ALABAMA STATE FIRE WEATHER ANNUAL OPERATING PLAN

2025

NATIONAL WEATHER SERVICE

UNITED STATES FOREST SERVICE

ALABAMA FORESTRY COMMISSION

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I. INTRODUCTION

Alabama forests are a vital part of the state's economy. The National Weather Service (NWS) has the primary responsibility for providing meteorological support to Land Management Agencies that reside in Alabama. There are four NWS offices which provide support to these agencies in Alabama: Huntsville, Birmingham, Mobile, and Tallahassee, Florida. Each NWS office employs a Fire Weather Program Leader who acts as a liaison between the NWS and user agencies within their area of responsibility. The Fire Weather Program Leader in Birmingham is responsible for maintaining the Alabama Fire Weather Operating Plan. The purpose of this operating plan is to provide guidance for meteorological support to land management agencies

within the state of Alabama. The Alabama Forestry Commission (AFC), the United States Forest Service (USFS) and the National Park Service are the primary user agencies in Alabama.

This Operating Plan serves as the official document governing interaction and relationships between the National Weather Service offices that serve the federal, state and local land management agencies that rely on weather support in Alabama.

This Operating Plan is issued in lieu of a formal Memorandum of Understanding (MOU) between the National Weather Service, USDA Forest Service, Alabama Forestry Commission and other land management agencies that rely on fire weather support. The plan will also outline fire weather forecast operations and services available to customers. This includes products and formats, dissemination and coordination as well as customer input. The services will consist of fire weather products and support as outlined in the National Agreement for Meteorological Services, which was signed by the Departments of Commerce, Agriculture, and Interior. NWS staff and partners will annually reassess the criteria for issuance, frequency of issuance, format, content, dissemination, etc for all of the fire weather products.

Objectives of the forestry program are:

To provide weather forecasts and meteorological advice with enough detail to guide fire control personnel in making operational decisions concerning: fire suppression, fire prevention, prescribed burning, smoke management, wildfire suppression and other land management activities.

To keep abreast of the needs and problems of forestry interests as well as changing forecast and communication techniques, and to review this plan annually to assure the plans continued usefulness.

II. FORECAST AREA/CONTACTS

The National Weather Service Office in Huntsville serves 12 counties in northern Alabama. These counties are; **Lauderdale, Colbert, Franklin, Lawrence, Winston, Limestone, Morgan, Cullman, Madison, Marshall, Jackson, and DeKalb.**

The National Weather Service office in Birmingham serves 38 counties in central Alabama. These counties are; **Marion, Lamar, Pickens, Fayette, Walker, Tuscaloosa, Jefferson, Shelby, Blount, St. Clair, Etowah, Cherokee, Calhoun, Talladega, Cleburne, Clay, Randolph, Sumter, Greene, Hale, Marengo, Bibb, Perry, Dallas, Chilton, Autauga, Lowndes, Coosa, Elmore, Montgomery, Tallapoosa, Chambers, Macon, Lee, Bullock, Pike, Russell, and Barbour.**

The National Weather Service office in Mobile serves counties in southwest Alabama. These counties are; **Choctaw, Washington, Mobile, Clarke, Wilcox, Monroe, Baldwin, Conecuh, Escambia, Butler, Covington, and Crenshaw.**

The National Weather Service office in Tallahassee serves counties in southeast Alabama. These counties are; **Coffee, Geneva, Dale, Henry, Houston.**

The state of Alabama is divided into 67 counties. Each county has its own unique zone number except Mobile and Baldwin Counties, which are divided into inland and coastal zones. Alabama's forecast area is divided between four NWS offices.

The Alabama Forestry Commission (AFC) has four main districts in Alabama **(Fig. 2)**. Burn permits from the AFC are required for wood and field burns of more than 1/4 acre. The AFC has the authority to restrict or ban all outdoor burning. There are four national forests in Alabama **(Fig. 3)**, comprising over 660,000 acres. Both the AFC and U.S. Forest Service (USFS) are headquartered in the city of Montgomery.

III. FIRE WEATHER FORECAST

The Fire Weather Forecast is designed to provide weather input to be used for decision-making purposes related to fire pre-suppression and other activities throughout the year. Each National Weather Service office issues a separate Fire Weather Forecast (FWFxxx, where "xxx" is the 3 letter identifier for the office) **(Appendix B).** The format of the Fire Weather Forecast is tailored to meet the requirements of the AFC and USFS in Alabama. Figure 1 shows the fire weather zones for Alabama. Because the Mobile and Tallahassee NWS offices have forecast responsibility outside of Alabama, their fire weather forecasts include additional fire

weather parameters, but all the offices are striving to meet a standardized format. The requirements and parameters detailed below are those established with Alabama user agencies. Individual Fire Weather pages can be found here…**Birmingham**, **Huntsville**, **Mobile**, & **Tallahassee**.

