

## Chapter 10 Preparedness

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### Preparedness

Preparedness is the result of activities that are planned and implemented prior to wildland fire ignitions. Preparedness is a continuous process that includes developing and maintaining unit, state/regional, and national level firefighting infrastructure, predicting fire activity, hiring, training, equipping, and deploying firefighters, evaluating performance, correcting deficiencies, and improving overall operations. The preparedness process includes routine pre-season actions as well as incremental in-season actions conducted in response to increasing fire danger.

Preparedness actions are based on operational plans such as fire danger rating operating plans, which use information from decision support tools such as the National Fire Danger Rating System (NFDRS), the Canadian Forest Fire Danger Rating System (CFFDRS, used in interior Alaska), the Palmer Drought Index, live fuel moisture data, Monthly or Seasonal Wildland Fire Outlooks, Seasonal Climate Forecasts, and Wildland Fire Risk Analyses.

### Fire Danger Rating Operating Plan

A Fire Danger Rating Operating Plan is a fire danger applications guide for agency users at the local level. A Fire Danger Rating Operating Plan documents the establishment and management of the local unit fire weather station network and describes how fire danger ratings are applied to local unit fire management decisions. Fire danger rating operating plans may be packaged as either stand-alone documents or as part of a larger planning effort; such as a fire management plan. Fire danger rating operating plans include, but are not limited to, the following components:

- **Roles and Responsibilities**  
Defined for those responsible for maintenance and daily implementation of the plan, program management related to the plan, and associated training. Training for development of fire danger rating areas is available through NWCG-sponsored NFDRS courses.
- **Operational Procedures**  
This section 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 schedules are defined as appropriate.
  - NFDRS offers several choices of fuel model and output to the user. Distinct selections of fuel model and index/component are appropriate for different management decisions (such as internal readiness or industrial and public restrictions). The choice of NFDRS

- 1 fuel model and index or component used to determine fire danger  
2 ratings to support particular decisions is explained in this section.
- 3 ➤ NFDRS requires periodic management in order to produce  
4 appropriate results that are applied in a timely manner. Some daily  
5 observation variables (such as state of the weather, fuels, red flags)  
6 are entered manually. This procedure (often called “taking the  
7 weather”) also initiates the calculation of daily and forecasted outputs  
8 in the Weather Information Management System (WIMS) and  
9 ensures data storage in the National Interagency Fire Management  
10 Integrated Database (NIFMID). These efforts are coordinated with  
11 the local National Weather Service fire weather meteorologists and  
12 Geographic Area Coordination Center (GACC) predictive services  
13 meteorologists to provide timely forecasted NFDRS outputs.  
14 Observed (afternoon) and forecasted (tomorrow) NFDRS outputs are  
15 communicated daily. Live fuel moisture model inputs (such as  
16 herbaceous vegetation stage, season code, greenness factor) are  
17 adjusted seasonally in WIMS (<http://fam.nwcg.gov/fam-web/>) at  
18 appropriate times. Decision points (such as percentiles discussed  
19 below) are determined in FireFamily Plus and reviewed and adjusted  
20 annually or more often as appropriate in WIMS and/or other fire  
21 danger platforms.
- 22 • **Fire Danger Rating Inventory**  
23 Identifies basic components of the operating plan such as dispatch response  
24 areas, protection units, administrative units, fire history, land management  
25 planning direction, standards, and guidelines, etc. Aggregates NFDRS fuel  
26 models, slope classes (topography), and weather/climatology into fire  
27 danger rating areas; validates the existing weather station network and  
28 identifies any additional stations to support fire danger rating needs.
  - 29 • **Climatic Breakpoints and Fire Business Thresholds**  
30 Climatological breakpoints and fire business thresholds are established to  
31 provide NFDRS-based decision points for all appropriate management  
32 responses in a fire danger rating area. Climatological breakpoints are  
33 points on the cumulative distribution of one fire weather/danger index  
34 computed from climatology without regard for associated fire  
35 occurrence/business. For example, the value of the 90th percentile ERC is  
36 the climatological breakpoint at which only 10 percent of the ERC values  
37 are greater in value. The percentiles for climatological breakpoints  
38 predetermined by agency directive are shown below.
    - 39 ➤ ***BLM - 80th and 95th percentiles***
    - 40 ➤ ***FWS - 90th and 97th percentiles***
    - 41 ➤ ***NPS - 90th and 97th percentiles***
    - 42 ➤ ***FS - 90th and 97th percentiles***

