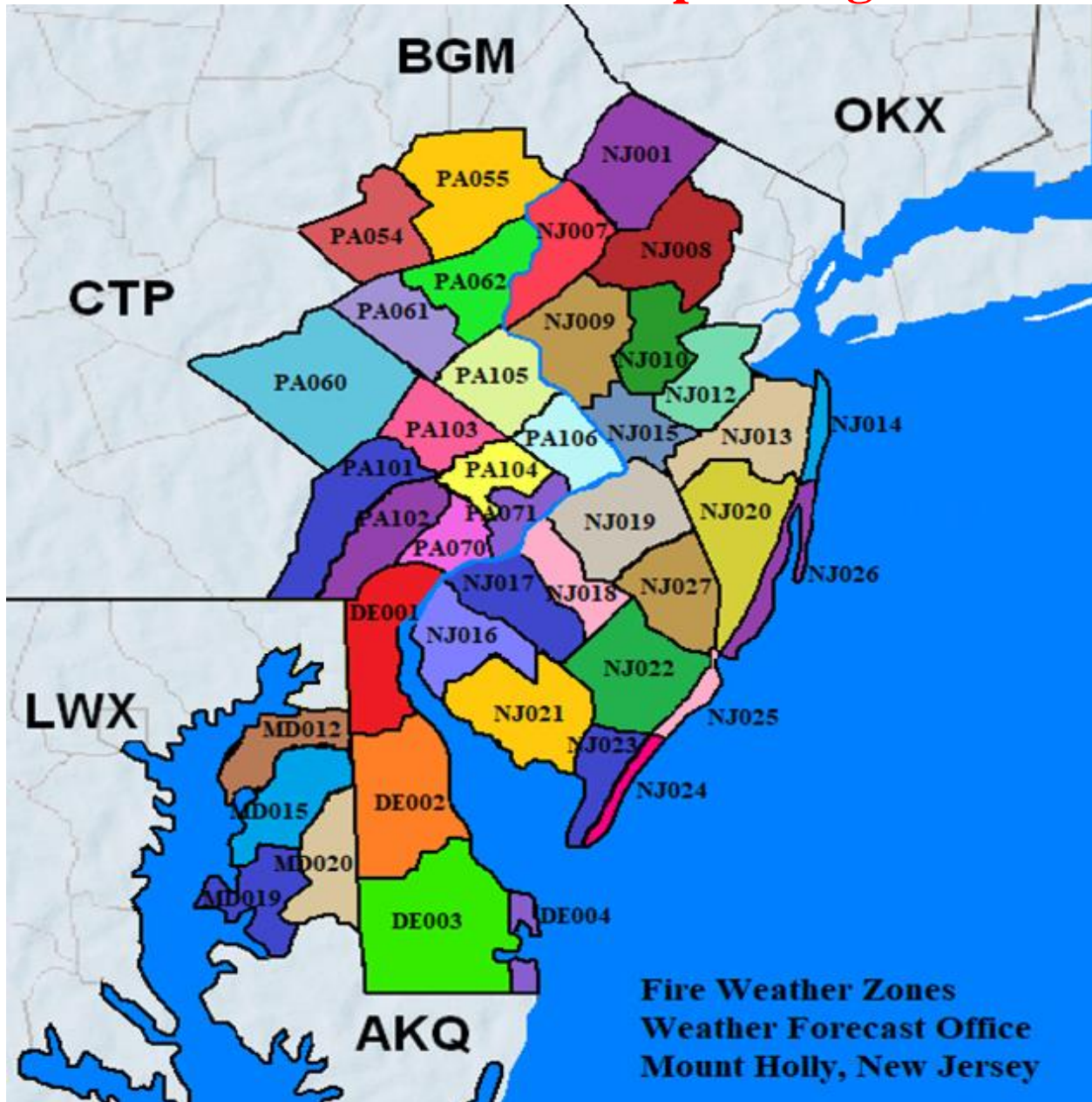


National Weather Service Weather Forecast Office Philadelphia/Mount Holly

Fire Weather Annual Operating Plan



INTRODUCTION

The USGS defines Pennsylvania, New Jersey, Maryland, and Delaware as part of the Mid-Atlantic Region.

Pennsylvania's 45,333 square miles encompasses almost every geographical feature except desert and ocean. Mountains divide the land into three regions. The Appalachian Plateau, which splits the state in half from southwest to northeast, is a place of high, flat-topped divides, cut by stream-etched valleys. Many rivers and lakes are found in the northwest, with its rolling hills and valleys. Just east of the plateau country are the long, narrow mountain ridges and valleys that make up the Appalachian Mountains. Southeast of the mountains are the valleys of southeastern Pennsylvania.

New Jersey's approximate 8,000 square miles are bordered by New York to the north, Pennsylvania to the west and Delaware to the south. More than 50% of the state is defined as coastal plain. The highest point in the state (1803 feet) is High Point located in Sussex County, a topographic region known as the Appalachian Valley. Nearly 40% of New Jersey land is considered forest, while about 20% is used for agriculture. New Jersey offers nearly 200 miles of coastline.

