

ROCKY MOUNTAIN AREA FIRE WEATHER ANNUAL OPERATING PLAN



2023

**COLORADO - WYOMING -
SOUTH DAKOTA - NEBRASKA - KANSAS**

ROCKY MOUNTAIN AREA FIRE WEATHER ANNUAL OPERATING PLAN
2023

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I. INTRODUCTION

This document serves as the Interagency Fire Weather Annual Operating Plan (AOP) for the Rocky Mountain Geographic Area. The general relationship between the NWS and the interagency fire management community is set forth in the National Interagency Agreement for Meteorological Services. The AOP provides specific procedural and policy information about the responsibilities of both NWS offices and land management offices regarding meteorological services provided to the fire management community in the Rocky Mountain Area, as contained within the umbrella of the National Agreement.

References will include:

- [National Weather Service Directives NWSI 10-4: Fire Weather Services](#)
- [Interagency Agreement for Meteorological Services](#) (National MOA or National Agreement)
- [Rocky Mountain Area](#) and [National Interagency](#) Mobilization Guides

II. SIGNIFICANT CHANGES SINCE LAST YEAR

A. Staffing levels have changed in the RMA Predictive Services Unit.

III. SERVICE AREA AND ORGANIZATIONAL DIRECTORY

A. Fire weather services in the Rocky Mountain Area are provided by the NWS forecast offices, [RMA Predictive Services](#), and States listed below:

Boulder, CO	Riverton, WY	North Platte, NE
Pueblo, CO	Rapid City, SD	Goodland, KS
Grand Junction, CO	Billings, MT	Aberdeen, SD
Cheyenne, WY	Sioux Falls, SD	Hastings, NE
Omaha, NE	Wichita, KS	Topeka, KS
Dodge City, KS	Pleasant Hill, MO	Springfield, MO
State of South Dakota	RMACC, Lakewood, CO	

ROCKY MOUNTAIN AREA PREDICTIVE SERVICES,
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PUEBLO WEATHER SERVICE FORECAST OFFICE,
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 FAX Number: (308) 532-9557
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 Primary Backup Office: NWS Rapid City (UNR)
 Secondary Backup Office: NWS Hastings (GID)

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 FAX Number: (402) 462-2746
 Web Site Address: <http://weather.gov/gid/fire>
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 Secondary Backup Office: NWS North Platte (LBF)

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OMAHA WEATHER SERVICE FORECAST OFFICE

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Backup Office: NWS Hastings

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GOODLAND WEATHER SERVICE FORECAST OFFICE

920 Armory Rd, Goodland, KS 67735

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Web Site Address: <http://weather.gov/ddc/fire>

Backup Office: NWS Goodland

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Secondary Backup Office: NWS Pleasant Hill

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WICHITA WEATHER SERVICE FORECAST OFFICE

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Backup Office: NWS Topeka

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1803 N 7 Hwy, Pleasant Hill, MO 64080-9421

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Web Site Address: <http://weather.gov/eax/fire>

Primary Backup Office: NWS Springfield

Secondary Backup Office: NWS Topeka

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SPRINGFIELD WEATHER SERVICE FORECAST OFFICE

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Web Site Address: <http://weather.gov/sgf/fire>

Backup Office: NWS St. Louis

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IV. NATIONAL WEATHER SERVICE SERVICES AND RESPONSIBILITIES

A. Basic Services

The following constitutes the current operational Fire Weather Planning Forecast products provided by NWS offices in the RMA. Significant changes to these forecast services or deployment of new operational forecast products and services will be coordinated through Rocky Mountain Area Predictive Services (Reference [NWSI 10-403](#)) and local users within the County Warning Forecast Area (CWFA) of the NWS office that would like to make the change. Any non-operational forecast products will be clearly labeled as “Experimental” or “Prototype”. Basic meteorological services include:

1. Fire Weather Planning Forecasts (FWF)

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All NWS offices serving the Rocky Mountain Area issue routine Fire Weather Planning Forecasts. The FWF is a zone- type product used by land management personnel primarily for input in decision- making related to pre-suppression and other planning. Unless otherwise noted, the format of the FWF will conform to [NWSI 10-401](#). **Note: Users should review the NWS Zone Map located [Section VII](#) of the AOP to determine NWS office zone responsibility.**

Standard Issuance Times and Dates –

Colorado:

Start/Stop Dates:

NWS Boulder will issue the narrative Fire Weather Planning Forecasts twice daily, year-round by 5:00 am and 4:00 pm local time.

NWS Grand Junction will issue twice daily starting *around* April 1 or first Monday of April through April 30 by 3:00 p.m. Twice daily by 7:00 am and 3:00 pm local time from *around* May 1 through *around* October 31. Beginning and ending dates are general guidelines to incorporate the majority of prescribed burn and wildfire season, and are flexible. From November 1 through March 31, automated FWF forecasts will be issued twice daily without a narrative discussion.

NWS Pueblo will issue the narrative Fire Weather Planning Forecasts year- round by 5:00 am and 4:00 pm local time.

Wyoming:

Start/Stop Dates: Twice daily by 7:00 am and 3:00 pm local time from

around May 1 through *around* October 31. Beginning and ending dates are general guidelines to incorporate the majority of prescribed burn and wildfire seasons, and are flexible.

Exception: NWS Cheyenne will also issue once per day by 7:00 am from *around* November 1 through *around* April 30.

Exception: NWS Billings please see times listed in [section D-5](#).

South Dakota:

Start/Stop Dates:

NWS Rapid City will issue once daily year-round by 7:00 am. Twice daily *around* July 1 through October 31 by 7:00 am and 2:30 pm local time. Beginning and ending dates are general guidelines to incorporate the majority of the prescribed burn and wildfire season and are flexible.

NWS Sioux Falls will issue twice daily from April 1 through May 31, and from August 15 through November 15 by 7:00 am and 4:00 pm local time. Once daily from June 1 through August 14 by 7:00 am. Beginning and ending dates are general guidelines to incorporate the majority of prescribed burn and wildfire seasons, and are flexible.

NWS Aberdeen will issue daily, year-round, with updates as needed throughout the day.

Nebraska:

Start/Stop Dates:

NWS North Platte will issue twice daily by 5:00 am and 3:00 pm local time year-round.

NWS Hastings will issue by 6:00 am local time year-round.

NWS Omaha will issue year round by 6:00 am local time, with a late morning update as needed - generally from March to mid May and September to late November. Beginning and ending dates are general guidelines to incorporate the majority of prescribed burn and wildfire season, and are flexible.

Kansas:

Start/Stop Dates:

NWS Dodge City, Goodland, Topeka, Wichita Kansas will issue by 6:00 am local time year-round.

NWS Pleasant Hill will issue twice daily by 6:00 am and 4:30 pm local time year-round.

Note: Some offices in the Rocky Mountain Area provide Fire Weather Planning Forecasts outside these dates, based on local needs. Please see individual office information for FWF services outside these core dates.

Issuance Outside Regular Times and Dates-

NWS offices will issue FWF's for their CWFA outside regular times and dates when:

A Fire Weather Watch or Red Flag Warning has been issued from the servicing NWS office. ***Note: Offices may issue the FWF for only those zones in the watch or warning area.***

Large fire activity is occurring (100 acres in timber, 300 acres in grass/sage) within the servicing office CWFA and is expected to last more than 24 hours

(less than 100% contained), ***Note: In this case, Land Agency Meteorologists or local fire managers can request an earlier start date, or an extension to the stop date. Also, offices may issue a FWF for a specific zone or zones in lieu of the entire forecast area if weather forecast trends indicate that significant weather changes will reduce fire potential within 24 hours, or current conditions (fuels, weather, high elevation snowpack) do not support elevated fire potential.***

Forecast Updates- The FWF will be updated when: **1)** A Fire Weather Watch or a Red Flag Warning is issued or updated, **2)** The current forecast does not depict the NWS forecaster's vision of current or predicted weather conditions, or **3)** A significant typographical/format error is detected. ***Note: The NWS office will notify the local dispatch offices when the FWF is updated.***

Access – Forecasts are transmitted automatically through the NWS AWIPS computer system and made available within minutes via WIMS, the Rocky Mountain Area Predictive Services website, and the web sites of the various NWS offices that serve the Rocky Mountain Area.

These web site addresses can be found under [Section III, Service Area and Organizational Directory](#).

Content and Format – The FWF will conform to the “narrative” or “tabular” format, per [NWSI](#) Rocky Mountain Area Fire Weather Annual Operating Plan - 2023

[10-401](#). Morning forecasts will focus on the following 36 hours and afternoon forecasts on the following 48 hours, with general extended outlooks in both cases out to at least 5 days and no more than 10 days.

Each FWF will begin with pertinent headlines and a non-technical weather discussion. Six-hour increments or greater will be used for forecast weather elements for the periods out to 48 hours. The extended forecast periods beyond 48 hours will contain the most significant weather within each 12 hour (in the case of a night period) or 24 hour period. Headlines are required for Red Flag Warnings and Fire Weather Watches, but may be included for other significant situations including air stagnation, record heat, severe weather potential, significant weather pattern changes, etc.

Forecasts for the first 36 or 48 hours will contain the following elements for each zone or zone grouping, listed in the order they will appear. Some of the elements are optional and will be included in the FWF based on user needs.

1. Headline(s) as appropriate
2. Sky/weather
3. Temperature (24 hour trends optional)
4. Humidity (24 hour trends optional)
5. Wind - 20 foot RAWs standard (slope/valley)
6. Wind – Ridgetop (as appropriate)
7. Chance of Wetting Rain (Optional)
8. Lightning Activity Level (LAL)
9. Haines Index
10. Mixing Level (Optional)
11. Transport Winds (Optional)
12. Ventilation (kt-ft) and Ventilation/Dispersion Category (Optional)
13. Extended outlook to at least day 5 (or at end of product)

Format examples and descriptions of forecast parameters can be found in the [NWSI 10-401](#).

2. Site-specific (Spot) Forecasts

Criteria - Spot forecasts are site-specific forecast products issued for wildfires, prescribed burns, aerial spraying, HAZMAT incidents, search and rescue etc., and are available upon request at any time of day, week or season. WFOs will provide site-specific (spot) forecast services upon request of any qualified user agency to support land management activities associated with wildland fire (including prescribed burning). Providing non-federal, non-wildfire spots will be restricted to purposes directly related to personnel, equipment, fuels reduction projects (prescribed burns or spraying) for public safety, or interagency protection agreements providing such involvement. Fire weather spot requests are to be requested via the [National Weather Service Spot Forecast Request](#) webpage.

A spot forecast will be assigned a high priority by the receiving NWS office. Normally, a request should be provided to the requestor in less than 60 minutes of the receipt of the request. During

heavy spot loads 60 minutes may be exceeded. **Note: It is recommended that the requestor call after submitting the spot forecast.**

Site-specific forecasts are considered one-time requests, and are not routinely updated. However, spot forecasts should be updated when representative observations are available to the forecaster and he/she deems the current forecast does not adequately represent current or expected weather conditions. Land management personnel may contact the appropriate WFO for a spot update if forecast conditions appear unrepresentative of the actual weather conditions.

Spot forecasts will not be updated for changes within the third period of the forecast, because at this point spot forecasts will be 24 hours old, or nearly so, and a new spot forecast request should be submitted.

Priority for the update of spot forecasts is as follows:

- Wildfires
- Prescribed burns or Wildland Fire Use (WFU)
- Spot forecasts for non-critical operations, aerial spraying, etc

Site-specific forecasts for Wildfires managed for resource benefit (those fires with little or no suppression efforts). Initially, spot forecasts will be issued under the same guidelines as spot forecasts for a declared wildfire. The requesting agency should provide the local NWS office with an idea of how long the fire is expected to burn, and what weather conditions are critical to the prescription. With the initial spot forecast request, the requesting agency should set up a schedule for providing fire line weather observations to the NWS and requesting follow-on spot forecasts for the duration of the fire. The requesting agency is encouraged to also request more detailed long-range weather forecasts to aid in the planning and control efforts. Be sure to discuss these needs with the fire weather forecaster.

The spot forecast will be corrected when a significant typographical/format error is detected. Corrections should be delivered to users in the same manner as the original spot forecast when possible.

Spot forecast requests and updates will be responded to according to the instructions of the requesting agency. Web based spot forecast requests (from NWS websites) are preferred, and will generally result in more efficient and timely feedback. The WFO will contact the local user by phone whenever the spot forecast is updated.

Content and Format – Spot forecasts typically contain the following elements, unless otherwise specified upon request:

1. Headline (required when Red Flag Warning / Fire Weather Watch)
2. Discussion
3. Sky/weather (including chance of rain)
4. Temperature
5. Relative humidity
6. 20 foot winds

Optional elements (including transport winds, mixing depth, smoke dispersal, LAL, Haines index, etc.) may be included upon request. The valid time will be determined at the time of the request. Most spots contain three periods, usually “TODAY”, “TONIGHT”, and “NEXT DAY”, e.g., “TODAY”, “TONIGHT”, and “THURSDAY”.

Procedures – Internet-based [NWS Spot](#) is the standard for requesting and retrieving spot forecasts and should be used when available. **Links to the web-based spot program can be found under [Section IV-D](#), individual forecast office information.** In times when internet access is hindered or not possible, spot forecasts may be requested and disseminated via phone or fax using the backup spot forecast request form found [Appendix A](#).

The requesting agency will provide information about the location, topography, fuel type(s), elevation(s), size, ignition time, contact name(s), and telephone number(s) of the responsible land management personnel.

Weather Observations- Quality representative weather observation(s) at, or within close proximity of the project should be made available to the responsible WFO along with the request for a spot forecast(s). At the beginning of a project, a nearby RAWS site may be used for the initial spot request if it is at a similar elevation, aspect, and sheltering, and has been shown to be very representative of the actual project. The requesting agency should provide the fire weather meteorologist with as many observations from the project as possible to help provide detail in the spot forecasts which will aid in fire behavior predictions. The best observations to send are those that show the maximum temperature, minimum humidity, and character of the winds from the previous afternoon. Additionally, a morning observation depicting the humidity recovery and downslope/downvalley wind is recommended. **Failing to provide on-site complete observations, may result in a less accurate forecast.**

However, there are special circumstances where fire personnel are unable to provide on-site weather observation. Land Agencies should communicate to the responsible WFO when on-site weather observations are not possible.

