

1 **Chapter 10**
2 **Preparedness**

3 **Preparedness Overview**

4 Fire preparedness is the state of being ready to provide an appropriate response
5 to wildland fires based on identified objectives and is the result of activities that
6 are planned and implemented prior to fire ignitions.

7 Preparedness requires:

- 8 • Identifying necessary firefighting capabilities;
- 9 • Implementing coordinated programs to develop those capabilities;
- 10 • A continuous process of developing and maintaining firefighting
11 infrastructure;
- 12 • Predicting fire activity;
- 13 • Implementing prevention activities;
- 14 • Identifying values to be protected;
- 15 • Hiring, training, equipping, pre-positioning, and deploying firefighters and
16 equipment;
- 17 • Evaluating performance;
- 18 • Correcting deficiencies; and
- 19 • Improving operations.

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

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

25 **Preparedness Planning**

26 At the local level, preparedness planning and the resultant activities begin with a
27 Fire Danger Operating Plan (FDOP), which includes a number of other plans
28 that result in coordinated actions based on the fire situation.

29 References, templates, and other supporting materials pertaining to the FDOP
30 process and related operationally-focused preparedness plans can be found at
31 <https://www.wfas.net/nfdrs2016>.

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

- 1 Preparedness plans should include, but are not limited to:
- 2 • Fire Danger Operating Plan
 - 3 • Preparedness Level Plan
 - 4 • Initial Response/Pre-planned Dispatch Plan
 - 5 • Step-up/Staffing Plan
 - 6 • Fire Prevention/Mitigation Plan (as specified by agency requirements)
 - 7 • Closure/Restriction Plan (as specified by agency requirements)

8 **Fire Danger Rating**

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

20 The following requirements apply to all NFDRS-compliant weather stations
21 managed in WIMS:

- 22 • For the primary fuel model (i.e., the first model listed in the WIMS station
23 catalog):
 - 24 ○ Identify an appropriate Staffing index;
 - 25 ○ Identify the Staffing index breakpoints (i.e., the two highest breakpoint
26 values and their associated percentiles*); and
 - 27 ○ Identify the number of Decision Classes (i.e., the number of Staffing
28 Levels).
- 29 • If not already entered as the primary fuel model, also enter Fuel Model G:
 - 30 ○ Identify ERC as the Staffing index;
 - 31 ○ Identify the ERC breakpoints (i.e., the two highest ERC breakpoint
32 values and their associated percentiles*); and
 - 33 ○ Identify the number of Decision Classes (i.e., the number of Staffing
34 Levels).

35 * For units that have not performed detailed analysis to identify Fire
36 Business Thresholds or Climatological Breakpoints, it is recommended
37 to use the 90th and 97th percentiles as default values for these Critical
38 Percentiles.

- 39 ■ *BLM – 80th and 95th percentiles*

1 Communication of Fire Danger

2 Daily Observed and Forecasted Fire Danger Outputs will be:

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

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

8 Fire Danger Operating Plan

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

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

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

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

- 1 A FDOP template can be found at <https://www.wfas.net/nfdrs2016>.
- 2 Required minimum content for the FDOP includes the following components:
- 3 • **Roles and Responsibilities**
- 4 This section of the FDOP defines the roles and responsibilities for those
5 responsible for the development, maintenance and daily implementation of
6 the plan, program management related to the plan, and associated training.
- 7 • **Fire Danger Area Inventory**
- 8 This section of the FDOP presents the inventory of the basic components of
9 the FDOP area, which will describe the general area, including the
10 administrative units involved in the planning process. The fire danger area
11 inventory will include:
- 12 ○ Fire history, as well as identification of fire/ignition issues specific to
13 the area;
- 14 ○ Description of vegetation/fuels, topography, and weather/climatology
15 resulting in the delineation of specific Fire Danger Rating Areas
16 (FDRAs), which are broad landscapes (typically, on the scale of tens or
17 hundreds of thousands of acres each) that are considered to have
18 relatively homogeneous fire danger;
- 19 ○ The existing weather station network and identification of any
20 additional weather station system needs; and
- 21 ○ Validation that each Remote Automated Weather Station (RAWS)
22 meets the requirements of the *Interagency Wildland Fire Weather*
23 *Station Standards and Guidelines* (PMS 426-3).
- 24 • **Operational Procedures**
- 25 This section of the FDOP establishes the procedures used to gather and
26 process data in order to integrate fire danger rating information into
27 decision processes. The network of fire weather stations whose observations
28 are used to determine fire danger ratings is identified. Station maintenance
29 responsibilities and schedules are defined. Include:
- 30 ○ Daily weather processing schedule and procedures;
- 31 ○ Daily communication schedule and modes;
- 32 ○ Seasonal station catalog adjustment schedule and responsible
33 personnel;
- 34 ○ Annual review of decision points and responsible personnel; and
- 35 ○ Periodic review of PocketCards or other communication methodology
36 and responsible personnel.
- 37 • **Decision Point Analysis**
- 38 This section of the FDOP describes the analysis of climatological
39 breakpoints and fire business thresholds that trigger changes in fire danger-
40 related decisions within an FDRA. Decision points are identified using
41 statistical analysis software such as but not limited to FFP. Distinct
42 selections of fuel model and fire danger index/component (NFDRS or
43 CFFDRS) are appropriate for different management decisions (such as
44 staffing, initial response, or industrial and public restrictions).