Maryland's approximate 10,000 square miles extends from the Atlantic Ocean to the Allegheny Mountains in the west. The "western panhandle" of the state is etched with mountains and valleys. Several ski areas are found here, with elevations up to 3,300 feet above sea level. The remainder of the state is part of the coastal plain, with rolling hills in the central part of the state gradually flattening out toward the coastline of the Chesapeake Bay and Atlantic Ocean. In all, Maryland enjoys 3,190 miles of tidal shoreline, plus it has more than 4,000 lakes.

Delaware is the second smallest state in the nation, with only 1,982 square miles. It is only 96 miles long, and between 9 and 35 miles wide. The land, mostly near sea level, is flat. The exception is the undulating hills of the Brandywine River valley in the north. About half the state is farmland, but the main attraction is its miles of unspoiled beaches along the Atlantic Ocean.

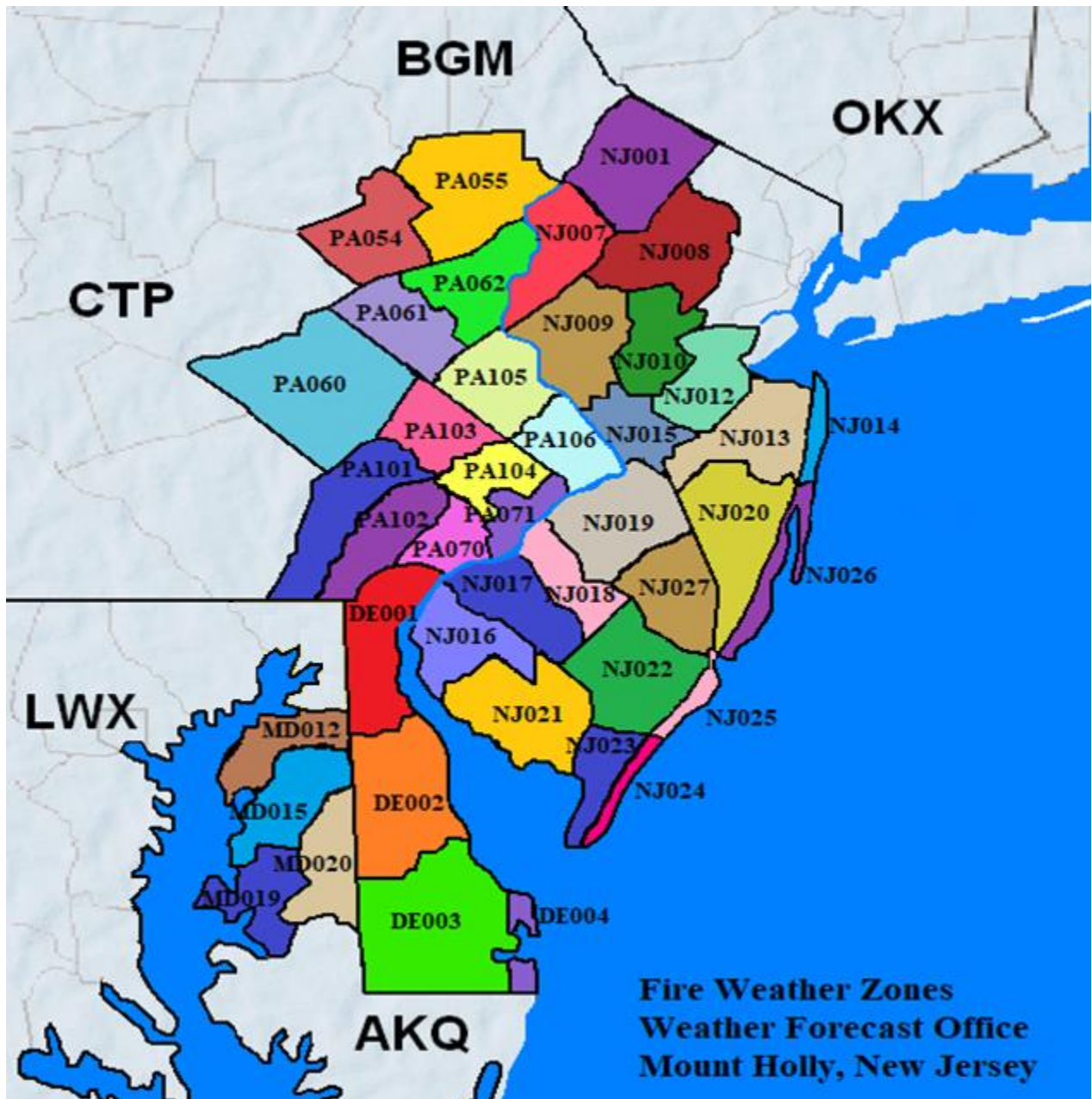
The climate of these three states is dominated by the Westerlies. The Atlantic Ocean has the greatest influence on Delaware and New Jersey, but also has some influence on eastern Pennsylvania and Maryland.

Because of the goal of protecting life, property and economic interests on government land, land management agencies must be critically concerned with the control of wildfire, as well as the use of fire as a land management tool. Critical to this goal is timely and accurate weather information.

