

## NWS WARNINGS AND ADVISORIES FOR SOUTHERN NEW ENGLAND

(Last Updated: December 4, 2015)

The following are National Weather Service criteria for issuing Watches/Warnings/Advisories:

**Watches:** 50% confidence of meeting **Warning** criteria (generally within 36-48+ hours).

**Advisories and Warnings:** 80% confidence in the event occurrence (generally within 24-36 hours).

### TYPE OF ISSUANCE

#### WINTER WEATHER ADVISORY



### WHEN ISSUED FOR SOUTHERN NEW ENGLAND

#### **More than one predominant hazard**

- Winter weather event having more than one predominant hazard (ie., snow and ice, snow and sleet, or snow, ice & sleet) meeting or exceeding advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.

#### **Snow, Ocean Effect Snow, and/or Sleet**

- 3 inches averaged over a forecast zone in 12 hours (except 4 inches in Berkshire/Litchfield Counties)

#### **Snow and Blowing Snow**

- Sustained or frequent gusts of 25 to 34 mph accompanied by falling and blowing snow occasionally reducing visibility to  $\leq 1/4$  mile for  $\geq 3$  hours

#### **Blowing Snow**

- Widespread or localized blowing snow reducing visibility to  $\leq 1/4$  mile with winds  $< 35$  mph

#### **Black Ice**

- A Special Weather Statement will usually be issued when sufficient moisture is expected to cause a thin layer of ice on road surfaces, typically on cloudless nights (“black ice”). At forecaster discretion a formal Winter Weather Advisory may be issued instead.

#### FREEZING RAIN ADVISORY

Any accretion of freezing rain or freezing drizzle on road surfaces

#### WIND CHILL ADVISORY

Wind chill index between  $-15^{\circ}\text{F}$  and  $-24^{\circ}\text{F}$  for at least 3 hours using only the sustained wind

#### WINTER STORM WARNING



#### **More than one predominant hazard**

- Winter weather event having more than one predominant hazard {ie. heavy snow and blowing snow (below blizzard conditions), snow and ice, snow and sleet, sleet and ice, or snow, sleet and ice} meeting or exceeding warning criteria for at least one of the precipitation elements.

#### **Snow, Ocean Effect Snow, or Sleet**

- 6 inches averaged over a forecast zone in a **12 hour period** (except 7 inches in Berkshire and Litchfield Counties)
- 8 inches averaged over a forecast zone in a **24 hour period** (except 9 inches in Berkshire and Litchfield Counties)

|                              |  |
|------------------------------|--|
| BLIZZARD WARNING             | Sustained winds or frequent gusts $\geq 35$ mph AND considerable falling and/or blowing snow frequently reducing visibility $< \frac{1}{4}$ mile for $\geq 3$ hours ( <i>Blizzard conditions need to be the predominant condition over a 3 hour period</i> ) |
| ICE STORM WARNING            | $\frac{1}{2}$ inch or greater accretion of freezing rain in any zone   |
| WIND CHILL WARNING           | Wind chill index $\leq -25^{\circ}\text{F}$ for at least 3 hours using only sustained wind   |
| WIND ADVISORY                | Sustained winds 31-39 mph (27-34 kts) for at least 1 hour; OR any gusts to 46-57 mph (40-49 kts)   |
| HIGH WIND WARNING            | Sustained winds $\geq 40$ mph ( $\geq 35$ kts) for at least 1 hour; OR any gusts $\geq 58$ mph ( $\geq 50$ kts)  |
| TROPICAL STORM WARNING       | Sustained winds 39-73 mph (34-63 kts) (no gust criteria) <i>associated with a tropical storm</i> expected to affect a coastal or inland zone within 36 hours   |
| HURRICANE WARNING            | Sustained winds $\geq 74$ mph ( $\geq 64$ kts) (no gust criteria) <i>associated with a hurricane</i> expected to affect a coastal or inland zone within 36 hours   |
| EXTREME WIND WARNING         | Short-fused warning for onset of extreme winds, defined as sustained at 111+ mph (equivalent to a Category 3+ hurricane). This is typically used for the approach of the eyewall of a major landfalling hurricane.   |
| SMALL CRAFT ADVISORY         | Sustained winds or frequent gusts 25-33 kts ( $> 2$ hrs) AND/OR Seas $\geq 5$ feet within 24 hours (marine only)   |
| GALE WARNING                 | Sustained winds or frequent gusts 34-47 kts ( $> 2$ hrs) within 24 hrs <i>from a non-tropical system</i> (marine only)   |
| STORM WARNING                | Sustained winds or frequent gusts 48-63 kts ( $> 2$ hrs) within 24 hours <i>from a non-tropical system</i> (marine only)   |
| HURRICANE FORCE WIND WARNING | Sustained winds or frequent gusts $\geq 64$ kts ( $> 2$ hrs) within 24 hours <i>from a non-tropical system</i> (marine only)   |
| SPECIAL MARINE WARNING       | Brief/sudden occurrence of sustained wind or frequent gusts $\geq 34$ kts, usually associated with thunderstorms, AND/OR hail $\geq \frac{3}{4}$ " in diameter; also issued for waterspouts  |
| SEVERE THUNDERSTORM WARNING  | Thunderstorms with wind gusts $\geq 58$ mph ( $\geq 50$ kts) AND/OR hail $\geq 1$ " (quarter size) in diameter   |
| TORNADO WARNING              | Likelihood of a tornado within the given area based on radar or actual sighting; usually accompanied by conditions indicated above for "Severe Thunderstorm Warning"   |