Certain prescribed burns will be considered high risk in Colorado for significant smoke impacts, as determined by the Standard Permit Condition Worksheets for Prescribed Fire Projects, which is part of the Colorado permit process. These burns could either be Category III or Category IV burns, and REQUIRE detailed observations at least 3 days prior to burn as well as feedback. Consult with the Fire Weather Program Manager at the appropriate WFO well in advance of the scheduled burn date for further information.

Spot Forecast Feedback – Timely feedback on forecast performance (both positive and negative) is requested, and should be given whenever possible by the requesting agency.

3. Red Flag Program

The Red Flag Program is a means by which NWS forecast offices communicate the onset of critical weather conditions conducive to rapid or extensive wildfire occurrences, or extreme fire behavior. Identification of Red Flag events is a primary responsibility of NWS offices that produce Fire Weather Planning Forecasts.

A **Red Flag Warning** informs agencies of the imminent or actual occurrence of Red Flag conditions. A Red Flag Warning will be issued when there is high confidence that Red Flag criteria will be met within the next 24 hours, or when those criteria are already being met or exceeded. A warning may be issued for all, or portions of a fire weather zone or region. Zones impacted by the event will be listed within the RFW.

A **Fire Weather Watch** alerts agencies to the high potential for development of a Red Flag event in the 18-96 hours. The watch may be issued for all, or portions of a fire weather zone or region. Zones impacted by the event will be listed within the RFW.

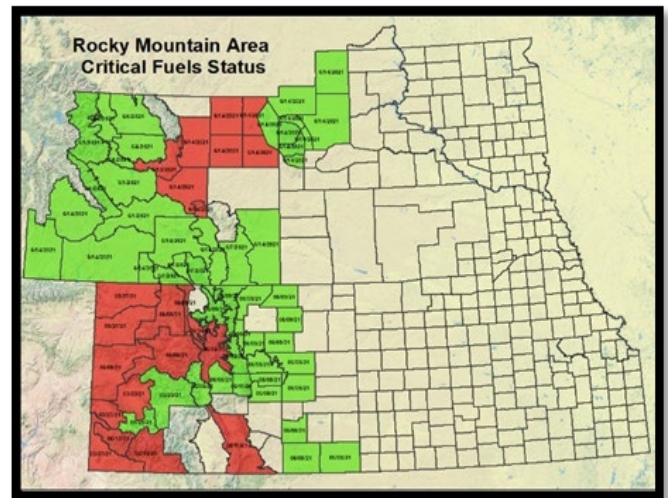
Criteria – The criteria for issuing Fire Weather Watches and Red Flag Warnings in the Rocky Mountain Area are a combination of fuels conditions (as determined by fire management) and weather (relative humidity and wind, or dry thunderstorm coverage) for any 3 hours or more in a 12-hour period. These criteria are defined as follows:

1. **Fuels** – Depending on the season, fuels may be snow covered, or exposed and critical at certain elevational ranges, cured and ready to carry fire, or in various stages of green-up. Fire managers and other fuels specialists with land management agencies are ultimately responsible for communicating important fuels status information to the RMA Predictive Services Unit and NWS Forecast Offices throughout the year. The information not only serves as a criterion to review for the issuance of watches and warnings in support of the NWS Red Flag Program, but also helps establish a common operating picture and maintaining situational awareness within the Rocky Mountain Area.

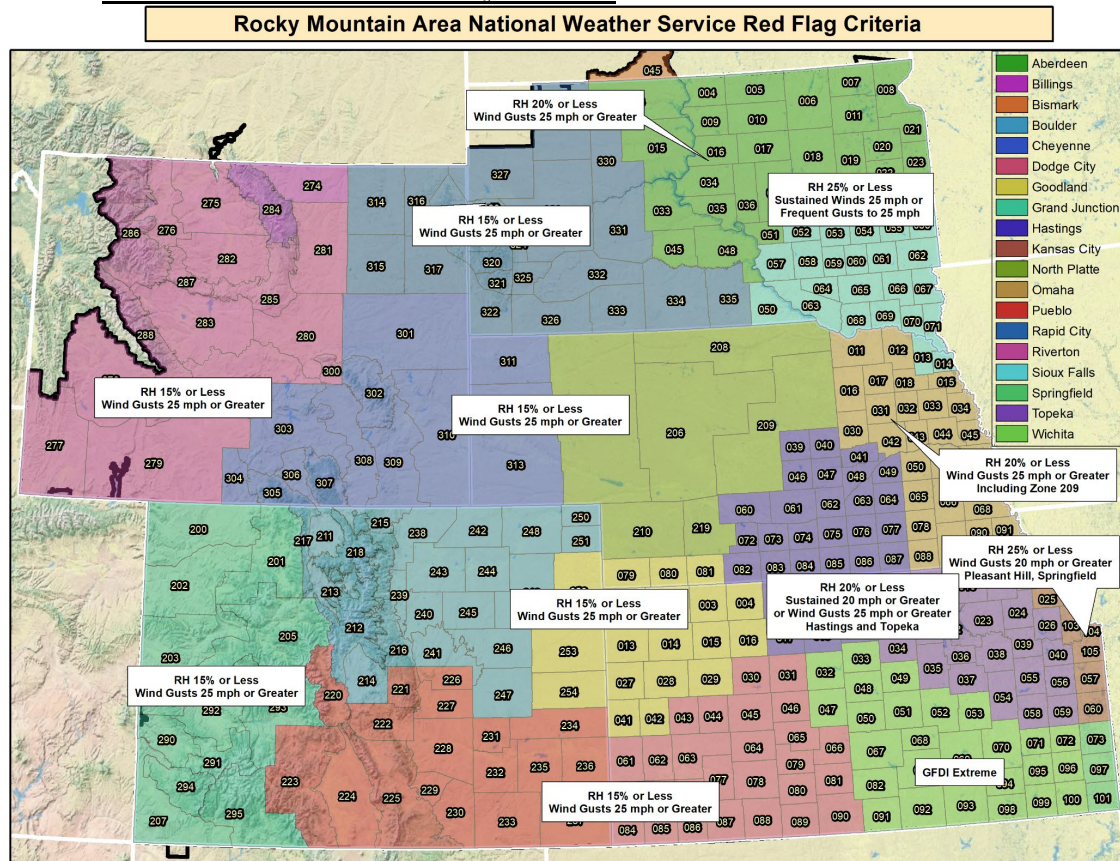
In the past, land management agencies have submitted fuels information via a shared spreadsheet or other communications directly to NWS offices. **This past practice and the spreadsheet option will continue to be utilized for the 2023 Fire Season.** The major difference is that the gathering and maintaining of the information will be a **collaborative effort** between the RMA Predictive Services Unit and the NWS Forecast Offices. NWS offices will continue to gather fuels information and share the spreadsheets with the RMCC. Predictive Services will be responsible for reviewing the information, monitoring submissions from land management agencies, and to assist in determining fuels contacts for areas where fire management staffing may be limited.

A future goal will be to display the information from the fuels form (spreadsheet) in an on-line map “RMA Critical Fuels Status” on the RMCC website that can be utilized by NWS forecast offices to determine whether or not to issue Red Flag Warnings or Fire Weather Watches. (See examples below)

NWS Wyoming Critical Fuels Form				
File Edit View Insert Format Data Tools Extensions Help Last edit was 2 days ago				
A1	zone			
17	427	No	3/10/2022	Mike Wengert - Primary will now be Chris Otto (c75otto@blm.gov). Mark Randall secondary (mranda@blm.gov 307 231 9092). Phil Lockwood still good last resort contact.
18	428	No	3/9/2022	Jerod Delay - New contact information for Jeremy McManis and Blake Creegan entered.
19	429	No	3/9/2022	Jerod Delay - New contact information for Jeremy McManis and Blake Creegan entered.
20	430	No	3/9/2022	Eric Chapman (retired). Contact information for Casey Cheesbrough and Craig Short are still good.
21	431	No	3/9/2022	Eric Chapman (retired). Contact information for Casey Cheesbrough and Craig Short are still good.
22	432	No	3/9/2022	Eric Chapman (retired). Contact information for Casey Cheesbrough and Craig Short are still good.
23	433	No	3/9/2022	Eric Chapman (retired). Contact information for Casey Cheesbrough and Craig Short are still good.
24	434	Yes	03/14/2022	Brian Daunt - Control problems likely if red flag criteria are met.
25	435	Yes	3/14/2022	Brian Daunt - Control problems likely if red flag criteria are met.
26	436	Yes	3/14/2022	Brian Daunt - Control problems likely if red flag criteria are met.



2. Wind and Relative Humidity Criteria:



3. Dry Thunderstorms Criteria: A fire weather watch or red flag warning will be issued for dry thunderstorm coverage of 15% or more, constituting an LAL of 6.

Issuing Fire Weather Watches and Red Flag Warnings- A fire weather watch or red flag warning will be issued when fuel characteristics are “Yes” as determined and relayed by land

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agencies using the fuel status web page, and one of the weather criteria (**as stated under 2 and 3 above**) is met.

Additional Red Flag Factors:- In addition to the basic criteria above, a combination of other elements may result in Red Flag conditions. Haines Index of 5 or 6, wind shifts associated with cold frontal passages, significant wind shifts, microburst winds, first significant lightning (wet or dry, 15% coverage of thunderstorms or more) event after an extended hot and dry period, and poor RH recovery.

***Note:** The decision to issue a Fire Weather Watch or Red Flag Warning can be difficult and complicated at times. Coordination with neighboring NWS offices and Land Agencies will play a vital role in the final decision.*

Product Format and Contents – An RFW product will be issued whenever a Fire Weather Watch or Red Flag Warning is issued, updated, extended, or canceled. The RFW message will include:

1. A standard UGC header coding, as mandated within the [NWSI 10-401](#), including the fire weather zone number and expiration time
2. A headline, as mandated within [NWSI 10-401](#)
3. A short, but detailed discussion on the causes and nature of the event, including weather element values

Procedures and Access - When Fire Weather Watches and Red Flag Warnings are issued, they will be headlined in spot forecasts, the general Fire Weather Planning Forecast (FWF) and appropriate zone sections within the FWF. The headline will be in the same descriptive format as on the RFW product itself. The FWF will be updated if a Fire Weather Watch or Red Flag Warning is issued, canceled, or expires. Red Flag Warnings and Fire Weather Watches will remain in effect through the expiration time noted in the forecast, or until canceled or extended. Red Flag Warnings and Fire Weather Watches are available within minutes of issuance via WIMS, the Rocky Mountain Area Predictive Services page and the web sites of the various NWS offices that serve the Rocky Mountain Area. These links can be found in the office directory ([Section III](#)) of this document.

Notification – When a Fire Weather Watch or Red Flag Warning is issued or updated (non-routine), NWS offices will verbally notify affected dispatch centers that fall under the watch or warning area ***at the time of issuance***. The NWS may reach answering services outside of normal business hours, but should still relay Fire Weather Watch or Red Flag information.

4. **Grassland Fire Danger Index (GFDI)**

The Grassland Fire Danger Index (GFDI) is based on a mathematical formula that uses temperature, relative humidity, wind speed, and curing data. Curing is related to the “greenness” of the plant material. Grass is a light-weight fuel that reacts quickly to changing weather conditions, which have a large and immediate effect on fire potential. The GFDI also better represents the role of wind speed. Recent studies have shown that wind often has the greatest effect on the overall fire danger for grasslands.

5. **NFDRS Forecasts**

The National Weather Service provides 24-hour weather forecasts for NFDRS that allow the NFDRS software to predict the next 7 day’s fire danger indices.

- **Observational Requirements** – NFDRS observations must be complete and available in WIMS by 1350 LST (1450 LDT) local time to be received by NWS in time to produce a forecast. NFDRS stations that do not have valid observations in WIMS on time will not have next day fire danger indices available.
- **Content and Format** – Complies with [NWSI 10-401](#) and is outlined in Appendix A for reference. The actual NWS NFDRS forecast product is used only by WIMS and is not viewed directly by fire management.
- **Procedures** – For every NFDRS observation received from WIMS at the 1350 local time collective, forecast weather parameters for 1300 local time the next day will be produced.

6. **Participation in Interagency Groups**

NWS offices and land management providing service within the Rocky Mountain Area should provide representation at the regional AOP meeting held annually. Proxy representation is acceptable. NWS offices should host at least one meeting each year with local fire management units, or visit local fire management units once per year.

B. **Special Services**

Special meteorological services include mobile unit and other on-site meteorological services, participation in user agency training activities, weather observer training, and weather observation station visits requested by user agencies, as time and office staffing permits. The services are usually provided away from the office or on overtime. As stated in the [Interagency Agreement for Meteorological Services](#) among the Interagency Wildland Fire Agencies and the National Weather Service, the user agencies will pay overtime, travel, and per diem costs for these special services. The NWS and Land Agencies will provide and maintain a cadre of trained IMETs to provide on-site incident meteorological support.

C. **Forecaster Training**

The NWS recognizes the need for specialized training in fire weather meteorology for forecasters. All NWS meteorologists producing fire weather products will have met the requirements set forth in [NWSI 10-405](#).

D. **Individual Forecast Office Information**

1. **North Central and Northeast Colorado – Boulder, CO**

Unless otherwise mentioned, it is to be assumed that services provided by NWS Boulder for units in northeast Colorado will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Boulder, CO is responsible for providing Fire Weather support for north central and northeast Colorado. The area of responsibility covers Fire Weather Planning Forecast zones 211 through 218, and 238 through 251. The Boulder office is staffed with 15 meteorologists trained in fire weather forecasting, one of which is designated as an Incident Meteorologist.

All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts. A Fire Weather Forecaster will be on duty 24 hours a day...seven days a week year round.

Changes

None

Fire Weather Planning Forecasts (FWF)

The fire weather planning forecast (FWF) will be issued twice daily, year-round, by 0500 and 1600. In addition to the required elements noted on [page 10](#), the following elements are included: 24 hour temperature and humidity trends, 15,000 foot MSL winds, chance of wetting rain, mixing height, transport wind, and a 5-level ventilation/dispersion category forecast based on the state of Colorado specific criteria.