The purpose of the operating plan is to outline the meteorological support available to state management agencies in Pennsylvania, New Jersey, Maryland and Delaware as provided by the National Weather Service. Among these services are spot weather forecasts for wildfires. We also provide forecasts for prescribed burns and land management forecasts to federal agencies.

THE FORECAST AREA

We provide forecasts for Eastern Pennsylvania (from the Poconos Southward), all of Delaware, all of New Jersey except the extreme NE, and the eastern shore of Maryland. The forecast for the northeastern portion of New Jersey is prepared by Brookhaven, NY. The rest of the Maryland forecasts are prepared by Sterling, VA and Wakefield, VA.



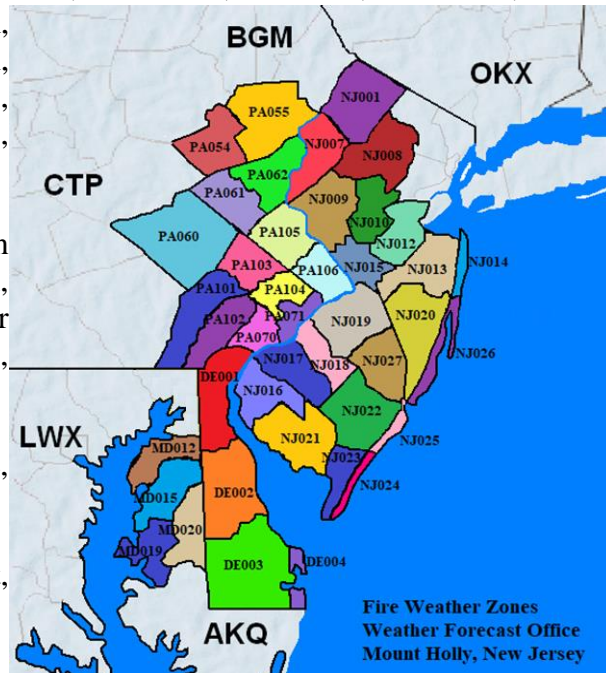
Fire Weather Planning Forecast

The forecast is made up of fire weather zones grouped by individual counties or zones. The New Jersey counties or zones are: Sussex, Warren, Morris, Hunterdon, Somerset, Middlesex, Western Monmouth, Eastern Monmouth, Mercer, Salem, Gloucester, Camden, Northwest Burlington, Ocean, Cumberland, Atlantic, Cape May, Atlantic Coastal Cape May, Coastal Atlantic, Coastal Ocean, and Southeastern Burlington.

The Pennsylvania counties or zones are: Carbon and Monroe, Berks, Lehigh, Northampton, Western Chester, Western Montgomery, Upper Bucks, Eastern Chester, Eastern Montgomery, Lower Bucks, Delaware, and Philadelphia.

The Delaware counties or zones are: New Castle, Kent, Inland Sussex, and Delaware Beaches.

The Maryland counties or zones are: Kent, Queen Annes, Caroline, and Talbot.



Two routine FWF products will be issued with a deadline 400 am and 400 pm local time. The forecast should be updated when significant changes occur to the forecast or conditions are significantly different from forecast, or a Red Flag Warning/Fire Weather Watch is issued. Forecasts are issued 365 days a year. The forecast consists of three 12 hour periods (today, tonight and tomorrow) beginning at 500 am local time on the day of forecast preparation for the morning issuance, and four 12 hour periods (tonight, tomorrow, tomorrow night, and the following day) beginning at 500 pm for afternoon issuance. An extended 3 to 7 day forecast, as well as an 8 to 14 day Outlook, is also included.

The forecast includes Cloud Amount as a descriptive term, Chance of Precipitation in Percent, Precipitation Type, Max/Min Temperatures, Max/Min Relative Humidities, Wind Direction to 8 points of the compass and Speed in mph(am and pm), Precipitation Amount and Duration (if precipitation were to occur), Mixing Height, Transport Direction and Speed, Ventilation, and a Dispersion Descriptor which is the product of the transport wind and mixing height.

...HEADLINE... REQUIRED FOR FIRE WEATHER WATCH OR RED FLAG WARNING

DISCUSSION

The discussion is a brief plain language summary of the weather pattern as it pertains to our County Warning Area. This is usually taken from the Area Forecast Discussion (AFD). When particularly windy and dry conditions are expected, they should be mentioned in the FWF discussion and Area Forecast Discussion (AFD). The FWF should be updated when a Red Flag Watch/Warning is issued, changed, or ended; or when conditions are significantly different than forecast.