FLOOD ADVISORY

Expected inundation by water of some low lying and poor drainage areas, resulting in a nuisance to the public but not a threat to life and property.

FLASH FLOOD WARNING



Rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within a short timeframe from the onset of heavy rain. A dam or levee failure, or water released from an ice jam is also considered.

FLOOD WARNING

Expected overflow or inundation by water which causes or will cause damage and/or a threat to life.

RIVER FLOOD WARNING

Water level at a River Forecast point along a main stem river (such as the Merrimack, Nashua or Charles) is expected to reach or exceed flood stage.

COASTAL FLOOD ADVISORY

Minor coastal flooding expected. Examples include: splashover that causes a few roads to be briefly impassable, standing water in parking lots, etc.

COASTAL FLOOD WARNING

Widespread serious (moderate or major) coastal flooding is expected to damage property AND/OR pose a threat to life.

EXCESSIVE HEAT WARNING

Daytime heat indices of  $\geq 105^{\circ}\text{F}$  for 2 or more hours

HEAT ADVISORY

Daytime heat indices of  $100^{\circ}\text{F}$ - $104^{\circ}\text{F}$  for 2 or more hours

HEAT WAVE

Issued for non-criteria warning/advisory heat. A heat wave is defined as 3 or more days of  $\geq 90^{\circ}\text{F}$  temperatures.

DENSE FOG ADVISORY

Widespread visibility  $\leq 1/4$  mile for at least 3 hours

FREEZING FOG ADVISORY

Very light ice accumulation from predominantly fog at or below freezing temperatures

FROST ADVISORY

Issued under clear, light wind conditions with forecast minimum shelter temperature  $33$ - $36^{\circ}\text{F}$  during growing season

FREEZE WARNING

When minimum shelter temperature drops to  $< 32^{\circ}\text{F}$  during growing season

HIGH SURF ADVISORY

When high surf poses a danger to life in the form of rip currents or breaking seas. Generally issued when 7+ foot incoming seas reported at the buoys from Memorial Day through September.

## RED FLAG WARNING

High degree of confidence that dry fuels and weather conditions support extreme fire danger within 24 hours using the following criteria as a guide:

- Winds sustained or with frequent gusts  $\geq 25$  mph
- Relative Humidity at or below 30% anytime during the day
- Rainfall amounts for the previous 5 days less than 0.25 inches (except 3 days in pre-greenup)
- Lightning after an extended dry period
- Significant dry frontal passage
- Dry thunderstorms
- Keetch-Byram Drought Index values of 300 or greater (summer only)