1 Because Fire Business Thresholds correlate periods of historical fire danger
2 and fire occurrence, they generally provide the best decision support and are
3 appropriate for identifying Staffing Levels, Dispatch Levels, fire
4 restrictions, Preparedness Levels, fire prevention activities, and other
5 specific readiness actions. Climatological Breakpoints, which are expressed
6 as percentiles, may be appropriate as decision points for longer term
7 decisions and general preparedness activities, such as seasonal staffing
8 start/end dates or contract aircraft availability periods.

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

13 • **Fire Danger-based Decisions**

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

22 **Preparedness Level Plans**

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

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

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

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

3 **Step-up/Staffing Plans**

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

11 **Staffing Level**

12 The Staffing Level should be used to guide daily internal fire operational
13 decisions at the local level. The Staffing Level specifies appropriate daily
14 staffing for initial response resources, such as when to implement 7-day coverage
15 and adjusted work schedules, and the number of personnel committed to initial
16 attack resources (in contrast to the Initial Response/Pre-planned Dispatch Plan –
17 described below – that specifies the number of resources dispatched to an
18 incident). Staffing Level helps define “How ready to be today?” A unit can
19 operate with 3 to 9 levels of staffing. Most units typically use 5 (1, 2, 3, 4, 5) or 6
20 (1, 2, 3L, 3H, 4, 5) levels. The use of Fire Business Thresholds to determine
21 Staffing Levels is encouraged; however, they must be computed outside of the
22 WIMS.

23 The Step-up/Staffing Plan describes pre-approved escalating responses that are
24 in the FDOP and FMP. A Step-up/Staffing Plan should also include recurring
25 supplemental preparedness actions designed to enhance the unit's fire
26 management capability during short periods (Fourth of July, or other pre-
27 identified events) where staffing normally needs to be increased to meet initial
28 attack, prevention, or detection needs.

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

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

38 In contrast to staffing actions established for the normal range of conditions,
39 severity is a longer duration condition that cannot be adequately dealt with under

1 normal staffing, such as a killing frost converting live fuel to dead fuel or drought
2 conditions. Severity is discussed later in this chapter.

3 **Initial Response/Pre-planned Dispatch Plans**

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

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

16 **Fire Prevention/Mitigation Plans**

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

24 The Prevention/Mitigation Plan outlines how the Adjective Fire Danger Ratings
25 are communicated to the public, and applied, in terms of responsible personnel
26 and assigned activities. Prevention activities are intended to reduce the occurrence
27 of unwanted human-caused fires and include, but are not limited to:

- 28 • Education (signage, school programs, radio and news releases, recreation
29 contacts, local business contacts, exhibits);
- 30 • Engineering (public utility company, government agency/cooperator
31 coordination);
- 32 • Enforcement/industrial program monitoring (patrol, permitting, inspections
33 including firewood cutting, logging, mining, power line maintenance, and
34 area closures); and
- 35 • Administration (patrol, communication, FDOP, sign and other plans and
36 planning activities).
 - 37 ○ *NPS – Only units that experience more than an average of 26 human-*
38 *caused fires per ten-year period are required to develop a fire*
39 *prevention plan.*

- 1 ○ **FWS** – *Prevention assessment determines requirement for prevention*
- 2 *plan. Refer to Fire Management Handbook Chapter 10.*
- 3 ○ **FS** – *Refer to FSM 5110.*
- 4 ○ **BIA** – *Refer to 90IAM 1.4C (6) – H, BIA National Wildfire Prevention*
- 5 *Handbook for guidance, available at*
- 6 *[https://www.bia.gov/bia/ots/dfwfm/bwfm/wildfire-prevention-and-](https://www.bia.gov/bia/ots/dfwfm/bwfm/wildfire-prevention-and-education/prevention-resource-library)*
- 7 *education/prevention-resource-library.*

8 **National Fire Prevention Education Teams**

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

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

17 A basic team is composed of three personnel with these minimum qualifications:

- 18 • 1 PETL – Prevention and Education Team Leader;
- 19 • 1 PETM – Prevention and Education Team Member; and
- 20 • 1 PIO2 – Public Information Officer Type 2.