GENERAL FORECAST

Parameter definitions:

Cloud Cover	(Cloudy, Mostly Cloudy, Partly Cloudy, Clear)
Precip Chc (%)	(Percent chance of Precip, 0-100)
Precip Type	(Thunderstorm, rain, freezing rain, snow/rain, drizzle, none)
Min/Max Temp	(Max/Min temperatures as zone avg)
Max/Min RH	(Max/Min Relative Humidity in percent)
20ft Wind-am (mph)	(20 foot wind speed and direction give to the 8 points of the compass for the morning)
20ft Wind-pm (mph)	(20 foot wind speed and direction give to the 8 points of the compass for the afternoon or evening/overnight)
Precip Amount	(A precipitation range similar to RDF ranges)
Precip Duration	(How long precip will accumulate (in hours))
Mixing Hgt (FT AGL)	(The mixing height to the nearest 100 feet at time of max/min temp)
Trans Wind (MPH)	(Transport wind direction and speed through the Mixed Layer)
Vent Rate (MPHXFT)	(Actual value of the product of the mixing height and transport wind)
Dispersion	(Categories based on the Dispersion Index)

Remarks:

Any item which you deem necessary to enhance usage of the forecast, such as additional information on strength and areal extent of thunderstorms, frontal timing, sudden wind shifts, or any other unusual weather activity which may not be evident from the general forecast.

EXTENDED FORECAST INCLUDING WINDS (3 to 7 days)

The extended forecast (broken into 12 hour segments) is a basic narrative forecast of expected weather over the 3 to 7 day extended period.

DISSEMINATION

Products are disseminated via the National Weather Service AWIPS Network and are transmitted on the NOAA Weather Wire Service. In addition, all forecasts are available on the Internet.

Fire Weather Forecast Example

Fire Weather Planning Forecast
National Weather Service Mount Holly NJ
1006 AM EST Thu Feb 6 2025

.DISCUSSION...

A low pressure system and its associated fronts cross the region today bringing a mixed bag of wintry precipitation to the area. High pressure briefly returns late tonight into Friday before another low pressure system passes through late Saturday into Saturday night. High pressure returns temporarily on Sunday into Monday before another system approaches the region for the Tuesday and Wednesday timeframe.

PAZ054-062100-

Carbon-

Including the city of Jim Thorpe
1006 AM EST Thu Feb 6 2025

	Today	Tonight	Fri
Cloud Cover	Mcldy	Pcldy	Pcldy
Precip Type	Snow/Fz Ra	None	None
Chance Precip (%)	100	0	0
Max/Min Temp	36	25	33
Min/Max RH %	72	97	47
Wind 20ft/early(mph)	SE 7 G21	W 5 G21	W 13 G27
Wind 20ft/late(mph)	S 4 G19	W 8 G23	NW 12 G25
Precip Amount	0.29	0.00	0.00
Precip Duration	7		
Mixing Hgt (ft-agl/msl)	1570	440	4730
Transport Wnd (mph)	SE 18	W 12	NW 35
Vent Rate (mph-ft)	35230	140	171840
Dispersion	Good	Very Poor	Very Good
Max ADI Early	19 Gen Poor	14 Gen Poor	91 Good
Max ADI Late	19 Gen Poor	14 Gen Poor	91 Good
Max LVORI Early	5	4	1
Max LVORI Late	5	4	1

Remarks...None.

.FORECAST FOR DAYS 3 THROUGH 7...

.FRIDAY NIGHT...Partly cloudy. Lows around 16. Northwest winds around 5 mph.

.SATURDAY...Partly sunny. Highs in the lower 30s. Northwest winds around 5 mph.

.SATURDAY NIGHT...Freezing rain and snow. Lows in the lower 20s. Southeast winds around 5 mph.

.SUNDAY...Partly sunny. Highs in the lower 30s. Southwest winds around 5 mph.

.SUNDAY NIGHT...Partly cloudy. Lows around 15. Northwest winds 5 to 10 mph.

.MONDAY...Partly sunny. Highs in the lower 30s. West winds around 5 mph.

.MONDAY NIGHT...Mostly cloudy. Lows around 18. Northwest winds around 5 mph.

.TUESDAY...Mostly cloudy with snow likely. Highs in the lower 30s. East winds around 5 mph.

.TUESDAY NIGHT...Mostly cloudy with snow likely. Lows around 19. North winds around 5 mph.

.WEDNESDAY...Partly sunny with a chance of snow. Highs around 30. North winds around 5 mph.

Fire Weather Planning Forecast for Southeastern New York
 Northern New Jersey and Southern CT
 National Weather Service New York NY
 323 AM EST Thu Feb 6 2025

.DISCUSSION...

Low pressure impacts the area today with mixed precipitation this morning into the afternoon. Winds will be out of the S-SE late through the day. Dry and windy conditions are expected for Friday with gusts upwards of 30-35 mph from the NW. Minimum RH values today will be above 60 percent and above 40 percent tomorrow.

