

Definitions of Weather Watch, Warnings and Advisories

<ul style="list-style-type: none"> • Hazardous Weather Outlook • Special Weather Statement <p><u>Winter Weather/Cold Weather</u></p> <ul style="list-style-type: none"> • Winter Storm Watch • Blizzard Warning • Winter Storm Warning • Ice Storm Warning • Freezing Rain Advisory • Winter Weather Advisory • Freeze Watch • Freeze Warning • Frost Advisory • Wind Chill Advisory • Wind Chill Warning <p style="text-align: center;"><u>Fire Weather</u></p> <ul style="list-style-type: none"> • Fire Weather Watch • Red Flag Warning 	<p><u>Fog / Wind /Severe Weather</u></p> <ul style="list-style-type: none"> • Dense Fog Advisory • High Wind Watch • High Wind Warning • Wind Advisory • Severe Thunderstorm Watch • Severe Thunderstorm Warning • Tornado Watch • Tornado Warning • Extreme Wind Warning <p style="text-align: center;"><u>Marine</u></p> <ul style="list-style-type: none"> • Small Craft Advisory • Gale Warning • Storm Warning • Hurricane Force Wind Warning • Special Marine Warning 	<p style="text-align: center;"><u>Flooding</u></p> <ul style="list-style-type: none"> • Coastal Flood Watch • Coastal Flood Warning • Coastal Flood Advisory • Flash Flood Watch • Flash Flood Warning • Flood Watch • Flood Warning • River Flood Watch • River Flood Warning <p style="text-align: center;"><u>Excessive Heat</u></p> <ul style="list-style-type: none"> • Excessive Heat Watch • Excessive Heat Warning • Heat Advisory <p style="text-align: center;"><u>Tropical</u></p> <ul style="list-style-type: none"> • Tropical Storm Watch • Tropical Storm Warning • Hurricane Watch • Hurricane Warning
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Hazardous Weather Outlook

The Hazardous Weather Outlook will describe potential hazardous weather and hydrologic information of concern in Days 1 through 7.

The outlook contains two segments: One segment for the marine zones and adjacent land-based (i.e., coastal) zones and the other segment for the rest of the land-based zones. Each segment of the HWO will contain 3 sections: short term through Day 1, long term for Days 2-7, and spotter information.

Special Weather Statement

The Special Weather Statement is designed to provide critical short term hazardous weather information. The time frame of this information is 6 hours or less. Examples include, but are not limited to:

- *High-Impact, High Resolution Information:*
 - Timing and impact information for organized convective storms such as derechos, squall lines, etc. Black ice
 - Timing and impact information for heavy snow bands
 - Heavy rainfall that is forecast to cause nuisance flooding
 - High Heat Indices that are not quite to advisory level
 - Enhanced fire threat that is not quite to warning level.

Winter Storm Watch

A Winter Storm Watch is issued when there is the potential for significant and hazardous winter weather within 48 hours. It does not mean that significant and hazardous winter weather will occur...it only means it is possible.

Significant and hazardous winter weather is defined as a combination of:

- 1) 5 inches or more of snow/sleet within a 12-hour period **or** 7 inches or more of snow/sleet within a 24-hour period
AND/OR
- 2) Enough ice accumulation to cause damage to trees or powerlines.
AND/OR
- 3) a life threatening or damaging combination of snow and/or ice accumulation with wind.

The snow/sleet criteria for a Winter Storm Watch for the five westernmost counties (Allegany, Mineral, Grant, Pendleton, and Highland) is higher (6 inches or more within a 12-hour period; 8 inches or more within a 24-hour period).

Blizzard Warning

A Blizzard Warning means that the following conditions are occurring or expected within the next 12 to 18 hours.

- 1) Snow and/or blowing snow reducing visibility to 1/4 mile or less for 3 hours or longer
AND
 - 2) Sustained winds of 35 mph or greater or frequent gusts to 35 mph or greater.
- There is no temperature requirement that must be met to achieve blizzard conditions.

Winter Storm Warning

A Winter Storm Warning is issued when a significant combination of hazardous winter weather is occurring or imminent.

Significant and hazardous winter weather is defined as a combination of:

1) 5 inches or more of snow/sleet within a 12-hour period **or** 7 inches or more of snow/sleet within a 24-hour period

AND/OR

2) Enough ice accumulation to cause damage to trees or powerlines.

AND/OR

3) a life threatening or damaging combination of snow and/or ice accumulation with wind.

The snow/sleet criteria for a Winter Storm Warning for the five westernmost counties (Allegany, Mineral, Grant, Pendleton, and Highland) is higher (6 inches or more within a 12-hour period; 8 inches or more within a 24-hour period).

Ice Storm Warning

¼ inch or more of ice accumulation.

Freezing Rain Advisory

Ice accumulations of less than 1/4 inch.

Winter Weather Advisory

A Winter Weather Advisory will be issued when 2 to 4 inches of snow, alone or in combination with sleet and freezing rain, is expected to cause a significant inconvenience, but not serious enough to warrant a warning.