Spot Forecasts

The Boulder office will prepare spot weather forecasts for prescribed burns and wildfires upon request for locations within the office's county warning area (CWA). The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program. During your follow-up telephone call to ensure receipt, tell the forecaster that your reply is for a wildfire. If you have not received your spot after 60 minutes, call the WFO to check on the status of your spot or to determine if there has been a communications system failure. The NWS strongly encourages land agencies to use the "REMARKS" section within NWS Spot to provide feedback with all follow-up spot requests. NWS Spot for Boulder can be accessed at: <http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

When requesting a non-wildfire spot forecast, it is STRONGLY SUGGESTED that requests during the fire season NOT be made between 1100 and 1500. Requests made during this time will occur during the key preparation period for the afternoon Fire Weather Planning Forecasts and will result in a much longer delay between the request and receipt of a spot forecast.

Certain prescribed burns will be considered high risk for significant smoke impacts, as determined by the Standard Permit Condition Worksheets for Prescribed Fire Projects which is part of the Colorado permit process. These burns could either be Category III or Category IV burns, and require detailed observations at least 3 days prior to the burn as well as feedback. Consult with the Fire Weather Program Manager well in advance of the scheduled burn date for further information.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Colorado narrative zones 211 through 218, and 238 through 251 after coordination and collaboration with customers and adjacent NWS offices.

Smoke Management Forecasts (SMF)

In lieu of a Smoke Management Forecast, the forecast elements of transport winds, mixing heights and ventilation as well as a brief discussion of air mass stability and any meteorological parameters

that may affect smoke dispersal have been included in the routine fire weather planning forecast (FWF).

NFDRS Forecasts

This product is issued by 1515 local time year-round and is a separate product from the afternoon FWF. The forecasts are used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

Detailed Hourly Fire Weather Table

A detailed hourly tabular table for user-selected locations can be found at the following URL: www.weather.gov/bou/fire. The table forecast includes not only the normal forecast parameters, but the following parameters tailored specifically to the fire weather community:

Hourly Relative Humidity, Haines Index, Lightning Activity Levels (LAL), Mixing Height, Transport Wind, and Ventilation Rate.

To retrieve the table, select the desired forecast type. Then enter a latitude and longitude in decimal format. The forecast can also be generated by simply clicking on a desired location on the map.

Note: The tabular forecast should be used for planning purposes only, and is NOT meant to replace a spot weather forecast.

IMET Services

The Boulder office has one IMET available for dispatch to major forest fires and projects.

Training

The fire weather program leader/IMET or assistant fire weather program leader are available to handle fire weather training requests from north central/northeast Colorado customers. Training requests outside the area will be handled on a case-by-case basis. All requests should be forwarded in writing to the office as early as possible to help ensure the request can be satisfied. Every attempt will be made to meet training requests. However, staffing limitations will need to be considered, and consequently, each request will be reviewed on a case-by-case basis.

Additional Information

The Boulder office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, RFW, Spot Forecasts, Public Fire Danger Statements, RAWs observations, experimental smoke dispersion graphics, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest or use the radio buttons below to select more than one zone.

To go directly to the Boulder fire weather web site, use the following url:

<http://www.weather.gov/bou/fire>

Back-Up

The primary service backup for NWS Boulder is NWS Pueblo and the secondary backup is NWS Grand Junction (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup

mode. To receive a spot from a backup office, customers will access the same web based spot program.

2. South Central and Southeast Colorado - Pueblo, CO

Unless otherwise mentioned, it is to be assumed services provided by NWS Pueblo will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service office in Pueblo provides fire weather support for most of south central and southeast Colorado. This area covers fire weather zones 220 through 237. The Pueblo office has a staff of 13 meteorologists, one of which is an Incident Meteorologist (IMET). All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts. A Fire Weather Forecaster will be on duty 24 hours a day...seven days a week year round.

Changes

None

Digital Web-Based Products

NWS Pueblo continues to add services to the fire weather community through their website [weather.gov/pub](https://www.weather.gov/pub). Information is derived from the Digital Forecast Database to develop graphical and digital products that are tailored to fire weather customers.

Graphical fire weather and smoke management parameters are available by clicking on Fire Weather, under the “Forecasts” tab. This link will take you to the Fire Weather page where you will find links to our graphical and digital products. These products, some currently listed as experimental, are part of our mainstream forecast process, and will be updated along with our Fire Weather Zones forecasts and other forecast products.

Information available in graphical format includes all of the normal forecast parameters, and in addition includes the following parameters that are tailored to the fire weather community:

Max and Min Relative Humidity
Mixing Height
Haines Index
10,000 ft Winds Transport Winds
Ventilation Rate Lightning Activity Level
8-14 Day Temperature and Precipitation Outlook
Critical Fire Weather Potential Graphic

Digital text information is available for all RAWS sites by clicking on the link to the **Fire Weather Point Forecast Matrix (PFM)**. This link will take you to a list of RAWS sites that you can click on to get a digital forecast with all fire weather forecast parameters.

Fire Weather Planning Forecasts (FWF)

Narrative Fire Weather Planning Forecasts will be issued by 0500 and 1600 each day, year-round.

Spot Forecasts

The Pueblo office will prepare spot weather forecasts for prescribed burns and wildfires as requested for locations within the office's fire weather service area. The primary means of requesting and disseminating spot forecasts will be through the NWS Spot Internet based forecast/reply program. NWS Spot for Pueblo can be accessed at: <http://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax, phone or telefax will be used to request a spot forecast.

When requesting a non-wildfire spot forecast, it is **STRONGLY SUGGESTED** that requests during the fire season NOT be made between 1100 and 1500. Requests made during this time will occur during the key preparation period for the afternoon Fire Weather Planning Forecasts and will result in a much longer delay between the request and receipt of a spot forecast.

To ensure receipt by the fire weather forecaster, the requester should call the NWS after submitting each spot request. During this follow-up telephone call, please be sure to tell the forecaster if the request is for a wildfire so it can receive the proper priority.

Certain prescribed burns will be considered high risk for significant smoke impacts, as determined by the Smoke Risk Rating Worksheet for Prescribed Fire Projects which is part of the Colorado Memorandum of Understanding (MOU). These burns could either be Category III or Category IV burns, and require detailed observations at least 3 days prior to burn as well as feedback. Consult with the fire weather program leader well in advance of the scheduled burn date for further information.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Colorado narrative zones 220 through 237 after coordination and collaboration with customers and adjacent NWS offices.

Smoke Management Forecasts (SMF)

The Smoke Management Forecast includes a brief discussion of air mass stability and any meteorological parameter that may affect smoke dispersal. The forecast also includes a forecast of transport winds, mixing heights and a ventilation forecast. The smoke management parameters and discussion are included within the Fire Weather Planning Forecast (FWF).

NFDRS Forecasts

This product is issued at 1515 during the fire season and is a separate product from the afternoon forecast. The forecasts are used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

IMET Services

The Pueblo office has one IMET available for dispatch to major forest fires and projects.

Training Services

The fire weather program leader/IMET or assistant fire weather program leader may be available to handle fire weather training requests from south central/southeast Colorado customers.

Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the Program Leader or Assistant.

Additional Information

The Pueblo office maintains a Fire Weather Page on its web site home page. This page contains links to forecasts (FWF), RFW, Spot Forecasts, RAWs observations, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative FWFs. Simply click on the map within the region of interest. To go directly to the Pueblo fire weather web site, use the following url: <http://weather.gov/pub/fire>.

Back-Up

The primary service backup for NWS Pueblo is NWS Boulder and the secondary backup is NWS Goodland (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

3. Western Colorado – Grand Junction, CO

Unless otherwise mentioned, it is to be assumed services provided by NWS Grand Junction will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

Changes

None

General Information

The Grand Junction Weather Forecast Office (WFO) provides fire weather support for western Colorado and eastern Utah. Its area of responsibility covers Colorado fire weather zones 200, 201, 202, 203, 205, 290, 291, 292, 293, 294, 295, and 207. WFO Grand Junction also provides fire weather services to eastern Utah. The Grand Junction office is staffed with 12 meteorologists trained in fire weather forecasting, one of which is a certified Incident Meteorologist (IMET). All forecasters have been trained to produce all the routine fire weather products, warnings, watches, and spot forecasts.

Weekly Fire Weather Briefing

A weekly fire weather webinar (geared toward fire restriction decision making) may be conducted at 1000 on Mondays during the designated fire season. For more information, please contact your local dispatch center or NWS Grand Junction directly via email at cr.gjt-fire@noaa.gov

Fire Weather Planning Forecasts

The fire weather planning forecast (FWF) will be issued by 0700 and 1500 during the designated fire season.

Spot Forecasts

The Grand Junction office prepares spot weather forecasts for prescribed burns and wildfires as requested for locations within the office's County Warning Area (CWA).

The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program. **To ensure receipt by the fire weather forecaster, the requester should call the NWS after submitting each spot request.** This call to the WFO will also allow the fire weather forecaster to ask any questions he/she might have, and inform you if multiple spot requests may delay completing your forecast. WFO Grand Junction will show the same courtesy by calling the requesting agency after each completed spot forecast is transmitted.

The NWS strongly encourages land agencies to use phone calls and the “REMARKS” section within NWS Spot to provide feedback with all follow-on spot requests. **Whenever possible (and at the earliest reasonable time), all spot forecast requests should include *on-site* observations.** NWS Spot for Grand Junction can be accessed at: <http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, fax or phone can be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

WFO Grand Junction issues Red Flag Warnings and Fire Weather Watches as required for its CWA, after coordination and collaboration with customers and adjacent NWS offices as outlined in the Basic Services section of this AOP.

NFDRS Forecasts

The station forecast for each NFDRS site is issued at 1515 during the fire season. These forecasts are used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

IMET Services

The Grand Junction office has two certified IMETs available for dispatch to major incidents. Dispatch for significant prescribed burn projects will only be possible when coordination with the fire weather program leader and WFO Meteorologist-in-Charge (MIC) has been accomplished well in advance (months in advance) of the project and only when NWS manpower and resources permit.

Training Services

The fire weather program leader, IMETs, MIC and other WFO forecasters may be available for fire weather training requests from western Colorado and eastern Utah customers. Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the program leader or the MIC.

Additional Information

The Grand Junction office maintains a fire weather page on its Internet web site. This page contains links to fire weather briefings, forecasts, warnings and watches, spot forecasts, RAWs observations, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative forecast. Simply click on the map at the point of interest or input the exact latitude and longitude to get a forecast. To go directly to the Grand Junction fire weather web site, use the following url: <http://weather.gov/gjt/fire>.

Fire weather partners can contact the office about specific fire topics directly through this email address: cr.gjt-fire@noaa.gov

Service Back-up

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The primary service backup for NWS Grand Junction is NWS Salt Lake City and the secondary backup is NWS Boulder (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should request the spot via <http://www.weather.gov/spot/>.

4. **Western-Central-Northern, Wyoming - Riverton, Wyoming**

Unless otherwise mentioned, it is to be assumed services provided by NWS Riverton will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Riverton is responsible for providing fire weather support for western-central-northern Wyoming. Its area of responsibility covers Wyoming fire weather zones 140, 275 through 283, 285 through 289, 300 and 414 through 416. The Riverton office is staffed with 13 meteorologists trained in fire weather forecasting; two are designated as Incident Meteorologists (IMET). All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts.

Changes

Two certified IMETs are available for dispatch.

NWS Riverton now issues a year-round morning Fire Weather Planning Forecast (FWF) by 0700.

Fire Weather Planning Forecasts

The Riverton office will issue routine Fire Weather Planning Forecasts (FWF) each morning year-round by 0700 for all zones. The FWF is also issued by 1500 during the primary prescribed burning and fire season as outlined in this AOP. The Riverton office will not provide updates to the daily morning FWF during the winter season, generally from November 1 to April 30.

Spot Forecasts

The Riverton office issues spot forecasts in support of wildfire and prescribed fire operations within its area of responsibility. Normally, spot forecasts will be provided within 30 to 45 minutes of the receipt of the request for wildfire and prescribed burns when prior notification has been provided.

The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program found online at <http://www.weather.gov/spot/>. **To ensure receipt by the fire weather forecaster, the requester should call the NWS after submitting each spot request.** This call to the WFO will also allow the fire weather forecaster to ask any questions he/she might have, and inform you if multiple spot requests may delay completing your forecast. WFO Riverton will show the same courtesy by calling the requesting agency after each completed spot forecast is transmitted.

The NWS strongly encourages land agencies to use phone calls and the “REMARKS” section within NWS Spot to provide feedback with all follow-on spot requests. **Whenever possible (and at the earliest reasonable time), all spot forecast requests should include *on-site* observations.**

When internet or computer capabilities are not available, fax or phone can be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as appropriate for all Wyoming fire weather zones located within the area of responsibility defined above.

Smoke Management Forecasts (SMF)

The Riverton office does not issue a separate SMF. Smoke management forecast elements (transport winds, mixing height and ventilation or dispersion) are located within the FWF and are available year-round via the “Point-n-Click” tabular data found online at:

<https://forecast.weather.gov/gridpoint.php?site=riw&TypeDefault=graphical>

NFDRS Forecasts

National fire danger rating system trend forecasts are routinely issued seven days a week from May 1st to November 1st of each year as observations are provided by the Land Management Agencies. The trend forecasts shall be prepared by 1515 each afternoon. Requests for spot forecasts in the afternoon may delay the issuance of the trend forecasts, as spot forecasts shall take priority over the trend forecasts.

Fire Weather Decision Support Services

NWS Riverton meteorologists will monitor and communicate the potential for critical fire weather conditions for each of its fire weather zones. In order to serve local customers better, staff will provide heads-up emails outside the time constraints of watches and warnings to give fire customers advance notice of extreme or widespread fire weather conditions. Partner conference calls and online video briefings may be utilized during rare instances and on an as needed basis, specifically during high impact fire events (e.g., large wildfire, WUI).

IMET Services

The Riverton NWS office has two certified IMETs available for dispatch directly to a wildland fire. Incident response meteorologist services (IMET dispatch) are usually available locally upon request 24 hours a day, seven days a week throughout the year.

Training Services

There are meteorologists available to assist partner agencies with fire weather training at fire behavior and other weather-related courses. A request should be forwarded in writing to the office as early as possible to help ensure the request can be satisfied. Every attempt will be made to meet training requests. However, staffing limitations will need to be considered, and consequently, each request will be reviewed on a case-by-case basis.