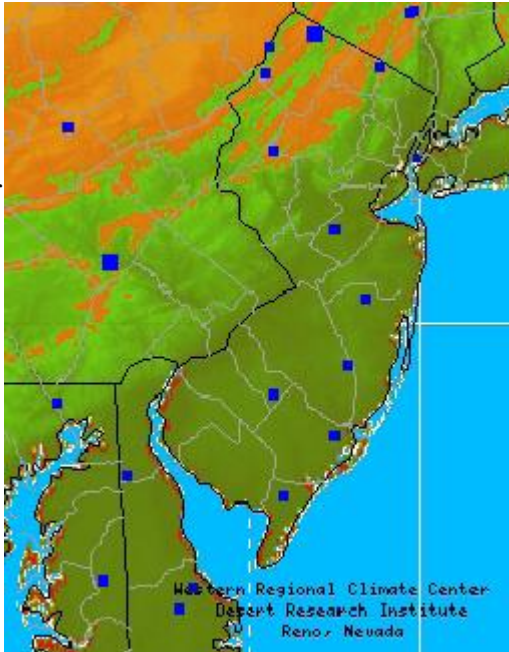
NYZ212-070830-
 New York City-
 323 AM EST Thu Feb 6 2025

	Today	Tonight	Fri
Cloud Cover	Cloudy	Pcldy	Pcldy
Precip Type	Snow/Rain	None	None
Chance Precip (%)	100	0	0
Chance of Thunder (%)	0	0	0
Temp (24h trend)	39 (+3)	34 (+5)	41
RH % (24h trend)	47 (+17)	95 (+5)	37
Wind 20ft/early(mph)	SE 7-11 G19	SW 5-9	W 12-16 G29
Wind 20ft/late(mph)	Lgt/Var	W 7-11 G20	NW 13-17 G29
Precip Amount	0.35	0.00	0.00
Precip Duration	9		
Precip Begin	6 AM		
Precip End	6 PM		
Mixing Hgt(ft-agl/msl)	2770	130	6080
Transport Wnd (mph)	SE 22	W 24	W 36
Vent Rate (kt-ft)	52630	2730	188480
Max ADI Early	49 Gen Good	19 Gen Poor	120 Very Good
Max ADI Late	23 Fair	22 Fair	114 Very Good

Remarks...None.

National Fire Danger Rating System (NFDRS) Forecast (FWM)

The National Fire Danger Rating System measures wildland fire danger at observation sites throughout the contiguous United States. The National Weather Service role in NFDRS is forecasting weather input which, combined with input, allows the NFDRS software to predict the day's fire danger indices. These indices impact resource management decisions, firefighter and protection of the public and property. Note NFDRS station may represent a large fire danger area of similar climatology and fuel type. NFDRS forecasts for a station are intended to be applied across a large fire danger rating area. The forecast is issued under the PIL PHLFWMPHI.



user
next
agency
safety,
that a
rating
applied

Sites used in Mount Holly's FWM:

Delaware: Blackbird (070031); Prime Hook (070301); Redden (070052)

Maryland: Tuckahoe (182101);

New Jersey: Ancora (280071); Blue Mountain (280101); Coyle Field (280051); Eb Forsythe (281501); Jackson (280291); New Middlesex (280231); Teetertown (280191); Walkkill River (305803); Woodbine (280091)

Pennsylvania: Hopewell (360112)

INFO

The forecast will be for the previously determined RAWS stations. The product will be automatically run at 4 pm after Fire Weather grids are created, saved and published.

GENERAL FORECAST

1. ZONE/FCST Shows whether this forecast is for an NFDRS zone or individual station. Zone average trends can be used when enough observations are available for the zone area. Choice between zone or individual station forecasts should be worked out in the AOP with fire weather users.
2. NO NFDRS Zone Number (or individual NFDRS site number)
3. YYMMDD Year, month, and day valid forecast time
4. 13 Always 1300 LST
5. WX Weather valid at 1300 LST tomorrow. Valid entries are:
 - a. 0-clear
 - b. 1-scattered clouds (1/8 to 4/8)
 - c. 2-broken clouds (5/8 to 7/8)
 - d. 3-overcast clouds (more than 7/8)
 - e. 4-foggy

- f. 5-drizzle
 - g. 6-raining
 - h. 7-snowing or sleet
 - i. 8-showers (in sight or at the station)
 - j. 9-thunderstorm (Categories 5, 6, or 7 sets wet flag to “yes”)
6. TEMP Temperature in deg F valid at 13 LST (or temperature trend + or -)
 7. RH Relative humidity in percent valid at 13 LST (or RH trend + or -)
 - 8.
 - 9.
 10. WDIR Use only for point forecast (FCST) version. Enter direction using sixteen point compass (N, NNE, NE, ENE, etc.) valid at 13 LST (20 ft level/10 minute average).
 11. WSPD Enter wind speed in mph valid at 13 LST (or wind speed trend + or -, 20 ft level/10 minute average)
 12. 10HR 10 hour timelag fuel moisture in percent valid at 13 LST (or trend + or -)
(***Forecasted only for manual NFDRS stations***)
 13. Tx Max temperature from 1300 LST today to 1300 LST tomorrow
 14. Tn Min temperature from 1300 LST today to 1300 LST tomorrow
 15. RHx Max relative humidity from 1300 LST today to 1300 LST tomorrow
 16. RHn Min relative humidity from 1300 LST today to 1300 LST tomorrow
 17. PD1 Precipitation duration in hours 1300 LST today to 0500 LST tonight
 18. PD2 Precipitation duration in hours 0500 LST tonight to 1300 LST tomorrow
 19. WETFLAG Y or N. Indicates whether liquid water will be on the fuels at 13 LST. (Use with caution - a “Y” will set all the NFDRS indices to zero!)