43  
44 It is equally important to identify the period or range of data analysis used  
45 to determine the agency percentiles. The percentile values for 12 months

1 of data will be different from the percentile values for the fire season. Year  
2 round data should be used for percentiles for severity type decisions, and  
3 percentiles based on fire season data for staffing levels and adjective fire  
4 danger.

5  
6 Fire business thresholds are values of one or more fire weather/fire danger  
7 indexes that have been statistically related to occurrence of fires (fire  
8 business). Generally the threshold is a value or range of values where  
9 historical fire activity has significantly increased or decreased. Assuming  
10 historical climate and occurrence patterns can be applied today, fire  
11 business thresholds are expected to more closely predict significant fire  
12 occurrence than climatological breakpoints.

13  
14 Climatological breakpoints or fire business thresholds are used to compute  
15 staffing levels and adjective fire danger ratings.

### 16 **Staffing Level**

17 The Staffing Level is used to make daily internal fire operations decisions. A  
18 unit can operate with anywhere from 3 to 9 levels of staffing. Most units  
19 typically use 5 (1,2,3,4,5) or 6 (1,2,3L,3H,4,5). Staffing Level is a direct output  
20 of the danger rating processor and is based on one of the following:

- 21 • NFDRS (Burning Index, Energy Release Component, Spread Component,  
22 or Ignition Component)
- 23 • Keetch-Byram Drought Index

24  
25 Additional Considerations:

- 26 • Palmer Drought Index or other drought index
- 27 • Live Fuel Moisture (calculated or sampled)
- 28 • Canadian Forest Fire Danger Rating System
- 29 • Soil Moisture

### 30 **Adjective Fire Danger Rating**

31  
32 Adjective Fire Danger Rating (low, moderate, high, very high, extreme) is based  
33 on the NFDRS index or component used to compute staffing level and the  
34 ignition component. It is a general description of fire danger for the purpose of  
35 informing the public. Adjective ratings are computed automatically in the  
36 Weather Information Management System (WIMS) based on NFDRS  
37 parameters provided by local fire managers.

38  
39 Climatic breakpoints and fire business thresholds are developed with NFDRS  
40 software, such as FIREFAMILY PLUS, and are applied to appropriate NFDRS  
41 processors, such as WIMS, to determine daily staffing levels and adjective  
42 ratings. Training for the FIREFAMILY PLUS program is available at local,  
43 regional, and national NFDRS courses.

### 1 **Fire Danger Pocket Card for Firefighter Safety**

2 The Fire Danger Pocket Card is used to communicate information on fire danger  
3 to firefighters. The prime objective of fire danger rating is to provide a measure  
4 of the seriousness of local burning conditions. The Pocket Card provides a  
5 visual reference of those conditions and how they compare to previous fire  
6 seasons. Pocket Cards are developed and implemented according to NWCG  
7 guidelines posted at <http://famweb.nwcg.gov/pocketcards/>. Fire Danger Pocket  
8 Cards are recommended at each local unit where weather data exists.

- 9 • **BLM/FS - Fire Danger Pocket Cards are developed for and implemented**  
10 *at each local unit.*

### 12 **Preparedness Plan**

13 Preparedness plans provide management direction given identified levels of  
14 burning conditions, fire activity, and resource commitment, and are required at  
15 national, state/regional, and local levels. Preparedness Levels (1-5) are  
16 determined by incremental measures of burning conditions, fire activity, and  
17 resource commitment. Fire danger rating is a critical measure of burning  
18 conditions. Refer to the *National Interagency Mobilization Guide* for more  
19 information on preparedness plans.