A. ISSUANCE TIME

Fire weather forecasts are issued twice daily by the NWS. The morning forecast is issued no later than 400 am local time and includes three periods: Today, Tonight, and Tomorrow. The afternoon forecast is issued no later than 400 pm local time and includes four periods: Tonight, Day One, Tomorrow Night, Day Two. The Fire Weather Forecast should be updated when a Fire Weather Watch or Red Flag Warning is issued. The product should be corrected when a typographical error is detected.

B. CONTENT

HEADLINE

This section is required to highlight Red Flag Warnings and/or Fire Weather Watches in effect, which counties are involved, reason for issuance, and effective time period.

DISCUSSION

The discussion should be a general weather pattern overview in a clear, brief and non-technical description. The emphasis should be on the first two days of the forecast and the parameters that most directly influence fire weather behavior and decision making.

CLOUD COVER

SKY COVER (%)	DAYTIME DESCRIPTOR	NIGHTTIME DESCRIPTOR
1-10	Sunny	Clear
11-20	Mostly Sunny	Mostly Clear
21-60	Partly Cloudy	Partly Cloudy
61-70	Partly Sunny	Partly Cloudy
71-90	Mostly Cloudy	Mostly Cloudy
91-100	Cloudy	Cloudy

PRECIP (WEATHER) TYPE

Rain (RAIN) - liquid precipitation, not showery, and usually in a stable air mass.

Freezing Rain (FRZG RAIN) - liquid precipitation that freezes upon impact with solid objects or vegetation as opposed to ice forming on already wet surfaces.

Sleet (SLEET) - precipitation in the form of almost clear grains or ice pellets; often mixed with rain or freezing rain.

Snow (SNOW) - general or patchy flakes of crystalline precipitation.

Showers (SHOWERS) - medium to large water drops that usually vary in intensity; and may begin or end abruptly; no thunder heard.

Thunderstorms (TSTMS) - heavy or violent downpour of large water drops with gusty winds and possibly small hail.

CHANCE PRECIP (%)

Chance of precipitation pertains to the expected occurrence of 0.01 inch or more of water equivalent precipitation at any point in a forecast zone, and has no relationship to the amount of precipitation that is expected to occur. These will be 12 hour period forecasts.

TEMP

Temperature forecasts are single values in degrees Fahrenheit. The maximum/minimum temperatures are an average value over the entire forecast zone. Maximum temperatures are forecast for the daytime periods and the minimum temperatures are forecast for the nighttime period. The maximum temperature normally occurs during the afternoon. Because of terrain and types of ground cover, the high temperature can vary several degrees over a small area. The minimum temperature usually occurs around sunrise and can vary significantly between valleys and ridge tops, especially during inversions when the sky is clear and winds are light.

RH (%)

Relative humidity is the ratio, in percent, of the amount of moisture in the air compared to the amount of moisture the air could hold if saturated (100%). Therefore, temperature must be considered when using relative humidity as a measure of moisture in the air. The daytime humidity forecast will be the minimum expected during that 12 hour period. The nighttime humidity forecast

will be the maximum expected. Usually, the minimum relative humidity occurs at the time of maximum temperature, and the maximum relative humidity occurs at the time of minimum temperature.

20FT WIND

For fire weather purposes, it is defined as a ten-minute averaged wind speed and direction at 20 feet above open ground, or twenty feet above the vegetation surface. The units are miles per hour (MPH). Six hour wind forecasts (AM/PM) are required. During the forecast process, a 20% reduction in the forecasted surface wind speeds is automatically calculated for the 20ft winds.

PRECIP AMOUNT

Precipitation amounts (inches) pertain to average liquid precipitation totals expected over the forecast zone. While general widespread precipitation tends to be more uniform over a forecast zone, shower activity will vary considerably. Ranges (0.10-0.20) are preferred for each of the 12 hour periods. The 12 hour amounts are for the periods 7am7pm (Today), 7pm7am (Tonight), and 7am7pm (Tomorrow) when on Central Daylight Time (CDT). For Central Standard Time (CST), these time frames will move to 6am6pm (Today), 6pm6am (Tonight) and 6am6pm (Tomorrow).

PRECIP BEGINS

The time period the precipitation chances begin in local time.

PRECIP ENDS

The time period the precipitation chances end in local time.

MIXING HGT (FT-AGL)

The mixing height is defined as the vertical mixing of suspended particles above the ground. The mixing height is given in units of feet. Mixing height forecasts are for the maximum height expected during the afternoon, usually during the time of maximum heating. Mixing height forecasts for the nighttime period are optional.

TRANSPORT WIND

The transport wind is the average wind speed in the mixed layer, and is given in miles per hour. The transport wind is a good indication of horizontal dispersion of suspended particles.