Format

The NFDRS Forecast will follow the comma delimited format as shown:

**FCST,NO,YMMDD,13,WX,TEMP,RH,,WDIR,WSPD,10HR,TX,TN,
RHx,RHn,PD1,PD2,WETFLAG**

Examples of the point and zone products, formatted for transmission into AWIPS, are displayed below:

FNUS81 KPHI DDHHMM
FWMPHI

FCST,280071,030219,13,1,69,43,,,SE,8,,72,46,100,40,0,0,N

Follow the format precisely in order for the forecasts to be used as NFDRS input. Separate each element by a comma with no intervening spaces. (Some elements may not be forecast, but are represented by the null space between two consecutive commas.)

Updates and Corrections

Since the NFDRS system runs once a day, FWMs are not typically updated. The FWM will be corrected when a topographical/format error is detected.

SPOT FIRE WEATHER FORECAST

The National Weather Service Forecast Office in Mount Holly, New Jersey will issue Spot Fire Weather Forecasts in support of wildfire management, and natural resource management. Mount Holly will provide spot forecast service upon request of any federal, state, tribal, or local official who represents that the spot forecast is required to support a wildfire. For non-wildfire purposes, resources permitting, Mount Holly will provide spot forecast service under the following circumstances and conditions:

1. Upon request of any federal official who represents that the spot forecast is required under the terms of the Interagency Agreement for Meteorological Services (NWS Directive 10-401).
2. Upon request of any state, tribal, or local official who represents that 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 (NWS Directive 10-401).
3. Upon request of any public safety official who represents that 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.

Requests should only be made through the internet. As a backup a Spot Request Form (WS FORM D-1) can be used and then faxed, or the request can be called in directly to the office.

Under optimal conditions, a forecast should be available in a short period of time. Only under the most adverse weather conditions will a forecast be delayed.

Because of the numerous non-forestry duties and forecast products, the staff at Mount Holly must ascertain the priority of the request among severe weather threats, aviation, marine, and public forecast deadlines. The requesting agency can greatly aid the forecaster by providing, at a minimum, the following information:

1. Nature of the fire (wildfire/prescribed burn/land management)
2. Location and size of the fire
3. Name of the agency
4. Elevation
5. Recent weather observation
6. Geography of the fire location
7. Any additional information which would help the forecaster prioritize the request and to assist the forecaster to make the best forecast possible

The submission of at least one recent, accurate observation from the fire site is optional, but requested if possible. Especially if current conditions are different than previously forecast.

Constructive critique of spot forecasts by users is encouraged, preferably directly to the forecaster and substantiated by on-site observations. There is an option of the spot forecast page for feedback.

THE SPOT FORECAST PROCEDURE:

Spot forecast requests will be received via AWIPS with the product header PHLSTQPHI and information about the request will be available on the Spot Forecast webpage. Spot forecasts will be issued through the GFE formatter; only the GFE formatter should be used to create a forecast. The forecast is issued under the PIL FWSPHI. The person(s) requesting the forecast will list all elements that are needed and they will show up in the formatter when issuing the forecast. As a minimum, you should be prepared to provide the following information after being provided the parameters listed above: expected relative humidity, wind direction and speed, and the chance of precipitation. The following pages include detailed directions on how to produce a spot forecast using the GFE formatter. Once the forecast is issued, it will update on the webpage, usually in about 5 to 10 minutes.

Spot Forecast Example

Spot Forecast for Taylors Bridge RX...Delaware Wild Lands, Inc.
National Weather Service Mount Holly NJ
542 AM EST Thu Jan 30 2025

Forecast is based on ignition time of 0600 EST on January 30.
If conditions become unrepresentative, contact the National Weather Service.

Please contact our office if you have questions or concerns with this forecast.

.DISCUSSION...

High pressure briefly slides across our area today. An area of low pressure moves through Friday, with high pressure arriving during Saturday. A warm front lifts northward late Sunday into early Monday before the next cold front arrives late Monday. High pressure returns briefly to our region Tuesday before another low pressure begins to encroach Wednesday.

.TODAY...

Sky/weather.....Sunny (20-30 percent).
CWR.....0 percent.
Chance of pcpn.....0 percent.
Max temperature.....Around 44.
Min humidity.....35 to 40 percent.
Wind shift.....WNW in the morning will become S/SW between 2 and 4 PM.
Wind (20 ft).....West winds 5 to 10 mph shifting to the south around 5 to 10 mph late in the afternoon.
Mixing height.....3500 ft AGL.
Transport winds.....Northwest 10 to 15 mph shifting to the south around 10 mph late in the afternoon.
Smoke dispersal.....Poor (3100 knot-ft) early in the morning increasing to good (34900 knot-ft) in the afternoon.
ADI.....8 early in the morning increasing to 49 in the afternoon.