### 21 **Preparedness Level/Step-up Plans**

22 Preparedness Level/Step-up Plans are designed to direct incremental  
23 preparedness actions in response to increasing fire danger. Those actions are  
24 delineated by “staffing levels.” Each Step-Up Plan should address the five  
25 preparedness levels (1, 2, 3, 4, and 5) and the corresponding planned actions that  
26 are intended to mitigate those fire danger conditions. Several assessment tools  
27 are available to measure fire danger.

29 Outputs from the fire danger rating operating plan process, such as staffing  
30 levels, are used to support the decisions found in staffing plans, step-up staffing  
31 plans, preparedness levels, dispatch response plans, dispatch response levels,  
32 etc. Increasing fire danger results in increasing staffing levels, suggesting a  
33 corresponding increase in preparedness actions intended to mitigate those fire  
34 danger conditions.

36 The Staffing Plan describes escalating responses that are pre-approved in the fire  
37 management plan. Mitigating actions are designed to enhance the unit’s fire  
38 management capability during short periods (one burning period, Fourth of July  
39 or other pre-identified events) where normal staffing cannot meet initial attack,  
40 prevention, or detection needs. The difference between preparedness level/step-  
41 up and severity is that preparedness level/step-up actions are established in the  
42 unit fire management plan, and implemented by the unit when those pre-  
43 identified conditions are experienced. Severity is a longer duration condition  
44 that cannot be adequately dealt with under normal staffing, such as a killing frost

- 1 converting live fuel to dead fuel or drought conditions. Severity is discussed  
2 later in this chapter.
- 3
- 4 Mitigating actions identified in the fire management plan should include, but are  
5 not limited to, the following items:
- 6 • Management direction and considerations
  - 7 • Fire prevention actions, including closures/restrictions, media messages,  
8 signing, and patrolling
  - 9 • Prepositioning suppression resources
  - 10 • Cooperator discussion and/or involvement
  - 11 • Safety considerations: safety message, safety officer
  - 12 • Augmentation of suppression forces
  - 13 • Support function: consideration given to expanded dispatch activation,  
14 initial attack dispatch staffing, and other support needs (procurement,  
15 supply, ground support, and communication)
  - 16 • Support staff availability outside of fire organization
  - 17 • Communication of Fire Weather Watch and Red Flag Warning conditions
  - 18 • Fire danger/behavior assessment
  - 19 • Briefings for management and fire suppression personnel
  - 20 • Fire information - internal and external
  - 21 • Multi-agency coordination groups/area command activation
  - 22 • Prescribed fire direction and considerations
  - 23 • Increased detection activities
- 24

#### 25 **Seasonal Risk Analysis**

26 A Seasonal Risk Analysis requires fire managers to review current and predicted  
27 weather and fuels information, compare this information with historic weather  
28 and fuels records, and predict the upcoming fire season's severity and duration  
29 for any given area. It is important to incorporate drought indices into this  
30 assessment.

31

32 Information from a Seasonal Risk Analysis can be used to modify the Annual  
33 Operating Plan (AOP), step-up and pre-attack plans. It provides the basis for  
34 actions such as prepositioning critical resources, requesting additional funding,  
35 or modifying Memoranda of Understanding (MOU) to meet anticipated needs.

36

37 Each unit selects, and compares to normal, the current value and seasonal trend  
38 of one or more of the following indicators which are most useful in predicting  
39 fire season severity and duration in its area:

- 40 • NFDRS (or CFFDRS) index values (ERC, BI)
- 41 • Temperature levels
- 42 • Precipitation levels
- 43 • Humidity levels

- 1 • Palmer Drought or Standardized Precipitation Index
  - 2 • 1000-hour fuel moisture (timber fuels)
  - 3 • Vegetation moisture levels
  - 4 • Live fuel moisture (brush fuels)
  - 5 • Curing rate (grass fuels)
  - 6 • Episodic wind events (moisture drying days)
  - 7 • Unusual weather events (early severe frost)
  - 8 • Fires to date
  - 9
- 10 The seasonal trend of each selected indicator is graphically compared to normal  
11 and all-time worst. This comparison is updated regularly and posted in dispatch  
12 and crew areas.

