Chapter 10 Preparedness

Preparedness 4

Preparedness is the result of activities that are planned and implemented prior to 5

- wildland fire ignitions. Preparedness is a continuous process that includes 6
- developing and maintaining unit, state/regional, and national level firefighting 7
- infrastructure, predicting fire activity, hiring, training, equipping, and deploying 8
- firefighters, evaluating performance, correcting deficiencies, and improving 9
- overall operations. The preparedness process includes routine pre-season 10
- actions as well as incremental in-season actions conducted in response to 11
- increasing fire danger. 12
- 13

1

2 3

- Preparedness actions are based on operational plans such as fire danger 14
- operating plans, which use information from decision support tools such as the 15
- National Fire Danger Rating System (NFDRS), the Canadian Forest Fire Danger 16
- Rating System (CFFDRS, used in interior Alaska), the Palmer Drought Index, 17
- live fuel moisture data, Monthly or Seasonal Wildland Fire Outlooks, Seasonal 18
- Climate Forecasts, and Wildland Fire Risk Analyses. 19
- 20

Fire Danger Rating Operating Plan 21

- A Fire Danger Rating Operating Plan is a fire danger applications guide for 22
- agency users at the local level. A Fire Danger Rating Operating Plan documents 23
- the establishment and management of the local unit fire weather station network 24
- and describes how fire danger ratings are applied to local unit fire management 25
- decisions. Fire danger rating operating plans may be packaged as either stand-26
- alone documents or as part of a larger planning effort; such as a fire 27
- management plan. Fire danger rating operating plans include, but are not 28
- limited to, the following components: 29

Roles and Responsibilities • 30

- Defined for those responsible for maintenance and daily implementation of 31
- the plan, program management related to the plan, and associated training. 32
- Training for development of fire danger rating areas is available through 33
- NWCG-sponsored NFDRS courses. 34

Operational Procedures 35

36	This section establishes the procedures used to gather and process data in		
37	order to integrate fire danger rating information into decision processes.		
38	The network of fire weather stations whose observations are used to		
39	determine fire danger ratings is identified. Station maintenance schedules		
40	are defined as appropriate.		
41	➢ NFDRS offers several choices of fuel model and output to the user.		
42	Distinct selections of fuel model and index/component are		
43	appropriate for different management decisions (such as internal		
44	readiness or industrial and public restrictions). The choice of NFDRS		
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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://famweb.nwcg.gov/) 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	

43

10-2

It is equally important to identify the period or range of data analysis used

- to determine the agency percentiles. The percentile values for 12 months 2 of data will be different from the percentile values for the fire season. Year
- 3
- round data should be used for percentiles for severity type decisions, and 4 percentiles based on fire season data for staffing levels and adjective fire 5
 - danger.
- 6

1

- Fire business thresholds are values of one or more fire weather/fire danger
- indexes that have been statistically related to occurrence of fires (fire 9
- business). Generally the threshold is a value or range of values where 10
- historical fire activity has significantly increased or decreased. Assuming 11
- historical climate and occurrence patterns can be applied today, fire 12
- business thresholds are expected to more closely predict significant fire 13
- occurrence than climatological breakpoints. 14
- 15 16
 - Climatological breakpoints or fire business thresholds are used to compute staffing levels and adjective fire danger ratings.
- 17 18

Staffing Level 19

- The Staffing Level is used to make daily internal fire operations decisions. A 20
- unit can operate with anywhere from 3 to 9 levels of staffing. Most units 21
- typically use 5 (1,2,3,4,5) or 6 (1,2,3L,3H,4,5). Staffing Level is a direct output 22 of the danger rating processor and is based on one of the following: 23
- NFDRS (Burning Index, Energy Release Component, Spread Component, 24
- or Ignition Component) 25
- Keetch-Byram Drought Index • 26
- 27
- Additional Considerations: 28
- Palmer Drought Index or other drought index ٠ 29
- Live Fuel Moisture (calculated or sampled) 30 •
- Canadian Forest Fire Danger Rating System 31 .
- Soil Moisture • 32