TIME (EST)	6AM	7AM	8AM	9AM	10A	11A	12P	1PM	2PM	3PM	4PM	5PM
Sky (%)	8	9	9	5	4	3	8	15	32	29	41	42
Weather cov	.....										
Weather type	....										
Tstm cov	.....										
CWR	.....0	0	0	0	0	0	0	0	0	0	0	0
Chc of pcpn (%)	.0	0	0	0	0	0	0	0	0	0	0	0
Temp	.....30	28	30	33	36	38	41	43	44	44	44	42
RH	.....60	66	60	51	45	42	39	38	38	39	43	46
20 FT wind dir	..W	NW	NW	NW	NW	NW	W	W	W	SW	S	S
20 FT wind spd	.5	5	5	7	6	7	7	7	7	6	6	6
20 FT wind gust	.14	10	12	13	14	14	15	10	12	10	12	12
Mix hgt (kft)	...0.4	0.4	0.4	2.1	2.6	2.9	3.1	3.5	3.1	2.7	1.7	0.4
Transp wind dir	NW	NW	NW	NW	NW	NW	W	W	W	W	S	S
Transp wind spd	.9	9	8	13	10	12	12	12	12	10	10	9
ADI	.....10	10	8	34	33	41	45	49	44	35	22	10
Vrate kt-ft/1K	.3	3	3	23	23	29	31	35	31	24	15	4
Ventrte Cat	....PR	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR

.TONIGHT...

Sky/weather.....Mostly cloudy (80-90 percent). Rain overnight.
CWR.....80 percent.
Chance of pcpn.....80 percent.

Min temperature.....Around 36.
 Max humidity.....90 to 95 percent.
 Wind shift.....None expected.
 Wind (20 ft).....South winds 5 to 10 mph.
 Mixing height.....400 ft AGL.
 Transport winds.....South 10 to 20 mph shifting to the southwest 15
 to 20 mph after 3 am.
 Smoke dispersal.....Poor (3800 knot-ft).
 ADI.....7 to 18.

TIME (EST)	6PM	7PM	8PM	9PM	10P	11P	MID	1AM	2AM	3AM	4AM	5AM
Sky (%)	50	72	79	80	86	96	98	99	98	98	99	98
Weather cov							SCH	SCH	LKY	DEF	DEF	LKY
Weather type							RN	RN	RN	RN	RN	RN
Tstm cov												
CWR	0	0	0	0	0	0	20	20	70	80	80	70
Chc of pcpn (%)	0	0	0	0	0	0	20	20	70	80	80	70
Temp	39	38	37	38	37	38	39	38	38	39	40	39
RH	54	59	61	62	67	64	64	70	76	82	85	92
20 FT wind dir	S	S	S	S	S	S	S	S	S	SW	S	S
20 FT wind spd	7	7	7	8	8	8	9	9	10	10	10	9
20 FT wind gust	13	10	13	14	14	14	15	15	15	15	15	14
Mix hgt (kft)	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5
Transp wind dir	S	S	S	S	S	S	S	SW	SW	SW	SW	S
Transp wind spd	10	13	14	15	16	16	17	17	17	20	20	16
ADI	7	8	9	13	14	14	15	15	15	18	18	14
Vrate kt-ft/1K	4	5	5	6	7	7	8	8	9	9	9	7
Ventrage Cat	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR

\$\$
 Forecaster...Hoeflich
 Requested by...Hannah Small
 Type of request...PRESCRIBED
 .TAG 2501670.0/PHI
 .DELDT 01/30/25
 .FormatterVersion 2.0.0
 .EMAIL hsmall@dewildlands.org

Fire Weather Watches, Red Flag Warnings, and Special Weather Statements

I. ISSUANCE TIMES AND PRODUCTS

Fire Weather Watches (PHLRFWPHL) are issued for the 2nd, 3rd or 4th 12 hour period of a forecast. A Red Flag Warning (also PHLRFWPHL) is issued for the 1st or 2nd period of a forecast.

FIRE WEATHER WATCHES AND RED FLAG WARNINGS WILL BE HEADLINED IN THE FIRE WEATHER FORECAST (PHLFWFPHL) AS WELL AS THE HAZARDOUS WEATHER OUTLOOK (PHLHWOPHI) AND INCLUDED IN THE AREA FORECAST DISCUSSION (PHLAFDPHI) WARNING SECTION.

If Red Flag Warning conditions are expected in the Day 2-7 period, it should be discussed in the Hazardous Weather Outlook (HWO), in addition to the Fire Weather Forecast (FWF), and Area Forecast Discussion (AFD).

After coordinating with Fire Weather partners, if it is determined that conditions will be close to Red Flag Warning Criteria, but a Red Flag Warning is not needed, a Special Weather Statement (SPS) may be issued if determined necessary (e.g., fuels are not critically low, or duration of conditions are not expected to be very long). In certain situations, an SPS may be issued during the overnight without coordination with partners to give a “heads up.” However, coordination with surrounding WFOs should occur before an SPS is issued overnight. When an SPS is in effect or expected, there is no need to include fire weather information in the HWO.

II. GENERAL GUIDELINES

The Watches and Warnings indicate the potential for spread of any fires that may develop. They are NOT an indication or forecast of whether fires will develop.