Additional Information

The NWS Riverton office maintains a Fire Weather Page on its website home page. This page contains links to the Fire Weather Planning Forecast (FWF), Fire Weather Watches and Red Flag Warnings, Spot Forecasts, Weather & Hazard Data Viewer, surface observations, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest. To go directly to the NWS Riverton fire weather website, use the following url: <http://www.weather.gov/riw/fire>.

The Riverton office also offers wildfire-specific decision support pages for more complex and longer-lived wildfires. These pages will be linked from the “Top News” section on the main home page.

Back-Up

The primary service backup for NWS Riverton is NWS Cheyenne [Phone Number: (307) 772-2227, Fax: (307) 772-2099] and the secondary backup is NWS Billings (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. Spot requests should continue to be requested on the internet from the Riverton spot request page

5. Bighorn National Forest, Bighorn Recreation Area, Sheridan County, WY – Billings, MT

Unless otherwise mentioned, it is to be assumed services provided by NWS Billings will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Billings is responsible for providing Fire Weather support for the Bighorn National Forest (zone 284), the remainder of Sheridan County (zone 274) and the Wyoming portion of the Bighorn Canyon Recreation Area (zone number 129). The Billings office is staffed with 13 meteorologists trained in fire weather forecasting, one of which is designated as an Incident Meteorologists (IMET). All fire weather forecasters are certified to produce all the routine fire weather products and spot forecasts.

Changes

None

Fire Weather Planning Forecasts

Forecasts commence in late March or early April, ending in November. The active fire season typically lasts from July through October. All dates are flexible and determined with user input.

Typical forecast issuance times:

Early spring Morning Daily 0700

May 1 thru October 31 Mornings Daily 0700

Afternoons Daily 1500 - 1530

November Mornings Daily 0700

Spot Forecasts

The Billings office will prepare spot weather forecasts for prescribed burns and wildfires as requested for locations within the office’s fire weather service area. The primary means of requesting and disseminating spot forecasts will be through the NWS Spot internet forecast/reply program which can be accessed at: <http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast. During your follow-up telephone call to ensure receipt of the request, please be sure to tell the forecaster if your request is for a wildfire.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Billings zones 129, 274 and 284 after coordination and collaboration with customers and adjacent NWS offices.

Smoke Management Forecasts

The Billings office issues a graphical Clearing Index Forecast which is available on the web site.

NFDRS Forecasts

This product is issued at 1515 during the fire season and is a separate product from the afternoon forecast. The forecasts are used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

IMET Services

The Billings office has one IMET available for dispatch.

Training Services

The office has a cadre of meteorologists that may be available to handle fire weather training requests. Refer all training requests to the Program Leader or Meteorologist-in-Charge.

Fire Weather Web Page

The Billings Fire Weather Web <https://www.wrh.noaa.gov/fire2/?wfo=byz> contains links to forecasts, Red Flag Warnings and Fire Weather Watches, Spot Forecasts, RAWs and other observations, digital and graphical products, planning tools and the annual operating plan.

Back-Up

The primary service backup for NWS Billings is NWS Glasgow (Phone Number: (406) 228-9622, Fax: (406) 228-9627) and the secondary backup is NWS Riverton (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. Spot requests should continue to be requested on the internet from the Billings spot request page

6. Southeast Wyoming-Nebraska Panhandle- Cheyenne, Wyoming

Unless otherwise mentioned, it is to be assumed services provided by NWS Cheyenne will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Cheyenne is responsible for providing fire weather support for southeast Wyoming and portions of western Nebraska. Its area of responsibility covers Wyoming fire weather zones 417 through 431, and western Nebraska fire weather zones 434 through 437. The Cheyenne office is staffed with 13 meteorologists trained in fire weather forecasting, one of which is designated as an Incident Meteorologist Trainee (IMET(t)). All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts.

Area Forecast Discussion

The Cheyenne office will continue to include a fire weather section in every issuance of the Area Forecast Discussion (AFD) product.

Changes

None

Multimedia Web Briefings for Fire Weather/Heads Up Emails

During the fire weather season, Meteorologists at NWS Cheyenne will monitor and communicate the potential for critical fire weather conditions for each of its fire weather zones. In order to serve local customers better, NWS Cheyenne staff will provide heads-up emails outside the time constraints of watches and warnings to give fire customers advance notice of extreme, or widespread fire weather conditions. In rare instances, NWS Cheyenne will record and publish a Fire Weather Multimedia Briefing to the office's web page. The multimedia briefing to customers will be made on an as needed basis, specifically during high impact fire (e.g., large Wildfire) events. The on-line briefing will contain weather parameters or a synopsis critical to fire weather conditions within the Cheyenne Fire Weather Service Area, but will not include the status of the fuels.

Fire Weather Planning Forecasts (FWF)

The Cheyenne office will issue routine Fire Weather Planning Forecasts (FWF) for its zones by 7:00 a.m. and 3:00 p.m. local time during the prescribed burn and wildfire seasons outlined in this AOP. The Cheyenne office will also issue routine Fire Weather Planning Forecasts (FWF) by 7:00 a.m. outside of the regular prescribed burn and wildfire seasons.

Spot Forecasts

The Cheyenne office issues spot forecasts in support of wildfire and prescribed fire operations within its area of responsibility. Normally, spot forecasts will be provided to you within 30 to 45 minutes of the receipt of the request for wildfire and prescribed burns when prior notification has been provided. The NWS strongly encourages land agencies to use the "REMARKS" section within NWS Spot to provide feedback with all follow-up spot requests and/or notify the forecaster of specific thresholds and watch-out situations. <http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

NWS Cheyenne issues Red Flag Warnings and Fire Weather Watches as appropriate for the fire weather zones in its fire weather service area.

Smoke Management Forecasts (SMF)

The Cheyenne office does not issue a separate SMF. Smoke management forecast elements (transport winds, mixing height and ventilation) are located within the Fire Weather Planning Forecasts (FWF). However, the Cheyenne Office does issue AQAs (Air Quality Alerts) for hazardous or unhealthy wildfire smoke in the air as needed. This is done in coordination with the Wyoming Department of Environmental Quality, Air Quality Division and the Wyoming Department of Health.

NFDRS Forecasts

National fire danger rating system trend forecasts are routinely issued year round seven days a week as observations are provided by the Land Management Agencies. The trend forecasts shall be

prepared by 1400 each afternoon. Requests for spot forecasts in the afternoon may delay the issuance of the trend forecasts, as spot forecasts shall take priority over the trend forecasts. The forecasts are used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

IMET Services

The Cheyenne office has one IMET Trainee available for dispatch to major forest fires and incidents. Dispatch for significant prescribed burn projects will only be possible when coordination with the fire weather program leaders and WFO Meteorologist-in-Charge (MIC) has been accomplished well in advance of the project and only when NWS resources permit.

Training Services

Fire Meteorologists are available for all training requests. Please send a letter or email to the NWS Cheyenne MIC and fire weather program leaders. Requests for training services should include the time, date, and place of the training. Requests should be made at least four weeks in advance of the scheduled training. Every attempt will be made to meet training requests. However, staffing limitations will need to be considered and each request will be reviewed on a case-by-case basis.

Additional Information

The Cheyenne office maintains a Fire Weather Page on its web site home page. This Page contains links to the Fire Weather Planning Forecast (FWF), Fire Weather Watches and Red Flag Warnings, Spot Forecast Request Page, Experimental On-Demand Fire Weather Forecast Matrices, Weather & Hazard Data Viewer, RAWs observations and trends, and other fire weather related sites. A clickable map is provided to obtain narrative FWFs. Simply click on the map within the region of interest. To go directly to the Cheyenne fire weather website, use the following url: <http://weather.gov/cys/fire>.

Back-Up

The primary service backup for NWS Cheyenne is NWS Riverton and the secondary backup is NWS Rapid City (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMCC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

7. Northeast Wyoming – Western South Dakota- Rapid City, SD

Unless otherwise mentioned, it is to be assumed services provided by NWS Rapid City will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information:

The National Weather Service in Rapid City, SD is responsible for providing fire weather support for portions of Northeast Wyoming and Western South Dakota. Its area of responsibility covers Northeast Wyoming Fire Weather Zones 314 through 318, and Western South Dakota Fire Weather Zones 319 through 335. The Rapid City office is staffed with 15 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all fire weather products.

Changes

None

Fire Weather Heads Up Emails:

A partners email list is used to communicate any fire weather concerns that arise, as well as for information pertaining to our fire weather products. To be added to this list, please contact the fire weather program leader.

Fire Weather Forecasts:

The Rapid City office will issue routine Fire Weather Planning Forecasts (FWF) for all of its fire zones by 700 am MDT/MST year-round. Twice daily forecasts are issued by 700 am and 230 pm MDT/MST from *around* July 1 through October 31. Beginning and ending dates are general guidelines to incorporate the majority of the prescribed burn and wildfire season and are flexible. Please contact either the fire weather program leader or the MIC to discuss starting these routine products earlier or extending the end date.

Spot Forecasts:

The Rapid City office issues spot forecasts in support of wildfire and prescribed fire operations within its area of responsibility. Normally, spot forecasts will be provided to you within 30 to 45 minutes of the receipt of the request. Please call the office once the request has been sent to confirm the spot request has made it through the system and has been received. To request a spot forecast, go to: <http://www.weather.gov/spot/>.

Please fill out as many sections as possible and provide a representative observation from the burn area. Again, please call to ensure that your spot request has arrived at our office. When internet or computer capabilities are not available, please give us a call and we can submit the forecast for you. The NWS encourages land agencies to provide feedback with all follow-up spot requests.

Red Flag Warnings / Fire Weather Watches:

NWS Rapid City issues Red Flag Warnings and Fire Weather Watches as appropriate for the fire weather zones in its fire weather service area.

Grassland Fire Danger Index (RFD):

The Rapid City NWS issues a routine Grassland Fire Danger Statement each morning by 700 am MDT/MST from April 1st through November 15th. Statements can be started prior to April 1st and continued after November 15th. In addition, a Grassland Fire Danger Statement will be issued outside of this time period if the index reaches the High, Very High or Extreme category. This statement serves the public, media, and other agencies to define burning conditions based on a variety of elements including curing of grasses, wind speed, temperature, and relative humidity. In addition to this statement, a Grassland Fire Danger Map can be found year-round on the Rapid City NWS Fire Weather web page, or more specifically at <https://www.weather.gov/unr/rfd>.

NFDRS Forecasts:

National fire danger rating system trend forecasts are routinely issued seven days a week year-round as observations are provided by the Land Management Agencies. The trend forecasts shall be prepared by 315 pm MDT/MST each afternoon.

Smoke Management Forecasts (SMF):

Smoke management forecast elements (transport winds, mixing height and ventilation) are included in the Fire Weather Planning Forecasts (FWF). Year round Vent Rate and Transport Winds maps are also available at the Rapid City NWS fire weather briefing web site, https://www.weather.gov/unr/brief_fire.

IMET Services:

Shane Eagan is a certified IMET.

Training Services:

Fire Meteorologists are available for all training requests. Please contact either the fire weather program leader or MIC to discuss your training needs. Every attempt will be made to meet training requests.

Additional Information:

The Rapid City office maintains a Fire Weather Page on its web site home page. This page contains links to fire weather planning forecasts (FWF), Red Flag Warning and Fire Weather Watch (RFW), Spot Forecasts (FWS), South Dakota Grassland Fire Danger, the Annual Operating Plan, and other fire weather related information. A clickable map is provided to obtain the narrative FWF for each Fire Zone. Simply click on the map within the region of interest. To go directly to the Rapid City NWS fire weather web site, go to <http://www.weather.gov/unr/fire>. An additional web site that is designed as a quick briefing page is also available at https://www.weather.gov/unr/brief_fire.

Back-Up:

Primary backup of the Rapid City office for all Fire Weather Products will be done by the North Platte NWS office, and the Cheyenne NWS office as a secondary backup office. Contact numbers for these offices can be found in the main body of the Rocky Mountain Area Fire Weather AOP. To go directly to the North Platte NWS fire weather web site, use the following URL: <http://www.weather.gov/lbf/fire>.

To go directly to the Cheyenne NWS fire weather web site, use the following URL: <http://www.weather.gov/cys/fire>.

8. Central, North Central, and Northeast South Dakota – Aberdeen, SD

Unless otherwise mentioned, it is to be assumed that services provided by NWS Aberdeen for its area of responsibility in South Dakota will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Aberdeen is responsible for providing fire weather support for portions of central, north central and northeast South Dakota, and two counties in west central Minnesota. The Aberdeen office is staffed with 13 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts.

Changes

No changes

Fire Weather Planning Forecasts

The Aberdeen office will issue routine Fire Weather Planning Forecasts (FWF) for its zones daily

during the entire calendar year. Updates are issued throughout the day as needed.

Spot Forecasts

Aberdeen will issue spot forecasts upon request for locations within its fire weather service area. The primary means of requesting and disseminating spot forecasts will be through the internet based NWSpot forecast/reply program. NWSpot for WFO Aberdeen can be accessed at: <http://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

NWS Aberdeen issues Red Flag Warnings and Fire Weather Watches as appropriate for the counties in its fire weather service area. Appropriate fire weather products will contain a statement as to the impact of such warnings/watches on the applicable fire weather zones.

Grassland Fire Danger Index (GFDI)

The Grassland Fire Danger Statements and South Dakota Grassland Fire Danger map are issued daily, year-round, by 6 AM local time. The Grassland Fire Danger values use the following categories, which correspond to the likelihood that grass fires will get out of control:

- Low Fire Danger
- Moderate Fire Danger
- High Fire Danger
- Very High Fire Danger
- Extreme Fire Danger

The grassland fire danger forecasts can be used by emergency managers and fire officials for decision-making on issuing burn permits or burn bans. It may also be used for planning prescribed burns.

NFDRS Forecasts

National Fire Danger Rating System trend forecasts are routinely issued seven days a week from April 1st to October 31st of each year as observations are provided by the Land Management Agencies. The trend forecasts shall be prepared by 1600 each afternoon. Requests for spot forecasts in the afternoon may delay the issuance of the trend forecasts, as spot forecasts shall take priority over the trend forecasts.