33

Adjective Fire Danger Rating 34

- Adjective Fire Danger Rating (low, moderate, high, very high, extreme) is based 35
- on the NFDRS index or component used to compute staffing level and the 36
- ignition component. It is a general description of fire danger for the purpose of 37
- informing the public. Adjective ratings are computed automatically in the 38
- Weather Information Management System (WIMS) based on NFDRS 39
- parameters provided by local fire managers. 40

41

- Climatic breakpoints and fire business thresholds are developed with NFDRS 42
- software, such as FIREFAMILY PLUS, and are applied to appropriate NFDRS 43
- processors, such as WIMS, to determine daily staffing levels and adjective 44

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1 ratings. Training for the FIREFAMILY PLUS program is available at local,

² regional, and national NFDRS courses.

3

4 Fire Danger Pocket Card for Firefighter Safety

- 5 The Fire Danger Pocket Card is used to communicate information on fire danger
- ⁶ to firefighters. The prime objective of fire danger rating is to provide a measure
- of the seriousness of local burning conditions. The Pocket Card provides a
- visual reference of those conditions and how they compare to previous fire
- 9 seasons. Pocket Cards are developed and implemented according to NWCG
- 10 guidelines posted at http://famweb.nwcg.gov/pocketcards/. Fire Danger Pocket
- ¹¹ Cards are recommended at each local unit where weather data exists.
- BLM Fire Danger Pocket Cards are developed for and implemented at
 each local unit.
- FS Forest Supervisors will develop and distribute Fire Danger Pocket
 Cards to each fireline supervisor.

16

17 Preparedness Plan

¹⁸ Preparedness plans provide management direction given identified levels of

- ¹⁹ burning conditions, fire activity, and resource commitment, and are required at
- ²⁰ national, state/regional, and local levels. Preparedness Levels (1-5) are
- 21 determined by incremental measures of burning conditions, fire activity, and
- ²² resource commitment. Fire danger rating is a critical measure of burning
- 23 conditions. Refer to the National Interagency Mobilization Guide for more
- ²⁴ information on preparedness plans.

25

26 Preparedness Level/Step-up Plans

- ²⁷ Preparedness Level/Step-up Plans are designed to direct incremental
- 28 preparedness actions in response to increasing fire danger. Those actions are
- ²⁹ delineated by "staffing levels." Each Step-Up Plan should address the five
- ³⁰ preparedness levels (1, 2, 3, 4, and 5) and the corresponding planned actions that
- are intended to mitigate those fire danger conditions. Several assessment tools
- ³² are available to measure fire danger.

33

- ³⁴ Outputs from the fire danger rating operating plan process, such as staffing
- ³⁵ levels, are used to support the decisions found in staffing plans, step-up staffing
- ³⁶ plans, preparedness levels, dispatch response plans, dispatch response levels,
- ³⁷ etc. Increasing fire danger results in increasing staffing levels, suggesting a
- 38 corresponding increase in preparedness actions intended to mitigate those fire
- ³⁹ danger conditions.
- 40
- ⁴¹ The Staffing Plan describes escalating responses that are pre-approved in the fire
- ⁴² management plan. Mitigating actions are designed to enhance the unit's fire
- ⁴³ management capability during short periods (one burning period, Fourth of July
- 44 or other pre-identified events) where normal staffing cannot meet initial attack,

10-4

- 1 prevention, or detection needs. The difference between preparedness level/step-
- ² up and severity is that preparedness level/step-up actions are established in the
- ³ unit fire management plan, and implemented by the unit when those pre-
- ⁴ identified conditions are experienced. Severity is a longer duration condition
- ⁵ that cannot be adequately dealt with under normal staffing, such as a killing frost

⁶ converting live fuel to dead fuel or drought conditions. Severity is discussed

7 later in this chapter.