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

24 NFPETs can assist the local unit in preventing unwanted human-caused
25 wildfires in several ways. They can assist the local unit to:

- 26 • Complete fire risk assessments;
- 27 • Determine the severity of the situation;
- 28 • Facilitate community awareness and education in fire prevention including
29 prescribed burning;
- 30 • Coordinate announcement of interagency restrictions and closures;
- 31 • Coordinate fire prevention efforts with the public, special target groups,
32 state and local agencies, and elected officials;
- 33 • Promote public and personal responsibility regarding fire prevention in the
34 wildland/urban interface; and
- 35 • Assist Incident Management Teams in accomplishing their objectives in
36 working with the public to develop fire protection plans.

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

1 Fire Danger PocketCard for Firefighter Safety

2 Fire Danger PocketCards provide, through a graphical interpretation of historic
3 fire danger, a means for firefighters to understand the fire potential for a given
4 local area during any day of the fire season. PocketCards apply to areas of
5 uniform fire danger rating, known as FDRAs, which should be developed
6 through an interagency FDOP process (if FDRAs aren't defined, PocketCards
7 may be developed based on other areas of like fire danger). The PocketCard can
8 also be an ideal tool for local seasonal tracking of fire season severity with the
9 addition of daily indices (see "Local Unit Seasonal Tracking" section). The Fire
10 Danger PocketCards must adhere to the NWCG standard located at
11 <https://fam.nwcg.gov/fam-web/pocketcards/default.htm>.

12 PocketCards should be updated following a significant fire season but;
13 otherwise, based on the length of the station or Special Interest Group (SIG)
14 dataset:

- 15 • 10 years or less of historic weather data, update PocketCard annually;
- 16 • 11-14 years, update every other year;
- 17 • 15 years or more, update every 3 years.

18 In all cases, a high quality database should be used; i.e., 5 years of poor data and
19 10 years of good data does not equal 15 years of quality data.

20 Compliance with the standard, including quality, currency, and application of
21 the PocketCard, is the responsibility of the local fire management unit.

- 22 • **BLM** – *All units will develop, maintain and ensure PocketCards are*
23 *available to all personnel. Alaska is required to complete a Seasonal Trend*
24 *Analysis in lieu of PocketCards. Final approval for PocketCards and*
25 *Seasonal Trend Analyses will be obtained from the BLM representative to*
26 *the NWCG Fire Danger Subcommittee (current contact information*
27 *available at [https://www.nwcg.gov/committees/fire-danger-](https://www.nwcg.gov/committees/fire-danger-subcommittee/roster)*
28 *subcommittee/roster).*
- 29 • **FS** – *Obtain Regional certification for Fire Danger PocketCards.*
30 *Distribute PocketCards to each fireline supervisor on Type 3, 4, and 5*
31 *wildfires. Units have the option to do more frequent updates if they choose*
32 *to do so.*
- 33 • **BIA** – *Agencies and Tribes will maintain Fire Danger PocketCards and*
34 *ensure they are available to all personnel.*

35 The NWCG standards for updating and posting the cards can be found at
36 <https://fam.nwcg.gov/fam-web/pocketcards/default.htm>.

37 Managing Weather Data in WIMS

38 Fire danger requires continual management in order to produce accurate results
39 that are applied in a timely manner. Some daily weather observation variables

1 (such as state of the weather) must be manually validated and published daily.
2 This procedure is essential for the calculation of daily and forecasted fire danger
3 outputs in WIMS and ensures weather data storage in the National Fire and
4 Aviation Management (FAMWeb) Database. These efforts are coordinated with
5 local National Weather Service fire weather meteorologists to provide timely
6 forecasted fire danger outputs.