DISPERSION INDEX

The dispersion index is computed from forecast variables that include 20 foot wind speed, mixing height, transport wind, and cloud cover. The index is used by fire managers as a guide for smoke management. Forest managers are cognizant of the need to occasionally restrict open burning to reduce atmospheric contaminants. When considered as a part of the whole pollution picture, prescribed burning is not one of the main contributing factors. It can become the dominant local factor, however, under certain atmospheric conditions. **A dispersion index of less than 21 limits the state and federal forestry services controlled burning program. There is no upper bound for the scale below.** The following are guidelines for the Dispersion Index:

SCALE	INTERPRETATION
1-6	Very poor dispersion
7-12	Poor dispersion
13-20	Generally poor dispersion
21-40	Fair dispersion
41-60	Generally good dispersion
61-100	Good dispersion
100+	Very good dispersion

MAX LVORI

LVORI (Low Visibility Occurrence Risk Index) is an index that numerically ranks, in relative terms, the likelihood of general weather conditions contributing to reduced visibilities on roadways.

Low Visibility Occurrence Risk Index (LVORI)	
LVORI Category	Interpretation
1	Lowest proportion of accidents with smoke and/or fog reported (130 of 127,604 accidents, or just over 0.0010 accidents.) Ideally Low Risk of accidents on roadways due to smoke/fog.

2	Physical or statistical reasons for not including in category 1, but proportion of accidents not significantly higher. Relatively Low Risk of accidents on highways due to smoke/fog.
3	Higher proportion of accidents than category 1, by about 30% to 50%, but of marginal significance (1%-5%). Relatively Low Risk of accidents on highways due to smoke/fog.
4	Significantly higher than category 1, by a factor of 2. Moderate Risk of accidents on roadways due to smoke/fog.
5	Significantly higher than category 1, by a factor of 3 to 10. Moderate Risk of accidents on roadways due to smoke/fog.
6	Significantly higher than category 1, by a factor of 10 to 20. Moderate Risk of accidents on roadways due to smoke/fog.
7	Significantly higher than category 1, by a factor of 20 to 40. Particularly High Risk of accidents on roadways due to smoke/fog.
8	Significantly higher than category 1, by a factor of 40 to 75. Particularly High Risk of accidents on roadways due to smoke/fog.
9	Significantly higher than category 1, by a factor of 75 to 125. Particularly High Risk of accidents on roadways due to smoke/fog.
10	Significantly higher than category 1, by a factor of 150. Particularly High Risk of accidents on roadways due to smoke/fog.

STABILITY CLASS

Atmospheric Stability is determined by the rate of temperature change with respect to height within the atmosphere, lapse rate. The rate of pollutant dispersion is significantly dependent on stability.

Pasquill Stability Table	
Stability Class	**Interpretation**
A	Very Unstable
B	Moderately Unstable
C	Slightly Unstable
D	Near Neutral
E	Slightly Stable
F	Moderately Stable
G	Very Stable

REMARKS

This section will include any specific information that the forecaster feels will aid the overall forecast. Examples would be information about wind shifts, wind gusts, heavy rainfall, and severe thunderstorms.

EXTENDED FORECAST

3 to 7 day forecast including Highs/Lows, chances for precipitation, surface winds, wind gusts and MIN RH/Max RH.

IV. SPOT FORECAST

Spot Forecasts (FWSxxx) are weather forecasts that fit the time, topography and weather of a specific location. These forecasts are more detailed, timely and specific than the Fire Weather Forecast and are issued only when requested by Land Management Agencies or any Public Service Official. Refer to Appendix E to determine who can request a Spot Forecast. Federal Agencies are required to file a Spot Forecast with their paperwork when performing a prescribed burn.

For a small or contained burn, it may be easier to call the NWS and get a forecast over the telephone. For a larger or uncontrolled burn, the requesting agency should use **NWS Spot** available at spot.weather.gov If no internet is available or the spot request page is down, the user can call the appropriate NWS office and provide the location (latitude and longitude) where the spot forecast is needed, along with contact information for where to send the forecast.

The Hysplit model output can be requested through the Spot Forecast by clicking the desired output type.

V. FIRE WEATHER WATCH/RED FLAG WARNING

A Red Flag Event occurs when ongoing or forecast critical weather conditions lead to or aggravate existing wildfires. **Red flag events require the combination of extreme fire danger and critical weather conditions**. Extreme fire danger is a slowly evolving situation that comes about from prolonged periods of little or no rainfall. Critical weather conditions may include unusually warm temperatures, moderate surface winds, or significantly decreased humidity.

A **Fire Weather Watch** will be issued when the above mentioned conditions are expected to occur within the next 18 to 96 hours. A **Red Flag Warning** is typically issued when the conditions below are expected in the next 24 hours, but may also be issued up to 48 hours in advance if high-confidence and/or particularly dangerous conditions are expected. In order to help the forecaster determine the onset of a Red Flag Event in Alabama, the following criteria must occur concurrently.