IMET Services

Kari Fleegel is a certified IMET.

Training Services

Fire Meteorologists may be available for training requests from customers within the WFO Aberdeen area of responsibility. Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the fire weather program leader or assistant fire weather program leader.

Additional Information

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The Aberdeen office maintains a Fire Weather Page on its internet web page. This page contains links to the FWF, RFW, RFD, Spot Forecasts, RAWs observations, the annual operating plan, and other fire weather related sites. To go directly to the Aberdeen fire weather web site, use the following URL: <http://weather.gov/abr/fire>

Back-Up

The primary service backup for WFO Aberdeen is WFO Sioux Falls and the secondary backup is WFO Bismarck (Please see [Service Area and Organizational Directory](#)). During the prescribed burn and wildfire seasons, the servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access NWSpot via the backup office's fire weather webpage.

9. South Central-Southeast South Dakota – Sioux Falls, South Dakota

Unless otherwise mentioned, it is to be assumed services provided by NWS Sioux Falls will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Sioux Falls is responsible for providing fire weather support for the southeast quadrant, a small portion of south central South Dakota, southwest Minnesota, extreme northeast Nebraska, and northwest Iowa. Its area of responsibility covers South Dakota fire weather zones 255 through 258, eight counties in southwest Minnesota, 11 counties in northwest Iowa, and Nebraska fire weather zone 249 which encompasses Dixon and Dakota counties near Sioux City, Iowa. The Sioux Falls office is currently staffed with 12 personnel who are trained in fire weather forecasting. All fire weather forecasters are trained to produce the routine fire weather products and spot forecasts.

Changes

None

Fire Weather Planning Forecasts

The Sioux Falls office will issue routine Fire Weather Planning Forecasts (FWF) for its zones twice a day from April 1st through May 31st, and August 15th through November 15th. The FWF will be issued once a day in the morning from June 1st through August 14th. The FWF will be issued by 0700 in the morning and 1600 for the afternoon. Through interagency agreement, these dates can be extended in times of persistent dryness.

Spot Forecasts

Spot forecasts prepared by the Sioux Falls weather office are available by request, 24 hours a day, 7 days per week, for locations within the office's fire weather service area. The primary means of requesting and disseminating spot forecasts will be through the internet based NWSpot forecast/reply program. NWSpot for Sioux Falls can be accessed at: <http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

NWS Sioux Falls issues Red Flag Warnings and Fire Weather Watches as appropriate for fire

weather zones within its fire weather service area. All attempts at coordination with involved user agencies are first attempted.

Grassland Fire Danger Index (RFD)

Sioux Falls issues a routine Grassland Fire Danger Statement each morning by 0600 from April 1st through November 15th. These dates can be extended in times of persistent dryness. In addition, a Grassland Fire Danger Statement will be issued during the winter months if the index reaches high, very high or extreme. This statement serves the public, media and local and state user agencies with a product that defines burning conditions which are not as critical as Red Flag Warnings.

NFDRS Forecasts

National Fire Danger Rating System forecasts are routinely issued from April 1st through November 15th. These dates can be extended through interagency coordination in times of persistent dryness. The forecasts will be prepared and issued between 1500 and 1600 each day. A current 1300 LST observation will be required for a forecast to be issued.

IMET Services

The Sioux Falls office has no IMET services currently available.

Training Services

The fire weather program leader is available for training services in resident courses with user agencies in the Sioux Falls forecast area. Specific user agency responsibilities in the reimbursement of costs associated with travel, per diem and overtime, are detailed in the National Interagency Agreement for Meteorological Services.

Additional Information

The Sioux Falls office maintains a Fire Weather Page on its web site home page. This page contains links to the Fire Weather Planning Forecast (FWF), Grassland Fire Danger Index, Spot Forecasts, Red Flag Warnings/Fire Weather Watches, products from the Storm Prediction Center, RAWs observations, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest. To go directly to the Sioux Falls fire weather web site, use the following URL:

<http://weather.gov/fsd/fire>

Back-Up

The primary service backup for NWS Sioux Falls is NWS Aberdeen and the secondary backup is NWS Minneapolis (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

10. Western and North Central Nebraska – North Platte, Nebraska

Unless otherwise mentioned, it is to be assumed services provided by NWS North Platte will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather (AOP).

General Information

The National Weather Service in North Platte is responsible for providing fire weather support

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for portions of Western and North Central Nebraska. Its area of responsibility covers Nebraska fire weather zones 204, 206, 208, 209, 210, and 219. The North Platte office is staffed with 13 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts.

Changes

No significant changes

Fire Weather Planning Forecasts

The North Platte office will issue routine Fire Weather Planning Forecasts (FWF) for its zones twice daily by 0500 and 1500 year round.

Spot Forecasts

The North Platte office prepares spot weather forecasts for prescribed burns and wildfires as requested for locations within the office's county warning area (CWA).

The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program. Internet requests are preferred and once sent, will alarm at the forecaster workstation. Phone calls to the WFO are welcome to ensure receipt of the spot request by the fire weather forecaster. If you have not received your spot forecast after 60 minutes, call the WFO to check on the status of your spot or to determine if there has been a communications system failure. The NWS strongly encourages land agencies to use the "REMARKS" section within NWS Spot to provide feedback with all follow-on spot requests. NWS Spot for North Platte can be accessed at: <http://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax or phone can be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

NWS North Platte issues Red Flag Warnings and Fire Weather Watches as appropriate for the fire weather zones in its fire weather service area.

Critical fire weather conditions occurring outside the normal fire season will be relayed to the local customers via the Hazardous Weather Outlook (OMAHWOLBF) product for RH values at 20 percent or less. A phone call to the users will be utilized if RH values drop below 15 percent. Notifications are also updated via a Situation Report and emailed to partners.

NFDRS Forecasts

WFO North Platte currently has one forecast point located at the Bessey Ranger District, in the Nebraska National Forest near Halsey. This product is issued around 1530 during the fire season and is used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

Detailed Hourly Tabular Forecast

WFO North Platte maintains a detailed hourly tabular forecast for user-selected locations. The tabular forecast includes not only the normal forecast parameters, but the following parameters tailored specifically to the fire weather community:

Hourly relative humidity, Haines index, lightning activity levels (LAL), mixing height, transport
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wind and ventilation rate.

The tabular forecast can be found at the following url:

<http://forecast.weather.gov/gridpoint.php?site=lbfg&TypeDefault=graphical>

To retrieve the tabular forecast, enter a latitude and longitude in either decimal or deg, min, sec.

The forecast can also be generated by simply selecting a desired location on the map.

Note: The tabular forecast should be used for planning purposes only, and is not meant to replace a spot weather forecast.

IMET Services

The North Platte office does not have an IMET on station.

Training Services

Fire Meteorologists are available for all training requests. Please send a letter or email to the North Platte NWS Office MIC and fire weather program leader. Requests for training services should include the time, date, and place of the training. Requests should be made at least four weeks in advance of the scheduled training. Every attempt will be made to meet training requests. However, staffing limitations will need to be considered and each request will be reviewed on a case-by-case basis.

Additional Information

The North Platte office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, Spot Forecasts, RAWS observations, this operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative forecasts. Simply click on the map within the region of interest. To go directly to the North Platte fire weather web site, use the following url: <http://weather.gov/lbf/fire> The office also maintains a decision support webpage that contains fire weather forecast graphics, including wind and humidity maps and a red flag monitor: https://www.weather.gov/lbf/dss_v2

Back-up

The primary service backup for NWS North Platte is NWS Rapid City (UNR) and the secondary backup is NWS Hastings (GID) (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

11. East Central CO/Northwest KS/SW Nebraska – Goodland, Kansas

Unless otherwise mentioned, it is to be assumed services provided by NWS Goodland will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Goodland is responsible for providing fire weather support for portions of east central Colorado, extreme southwest Nebraska and northwest Kansas. Its area of responsibility covers Colorado fire weather zones 252, 253, and 254, Nebraska fire weather zones N79-N81, and Kansas fire weather zones K1-K4, K13-K16, K27-K29, and K41-K42. The Goodland office is staffed with 12 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce the routine fire weather products and spot forecasts.

Changes

No major changes

Fire Weather Planning Forecasts

The Fire Weather Planning Forecasts (FWF) will be issued once daily by 0600 year-round for fire weather zones N79-N81 in Nebraska, K1-K4, K13-K16, K27- K29 and K41-K42 in Kansas and 252-254 in Colorado. The FWF will be updated as necessary, with at least one update during Red Flag Warning days.

Spot Forecasts

Goodland will issue a spot weather forecast upon request from all local, state, and federal land management agencies in support of wildland fires and prescribed burns. The NWS strongly encourages land agencies to use the “REMARKS” section within NWS Spot to provide feedback with all follow-up spot requests, or to provide additional information or updated observations. Spot forecasts are requested and retrieved using the following web address:

<http://www.weather.gov/spot/>.

When internet or computer capabilities are not available, spot requests may be made via fax or telephone.

Red Flag Warnings / Fire Weather Watches

NWS Goodland issues Red Flag Warnings and Fire Weather Watches as appropriate for fire weather zones within its fire weather service area. The Red Flag Warning Criteria is:

1. Relative Humidity: 15% percent or lower
2. Sustained winds and/or wind gusts: 25 mph or greater
3. Conditions need to be met for 3 or more cumulative hours during the warning period (this condition has not changed).

Red Flag conditions also include dry thunderstorm activity and the first significant lightning event after an extended hot and dry period.

NFDRS Forecasts

Not currently issued.

IMET Services

The Goodland office does not have a trained IMET.

Training Services

Fire Meteorologists are available for training requests.

Additional Information

The Goodland office maintains a Fire Weather Page on its web site home page. This page contains links to forecasts (FWF), RFW, Spot Forecasts, and other fire weather related sites. A clickable map is provided to obtain a FWF for each zone in Kansas. To go directly to the Goodland fire weather web site, use the following url: <http://weather.gov/gld/fire>

NWS Goodland is issuing “Hot Spot Notifications” for county emergency managers, dispatch
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centers, and fire partners for the GLD area of responsibility. These are text and email alerts notifying officials of a fire identified via satellite and radar interrogation. Notifications are only provided on days in which NWS Goodland has elevated fire weather conditions for any part of the forecast area.

Back-Up

The primary service backup for NWS Goodland is NWS Dodge City and the secondary backup is NWS Pueblo (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify its local dispatch centers and RMACC when the office is in service backup or plans to be in service backup. To receive a spot forecast from a backup office, customers should access the web based spot program of the office that is providing the backup service.

12. Central and South Central Nebraska and North Central Kansas, Hastings, NE

Unless otherwise mentioned, it is to be assumed that services provided by NWS Hastings for units in central and south central Nebraska and north central Kansas will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Hastings, NE is responsible for providing fire weather support for central and south central Nebraska and north central Kansas. The area of responsibility covers fire weather zones 39–41, 46–49, 60–64, 72–77, and 82–87 in central and south central Nebraska, and zones 5–7 and 17–19 in north central Kansas. The Hastings office is staffed with 12 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts. A Fire Weather Forecaster will be on duty 24 hours a day, seven days a week year-round.

Changes:

None

Fire Weather Planning Forecasts (FWF)

The Fire Weather Planning Forecast (FWF) will be issued once daily by 0600 year-round for fire weather zones 39–41, 46–49, 60–64, 72–77, and 82–87 in central and south central Nebraska, and zones 5–7 and 17–19 in north central Kansas. The FWF will be updated as necessary.

Smoke Management Forecasts (SMF)

Not issued.

NFDRS Forecasts

Not issued.

Spot Forecasts

The Hastings office will prepare spot weather forecasts for prescribed burns and wildfires upon request for locations within the office's county warning area (CWA). The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program. To ensure receipt of a spot request by the fire weather forecaster, the requester should call the NWS after submitting the spot request. During this follow-up telephone call to ensure receipt, please tell the forecaster if the request is for a wildfire so it can be handled with the proper priority. If you have not received your spot forecast after 60 minutes, call the WFO to check on the status of

your spot or to determine if there has been a communications system failure. The NWS strongly encourages land agencies to use the “REMARKS” section within NWS Spot to provide feedback with all follow-up spot requests. NWS Spot for Hastings can be accessed at:
<http://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Nebraska fire weather zones 39–41, 46–49, 60–64, 72–77, and 82–87, and Kansas fire weather zones 5–7 and 17–19 after coordination and collaboration with customers and adjacent NWS offices.

IMET Services

The Hastings office is not staffed with an IMET.

Training

The fire weather program leader or assistant fire weather program leader may be available to handle fire weather training requests from central and south central Nebraska and north central Kansas customers. Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the fire weather program leader or assistant fire weather program leader.

Additional Information

The Hastings office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, RFW, Spot Forecasts, Graphical Fire Weather Forecasts, the annual operating plan, and other fire weather related sites. To go directly to the Hastings fire weather web site, use the following url: <http://weather.gov/gid/fire>

Back-Up

The primary service backup office for NWS Hastings is NWS Omaha and the secondary backup office is NWS North Platte. The servicing NWS office will notify their local dispatch centers and RMACC when the office is in, or plans to be in, backup mode. To receive a spot forecast from a backup office, customers should access the web-based spot program of the office that is providing the backup service.

13. Southwest Kansas - Dodge City, KS

Unless otherwise mentioned, it is to be assumed that services provided by NWS Dodge City for units in southwest Kansas will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Dodge City, KS is responsible for providing Fire Weather support for southwest Kansas. The area of responsibility covers Fire Weather Planning Forecast zones 030, 031, 043-046, 061-066, 074-081, 084-090. The Dodge City office is staffed with 12 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts. A Fire Weather Forecaster will be on duty 24 hours a day,

seven days a week year round.

Changes

None

Fire Weather Planning Forecasts

The Fire Weather Planning Forecast (FWF) will be issued once daily by 0600 year-round for fire weather zones 030, 031, 043-046, 061-066, 074-081, 084-090. The FWF will be updated as necessary.