Red Flag Warnings will **not** be based solely on weather conditions. Bottom line – coordination with the customer before the issuance of a *RFW* is critical to ensure that **both** the meteorological and non-meteorological (fuels) parameters will meet the necessary criteria.

There are rare situations when a Red Flag Warning can be issued on the overnight shift without coordination with partners. If surrounding offices are confident ALL factors, including fuels, will be below criteria, even without partner coordination, we can issue a Red Flag Warning. However, this is rare and should only be done when confidence is high that a borderline case will not occur and we will not be the only office issuing warnings. But again, this should be a rare occurrence, and if possible, waiting for coordination with state partners should occur most of the time.

III. INDIVIDUAL STATE RFW Criteria

For New Jersey

The National Weather Service Forecast Office in Mount Holly will issue a Fire Weather Watch or Red Flag Warning, if the expected minimum relative humidity will be at or below 30 percent, sustained winds, or frequent gusts at or above 20 mph for 2 or more hours, and when the 10 hour time lag fuels are less than 10 percent.

For Pennsylvania

The National Weather Service Forecast Office in Mount Holly will issue a Fire Weather Watch or Red Flag Warning, if the expected minimum relative humidity will be at or below 30 percent, sustained winds, or frequent gusts at or above 20 mph for 2 or more hours, and when the 10 hour time lag fuels are less than 10 percent.

For Delaware

The National Weather Service Forecast Office in Mount Holly will issue a Fire Weather Watch or Red Flag Warning, if the expected minimum relative humidity will less than 30 percent, sustained winds will be at or above 20 mph, and when the 10 hour time lag fuels are less than or equal to 8 percent.

Maryland

The National Weather Service Forecast Office in Mount Holly will issue a Fire Weather Watch or Red Flag Warning, if the expected minimum relative humidity will less than 30 percent, sustained winds will be at or above 20 mph, and when the 10 hour time lag fuels are less than or equal to 8 percent.

The expectation of precipitation, in addition to the above criteria, will not diminish the need for a Fire Weather Watch or Red Flag Warning, unless the precipitation is widespread and concurrent with the initiation of winds described above.

Summary Criteria by State

<u>State</u>	<u>Wind</u>	<u>Humidity</u>	<u>10 Hour Fuels</u>
Pennsylvania	>=20 mph (Sustained/Frequent Gusts)	<=30 percent	<10%
New Jersey	>=20 mph (Sustained/Frequent Gusts)	<=30 percent	<10%
Delaware	>=20 mph (Sustained)	<30 percent	<=8%
Maryland	>=20 mph (Sustained)	<30 percent	<=8%

Red Flag Warning Example

URGENT - FIRE WEATHER MESSAGE
National Weather Service Mount Holly NJ
228 PM EST Fri Nov 15 2024

PAZ054-055-060>062-070-071-101>106-161100-
/O.UPG.KPHI.FW.A.0002.241116T1200Z-241116T2300Z/
/O.NEW.KPHI.FW.W.0006.241116T1200Z-241116T2300Z/
Carbon-Monroe-Berks-Lehigh-Northampton-Delaware-Philadelphia-
Western Chester-Eastern Chester-Western Montgomery-
Eastern Montgomery-Upper Bucks-Lower Bucks-
228 PM EST Fri Nov 15 2024

...RED FLAG WARNING IN EFFECT FROM 7 AM TO 6 PM EST SATURDAY FOR
GUSTY WINDS AND LOW RELATIVE HUMIDITY FOR THE SOUTHERN POCONOS,
LEHIGH VALLEY, AND THE REST OF SOUTHEAST PENNSYLVANIA INCLUDING
PHILADELPHIA...

The National Weather Service in Mount Holly has issued a Red Flag
Warning for gusty winds and low relative humidity, which is in
effect from 7 AM to 6 PM EST Saturday. The Fire Weather Watch is
no longer in effect.

- * AFFECTED AREA...Carbon, Monroe, Berks, Lehigh, Northampton,
Delaware, Philadelphia, Western Chester, Eastern Chester,
Western Montgomery, Eastern Montgomery, Upper Bucks and Lower
Bucks.
- * TIMING...From 7 AM to 6 PM EST Saturday.
- * WINDS...Northwest 15 to 20 mph with gusts up to 30 mph.
- * RELATIVE HUMIDITY...As low as 27 percent.
- * TEMPERATURES...Up to 59.
- * IMPACTS...Any fire that develops will catch and spread
quickly. 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 due to a combination of
strong winds, low relative humidity, and dry fuels. Any fires that
develop may quickly get out of control and become difficult to
contain.

For more information about wildfire danger, burn restrictions,
and wildfire prevention and education, please visit your state
forestry or environmental protection website.

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State Partners

Robert Gill	Date
New Jersey Forest Fire Service	
Division of Parks and Forestry	
Department of Environmental Protection	

Mike Kern	Date
Pennsylvania Bureau of Forestry	
Pennsylvania Department of Conservation and Natural Resources	

Chris Robertson	Date
Maryland Forest Service	
Maryland Department of Natural Resources	

Sam Topper	Date
Delaware Forest Service	