Alabama Red Flag Criteria:

1. Moderate Risk for Significant Fire Potential (Link)
2. Minimum Relative Humidity values less than 25%
3. 20-foot Wind ≥15 mph or 20-ft Wind Gusts ≥ 20 mph (10m ASOS Winds ≥ 17mph or Wind Gusts ≥ 25 mph

VI. FIRE ALERT

The Alabama Forestry Commission has the authority to restrict or completely ban outdoor burning. When fuel conditions reach critical levels, the AFC may issue a **Fire Alert** for all or portions of Alabama. If the conditions extend over a prolonged period, the alert could be elevated to a **Drought Emergency**.

A map of the alert area can be found at **http://www.forestry.alabama.gov/**

The Fire Alert may be used to ascertain which counties may need to be included in a Fire Weather Watch or Red Flag Warning.

VII. NATIONAL FIRE DANGER RATING STATIONS (NFDRS)

The USFS operates remote automated weather stations (RAWS) in each of the National Forests which measure temperature, dew point, wind speed and direction, precipitation, and fuel moisture. At 1300 LST, NFDRS will send a coded weather observation. The NWS will use that observation to create a forecast valid at 1300 LST the following day. NFDRS software will use the NWS forecast to create a fire danger index for the following day. There are several NFDRS sites in Alabama where a forecast is created and will be included in the Fire Weather Matrix (FWMxxx).

Station Name (ID)	Forest	County	Latitude	Longitude
Bankhead (10702)	Bankhead	Lawrence	34.34417	-87.33750
Open Pond (15902)	Conecuh	Covington	31.09444	-86.54861
Oakmulgee (13201)	Oakmulgee	Bibb	32.95722	-87.17056
Talladega (12701)	Talladega	Talladega	33.44111	-86.08111
Tuskegee (14201)	Tuskegee	Macon	32.48361	-85.55556
Shoal Creek (12902)	Talladega	Cleburne	33.64722	-85.63444
Little River Canyon (010990)	NPS	Dekalb	34.46043	-85.59725
Bon Secour (16703)	FWS	Baldwin	30.25278	-87.81250
Mount Longleaf (12201)	FWS	Calhoun	33.71722	-85.76222
Grove Hill (015201)	BLM	Clarke	31.69069	-87.76058
Dixon (016301)	Conecuh	Escambia	31.16181	-86.70325
Dixonville SRS (016302)		Escambia	31.01111	-87.05556
Schoolhouse (012801)	Talladega	Clay	33.16397	-86.09103
Terrapin Creek (012302)	Talladega	Cleburne	33.89347	-85.52789
Oneonta (011401)	AFC	Blount	33.93875	-86.389167
Eutaw (013001)	AFC	Greene	32.912722	-87.895194
Gunter (014801)	AFC	Montgomery	32.414278	-86.240889
Sanders Hill (015501)	AFC	Pike	31.700583	-86.032528
Brownsboro (010402)	AFC	Madison	34.740667	-86.435028