13

14 If the Seasonal Risk Analysis suggests an abnormal fire season might be  
15 anticipated, a unit should notify the state/regional office and request additional  
16 resources commensurate with the escalated risk.

17

18 Seasonal Risk Analyses are prepared, issued, and updated each year by GACC  
19 Predictive Service Units. Seasonal Assessment Workshops are conducted to  
20 facilitate these seasonal outlook reports. Local risk analyses should be compiled  
21 at the state/regional office to determine the predicted fire season severity within  
22 the state/region, and then forwarded to the respective national office for use in  
23 determining national fire preparedness needs. Risk analysis is ongoing. It  
24 should be reviewed periodically and revised when significant changes in key  
25 indicators occur. All reviews of seasonal risk analysis, even if no changes are  
26 made, should be documented.

27

### 28 **Fire Severity Funding**

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

- 33 • an abnormal increase in fire potential or danger.
- 34 • fire seasons that either start earlier or last longer than planned in the fire  
35 management plan.

36 The fire danger rating operating plan or annual operating plan should identify  
37 thresholds for identifying the need for severity resources.

38

39 The objective of fire severity funding is to mitigate losses by improving  
40 suppression response capability.

41

42 When suppression resources that were acquired through the approved fire  
43 planning process (e.g. NFMAS, IIAA, FPA) are insufficient to meet the  
44 extraordinary need, suppression resources may be requested through the severity

1 funding process. Fire severity funding is not intended to raise preparedness  
2 funding levels to cover differences that may exist between funds actually  
3 appropriated and those identified in the fire planning process.

#### 4 5 **Typical Uses**

6 Severity funds are typically used to:

- 7 • Increase prevention activities
- 8 • Temporarily increase firefighting staffing
- 9 • Pay for standby
- 10 • Preposition initial attack suppression forces
- 11 • Provide additional aerial reconnaissance
- 12 • Provide for standby aircraft availability

#### 13 14 **Authorization**

15 Authorization to use severity funding is provided in writing based on a written  
16 request with supporting documentation. Authorization is on a line item basis  
17 and comes with a severity cost code. Agencies will follow their administrative  
18 procedures for issuing severity cost codes. Authorization is provided for a  
19 maximum of 14 days per request; however, regardless of the length of the  
20 authorization, use of severity funding must be terminated when abnormal  
21 conditions no longer exist. If the fire severity situation extends beyond the 14  
22 day authorization, the State/Region must prepare a new severity request.

#### 23 24 **State/Regional Level Severity Funding**

25 Each fiscal year the national office will provide each state/region with \$300,000  
26 and a severity cost code for state/regional short-term severity needs (e.g., wind  
27 events, cold dry front passage, lightning events, and unexpected events such as  
28 off road rallies that are expected to last less than one week). Expenditure of  
29 these funds is authorized by the state/regional directors at the written request of  
30 the agency administrator. State/regional directors are responsible and  
31 accountable for ensuring that these funds are used only to meet severity funding  
32 objectives and that amounts are not exceeded. The national office will notify the  
33 state/regional director, state/regional budget officer, and the state/regional FMO  
34 when the severity cost code is provided.

- 35 • *FWS - Short-term severity or "step-up" cost codes are established yearly*  
36 *(at the Regional level) as PE01, PE02, etc (numeric value indicates the*  
37 *specific region utilizing short-term severity funding).*
- 38 • *NPS - Parks have the authority to approve "Step-up" actions only, as*  
39 *defined in their fire management plan. Regional offices approve severity*  
40 *(long term - up to 30 days) for parks up to \$100,000 per severity event.*
- 41 • *FS - Severity funding direction is found in FSM 5190.*

42  
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44

**1 National Level Severity Funding**

2 National Agency Fire Directors or their delegates are authorized to allocate fire  
3 severity funding under specific conditions stated or referenced in this chapter.  
4 Expenditure of these funds is authorized by the appropriate approving official at  
5 the written request of the state/regional director. Approved severity funding will  
6 be used only for the preparedness activities and timeframes specifically outlined  
7 in the authorization, and only for the objectives stated above.