- 9 Mitigating actions identified in the fire management plan should include, but are
 10 not limited to, the following items:
- Management direction and considerations
- ¹² Fire prevention actions, including closures/restrictions, media messages,
- signing, and patrolling
- Prepositioning suppression resources
- 15 Cooperator discussion and/or involvement
- ¹⁶ Safety considerations: safety message, safety officer
- 17 Augmentation of suppression forces
- ¹⁸ Support function: consideration given to expanded dispatch activation,
- ¹⁹ initial attack dispatch staffing, and other support needs (procurement,
- ²⁰ supply, ground support, and communication)
- ²¹ Support staff availability outside of fire organization
- 22 Communication of Fire Weather Watch and Red Flag Warning conditions
- Fire danger/behavior assessment
- Briefings for management and fire suppression personnel
- ²⁵ Fire information internal and external
- ²⁶ Multi-agency coordination groups/area command activation
- 27 Prescribed fire direction and considerations
- Increased detection activities

30 Seasonal Risk Analysis

- ³¹ A Seasonal Risk Analysis requires fire managers to review current and predicted
- ³² weather and fuels information, compare this information with historic weather
- ³³ and fuels records, and predict the upcoming fire season's severity and duration
- ³⁴ for any given area. It is important to incorporate drought indices into this
- 35 assessment.

36

29

- ³⁷ Information from a Seasonal Risk Analysis can be used to modify the AOP,
- ³⁸ step-up and pre-attack plans. It provides the basis for actions such as
- ³⁹ prepositioning critical resources, requesting additional funding, or modifying
- ⁴⁰ Memoranda of Understanding (MOU) to meet anticipated needs.

41

- 42 Each unit selects, and compares to normal, the current value and seasonal trend
- ⁴³ of one or more of the following indicators which are most useful in predicting
- ⁴⁴ fire season severity and duration in its area:

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- NFDRS (or CFFDRS) index values (ERC, BI)
- ² Temperature levels
- ³ Precipitation levels
- 4 Humidity levels
- 5 Palmer Drought or Standardized Precipitation Index
- 1000-hour fuel moisture (timber fuels)
- Vegetation moisture levels
- 8 Live fuel moisture (brush fuels)
- Curing rate (grass fuels)
- 10 Episodic wind events (moisture drying days)
- Unusual weather events (early severe frost)
- Fires to date
- 13

14 The seasonal trend of each selected indicator is graphically compared to normal

- ¹⁵ and all-time worst. This comparison is updated regularly and posted in dispatch ¹⁶ and crew areas.
- 17

¹⁸ If the Seasonal Risk Analysis suggests an abnormal fire season might be

- ¹⁹ anticipated, a unit should notify the state/regional office and request additional
- ²⁰ resources commensurate with the escalated risk.

21

- 22 Seasonal Risk Analyses are prepared, issued, and updated each year by GACC
- ²³ Predictive Service Units. Seasonal Assessment Workshops are conducted to
- 24 facilitate these seasonal outlook reports. Local risk analyses should be compiled
- ²⁵ at the state/regional office to determine the predicted fire season severity within
- $_{\rm 26}~$ the state/region, and then forwarded to the respective national office for use in
- 27 determining national fire preparedness needs. Risk analysis is ongoing. It
- 28 should be reviewed periodically and revised when significant changes in key
- 29 indicators occur. All reviews of seasonal risk analysis, even if no changes are
- 30 made, should be documented.
- 31

32 Fire Severity Funding

33

34 **Definition**

- ³⁵ Fire severity funding is the authorized use of suppression operations funds
- 36 (normally used exclusively for suppression operations, and distinct from
- 37 preparedness funds) for extraordinary preparedness activities that are required
- ³⁸ due to an abnormal increase in fire potential or danger, or to fire seasons that
- ³⁹ either start earlier or last longer than planned in the fire management plan. The
- ⁴⁰ fire danger rating operating plan or annual operating plan should identify
- ⁴¹ thresholds for identifying the need for severity resources.
- 42
- 43
- 44