Figure 1

National Weather Service Fire Weather Zones

Figure 2

Alabama Forestry Commission Districts

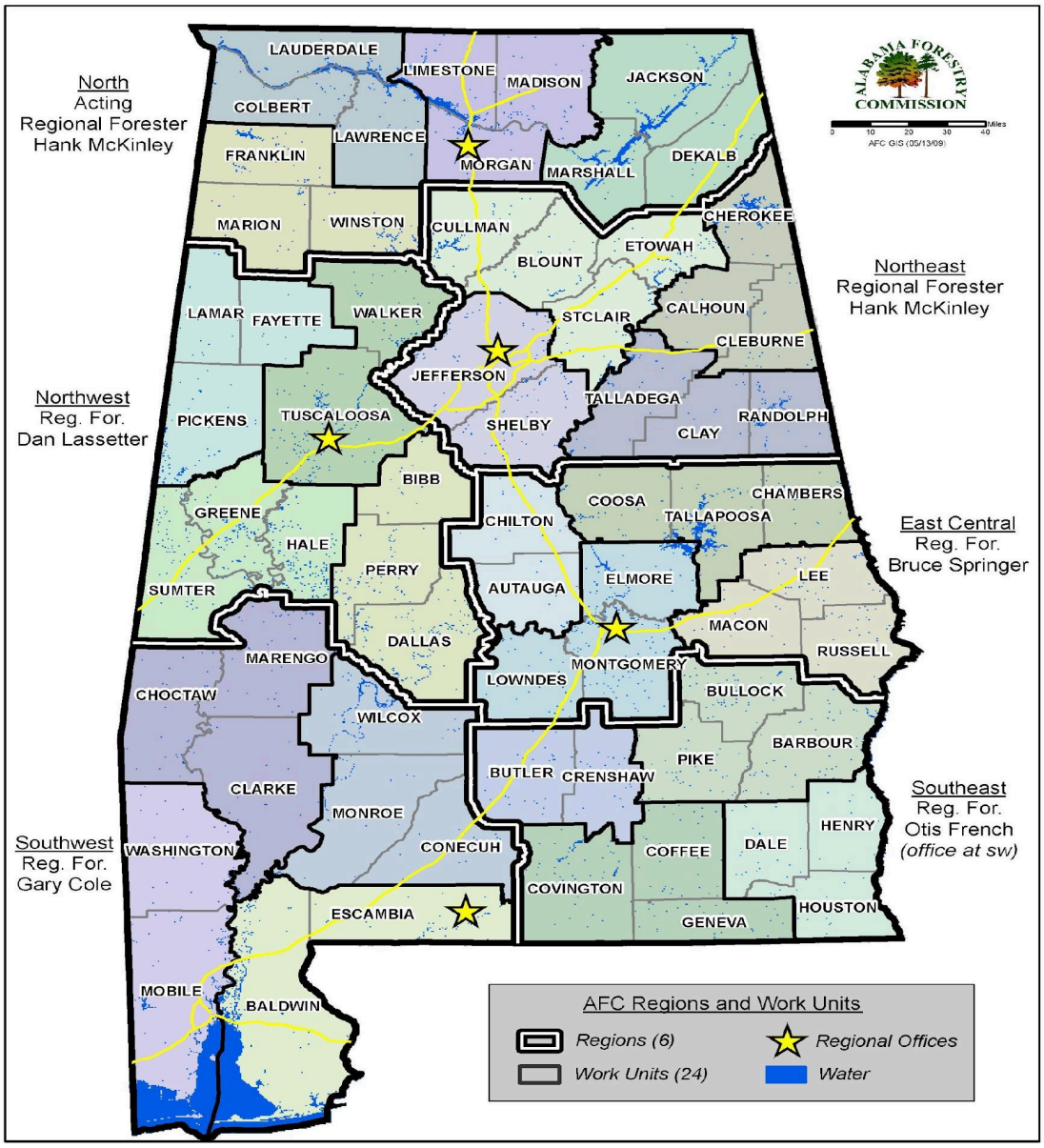
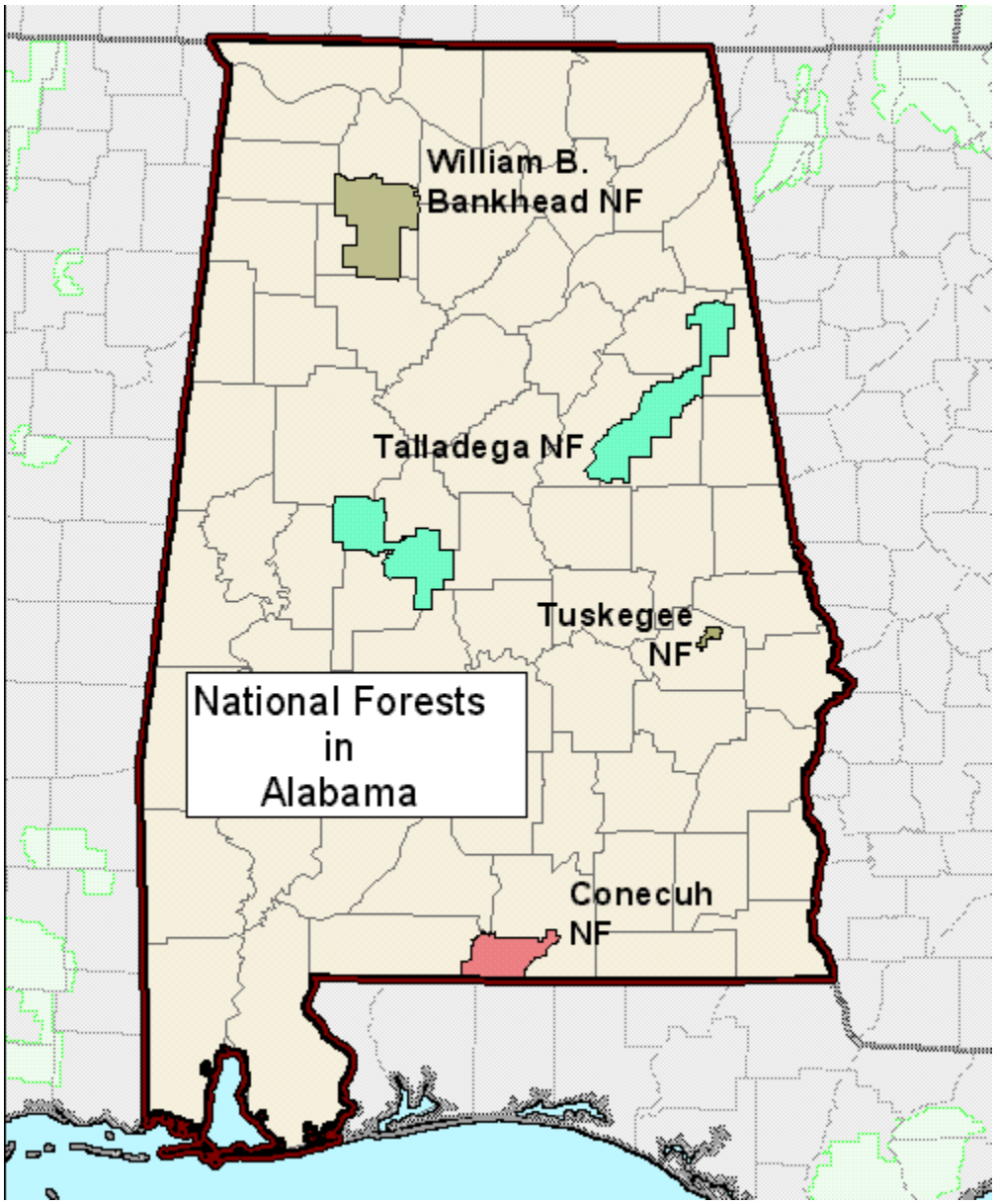