- 8 • *NPS - National office approves all requests over \$100,000.*

**10 Appropriate Severity Funding Charges****12 Labor**

13 Appropriate labor charges include:

- 14 • Regular pay for non-fire personnel
- 15 • Regular pay for seasonal/temporary fire personnel outside their normal fire  
16 funded activation period
- 17 • Overtime pay for all fire and non-fire personnel
- 18 • Severity funded personnel and resources must be available for immediate  
19 initial attack regardless of the daily task assignment
- 20 • Severity funded personnel and resources will not use a severity cost code  
21 while assigned to wildfires. The wildfire firecode number will be used.
- 22 • Overtime pay for severity funded personnel will be paid by severity funds,  
23 unless the personnel are assigned to a wildfire.

**25 Vehicles and Equipment**

- 26 • GSA lease rate and mileage
- 27 • Hourly rate or mileage for Agency owned vehicles
- 28 • Commercial rentals and contracts
- 29 • *FWS - Repair and maintenance of Fish and Wildlife vehicles and  
30 equipment; FWS does not have a Use Rate covering these charges.*

**32 Aviation**

33 This includes:

- 34 • Contract extensions
- 35 • The daily minimum for call when needed (CWN) aircraft
- 36 • Preposition flight time
- 37 • Support expenses necessary for severity funded aircraft (facility rentals,  
38 utilities, telephones, etc.)

**40 Travel and Per Diem**

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

- 43 • Lodging
- 44 • Government provided meals (in lieu of per diem)



- 1 • Airfare (including returning to their home base)
- 2 • Privately owned vehicle mileage (with prior approval)
- 3 • Other miscellaneous travel and per diem expenses associated with the
- 4 assignment

5

### 6 **Prevention Activities**

7 These include:

- 8 • Funding Prevention Teams (Preventions teams will be mobilized as
- 9 referred in the *National Mobilization Guide*, Chapter 20)
- 10 • Implementing local prevention campaigns, to include community risk
- 11 assessment, mitigation planning, outreach, and education
- 12 • Augmenting patrols
- 13 • Note: Non-fire funded prevention team members should charge base 8 and
- 14 overtime to the severity cost code for the length of the prevention activities
- 15 assignment. Fire funded personnel should charge overtime only to the
- 16 severity cost code for the length of the prevention activities assignment.

17

### 18 **Inappropriate Fire Severity Funding Charges**

- 19 • To cover differences that may exist between funds actually appropriated
- 20 (including rescissions) and those identified in the fire planning process
- 21 • Administrative surcharges, indirect costs, fringe benefits
- 22 • Equipment purchases
- 23 • Purchase, maintenance, repair, or upgrade of vehicles
- 24 • Purchase of radios
- 25 • Purchase of telephones
- 26 • Purchase of pumps, saws, and similar suppression equipment
- 27 • Aircraft availability during contract period
- 28 • Cache supplies which are normally available in fire caches
- 29 • Fixed ownership rate vehicle costs

30

### 31 **Emergency Equipment Rental Agreements**

32 Emergency Equipment Rental Agreements (EERAs) are used during emergency  
33 incidents under authorities that allow for direct, non-competitive ordering using  
34 established procedures in the event of immediate threat to life and property.  
35 EERAs will not be used for non-emergency activities, including severity  
36 activities, rehabilitation projects, and hazardous fuels projects.

37

### 38 **Interagency Requests**

39 Agencies working cooperatively in the same geographic area should work  
40 together to generate and submit joint requests, and to utilize severity funded  
41 resources in an interagency manner. However, each agency should request  
42 funds only for its own agency specific needs. The joint request should be routed  
43 simultaneously through each agency's approval system, and the respective

1 approving official will issue an authorization that specifies allocations by  
2 agency.

3

4 **Requesting Fire Severity Funding**

5 Fire severity funding requests should be submitted on the Interagency Severity  
6 Funding Request Form found at the website listed below. The completed and  
7 signed request is submitted from the state/regional director to the appropriate  
8 approving official as per the sequence of action outlined below. Authorizations  
9 will be returned in writing.