Spot Forecasts

The Dodge City office will prepare spot weather forecasts for prescribed burns and wildfires upon request for locations within the office's county warning area (CWA). The primary means of requesting and disseminating spot forecasts is the NWSSpot Internet-based spot request and reply program. During your follow-up telephone call to ensure receipt, tell the forecaster that your reply is for a wildfire. If you have not received your spot after 60 minutes, call the WFO to check on the status of your spot or to determine if there has been a communications system failure. The NWS strongly encourages land agencies to use the "REMARKS" section within NWSSpot to provide feedback with all follow-up spot requests. NWSSpot for Dodge City can be accessed at:

<http://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax, phone or telefax will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Kansas narrative zones 030, 031, 043-046, 061-066, 074-081, 084- 090 after coordination and collaboration with customers and adjacent NWS offices.

Smoke Management Forecasts (SMF)

Not currently issued.

NFDRS Forecasts

WFO Dodge City currently has two forecast points. One is located in the Cimarron National Grassland near Elkhart, KS and the other is located in the Quivira National Wildlife Refuge near Stafford, KS. This product is issued around 1530 during the fire season and is used as input to the National Fire Danger Rating System (NFDRS) through WIMS to compute fire danger indices.

IMET Services

The Dodge City office does not have a trained IMET.

Training

The fire weather program leader or assistant fire weather program leader may be available to handle fire weather training requests from southwest Kansas customers. Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the fire weather program leader or assistant.

Additional Information

The Dodge City office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, RFW, Spot Forecasts, Public Fire Danger Statements, RAWs observations, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest. To go directly to the Dodge City fire weather web site, use the following url: <http://weather.gov/ddc/fire>

Back-Up

The primary service backup for NWS Dodge City is NWS Goodland and the secondary backup is NWS Wichita (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

14. Eastern Nebraska and Southwestern Iowa – Omaha, NE

Unless otherwise mentioned, it is to be assumed that services provided by NWS Omaha for units in eastern Nebraska and southwestern Iowa will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Omaha, NE is responsible for providing Fire Weather support for eastern Nebraska and southwestern Iowa. The area of responsibility covers Fire Weather Planning Forecast zones 11, 12, 15-18, 30-34, 42-45, 50-53, 65-68, 78, and 88-93 in Nebraska; and zones 43, 55, 56, 69, 79, 80, 90 and 91 in Iowa. The Omaha office is regularly staffed with up to 15 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts. A Fire Weather Forecaster is on duty 24 hours a day...seven days a week year round.

Changes

Changes to wording of times FWF will be issued.

Fire Weather Planning Forecasts (FWF)

The fire weather planning forecast (FWF) will be issued all year around 5 am. From March 1 through October 31 it will be issued around 5 am and 11 am. The FWF will be updated as necessary.

Spot Forecasts

The Omaha office will issue a spot weather forecast upon request from all local, state, tribal and federal land management agencies in support of wildland fires and prescribed burns in eastern Nebraska. Spot forecasts are requested and retrieved using the following web address:

<http://www.weather.gov/spot/>

The NWS strongly encourages land agencies to use the “REMARKS” section within NWS Spot to provide feedback with all follow-up spot requests.

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings are issued as required for Nebraska and Iowa Fire Weather Zones served by NWS Omaha after coordination and collaboration with customers and adjacent NWS offices.

Grassland Fire Danger (RFD)

Eastern Nebraska CWA Customers will be provided a link to a Nebraska RFD map on the Omaha office Fire Weather Page. For Iowa CWA customers, a link will be provided to an Iowa GFDI map created by NWS Des Moines.

Smoke Management Forecasts (SMF)

Not issued.

NFDRS Forecasts

Not issued.

IMET Services

The Omaha office does not have a trained IMET.

Training

The fire weather program leader may be available to handle fire weather training requests from customers served by NWS Omaha. Training requests outside the area will be handled on a case-by-case basis. Refer all training requests or technical support questions to the fire weather program leader.

Additional Information

The Omaha office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, RFW, RFD, Spot Forecasts, the annual operating plan, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest. To go directly to the Omaha fire weather web site, use the following url: <http://weather.gov/oax/fire>

Back-Up

Primary service backup for NWS Omaha is NWS Hastings and the secondary backup is NWS Sioux Falls. The servicing NWS office will notify their local dispatch centers and RMACC when the office is in, or plans to be in, backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

15. Northeast Kansas- Topeka, KS

Unless otherwise mentioned, it is to be assumed services provided by NWS Topeka will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Topeka is responsible for providing fire weather support for portions of north central, east central, and northeast Kansas. Its area of responsibility covers Kansas fire weather zones 8>12, 20>26, 34>40, 54>56, 58 and 59. The Topeka office is staffed with 13 meteorologists trained in fire weather forecasting. All fire weather forecasters are trained to produce

all the routine fire weather products and spot forecasts.

Changes

None

Fire Weather Planning Forecasts

The Topeka office will issue routine Fire Weather Planning Forecasts (FWF) for its zones once daily by 0600 during the prescribed burn and wildfire seasons outlined in this AOP. Forecasts will be updated as appropriate.

Spot Forecasts

Topeka will issue a spot weather forecast upon request from all local, state, and federal land management agencies in support of wildland fires, and for agencies in the interagency agreement for prescribed burns. Spot forecasts are requested and retrieved using the following web address:

<http://www.weather.gov/spot/>

Internet requests are preferred. Phone calls to the WFO are welcome to ensure receipt of the spot request by the fire weather forecaster. If you have not received your spot forecast after 60 minutes, call the WFO to check on the status of your spot or to determine if there has been a communications system failure. The NWS strongly encourages agencies to use the “REMARKS” section within NWS Spot to provide feedback with all follow-on spot requests, or to provide additional information or updated observations. Phone calls to the NWS with updated on site weather information during the burn are also appreciated.

Red Flag Warnings / Fire Weather Watches

NWS Topeka issues Red Flag Warnings and Fire Weather Watches as appropriate for fire weather zones within its fire weather service area, in collaboration with area land management agencies.

Rangeland Fire Danger Statement

The Rangeland Fire Danger Statement represents the grassland fire danger across the Topeka CWA, and is an adaptation of the NFDRS to local fuels and climatology. NWS Topeka produces a Rangeland Fire Danger Statement to represent the index daily. The statement will be issued by 0500 each day, and updated as necessary.

Fire Weather Point Planning Forecast

The Point Planning forecast is issued by 0600, for Kansas fire zones 058, 024 and 012.

NFDRS Forecasts

Not currently issued.

IMET Services

The Topeka office does not have a trained IMET.

Training Services

The fire weather program leader, assistant fire weather program leader, SOO, or MIC may be available to handle fire weather training requests from customers within the NWS Topeka CWA. Refer all training requests or technical support questions to the fire weather program leaders, SOO,

or MIC.

Additional Information

The Topeka office maintains a Fire Weather Page on its web site home page. This page contains links to the Fire Weather Planning forecast, Spot Forecasts, Fire Weather Watches / Red Flag Warnings, Rangeland Fire Danger Statement, Graphical Fire Weather forecasts, and other fire weather related sites. A clickable map is provided to obtain a narrative FWF. Simply click on the map within the region of interest. To go directly to the Topeka fire weather web site, use the following url: <http://www.weather.gov/top/fire>

Back-Up

The primary service backup for NWS Topeka is NWS Wichita and the secondary backup is NWS Pleasant Hill (Please see [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

16. Central-Southeast Kansas – Wichita, Kansas

Unless otherwise mentioned, it is to be assumed services provided by NWS Wichita will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Wichita, KS is responsible for providing Fire Weather support for central and southeast Kansas. The area of responsibility covers Fire Weather Planning Forecast zones 32-33, 47-53, 67-72, 82-83, 91-96, and 98-100. The Wichita office is staffed with 16 meteorologists, all trained to issue the full suite of fire weather forecasts. A Fire Weather Forecaster will be on duty 24 hours a day, seven days a week, year-round.

Changes

When the grassland fire danger is unusually high/dangerous (usually well into the CATASTROPHIC category), we will utilize language such as “THIS IS A PARTICULARLY DANGEROUS SITUATION” within the body of the Red Flag Warning product.

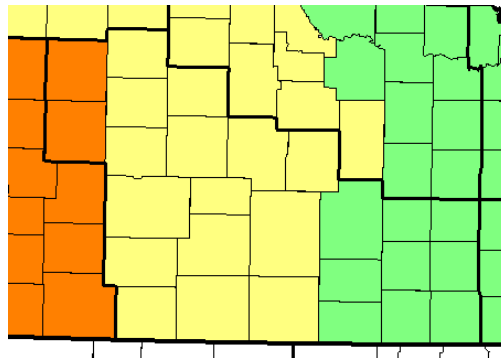
Fire Weather Planning Forecasts (FWF)

The fire weather planning forecast (FWF) will be generated every time NWS Wichita sends GFE grids to the NDFD server, which is typically accomplished every 3 hours. Additionally, when fire weather concerns exist within the next 7 days, the “DISCUSSION” section of the FWF will be populated with the latest “FIRE WEATHER” section of the Area Forecast Discussion (AFD).

Grassland Fire Danger Index (GFDI) Textual and graphical versions of the Grassland Fire Danger Index (GFDI) will be generated every time NWS Wichita sends GFE grids to the NDFD server, which is typically accomplished every 3 hours. A graphical version of the product will be available on the NWS Wichita’s [GFDI webpage](#). The [text product](#) will include 3-hourly forecasts for each county out to 7 days.

Grassland Fire Danger Index	Short Grass	Mixed Grass	Tall Grass
Low-Moderate (LM)	< 8	< 7	< 6

High (H)	9 - 23	8 - 19	7 - 15
Very High (V)	24 - 59	20 - 49	16 - 39
Extreme (X)	60 - 99	50 - 79	40 - 59
Catastrophic (C)	100 +	80 +	60 +



Red Flag Threat Index (RFTI)

NWS Wichita is assessing the Red Flag Threat Index (RFTI) and its potential usefulness as a regional baseline for future red flag warning decisions. Although NWS Wichita continues to utilize the Grassland Fire Danger Index (GFDI) as the primary driver for red flag issuance, the RFTI will run parallel to the GFDI for comparison. NWS Wichita's assessment of the RFTI: it is a wonderful and simple numerical rating, which appears to capture most red flag days on the plains of central and eastern Kansas. It quantifies the threat posed by various combinations of RH and wind, much like the GFDI. By pairing it with the ERC-G, it removes the subjectivity of the curing value we utilize for the GFDI, and appears to capture the fuel trends (wet or dry) rather well. NWS Wichita thinks utilizing the RFTI will be a step in the right direction, and will help considerably with our collaboration efforts when our neighboring offices utilize the RFTI as a common starting point for red flag warning considerations as we move forward.

Spot Forecasts

The Wichita office will prepare spot weather forecasts for prescribed burns and wildfires upon request for locations within the office's county warning area (CWA). The primary means of requesting and disseminating spot forecasts is the NWS Spot Internet-based spot request and reply program. The NWS strongly encourages land agencies to use the "REMARKS" section within NWS Spot to provide feedback with all follow-up spot requests. NWS Spot for Wichita can be accessed at: <https://www.weather.gov/spot/>

When internet or computer capabilities are not available, fax or phone will be used to request a spot forecast.

Red Flag Warnings / Fire Weather Watches

Red Flag Warnings and Fire Weather Watches will be issued as required for Kansas narrative zones 32-33, 47-53, 67-72, 82-83, 91-96, and 98-100 when the maximum value of the Grassland Fire Danger Index is "Extreme" or "Catastrophic". When the grassland fire danger is unusually high/dangerous (usually well into the CATASTROPHIC category), we will utilize language such as "THIS IS A PARTICULARLY DANGEROUS SITUATION" within the body of the Red Flag Warning product.

Hot spot notifications for remotely sensed wildland fires (GOES-16 satellite and/or dual-pol radar) will be issued by NWS Wichita when hot spots and/or smoke plumes are detected in a favorable wildfire environment (very high, extreme, or catastrophic GFDI). **Exception between March 1st-April 30th**, the following counties only want hot spot notifications during "Extreme" or "Catastrophic" GFDI levels: Cowley, Butler, Marion, Chase, Greenwood, and Elk Counties. Recipients of hot spot notifications (usually in the form of a text message or email) are emergency management and wildland fire suppression personnel. Feedback has been overwhelmingly positive as a very useful tool for the protection of life and property.

Unfortunately, some of our users have been experiencing latency issues receiving hotspot notifications, sometimes hours after the notification was sent. This is likely due to cell carrier spam filtering. Central Region HQ is working diligently to resolve this latency issue. In the meantime, in addition to sending the hotspot notification, we are also calling the county Emergency Manager for each hotspot.

Training/Outreach

The fire weather program leader, assistant fire weather program leader, Warning Coordination Meteorologist (WCM), or Science and Operations Officer (SOO) are available to handle fire weather training and/or outreach requests from central/southeast Kansas customers. Requests outside the area will be handled on a case-by-case basis. Refer all training/outreach requests or technical support questions to the fire weather program leader or assistant.

Additional Information

The Wichita office maintains a Fire Weather Page on its web site home page. This page contains links to the FWF, RFW, Grassland Fire Danger Index, Spot Forecasts, Public Fire Danger Statements, RAWs observations, the annual operating plan, and other fire weather related sites. To go directly to the Wichita fire weather web site, use the following url:

<https://www.weather.gov/ict/fire>

Back-Up

The primary service backup for NWS Wichita is NWS Topeka, and the secondary backup is NWS Dodge City (please refer to the [Service Area and Organizational Directory](#)). The servicing NWS office will notify their local dispatch centers and RMACC when the office is in or plans to be in backup mode. To receive a spot from a backup office, customers should access the web based spot program of the office that is providing the backup service.

17. Extreme East Central & Northeast Kansas- Pleasant Hill, MO

Unless otherwise mentioned, it is to be assumed services provided by NWS Pleasant Hill will follow the regional policies and procedures set forth in the Rocky Mountain Area Fire Weather AOP.

General Information

The National Weather Service in Pleasant Hill is responsible for providing fire weather support for portions of extreme northeast, and east central Kansas. Its area of responsibility covers Kansas fire weather zones 25, 57, 60, and 102>105. The Pleasant Hill office is staffed with 13 forecasters and 3

managers trained in fire weather forecasting. All fire weather forecasters are trained to produce all the routine fire weather products and spot forecasts.