Figure 3

National Forests in Alabama



Appendix A

NWS Fire Weather Products

Fire Weather Forecasts

Birmingham	BHMFWFBMX	**Forecast**
Huntsville	HUNFWFHUN	**Forecast**
Mobile	BHMFWFMOB	**Forecast**
Tallahassee	MIAFWFTAE	**Forecast**

Fire Weather Watch/Red Flag Warning

Birmingham	BHMRFWBMX	**Product**
Huntsville	HUNRFWHUN	**Product**
Mobile	BHMRFWMOB	**Product**
Tallahassee	MIARFWTAE	**Product**

Appendix B

Product Examples

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Fire Weather Planning Forecast for Alabama
National Weather Service Birmingham AL
402 AM CST Sun Nov 10 2024

.DISCUSSION...

Periods of light rain will continue today ahead of an approaching
cold front. Min RH will remain well above critical thresholds
through Monday. 20 ft winds will be from the southeast at 5 to 8
mph today, shifting to the west-northwest Monday morning as the
front passes through the area. Some drier air will filter in
behind the front on Tuesday, but min RH will still remain above
critical thresholds, ranging from 40 to 50%.

ALZ011-102200-
Marion-
Including the city of Hamilton
402 AM CST Sun Nov 10 2024

                     Today        Tonight      Mon

Cloud cover          MCldy        MCldy        PCldy
Temp                 72           58           74
RH %                 89           100          58
20ft wnd mph (AM)    S  6 G17                  Lgt/Var
20ft wnd mph (PM)    S  5         Lgt/Var      Lgt/Var
Chance precip (%)    60           50           10
Precip type          Tstms        Tstms        None
Precip duration      4            2            0
Precip amount        0.08         0.43         0.00
Mixing hgt (ft-AGL)  2800                      3900
Transport wnd (mph)  S 14                      N  9
LAL                  3            3            1
Stability class      C            E            C
Max LVORI                         10
Dispersion           32 Fair                   39 Fair

Remarks...None.

.MONDAY NIGHT...Mostly clear. Lows in the upper 40s. Maximum RH
99 percent. Light winds.
.TUESDAY...Sunny. Highs around 70. Minimum RH 53 percent.
Northeast winds around 5 mph.
.TUESDAY NIGHT...Mostly clear. Lows in the upper 40s. Maximum RH
96 percent. Light winds.
.WEDNESDAY...Partly sunny with a 30 percent chance of rain
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showers. Highs in the upper 60s. Minimum RH 67 percent. Southeast
winds around 5 mph.
.WEDNESDAY NIGHT...Mostly cloudy with a 50 percent chance of rain
showers. Lows in the lower 50s. Maximum RH 100 percent. Southeast
winds around 5 mph.
.THURSDAY...Mostly sunny. Highs in the upper 60s. Minimum RH
72 percent. East winds around 5 mph.
.THURSDAY NIGHT...Partly cloudy. Lows in the upper 40s. Maximum
RH 100 percent. Light winds.
.FRIDAY...Mostly sunny. Highs around 70. Minimum RH 62 percent.
Light winds.
.FRIDAY NIGHT...Partly cloudy. Lows in the upper 40s. Maximum RH
100 percent. Light winds.
.SATURDAY...Mostly sunny. Highs in the lower 70s. Minimum RH
62 percent. Southeast winds around 5 mph.