7 In addition to daily weather management, certain WIMS data requires periodic
8 adjustment. The following should be adjusted seasonally or as appropriate:

- 9 • Live fuel moisture model inputs, including herbaceous vegetation stage,
10 green-up and freeze date, season codes, greenness factors.
- 11 • Dead fuel moisture model inputs, including the snow flag and starting 1000
12 hour and X1000 fuel moisture and KBDI values.

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

16 **Management Actions for Remote Automated Weather Stations (RAWS)**

17 **Noncompliance Report**

18 A weekly report from Wildland Fire Management Information (WFMI) weather
19 module displays RAWS that are more than 1 year and 45 days past their annual
20 maintenance date. Fire weather stations are to be maintained annually per
21 *Interagency Wildland Fire Weather Station Standards and Guidelines* (PMS
22 426-3). The report is widely distributed by email and available at
23 <https://famit.nwccg.gov/applications/RAWS>. If a RAWS is on the report, it has
24 either not had annual maintenance, or the documentation for annual maintenance
25 has not been completed in WFMI. Data from these RAWS should not be used or
26 used with caution.

27 **Portable RAWS**

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

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

32 **Predictive Service Areas**

33 Predictive Service Areas (PSA) are sub-geographic areas of similar climate, fuels
34 and topography defined by Geographic Area Coordination Center (GACC)
35 meteorologists generally for forecasting purposes. The PSAs are also used to
36 display current and forecasted conditions at the national and Geographic Area
37 level, such as maps showing 7-day Significant Fire Potential and statistics graphs
38 of select indices and fuel moistures. While PSAs are defined using similar criteria
39 as Fire Danger Rating Areas (FDRAs), the PSA-based products are intended for

1 longer range prediction purposes and strategic planning at the sub-geographic
2 scale, and FDRA-based products are intended to guide daily operational decisions
3 at the unit level.

4 **National Predictive Services Fire Potential Outlooks and Advisories**

5 **National Significant Wildland Fire Potential Outlook**

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

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

21 **National 7-day Significant Fire Potential Outlook**

22 The National 7-day Significant Fire Potential Outlook is a composite of outlooks
23 produced by each of the Geographic Area Predictive Services units. The 7-day
24 provides a week-long projection of fuel dryness, weather, and fire potential. The
25 7-day depicts a nationwide view of the significant fire potential for the next
26 seven days with links to the individual Geographic Area 7-day outlooks. The
27 system is database-driven and is updated periodically as each Geographic Area
28 Predictive Services unit posts its outlook. Each Geographic Area Predictive
29 Services unit will determine whether to routinely produce a morning or
30 afternoon product. Issuance times for each Area's outlook can be found in the
31 Geographic Area Mobilization Guide and/or in its National Weather
32 Service/Predictive Services Annual Operating Plan. Guidance on issuance and
33 requirements for National 7-day Significant Fire Potential Outlook can be found
34 in the *National Interagency Mobilization Guide* at
35 <https://www.nifc.gov/nicc/mobguide/index.html>.

36 **Fuels and Fire Behavior Advisories**

37 Fuels and Fire Behavior Advisories are alerts issued as needed to address an
38 exceptional or extreme circumstance that could threaten firefighter or public
39 safety. Conditions that could be reasonably expected normally do not warrant a
40 Fuels and Fire Behavior Advisory. Advisories will focus on fuel conditions and
41 fire behavior that have long term impacts, not atmospheric conditions that can

1 be found in other Predictive Services products. Advisories will highlight and
2 give specific examples of conditions that are currently on-going and have been
3 experienced in the field. Advisories should be tailored so that firefighters at all
4 experience levels can recognize the situation and act accordingly. Advisories
5 should be coordinated with neighboring administrative units to ensure that all
6 areas with similar conditions are being addressed. All Advisories that extend
7 beyond a single local administrative unit or that will be posted on the national
8 Advisory map must be coordinated with the NICC and GACC Predictive
9 Service Units. Each Advisory must include a map of the affected area. Only one
10 Advisory may be active at any time over any area. If multiple Advisory
11 conditions are present incorporate them into one Advisory. Advisories will
12 remain in effect for 14 days from issuance. If the Advisory conditions continue
13 beyond the 14 days a new Advisory will need to be issued to update conditions
14 and circumstances with more timely information. At the request of the issuer
15 Advisories may be lifted before the 14 days has passed. For the Fuels and Fire
16 Behavior Advisory Template and Protocols, see
17 https://www.predictiveservices.nifc.gov/fuels_fire-danger/fuels_fire-danger.htm.