Changes

No changes

Fire Weather Planning Forecasts

The Pleasant Hill office will issue routine Fire Weather Planning Forecasts (FWF) for its zones twice daily year-round by 0600 and 1630. Forecasts will be updated as appropriate.

Spot Forecasts

Pleasant Hill will issue a spot weather forecast upon request from all local, state, and federal land management agencies in support of wildland fires, and for agencies in the interagency agreement for prescribed burns.

Spot forecasts are requested and retrieved using the following web address:

<http://www.weather.gov/spot/>

Internet requests are preferred. Phone calls to the WFO are welcome to ensure receipt of the spot request by the fire weather forecaster. If you have not received your spot forecast after 60 minutes, call the WFO to check on the status of your spot or to determine if there has been a communications system failure. The NWS strongly encourages agencies to use the “REMARKS” section within NWSSpot to provide feedback with all follow-on spot requests, or to provide additional information or updated observations. Phone calls to the NWS with updated on site weather information during the burn are also appreciated.

Red Flag Warnings / Fire Weather Watches

NWS Pleasant Hill issues Red Flag Warnings and Fire Weather Watches as appropriate for fire weather zones within its fire weather service area.

Rangeland Fire Danger Statement

The NWS Pleasant Hill office does not issue a Rangeland Fire Danger Statement.

Grassland Fire Danger Index (GFDI)- (Experimental Forecast Product NWS Kansas City/Pleasant Hill) – *Red Flag Warnings are NOT based on this experimental product.*

The Grassland Fire Danger Index (GFDI) values correspond to the likelihood that grassland fires will become uncontrolled. The index was developed in Australia and adapted for use in the United States. The GFDI forecast is used as a fire weather planning aid for predictive service meteorologists, land management personnel, and can potentially be used by emergency management and county fire personnel to decide when to issue burn permits. The index values for days 1 through 7 are intended to be used as a planning guideline.

GFDI numeric output is based on expected relative humidity, temperature, 20 ft wind speed, and a grassland “curing index” from direct field observations. It does not account for precipitation that occurs within the hour preceding any given forecast hour or any snow on the ground at the forecast hour.

The GFDI adjectives and numeric values are summarized below:

Grassland Fire Danger Adjective	GFDI Numeric Value
Low (L)	0 to 2
Moderate (M)	3 to 7
High (H)	8 to 19
Very High (V)	20 to 49
Extreme (E)	50+

GFDI values are calculated on a county basis as depicted below. Daily 24 hour index values are based on hourly data. The three hourly data is calculated for each day.

KSZ073-220415- BOURBON- INCLUDING THE CITY OF...FORT SCOTT 405 AM CST MON DEC 21 2009												
(ALL TIME REFERENCES ARE IN CST)												
DAY/DATE	24HR INDEX	*		MID	3AM	6AM	9AM	NOON	3PM	6PM	9PM	
MON DEC 21	MODERATE	4	*	L	L	L	L	L	M	M	L	
TUE DEC 22	LOW	2	*	L	L	L	L	L	L	L	L	
WED DEC 23	MODERATE	4	*	L	L	L	L	L	M	M	M	
THU DEC 24	HIGH	15	*	M	M	M	M	H	H	H	H	
FRI DEC 25	HIGH	9	*	M	M	M	M	H	M	M	M	
SAT DEC 26	MODERATE	5	*	M	M	M	M	M	M	M	L	

NFDRS Forecasts

National fire danger rating system forecasts are routinely issued everyday year round by 2000 GMT for 4 sites, including the State Line site TRDK1, ID 145801.

IMET Services

The Pleasant Hill office does not have a trained IMET.

Training Services

The fire weather program leader, SOO, WCM, or MIC may be available to handle fire weather training requests from customers within the NWS Pleasant Hill CWA. Refer all training requests or technical support questions to the fire weather program leader, SOO, WCM, or MIC.

Additional Information

The Pleasant Hill office maintains a Fire Weather Page on its web site home page. This page contains links to the Fire Weather Planning forecast, Spot Forecasts, Fire Weather Watches / Red Flag Warnings, and other fire weather related sites. To go directly to the Pleasant Hill fire weather web site, use the following url: <http://weather.gov/eax/fire>

Back-Up

The primary service backup for NWS Pleasant Hill is NWS Springfield and the secondary backup is NWS Topeka (Please see [Service Area and Organizational Directory](#)). To receive a spot from a

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backup office, customers should access the web based spot program of the office that is providing the backup service. If a spot forecast is not received in a timely manner, the customer requesting the spot forecast should call the primary office to see if there was a problem with the receipt of the request, or if the office is in service back-up mode.

V. WILDLAND FIRE AGENCY SERVICES AND RESPONSIBILITIES

A. Predictive Services Products and Services

The Rocky Mountain Area Coordination Center provides regional and national products for strategic use in resource prioritization and utilization. Interagency Fire Meteorologists at RMCC combine forecast information from local weather analysis, the NWS and other sources into **area-wide summaries and briefings** for use by fire management on a local, geographical or national level. The meteorologists work in conjunction with Intelligence to form the Predictive Services Unit, which produces integrated fire weather/fire danger assessments for the entire Rocky Mountain Area. The intent of Predictive Services is to provide strategic decision support information to assist in the preparedness, movement, and allocation of wildland fire resources. RMA Predictive Services is the exclusive provider of fire danger and significant fire potential forecasts within the Rocky Mountain Area beyond the next day NFDRS forecasts provided by the NWS.

Products and services are available online, in **document, graphical or audio/recorded format**, and can be obtained from the RMA Predictive Services homepage at:

https://gacc.nifc.gov/rmcc/obs_weather.php

<https://gacc.nifc.gov/rmcc/outlooks1.php>

1. **Day 1 Thru 7 RMA Fire Weather Outlook Maps**: This is a graphical product that contains forecast fire weather information for the Rocky Mountain Area. This product is used in briefings for long term strategic resource planning.

https://gacc.nifc.gov/rmcc/rma_7day_wx_loop.html

Issuance Schedule: Issued daily by 800 am on a year-round basis.

2. **7-Day Significant Fire Potential Outlook**: Forecast and discussion of significant fire potential for a 7-day period, based on statistical thresholds and breakpoints using NFDRSV4 analysis. A four-tier system is used to indicate fuel dryness levels and risk. Green (Little or No risk), Yellow (Low risk), Brown (Moderate risk), and Red (High risk).

<https://fsapps.nwcg.gov/psp/npsg/forecast#/outlooks?state=map&gaccId=7>

Issuance Schedule: Issued daily by 0930 am Mountain Time (MT) on a year-round basis. Generally when the National Preparedness Levels (PL) is at 3 or higher, or as wildfire potential warrants with the RMA.

3. **Monthly Seasonal Significant Fire Potential Outlook**: Utilizes all available weather, climate, and fire danger information to make long-term outlooks of fire potential through 120 days. Outlooks highlight periods for significant large fire potential and resource mobilization relative to normal. The product will be issued by the National Interagency Coordination Center (NICC)

and is a compilation from each of the geographic areas of fire potential covering the 120-day period.

<http://gacc.nifc.gov/rmcc/outlooks2.php>

Issuance Schedule: Year round and published on the first day of each month.

- B. Program Management** – The RMA Predictive Services Program Manager is responsible for acting as a liaison with land management agencies and other fire weather and fuels programs at various levels. Predictive Services staff will interface with other government entities, the private sector, and the academic research community to facilitate scientific technology transfer into wildland fire operations. This includes regional numerical modeling of weather and smoke dispersion.
- C. Technical Specialist**- Land Agency Meteorologists with THSP qualifications can be dispatched to incidents, prescribed burns, or other Predictive Services GACCs as a Technical Specialist. Qualifications and Red Card documentation are maintained by the employee's agency and are stored in the IQCS. Meteorologists can be ordered the same way as NWS IMETs using the IROC system.
- D. Reimbursement for NWS Provided On-site Support** – Federal agencies will reimburse NWS for all costs incurred by the agency for IMET support and training assistance per the procedures set forth in the National Agreement. Non-federal agencies do not have blanket reimbursable agreements under the national agreement.
- E. Fuels Information Support** – Depending on the season, fuels may be snow covered, or exposed and critical at certain elevations, cured and ready to carry fire, or in various stages of green-up. Fire managers and other fuels specialists with land management agencies are ultimately responsible for communicating important fuels status information to the RMA Predictive Services Unit and NWS Forecast Offices throughout the year. The information serves as a criterion to review for the issuance of watches and warnings in support of the NWS Red Flag Program, and helps establish a common operating picture and maintain situational awareness within the Rocky Mountain Area.

Land management agencies fuels technicians submit fuels information via a shared spreadsheet or other communications directly to NWS offices and Predictive Services. The Fire Environment Mapping System (FEMS) will support a viewer for live fuels data that is sampled in the field as early as fire season, 2023. It will replace the Fuel Moisture Data Base viewer that broke several years ago.

VI. JOINT RESPONSIBILITIES

- A. Training** – Meteorological training assistance for NWCG and other courses including the RT-130 refresher will be provided jointly. Requests for training from NWS offices should be directed to that office's fire weather program leader or assistant fire weather program leader, followed by a generic written request sent to the Meteorologist-in-Charge. In all cases, the requesting agency will provide dates of service needed and sufficient notice to allow for scheduling and proper preparation. There is not a national interagency agreement to cover costs incurred by NWS in providing training assistance. On a case-by-case basis, NWS management will coordinate regarding availability for their staff to teach courses and coordinate how to pay for travel and lodging.
- B. Incident Response** – Costs incurred by NWS in providing IMET support will be borne by the

requesting agency. Qualified (Under NWS or Land Agency Qualifications) fire management agency IMETs may be utilized under special circumstances, and to maintain qualifications. All requests for IMETs will be processed through normal dispatch procedures through the NFWOC at NIFC.

The following information will be provided to the requested IMET:

1. Name of fire
2. Location of fire
3. Directions to location where the IMET is to report and Fire Camp Location
4. Name of Incident Commander, Plans Chief and Fire Behavior Analyst if available, and telephone contacts at the ICP
5. Request and Resource Order number for IMET
6. If the IMET resource order is delayed, NWS offices may call the RMCC meteorologists, who will ensure the order process is expedited.

Additionally, the user agency is responsible for providing adequate shelter to allow the equipment and fire weather meteorologist to function efficiently. This would include a location free of excessive dust, heat and moisture, protection from wind and other elements, table and chair. Transportation and shelter arrangements should be made at the time of request. 120 volt AC power is desirable.

IMETs will carry their own communications equipment. An Incident Remote Automated Weather Station (IRAWS) may be ordered by the IMET from the incident. Below is a list of IMETs in the Rocky Mountain Area.

Rocky Mountain Area Incident Meteorologists and or Technical Specialist

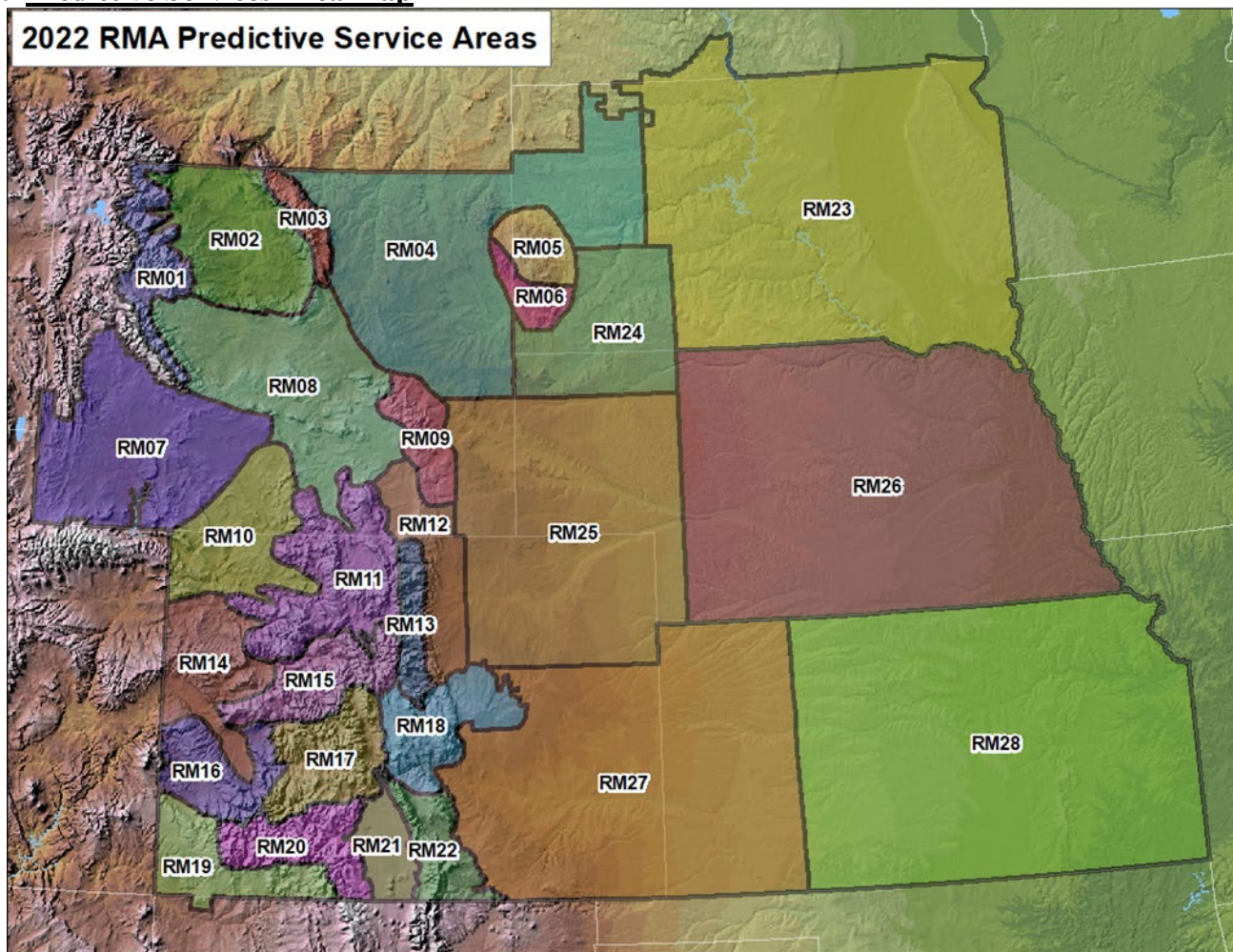
<u>Location</u>	<u>Name</u>	<u>Agency</u>
Boulder, CO	Bruno Rodriguez	NWS
Pueblo, CO	Makoto Moore	NWS
Grand Junction, CO	Jeff Colton	NWS
Grand Junction, CO	Scott Stearns	NWS
Riverton, WY	Noah Myers	NWS
Riverton, WY	Jason Straub	NWS
Cheyenne, WY	Brandon Wills (Trainee)	NWS
Billings, MT	Shawn Palmquist	NWS
Aberdeen, SD	Kari Fleegel	NWS
Rapid City, SD	Shane Eagan	NWS
CR HQ	Chris Foltz	NWS
Rapid City, SD	Darren Clabo	SD State (RMA T2 Team)
Manhattan, KS	Chip Redmond	State of Kansas

- C. **Briefings** – NWS offices/IMETs and RMA Predictive Services meteorologists may conduct briefings with wildland fire agencies and other key partners (i.e., FEMA) with efforts made between the NWS and RMCC to **coordinate** requests based on the date/time needed and available staffing. RMA Predictive Services meteorologists will be responsible to provide briefings to multi-agency groups for strategic planning during organized RMA MAC. The NWS offices and IMETs may participate in these briefings if requested.