10

11 The interagency standard format for fire severity funding requests may be found  
12 at: <http://www.blm.gov/nifc/st/en/prog/fire/fireops/severity.html>

13

14 **Sequence of Action and Responsible Parties for Severity Funding Requests**

Action	Responsible Party
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 approve (or reject) 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
Execute severity cost code. Ensure that project expenditures are only used for authorized purposes.	Unit Office
Maintain severity files, including requests, authorizations, and summary of expenditures and activities.	Unit/State/Regional/ National Offices

15

16 **Labor Cost Coding For Severity Funded Personnel**

17 Fire personnel outside their normal activation period, employees whose regular  
18 salary is not fire funded, and Administratively Determined (AD) employees  
19 hired under an approved severity request should charge regular time and

1 approved non-fire overtime to the severity suppression operations subactivity  
2 and the requesting office's severity cost code.

3

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

8

9 Regular hours worked in suppression operations will require the use of the  
10 appropriate fire subactivity with the appropriate firecode number. Overtime in  
11 fire suppression operations will be charged to the suppression operations  
12 subactivity with the appropriate firecode number.

13

14 Employees from non-federal agencies should charge their time in accordance  
15 with the approved severity request and the appropriate local and statewide  
16 agreements. A task order for reimbursement will have to be established and is  
17 authorized under the Interagency Agreement for Fire Management.

- 18 • *FS - Labor Cost Coding. Forest Service severity funding direction in FSM*  
19 *5190 provides agency specific direction.*

20

### 21 **Documentation**

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

25

### 26 **Severity Funding Audits**

27 State/regional and national offices should ensure appropriate usage of severity  
28 funding and expenditures. This may be done as part of their normal agency fire  
29 program review cycle. The severity funding audit checklist may be used as a  
30 guide for this process. Interagency Preparedness Review checklists can be  
31 found at: [http://www.nifc.gov/references/prep\\_review.html](http://www.nifc.gov/references/prep_review.html)

- 32 • *BLM - Severity funding is not a reviewed item of the BLM national*  
33 *Preparedness Review. BLM Preparedness Review Checklists can be found*  
34 *at:*  
35 *<http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness>*  
36 *[\\_review/checklists.html](http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness)*

37

### 38 **Fire Prevention/Mitigation**

39

#### 40 **Wildland Fire Cause Determination & Fire Trespass**

41 Agency policy requires any wildfire to be investigated to determine cause,  
42 origin, and responsibility.

43

1 For all human-caused fires where the guilty party has been determined, actions  
2 must be taken to recover the cost of suppression activities, land rehabilitation,  
3 and damages to the resources and improvements.

4

#### 5 **Wildland Fire Mitigation and Prevention**

6 Fire programs are required to fund and implement unit level Fire Prevention  
7 Plans by completing a wildland mitigation/prevention assessment. The purpose  
8 of this is to reduce undesirable human caused ignitions, to reduce damages and  
9 losses caused by unwanted wildland fires, and to reduce the suppression costs of  
10 wildland fires. Wildland fire mitigation/prevention programs based on the Risk  
11 Assessment and Mitigation Strategies (RAMS) process can reduce damages and  
12 losses during periods of average weather, fuels, and human activity. As weather  
13 and fuel conditions move from average to above average or severe, and/or  
14 human activity increases, mitigation and prevention activities must be  
15 strengthened to maintain effectiveness.

16

17 Prevention includes education (sign posting plans, school programs, radio and  
18 news releases, recreation contacts, local business contacts, exhibits), industrial  
19 program monitoring (timber, mining, power line maintenance operations),  
20 reconnaissance patrols, and other activities to prevent and mitigate wildfire  
21 damage, and loss.

- 22 • *NPS - Only units that experience more than an average 26 human caused*  
23 *fires per ten-year period are required to develop a fire prevention plan,*  
24 *based upon a prevention analysis such as RAMS; however, use of this*  
25 *software is not required.*
- 26 • *FS - Forest Service direction for wildland prevention and investigation is*  
27 *found in FSM 5110 and 5300.*