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1 Objective

5

- ² The objective of fire severity funding is to mitigate losses by improving
- ³ suppression response capability when there is:
- Potential for abnormally severe fire behavior, or
- Fire occurrence outside of the normal fire season.
- 7 When either of these conditions exist, and when suppression resources that were
- ⁸ acquired through the approved fire planning process (e.g. NFMAS, IIAA, FPA)
- ⁹ are insufficient to meet the extraordinary need, suppression resources may be
- ¹⁰ requested through the severity funding process. Fire severity funding is not
- in intended to raise preparedness funding levels to cover differences that may exist
- 12 between funds actually appropriated (including rescissions) and those identified
- ¹³ in the fire planning process.

14

- 15 Typical Uses
- 16 Severity funds are typically used to:
- 17 Increase prevention activities
- 18 Temporarily increase firefighting staffing
- 19 Pay for standby
- 20 Preposition initial attack suppression forces
- Provide additional aerial reconnaissance
- ²² Provide for standby aircraft availability
- 23

24 Authorization

- ²⁵ Authorization to use severity funding is provided in writing based on a written
- ²⁶ request with supporting documentation. Authorization is on a line item basis
- 27 and comes with a severity cost code. Agencies will follow their administrative
- ²⁸ procedures for issuing severity cost codes. Authorization is provided for a
- ²⁹ maximum of thirty days per request; however, regardless of the length of the
- ³⁰ authorization, use of severity funding must be terminated when abnormal
- 31 conditions no longer exist. If the fire severity situation extends beyond the thirty
- 32 day authorization, the State/Region must prepare a new severity request.

33

34 State/Regional Level Severity Funding

- ³⁵ Each fiscal year the national office will provide each state/region with \$100,000
- ³⁶ and a severity cost code for state/regional short-term severity needs (e.g., wind
- 37 events, cold dry front passage, lightning events, and unexpected events such as
- ³⁸ off road rallies that are expected to last less than one week). Expenditure of
- ³⁹ these funds is authorized by the state/regional directors at the written request of
- 40 the agency administrator. State/regional directors are responsible and
- ⁴¹ accountable for ensuring that these funds are used only to meet severity funding
- 42 objectives and that amounts are not exceeded. The national office will notify the
- 43 state/regional director, state/regional budget officer, and the state/regional FMO
- ⁴⁴ when the severity cost code is provided.

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- FWS Short-term severity or "step-up" cost codes are established yearly
- (at the Regional level) as PE01, PE02, etc (numeric value indicates the 2 specific region utilizing short-term severity funding). 3
- NPS Parks have the authority to approve "Step-up" actions only, as 4 defined in their fire management plan. Regional offices approve severity 5 6
- (long term up to 30 days) for parks up to \$100,000.

FS - Severity funding direction is found in FSM 5190. 7 .

National Level Severity Funding 9

- National Agency Fire Directors or their delegates are authorized to allocate fire 10
- severity funding under specific conditions stated or referenced in this chapter. 11
- Expenditure of these funds is authorized by the appropriate approving official at 12
- the written request of the state/regional director. Approved severity funding will 13
- be used only for the preparedness activities and timeframes specifically outlined 14
- in the authorization, and only for the objectives stated above. 15
- **NPS** National office approves all requests over \$100,000. • 16

Appropriate Severity Funding Charges 18

19 Labor 20

17

- Appropriate labor charges include: 21
- Regular pay for non-fire personnel • 22
- Regular pay for seasonal/temporary fire personnel outside their normal fire • 23 funded activation period 24
- Overtime pay for all fire and non-fire personnel 25
- Severity funded personnel and resources must be available for immediate 26 . initial attack regardless of the daily task assignment 27
- Severity funded personnel and resources will not use a severity cost code 28 while assigned to wildfires. The wildfire firecode number will be used. 29
- Overtime pay for severity funded personnel will be paid by severity funds, 30 31
 - unless the personnel are assigned to a wildfire.
- 32