If the event is expected to impact the Baltimore/Washington metro areas during rush hours (4-9 am or 2-7 pm on weekdays) forecasted snow totals of one inch will necessitate the issuance of a winter weather advisory. The snow/sleet criteria for a Winter Weather Advisory for the five westernmost counties (Allegany, Mineral, Grant, Pendleton, and Highland) is higher (3-5 inches).

Freeze Watch

A Freeze Watch is issued when there is a potential for significant, widespread freezing temperatures within the next 24-36 hours.

A Freeze Watch is issued in the autumn until the end of the growing season (marked by the occurrence of first widespread freeze). The normal end of the growing season is mid to late October west of the Blue Ridge and early November east of the Blue Ridge. However, during anomalously warm autumns, the growing season may be extended past the normal end of the growing season.

A Freeze Watch is issued in the spring at the start of the growing season (when it is late enough to cause damage to new plants and crops).

Freeze Warning

A Freeze Warning is issued when significant, widespread freezing temperatures are expected.

A Freeze Warning is issued in the autumn until the end of the growing season (marked by the occurrence of first widespread freeze). The normal end of the growing season is mid to late October west of the Blue Ridge and early November east of the Blue Ridge. However, during anomalously warm autumns, the growing season may be extended past the normal end of the growing season.

A Freeze Warning is issued in the spring at the start of the growing season (when it is late enough to cause damage to new plants and crops).

Frost Advisory

A Frost Advisory is issued when the minimum temperature is forecast to be 33 to 36 degrees on clear and calm nights during the growing season.

A Frost Advisory is issued in the autumn until the end of the growing season (marked by the occurrence of first widespread freeze). The normal end of the growing season is mid to late October west of the Blue Ridge and early November east of the Blue Ridge. However, during anomalously warm autumns, the growing season may be extended past the normal end of the growing season.

A Frost Advisory is issued in the spring at the start of the growing season (when it is late enough to cause damage to new plants and crops).

Wind Chill Advisory

A Wind Chill Advisory is issued when wind chills of -5F to -19F are expected.

Wind Chill Warning

A Wind Chill Warning is issued when wind chills of -20F or lower are expected.

Dense Fog Advisory

A Dense Fog Advisory is issued when widespread fog is expected to reduce visibilities to 1/4 mile or less over a large area for an extended period of time (2 or more hours).

High Wind Watch

A High Wind Watch is issued when the following conditions are *possible*:

1) sustained winds of 40 mph or higher for one hour or more

OR

2) wind gusts of 58 mph or higher for one hour or more.

High Wind Warning

A High Wind Warning is issued when the following conditions are occurring or imminent:

1) sustained winds of 40 mph or higher for one hour or more

OR

2) wind gusts of 58 mph or higher for one hour or more.

Hurricane Watch

A Hurricane Watch is issued when a tropical cyclone containing winds of 64 kt (74 mph) or higher poses a

possible threat, generally within 48 hours. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding.

The watch does not mean that hurricane conditions will occur. It only means that these conditions are possible.

Hurricane Warning

A Hurricane Warning is issued when sustained winds of 64 kt (74 mph) or higher associated with a tropical cyclone are expected in 36 hours or less. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force.

Wind Advisory

A Wind Advisory is issued when the following conditions are expected for 3 hours or longer.

1) sustained winds of 31 to 39 mph

AND/OR

2) wind gusts of 46 to 57 mph.

Extreme Wind Warning

An Extreme Wind Warning is issued for surface winds of 100 knots (115 MPH) or greater associated with non-convective, downslope, derecho (NOT associated with a tornado), or sustained hurricane winds are expected to occur within one hour.

Small Craft Advisory

Small Craft Advisories are issued for the Tidal Potomac River and the Chesapeake Bay when one or both of the following conditions is expected to begin within 36 hours:

1) sustained winds of 18 knots to 33 knots

OR

2) frequent gusts (duration of two or more hours) between 18 knots and 33 knots.

OR

3) waves of 4 feet or higher

Gale Warning

Gale Warnings are issued for the Tidal Potomac River and the Chesapeake Bay when one or both of the following conditions is expected to begin within 36 hours and not directly associated with a tropical cyclone:

1) sustained winds of 34 knots to 47 knots

OR

2) frequent gusts (duration of two or more hours) between 34 knots and 47 knots.

Storm Warning

Storm Warnings are issued for the Tidal Potomac River and the Chesapeake Bay when one or both of the following conditions is expected to begin within 36 hours and not directly associated with a tropical cyclone:

1) sustained winds of 48 knots to 63 knots

OR

2) frequent gusts (duration of two or more hours) of 48 knots to 63 knots

Hurricane Force Wind Warning

Hurricane Force Wind Warnings are issued for the Tidal Potomac River and the Chesapeake Bay when one or both of the following conditions is expected to begin within 36 hours and not directly associated with a tropical cyclone:

1) sustained winds of 64 knots or greater

OR

2) frequent gusts (duration of two or more hours) of 64 knots or greater

Special Marine Warning

A warning of potentially hazardous weather conditions of short duration (up to 2 hours) affecting areas included in a CWF that are not adequately covered by existing marine warnings and producing one or more of the following:

1) Sustained marine convective winds (showers/thunderstorms) or associated gusts of 34 knots or greater

AND/OR

2) Hail three quarters of an inch or more in diameter

AND/OR

3) Waterspouts

Severe Thunderstorm Watch

A Severe Thunderstorm Watch is issued when severe thunderstorms are possible in and near the watch area. It does not mean that they will occur. It only means they are possible.

