevention campaigns, to include community risk assessments, mitigation planning, enforcement, outreach, and education.
- Augmenting patrols.
- **Note:** Non-fire funded prevention team members should charge base 8 and overtime to the severity cost code for the length of the prevention activities assignment. Fire funded personnel should charge overtime only to the severity cost code for the length of the prevention activities assignment.

Inappropriate Fire Severity Funding Charges

- To cover differences that may exist between funds actually appropriated (including rescissions) and those identified in the fire planning process.
- Administrative surcharges, indirect costs, fringe benefits.
- Equipment purchases.
- Purchase, maintenance, repair, or upgrade of vehicles.
  - *NPS/FWS/BIA – Severity-related repair and maintenance of agency vehicles and equipment may be funded by severity because they do not have a use rate covering these charges. These charges must be approved by the National Office.*
- Purchase of radios.
- Purchase of telephones.
- Purchase of pumps, saws, and similar suppression equipment.
- Aircraft availability during contract period.
- Cache supplies that are normally available in fire caches.
- Fixed ownership rate vehicle costs.

Interagency Severity Requests

Agencies working cooperatively in the same geographic area must work together to generate and submit joint requests, to minimize duplication of required resources, reduce interagency costs, and to utilize severity funded resources in an interagency manner. However, each agency should request funds only for its fair-share contributions or offsets for pooled, interagency resources/activities. The joint request should be routed simultaneously through each agency's approval system, and the respective approving official will issue an authorization that specifies allocations by agency.

Requesting Fire Severity Funding

Each agency has established severity funding request protocols. The completed and signed request is submitted from the State/Regional Director to the appropriate approving official as per the sequence of action outlined below. Authorizations will be returned in writing.

Severity funding request information for all agencies can be found at https://www.nifc.gov/policies/pol_severity_funding.html.

Sequence of Action and Responsible Parties for Severity Funding Requests

Action	Responsible Party
In collaboration with interagency partners, as appropriate, identify and develop severity funding request.	Unit FMO
Review, modify, and approve (or reject) request. Forward to state/regional office.	Unit Agency Administrator
Review, modify, and recommend for approval (or rejection) unit request. Add state/regional needs and consolidate. Forward to State/Regional Director for approval within 48 hours.	State/Regional FMO
Review, modify, and approve (or reject) request. Forward to the appropriate National Fire Director/approving official within 48 hours. Notify the fire budget staff.	State/Regional Director
Review, modify, and approve (or reject) the request within 48 hours. Issue written authorization with a severity cost code.	Appropriate National Fire Director/Approving Official
Establish severity cost code in the appropriate finance system within 24 hours.	Applicable National Finance System
Notify unit office(s) and state/regional budget lead upon receipt of authorization.	State/Regional FMO

Action	Responsible Party
Utilize severity cost code. Ensure that project expenditures are only used for authorized purposes. Continually assess needs and submit new requests/extensions as required.	Unit FMO
Maintain severity files, including requests, authorizations, and summary of expenditures and activities.	Unit/State/Regional/ National Offices

- ***FS** – Severity codes are pre-established at the beginning of the fiscal year. Requests are approved at the regional office with a copy to the national office for those exceeding $250,000 or including National Shared Resources.*

Labor Cost Coding For Fire Severity Funded Personnel

Fire preparedness personnel outside their normal activation period, employees whose regular salary is not fire funded, and Administratively Determined (AD) employees hired under an approved severity request should charge regular time and approved non-fire overtime to the severity suppression operations subactivity and the requesting office's severity cost code.

Fire preparedness personnel should charge their regular planned salary (base-eight) to their budgeted subactivity using their home unit's location code. Overtime associated with the severity request should be charged to the severity suppression operations subactivity and the requesting office's severity cost code.

Regular hours worked in suppression operations will require the use of the appropriate fire subactivity with the appropriate FireCode number. Overtime in fire suppression operations will be charged to the suppression operations subactivity with the appropriate FireCode number.

Employees from non-federal agencies should charge their time in accordance with the approved severity request and the appropriate local and statewide agreements. An interagency agreement for reimbursement must be established. The Interagency Agreement for Fire Management can be used as a template.

- ***FS** – Firefighters under a severity order will continue to charge base salary to a B-code and overtime to the severity S-code, even if it is outside their funded tour. If called out to an incident these resources will be under the same rules of charging base salary to a B-code and overtime to the P-code. Regions must manage funding of tours within allocations provided. Firefighters working on an incident beyond their planned and funded tour will continue to charge their Base 8 hours to a B-code (WFPR). Regions must contact WO FAM if they believe they might exceed their allocations. All firefighters charge their Base 8 hours to Preparedness job codes – either WFPR or a B-code unless they are working on other non-fire project work outside of fire season. These situations are accounted for*

in the allocations by basing the allocations on the last three years of salary
expenditures.

Documentation

The unit/state/regional and national office will document and file accurate
records of severity funding activity. This will include complete severity funding
requests, written authorizations, and expenditure records.

Severity Funding Reviews

State/Regional and National offices should ensure appropriate usage of severity
funding and expenditures. This may be done as part of their normal agency fire
program review cycle.

Qualification for Professional Liability Insurance Reimbursement

Public Law 110-161 provides for reimbursement for up to one half of the cost
incurred for professional liability insurance (including any administrative
processing cost charged by the insurance company) for temporary fire line
managers, management officials, and law enforcement officers.

To qualify for reimbursement, "temporary fire line managers" must meet one of
the following three criteria:

- Provide temporary supervision or management of personnel engaged in
  wildland fire activities;
- Provide analysis or information that affects a supervisor's or manager's
  decision about a wildland fire;
- Direct the deployment of equipment for a wildland fire, such as a base camp
  manager, an equipment manager, a helicopter coordinator, or an initial
  attack dispatcher.
  - ○ ***DOI** – See Personnel Bulletin No. 08-07, March 20, 2008.*
  - ○ ***FS** – Refer to https://fsweb.asc.fs.fed.us/HR.*

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