Vehicles and Equipment 33

- GSA lease rate and mileage . 34
- Hourly rate or mileage for Agency owned vehicles 35 .
- Commercial rentals and contracts . 36
- FWS Repair and maintenance of Fish and Wildlife vehicles and 37
- equipment; FWS does not have a Use Rate covering these charges. 38
- 39

Aviation 40

- This includes: 41
- Contract extensions 42
- The daily minimum for call when needed (CWN) aircraft 43 .

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- Preposition flight time •
- Support expenses necessary for severity funded aircraft (facility rentals,
- utilities, telephones, etc.)

Travel and Per Diem 5

- Severity funded personnel in travel status are fully subsisted by the government 6
- in accordance with their agency regulations. Costs covered include: 7
- Lodging .
- Government provided meals (in lieu of per diem) . 0
- Airfare (including returning to their home base) 10
- Privately owned vehicle mileage (with prior approval) 11 .
- Other miscellaneous travel and per diem expenses associated with the 12
- assignment 13

14

2

3 4

Prevention Activities 15

- These include: 16
- Funding Prevention Teams (Preventions teams will be mobilized as . 17 referred in the National Mobilization Guide, Chapter 20) 18
- Implementing local prevention campaigns, to include community risk 19
- assessment, mitigation planning, outreach and education 20
- Augmenting patrols 21 •
- Note: Non-fire funded prevention team members should charge base 8 and 22
- overtime to the severity cost code for the length of the prevention activities 23
- assignment. Fire funded personnel should charge overtime only to the 24
- severity cost code for the length of the prevention activities assignment. 25
- 26

Inappropriate Fire Severity Funding Charges 27

- To cover differences that may exist between funds actually appropriated 28 (including rescissions) and those identified in the fire planning process
- 29
- Administrative surcharges, indirect costs, fringe benefits • 30
- Equipment purchases 31 •
- Purchase, maintenance, repair, or upgrade of vehicles • 32
- Purchase of radios 33 •
- 34 • Purchase of telephones
- Purchase of pumps, saws, and similar suppression equipment . 35
- Aircraft availability during contract period • 36
- Cache supplies which are normally available in fire caches 37 •
- Fixed ownership rate vehicle costs • 38
- 39

Emergency Equipment Rental Agreements 40

- Emergency Equipment Rental Agreements (EERAs) are used during emergency 41
- incidents under authorities that allow for direct, non-competitive ordering using 42
- established procedures in the event of immediate threat to life and property. 43

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- 1 EERAs will not be used for non-emergency activities, including severity
- ² activities, rehabilitation projects, and hazardous fuels projects.

3

4 Interagency Requests

- 5 Agencies working cooperatively in the same geographic area should work
- ⁶ together to generate and submit joint requests, and to utilize severity funded
- 7 resources in an interagency manner. However, each agency should request
- 8 funds only for its own agency specific needs. The joint request should be routed
- ⁹ simultaneously through each agency's approval system, and the respective
- ¹⁰ approving official will issue an authorization that specifies allocations by
- 11 agency.
- 12

13 Requesting Fire Severity Funding

- ¹⁴ Fire severity funding requests should be submitted on the Interagency Severity
- ¹⁵ Funding Request Form found at the website listed below. The completed and
- ¹⁶ signed request is submitted from the state/regional director to the appropriate
- ¹⁷ approving official as per the sequence of action outlined below. Authorizations
- 18 will be returned in writing.
- 19
- ²⁰ The Standard format for fire severity funding requests may be found at:
- $_{21}\ http://www.fire.blm.gov/Standards/BLM_Fire_Severity_Funding_Request.htm.$
- 22