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FWM Product Example

FCST,031201,070429,13,1,78,37,1,1,259,05,M,78,52,83,37,0,0,N
The administrative section of the forecast with the site identification (031201), followed by the date (070429) and the specific forecast time (1300 hours). The stations are as follows:

FCST,031201,070429,13,**1**,78,37,1,1,259,05,M,78,52,83,37,0,0,N
State of Weather - The state of weather is input as a code for the weather expected at basic observation time the next day. Forecasters will select the highest code when more than one type of weather is expected. For example, if both fog and rain are anticipated at basic observation time, the state of weather would be coded as six, the higher state of weather code. The codes are as follows:

0 Clear Skies
1 Scattered Clouds
2 Broken Clouds
3 Overcast Conditions
4 Fog
5 Drizzle
6 Rain
7 Snow
8 Showers
9 Thunderstorms

FCST,031201,070429,13,1,**78,37**,1,1,259,05,M,78,52,83,37,0,0,N
Temperature and humidity - The forecaster will enter the temperature in degrees Fahrenheit, and the relative humidity in whole percent expected at observation time.

FCST,031201,070429,13,1,78,37,**1,1**,259,05,M,78,52,83,37,0,0,N
Lightning activity level - Currently these values default to 1 as dry lightning is a very rare event in Alabama.

FCST,031201,070429,13,1,78,37,1,1,**259,05**,M,78,52,83,37,0,0,N
Wind direction and speed - The forecaster will enter the expected wind direction in degrees and the expected wind speed at the observation site in mph. The wind speed at a fire weather station is the average of the speed measured over a 10 minute period. Wind speeds measured at a fire weather station usually do not compare with the ASOS 10 meter winds measured at airports. Wind speeds are observed to be lower over the rougher terrain of a forest as compared to the observation site at an airport. The 10- minute average wind at the 20 foot level will produce lower wind speeds than the 2- minute ASOS winds. The forecast wind speed will reflect the lower wind speeds at fire weather stations by reducing the forecast wind speed by 70%.

FCST,031201,070429,13,1,78,37,1,1,259,05,M,**78,52,83,37**,0,0,N
24 hour forecasts - The forecaster will follow the basic observation time forecasts with the maximum temperature expected during the 24 hour period from basic observation time the day the forecast is being prepared to the basic observation time the following day. This is followed by a forecast of minimum temperature, maximum humidity and minimum humidity expected in the same 24-hour time frame.

FCST,031201,070429,13,1,78,37,1,1,259,05,M,78,52,83,37,**0,0**,N
Precipitation time duration - The forecaster will enter the expected duration of precipitation in whole hours that will fall at the site for the first 16 hours of the forecast between basic observation times. This sixteen hour forecast will be followed by a forecast of the expected duration of precipitation in whole hours that will fall at the site for the final eight hours of the forecast between basic observation times.

FCST,031201,070429,13,1,78,37,1,1,259,05,M,78,52,83,37,0,0,**N**
Wet Fuels Condition - A wet fuels condition anticipated at the next basic observation time is entered next. If the forecaster expects fuels to be wet, a Y for yes will be entered. If the forecaster feels fuels will not be wet, an N for no will be entered. Basically, this parameter will be yes when liquid water, ice or snow, will be sitting on the fuels at observation time, i.e., really soaked! Use yes with caution as all indices in the NFDRS are set to zero when wet fuels are forecast.

Spot Forecast Example

SPOT FORECAST FOR TYLER WEST...USFS
NATIONAL WEATHER SERVICE BIRMINGHAM AL
449 PM CDT FRI APR 26 2013

FORECAST IS BASED ON IGNITION TIME OF 1635 CDT ON APRIL 26.

IF CONDITIONS BECOME UNREPRESENTATIVE...CONTACT THE NATIONAL WEATHER SERVICE.

...RED FLAG WARNING IN EFFECT UNTIL 6 PM CDT THIS EVENING...

.DISCUSSION...
RED FLAG CONDITIONS WILL CONTINUE THROUGH THIS AFTERNOON. LOW LEVEL MOISTURE WILL INCREASE TONIGHT...LEADING TO GOOD RAIN CHANCES SPREADING FROM NORTH TO SOUTH OVER THE NEXT SEVERAL DAYS. WINDS MAY BRIEFLY BECOME VARIABLE AND GUSTY IN AND NEAR ACTIVE THUNDERSTORMS.

THE FORECAST HAS JUST BEEN UPDATED TO REFLECT MORE ACCURATE CURRENT CONDITIONS AND THE EXPECTED SHORT TERM TRENDS. THE BEST CHANCE FOR SHOWERS AND THUNDERSTORMS MAY BE BETWEEN 7 AM AND NOON NEAR THE PRESCRIBED BURN. HAVE REDUCED RAIN CHANCES WITH THIS UPDATE. THERE IS A CHANCE THAT THE AXIS OF RAIN MAY MISS THE PRESCRIBED BURN AREA TO THE NORTH DURING THE MORNING HOURS.

.TONIGHT...