- D. Conference Calls** – Conference calls will be held throughout the year between the RMA Predictive Services Unit and NWS offices with forecast responsibility within the geographic area. These calls are scheduled every Wednesday at 1:15 PM (1315 hours) Central Time (CT) and allow for discussion on the current and forecasted fire weather. IMETs deployed to incidents within the RMA are encouraged to join these calls to provide updates on fire activity and coordinate forecast information.
- E. WIMS IDs for NFDRS Stations** – All RAWs and NFDRS observation stations are assigned a 6- digit NWS station identification number for use in WIMS. **All** 6-Digit IDs will be requested through the Rocky Mountain Area RAWs/WIMS/NFDRS charter. To request an ID, please email Marco Perea mperea@blm.gov.
- F. NWSChat Coordination** – A private NWS Chat room ‘**rmccfirechat**’ has been established and will be used to share and coordinate vital information between the RMCC, NWS forecast offices, IMETs, SPC, and land management agency representatives. Media and other outside entities do not have access to this chat room. NWS will be transitioning from NWSChat to Slack by the end of 2023.

VII. Predictive Services Area Map and NWS Fire Weather Zones

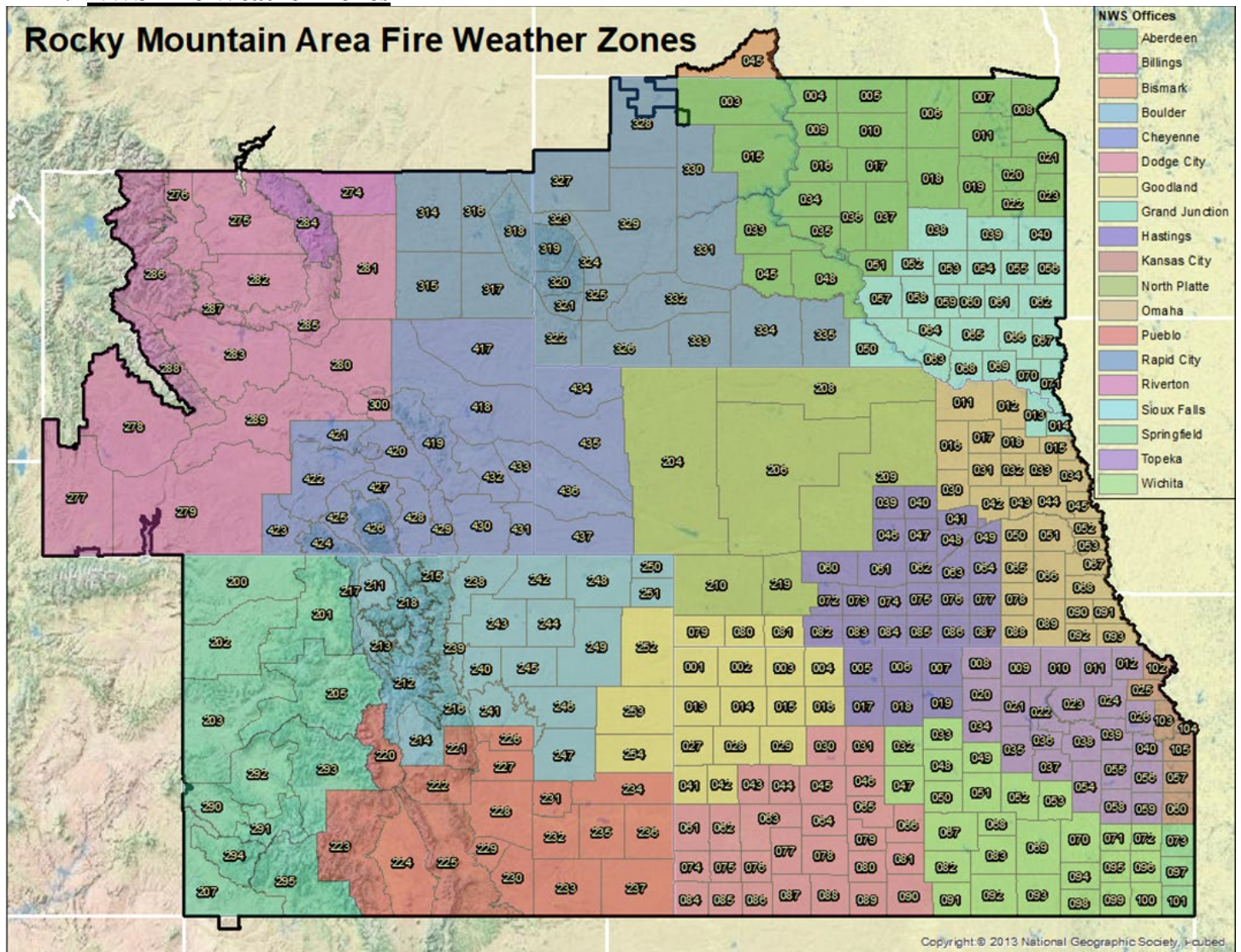
A. Predictive Services Area Map



RM01 - Shoshone	RM02 - Big Horn Basin
RM03 – Big Horn Basin	RM04 – Powder River Basin
RM05 – Black Hills North	RM06 – Black Hills South
RM07 – Southwest Wyoming	RM08 – Wind River Basin / Casper Mountain
RM09 – Laramie Mountains	RM10 – Northwest Colorado Plateau
RM11 – Northern Colorado Mountains	RM12 – Northern Front Range Foothills
RM13 – Northern Front Range Mountains	RM14 – Lower Colorado River Plateau
RM15 – Grand Mesa / White River	RM16 - Uncompahgre

RM17 – Gunnison / Pike	RM18 – Central Front Range
RM19 – Ute Mountain / Mesa Verde	RM20 – San Juan
RM21 – San Luis Valley / Great Sand Dunes	RM22 – Southern Front Range
RM23 – Central South Dakota	RM24 – SW South Dakota / NE National Forest
RM25 – NE Colorado / SE Wyoming / W Nebraska	RM26 – Central Nebraska
RM27 – SE Colorado / W Kansas	RM28 – Central / E Kansas

B. NWS Fire Weather Zones



VIII. Interagency Change of Service Procedures

Recommended NWS fire weather service changes must be reviewed and agreed upon by land agency user groups, Rocky Mountain Area Predictive Services, and National Weather Service. Review,

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discussions and agreements can take place through annual Land Agency/NWS meetings, AOP meetings, email, or conference calls. Service changes include adding experimental products, new “official” fire weather products, and new formats to routine and non-routine fire weather products (FWF, SPOTs, etc). Additionally, when recommending local or regional fire weather service changes, the National Weather Service will act in accordance with policies and procedures outlined in [NWSI 10-102](#) and [NWSI 10-1805](#) and will be responsible for:

1. Contacting local user groups (i.e. Local Fire Management Officers and Dispatch Centers) to discuss and come to agreement on recommended service changes.
2. Contacting Rocky Mountain Area Predictive Services to discuss and come to agreement on recommended service changes.
3. Obtaining internal approval for such changes.

A consensus must be reached among interagency user groups prior to the implementation of service changes.

IX. EFFECTIVE DATES OF THE AOP - May 1, 2023 to April 30, 2024

This AOP shall be effective on the date the last signature is placed on the signature section and it will remain in effect until the date the last signature is placed on the signature page the following year. Updates or amendments may be added in the interim upon agreement of all signatories.

X. AGENCY SIGNATURES (On file)

<u>/s/Kelly Allen</u> Deputy Chief, Integrated Services Division NWS Central Region Headquarters	<u>4/28/2023</u> Date
<u>/s/Christopher Foltz</u> Emergency Response Specialist/Fire Weather Program Manager NWS Central Region Headquarters	<u>04/26/2023</u> Date
<u>/s/Coleen Haskell</u> Rocky Mountain Area Predictive Services Meteorologist Rocky Mountain Coordination Center	<u>05/31/2023</u> Date

Appendix A - Paper Request Spot for WS Form D-1 to use in case of internet outage ([Fillable PDF Available](#))

WS FORM D-1 U.S. Department of Commerce (1-2005) SPOT REQUEST NOAA (Supersedes Previous Editions) (See reverse for instructions) National Weather Service											
Please call the NWS Weather Forecast Office (WFO) when submitting a request and also after you receive a forecast to ensure request and forecast were received. Please provide feedback to WFO on forecast.											
1. Time†		2. Date		3. Name of Incident or Project				4. Requesting Agency			
5. Requesting Official				6. Phone Number			7. Fax Number			8. Contact Person	
9. Ignition/Incident Time and Date			12. Reason for Spot Request (choose one only) <input type="radio"/> Wildfire <input type="radio"/> Non-Wildfire Under the Interagency Agreement for Meteorological Services (USFS, BLM, NPS, USFWS, BIA) <input type="radio"/> Non-Wildfire State, tribal or local fire agency working in coordination with a federal participant in the Interagency Agreement for Meteorological Services <input type="radio"/> Non-Wildfire Essential to public safety, e.g. due to the proximity of population centers or critical infrastructure.						13. Latitude/Longitude:		
10. Size (Acres)									14. Elevation (ft, Mean Sea Level) Top: Bottom:		
11. Type of Incident <input type="radio"/> Wildfire <input type="radio"/> Prescribed Fire <input type="radio"/> Wildland Fire Use(WFU) <input type="radio"/> HAZMAT <input type="radio"/> Search And Rescue (SAR)									15. Drainage		
									16. Aspect		17. Sheltering <input type="radio"/> Full <input type="radio"/> Partial <input type="radio"/> Unsheltered
18. Fuel Type: Grass Brush Timber Slash Grass/Timber Understory Other _____ Fuel Model: 1,2,3 4,5,6,7 8,9,10 11,12,13 2,5,8											
19. Location and name of nearest weather observing station (distance & direction from project):											
20. Weather Observations from project or nearby station(s): (Winds should be in compass direction e.g. N, NW, etc.)											
Place	Elevation	†Ob Time	20 ft. Wind Dir Speed		Eye Level Wind. Dir Speed		Temp. Dry Wet		Moisture RH DP		Remarks (Relevant Weather, etc)

21. Requested Forecast Period Date _____ Start _____ End _____ Forecast needed for: <ul style="list-style-type: none"> <input type="radio"/> Today <input type="radio"/> Tonight <input type="radio"/> Day 2 <input type="radio"/> Extended 		22. Primary Forecast Elements (Check all that are needed) <i>(for management ignited wildland fires, provide prescription parameters):</i> Needed: Sky/Weather ____ Temperature ____ Humidity ____ 20 ft Wind ____ Valley ____ Ridge Top ____ Other (Specify in #23) ____						23. Remarks (other needed forecast elements, forecast needed for specific time, etc.) 				
24. Send Forecast to: ATTN: _____		25. Location: _____						26. Phone Number: _____ Fax Number: _____				
27. Remarks (Special requests, incident details, Smoke Dispersion elements needed, etc.): 												
EXPLANATION OF SYMBOLS: † Use 24-hour clock to indicate time. Example: 10:15 p.m. = 2215; 10:15 a.m. = 1015 Indicate local standard time or local daylight time												

WS FORM D-1, January 2005 INSTRUCTIONS:**I. Incident Personnel:**

1. Complete items 1 through 27 where applicable.

a. Example of weather conditions on site:

13. Weather Observations from project or nearby station(s):											
Place	Elevation	†Ob Time	20 ft. Wind		Eye Level Wind.		Temp.		Moisture		Remarks (Relevant Weather, etc.)
			Dir	Speed	Dir	Speed	Dr y	Wet	RH	DP	
Unit G-50	1530'	0830	NW		NW		32		72		Observations from unit RAWS station, 50% cloud cover.

b. If the incident (HAZMAT, SAR) involves marine, put the wave/swell height and direction in the Remarks section.

2. Transmit in numerical sequence or fax to the appropriate Weather Forecast Office. (A weather forecaster on duty will complete the special forecast as quickly as possible and transmit the forecast and outlook to you by the method requested)

3. Retain completed copy for your records.

4. **Provide feedback to NWS utilizing separate page.** Be sure to include a copy of the spot forecast with any feedback submission including forecaster's name. Feedback to NWS personnel is imperative to assist with future forecasts. Remember, feedback on correct forecasts is equally as valuable as feedback on incorrect forecasts! If spot forecast is significantly different from conditions on site, a second forecast may be required.

II. ALL RELAY POINTS should use this form to ensure completeness of date and forecast. A supply of this form should be kept by each dispatcher and all others who may be relaying requests for forecasts or relaying completed forecasts to field units.

III. Forms are available from your local National Weather Service Weather Forecast Office. They may also be reproduced by other agencies as needed, entering the phone number and radio identification if desired.

NOTICE: Information provided on this form may be used by the National Weather Service for official purposes in any way, including public release and publication in NWS products. False statements on this form may be subject to prosecution under the False Statement Accountability Act of 1996 (18 U.S.C. § 1001) or other statutes.