23 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

10-10

PREPAREDNES	s
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	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

2 Labor Cost Coding For Severity Funded Personnel

³ Fire personnel outside their normal activation period and employees whose

regular salary are not funded by fire preparedness, and Administratively

- ⁵ Determined (AD) employees hired under an approved severity request should
- ⁶ charge regular time and approved non-fire overtime to the severity suppression
- 7 operations subactivity and the requesting office's severity cost code.
- 8

1

9 Fire funded personnel should charge their regular planned salary (base-eight) to

¹⁰ preparedness using their home unit's location code. Overtime associated with

11 the severity request should be charged to the severity suppression operations

¹² subactivity and the requesting office's severity cost code.

13

¹⁴ Regular hours worked in suppression operations will require the use of the

¹⁵ appropriate fire subactivity with the appropriate firecode number. Overtime in

¹⁶ fire suppression operations will be charged to the suppression operations

¹⁷ subactivity with the appropriate firecode number.

18

¹⁹ Employees from non-federal agencies should charge their time in accordance

²⁰ with the approved severity request and the appropriate local and statewide

agreements. A task order for reimbursement will have to be established and is

²² authorized under the Interagency Agreement for Fire Management.

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

26 Documentation

²⁷ The state/regional and national office will document and file accurate records of

28 severity funding activity. This will include complete severity funding requests,

²⁹ written authorizations, and expenditure records.

30

25

31 Severity Funding Audits

32 State/regional and national offices should ensure appropriate usage of severity

³³ funding and expenditures. This may be done as part of their normal agency fire

³⁴ program review cycle. The severity funding audit checklist may be used as a

³⁵ guide for this process. Interagency Preparedness Review checklists can be

³⁶ found at: http://www.nifc.gov/references/prep_review.html

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- **BLM** Severity funding is not a reviewed item of the BLM national
- Preparedness Review. BLM Preparedness Review Checklists can be found 2 at: 3
- http://www.fire.blm.gov/Standards/FIRE_AVIATION_PREPAREDNESS _REVIEW_GUIDE.htm 5

6

4

Fire Prevention/Mitigation 7

Wildland Fire Cause Determination & Fire Trespass 8

- Agency policy requires any wildfire to be investigated to determine cause, 9
- origin, and responsibility. 10

11

- For all human-caused fires where the guilty party has been determined, actions 12
- must be taken to recover the cost of suppression activities, land rehabilitation, 13
- and damages to the resources and improvements. 14

15

Wildland Fire Mitigation and Prevention 16

- Fire programs are required to fund and implement unit level Fire Prevention 17
- Plans by completing a wildland mitigation/prevention assessment. The purpose 18
- of this is to reduce undesirable human caused ignitions, to reduce damages and 19
- losses caused by unwanted wildland fires, and to reduce the suppression costs of 20
- wildland fires. Wildland fire mitigation/prevention programs based on the Risk 21
- Assessment and Mitigation Strategies (RAMS) process can reduce damages and 22
- losses during periods of average weather, fuels, and human activity. As weather 23
- 24 and fuel conditions move from average to above average or severe, and/or
- human activity increases, mitigation and prevention activities must be 25
- strengthened to maintain effectiveness. 26
- Prevention includes education (sign posting plans, school programs, radio and 27
- news releases, recreation contacts, local business contacts, exhibits), industrial 28
- program monitoring (timber, mining, power line maintenance operations), 29
- reconnaissance patrols, and other activities to prevent and mitigate wildfire 30
- damage and loss. 31
- **NPS** - Only units that experience more than an average 26 human caused 32
- fires per ten-year period are required to develop a fire prevention plan, 33
- based upon a prevention analysis such as RAMS; however, use of this 34
- software is not required. 35
- FS Forest Service direction for wildland prevention and investigation is 36 . found in FSM 5110 and 5300. 37

10-12