Severe thunderstorms are defined as follows:

1) Winds of 58 mph or higher

AND/OR

2) Hail 1 inch in diameter or larger.

Severe Thunderstorm Warning

A Severe Thunderstorm Warning is issued when severe thunderstorms are occurring or imminent in the warning area.

Severe thunderstorms are defined as follows:

1) Winds of 58 mph or higher

AND/OR

2) Hail 1 inch in diameter or larger.

Tornado Watch

A Tornado Watch is issued when severe thunderstorms and tornadoes are possible in and near the watch area. It does not mean that they will occur. It only means they are possible.

Severe thunderstorms are defined as follows:

1) Winds of 58 mph or higher

AND/OR

2) Hail 1 inch in diameter or larger.

Tornado Warning

A Tornado Warning is issued when a tornado is imminent. When a tornado warning is issued, seek safe shelter immediately.

Tropical Storm Watch

A Tropical Storm Watch is issued when a tropical cyclone containing winds of 34 to 63 kt (39 to 73 mph) or higher poses a possible threat, generally within 48 hours. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding.

The watch does not mean that tropical storm conditions will occur. It only means that these conditions are possible.

Tropical Storm Warning

A Tropical Storm Warning is issued when sustained winds of 34 to 63 kt (39 to 73 mph) or higher associated with a tropical cyclone are expected in 36 hours or less. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding.

Coastal Flood Watch

A Coastal Flood Watch is issued when moderate to major coastal flooding is possible. Such flooding would potentially pose a serious risk to life and property.

Coastal Flood Watches are issued for coastal areas along the Tidal Potomac River and coastal areas along the Chesapeake Bay.

Coastal Flood Warning

A Coastal Flood Warning is issued when moderate to major coastal flooding is occurring or imminent. This flooding will pose a serious risk to life and property.

Coastal Flood Warnings are issued for coastal areas along the Tidal Potomac River and areas along the Chesapeake Bay.

Coastal Flood Advisory

A Coastal Flood Advisory is issued when minor or nuisance coastal flooding is occurring or imminent.

Coastal Flood Advisories are issued for coastal areas along the Tidal Potomac River and areas along the Chesapeake Bay.

Flash Flood Watch

A Flash Flood Watch is issued when conditions are favorable for flash flooding. It does not mean that flash flooding will occur, but it is *possible*.

Flash Flood Warning

A Flash Flood Warning is issued when flash flooding is imminent or occurring.

Flood Watch

A Flood Watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is *possible*.

Flood Warning

A Flood Warning is issued when flooding is imminent or occurring.

River Flood Watch

A River Flood Watch is issued when river flooding is possible at one or more forecast points along a river.

River Flood Warning

A River Flood Warning is issued when river flooding is occurring or imminent at one or more forecast points along a river.

Excessive Heat Watch

An Excessive Heat Watch is issued when there is a potential for the heat index value to reach or exceed 110 degrees within the next 24 to 48 hours.

Excessive Heat Warning

An Excessive Heat Warning is issued when the heat index value is expected to reach or exceed 110

degrees within the next 12 to 24 hours. An Excessive Heat Warning may be issued for lower criteria if it is early in the season or during a multi-day heat wave.

Heat Advisory

A Heat Advisory is issued when the heat index value is expected to reach 105 to 109 degrees within the next 12 to 24 hours. A Heat Advisory may be issued for lower criteria if it is early in the season or during a multi-day heat wave.

Fire Weather Watch

A Fire Weather Watch is issued to alert fire officials and firefighters of potentially dangerous fire weather conditions within the next 24 to 36 hours. They are issued when the following three criteria are met:

- 1) Surface relative humidity (RH) less than 30 % for VA and MD; RH less than or equal to 25% for WV
AND
- 2) Sustained surface wind of 20 MPH or greater AND
- 3) 10-hour fuel moisture less than 8% for VA; less than or equal to 8% for MD and WV

Red Flag Warning

A Red Flag Warning is issued to alert fire officials and firefighters of potentially dangerous fire weather conditions within the next 12 to 24 hours. They are issued when the following three criteria are met:

- 1) Surface relative humidity (RH) less than 30 % for VA and MD; RH less than or equal to 25% for WV
AND
- 2) Sustained surface wind of 20 MPH or greater AND
- 3) 10-hour fuel moisture less than 8% for VA; less than or equal to 8% for MD and WV