TIME (CDT)	6 PM	8 PM	10 PM	MIDNGT	2 AM	4 AM
SKY.....	PCLDY	MCLDY	MCLDY	MCLDY	CLOUDY	CLOUDY
WEATHER COV.....				S CHC	S CHC	
WEATHER TYPE....	NONE	NONE	NONE	NONE	TSTORM	TSTORM
TEMP.....	76	71	61	57	59	58
RH.....	23	33	52	69	73	84
20 FT WIND.....	E 2	E 1	NE 1	E 1	E 2	E 2
20 FT WIND GUST	5	<5	<5	<5	5	5
CHC OF PCPN (%)	10	20	20	20	20	20
MIX HGT (FT)....	4600	2800	300	BLW100	200	200
TRANSPORT WIND	150/9	150/8	130/5	120/5	120/5	130/6
DISPERSION.....	50	28	2	2	2	3

.SATURDAY...

TIME (CDT)	6 AM	8 AM	10 AM	NOON	2 PM	4 PM
SKY.....	CLOUDY	MCLDY	MCLDY	MCLDY	MCLDY	MCLDY
WEATHER COV.....	S CHC	CHANCE	CHANCE	CHANCE	CHANCE	CHANCE
WEATHER TYPE....	TSTORM	RNSHWR	RNSHWR	RNSHWR	RNSHWR	RNSHWR
TEMP.....	56	60	66	72	75	76
RH.....	83	72	64	55	49	47
20 FT WIND.....	E 2	E 5	E 7	SE 7	S 7	S 7

20 FT WIND GUST.5 10 10 10 10 15
CHC OF PCPN (%).20 40 40 40 40 40
MIX HGT (FT)....300 900 2100 4400 5500 4700
TRANSPORT WIND..140/13 150/17 160/16 180/15 190/15 170/14
DISPERSION.....6 12 22 58 65 55

$$
FORECASTER...GRANTHAM
REQUESTED BY...SCOTT LAYFIELD
TYPE OF REQUEST...PRESCRIBED
.TAG 20130426.TYLER.02/BMX

Red Flag Warning Example

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URGENT - FIRE WEATHER MESSAGE
National Weather Service Birmingham AL
410 AM CDT Thu Apr 4 2024

...RED FLAG WARNING IN EFFECT THIS AFTERNOON AND EARLY EVENING...


ALZ011>013-015-017>050-050000-
/O.NEW.KBMX.FW.W.0002.240404T1700Z-240405T0000Z/
Marion-Lamar-Fayette-Walker-Blount-Etowah-Calhoun-Cherokee-
Cleburne-Pickens-Tuscaloosa-Jefferson-Shelby-St. Clair-Talladega-
Clay-Randolph-Sumter-Greene-Hale-Perry-Bibb-Chilton-Coosa-
Tallapoosa-Chambers-Marengo-Dallas-Autauga-Lowndes-Elmore-
Montgomery-Macon-Bullock-Lee-Russell-Pike-Barbour-
410 AM CDT Thu Apr 4 2024

...RED FLAG WARNING IN EFFECT FROM NOON TODAY TO 7 PM CDT THIS
EVENING FOR CENTRAL ALABAMA...

* WINDS...West 15 to 20 mph with gusts up to 30 mph.

* RELATIVE HUMIDITY...As low as 24 percent.

* IMPACTS...The combination of a dry air mass and windy
  conditions will result in critical fire weather conditions.
  Outdoor burning is not recommended.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Red Flag Warning means that critical fire weather conditions
are either occurring now....or will shortly. A combination of
strong winds...low relative humidity...and warm temperatures can
contribute to extreme fire behavior.

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Appendix C

Spot Forecast Request Guidelines

Spot forecasts will be issued on request to any governmental or private agency for a wildfire. Requests for spot forecasts for non-wildfire purposes will only be honored from federal agencies, from non-federal agencies operating with a federal agency on an interagency agreement or from any non-federal government agency when public safety is at risk.

For non-wildfire purposes, resources permitting, WFOs will provide spot forecast service under the following circumstances and conditions:

A. Upon request of any federal official who represents that the spot forecast is required under the terms of the Interagency Agreement for Meteorological Services.

B. Upon request of any state, tribal, or local official who represents the spot forecast is required to carry out their wildland fire management responsibilities in coordination with any federal land management agency participating in the Interagency Agreement for Meteorological Services.

C. Upon request of any public safety official who represents the spot forecast is essential to public safety, e.g. due to the proximity of population centers or critical infrastructure. A "public safety official" is an employee or contract agent of a government agency at any level (federal, state, local, tribal, etc.) charged with protecting the public from hazards including wildland fires of whatever origin and/or other hazards influenced by weather conditions such as hazardous material releases.

D. In support of Homeland Security Presidential Directive #5 (HSPD 5).

WFOs will not provide spot forecasts to private citizens or commercial entities not acting as a contract agent of a government agency at any level.