18 **National Intelligence Products**

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

20 **Local Unit Seasonal Tracking**

21 As identified in the FMP and/or FDOP, each unit selects and compares to
22 normal, the current value and seasonal trend of one (or more) of the following
23 indicators which are most useful in predicting fire season severity and duration
24 in its area. By downloading daily weather observations and adding them to the
25 database, FFP or similar statistical analysis software can be used to produce the
26 current NFDRS, CFFDRS, and fuel moisture products, including statistical
27 graphs of various indices and components such as:

- 28 • NFDRS (or CFFDRS) index and/or component values;
- 29 • Palmer Drought or Keetch-Byram Drought Index;
- 30 • 1000-hour fuel moisture;
- 31 • 100-hour fuel moisture;
- 32 • Live fuel moisture; and/or
- 33 • Growing Season Index.

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

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

6 **Fire Severity Funding**

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

- 11 • FMP, FDOP, or Annual Operating Plan criteria that indicate the need for
12 additional preparedness/suppression resources. The plan(s) should identify
13 thresholds for severity needs.
- 14 • Anticipated fire activity will exceed the capabilities of local resources.
- 15 • Fire seasons that either start earlier or last longer than identified in the
16 FDOP.
- 17 • An abnormal increase in fire potential or danger not planned for in existing
18 preparedness plans.

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

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

26 Fire severity funding is not intended to:

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

34 **Typical Uses**

35 Fire severity funds are typically used to:

- 36 • Increase prevention activities;
- 37 • Temporarily increase firefighting staffing;
- 38 • Pay for standby;
- 39 • Preposition initial attack suppression forces;
- 40 • Provide additional aerial reconnaissance; and
- 41 • Provide for standby aircraft availability.

1 Authorization

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

11 State/Regional-Level Fire Severity Funding

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

- 22 • **BLM** – Refer to Chapter 2 and the BLM Fire Operations Website
23 (http://web.blm.gov/internal/fire/fire_ops/index.html) for additional short-
24 term severity guidance.
- 25 • **NPS** – Parks have the authority to approve “Step-up” actions only, as
26 defined in their fire management plan. Regional offices approve severity
27 (long term – up to 30 days) for parks up to \$100,000 per severity event.
- 28 • **FWS** – Refer to the Fire Management Handbook Chapter 10 for additional
29 short-term severity guidance.
- 30 • **FS** – Severity funding direction is found in FSM 5130 and current FY
31 Program Direction.
- 32 • **BIA** – Regional Offices will establish procedures for approval and
33 monitoring short-term severity usage/funds within their respective regions.

34 National-Level Fire Severity Funding

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

- 41 • **BLM** – Refer to Chapter 2 and the BLM Fire Operations Website for
42 additional national severity guidance.
- 43 • **NPS** – National office approves all single or cumulative requests exceeding
44 \$100,000.

- 1 • *FWS* – Additional information may be found on the *FWS* Sharepoint site.
- 2 • *FS* – Regional offices approve all severity requests.
- 3 • *BIA* – Refer to Chapter 6 for additional guidance.

4

5 **Appropriate Fire Severity Funding Charges and Activities**

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

8 **Labor**

9 Appropriate labor charges include:

- 10 • Regular pay for non-fire personnel;
- 11 • Regular pay for seasonal/temporary fire personnel outside their normal fire
12 funded activation period; and
- 13 • Overtime pay for all fire and non-fire personnel.

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

16 **Vehicles and Equipment**

17 Appropriate vehicle and equipment charges include:

- 18 • GSA lease rate and mileage;
- 19 • Hourly rate or mileage for Agency owned vehicles; and
- 20 • Commercial rentals and contracts.

21 **Aviation**

22 Appropriate aviation charges include:

- 23 • Contract extensions;
- 24 • The daily minimum cost for call when needed (CWN) aircraft;
- 25 • Preposition flight time; and
- 26 • Support expenses necessary for severity funded aircraft (facility rentals,
27 utilities, telephones, etc.).

28 **Travel and Per Diem**

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

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

1 Prevention Activities

2 Appropriate prevention activities include:

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

12 Inappropriate Fire Severity Funding Charges

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

28 Interagency Severity Requests

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

37 Requesting Fire Severity Funding

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

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

3 **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
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

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

7 **Labor Cost Coding For Fire Severity Funded Personnel**

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

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

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

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

13 **Documentation**

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

17 **Severity Funding Reviews**

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

21 **Qualification for Professional Liability Insurance Reimbursement**

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

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

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