

## REFERENCE SHEET FOR WARNING/ADVISORY THRESHOLDS

Last Updated: December 7, 2006

The following are National Weather Service criteria for issuing **Advisories** and **Warnings** for various weather events. **Watches** generally are issued with longer lead times in expectation of meeting **Warning** criteria.

<u>TYPE OF ISSUANCE</u>	<u>WHEN ISSUED FOR SOUTHERN NEW ENGLAND</u>
<b>WINTER WEATHER ADVISORY</b>	<p><b>When any of the following is expected within the next 12 to 24 hours:</b></p> <p><b>Blowing Snow Advisory...</b></p> <ul style="list-style-type: none"><li>• Widespread or localized blowing snow reducing visibility to <math>\leq \frac{1}{4}</math> mi with winds <math>&lt; 35</math> mph</li></ul> <p><b>Freezing Rain Advisory...</b></p> <ul style="list-style-type: none"><li>• Any accretion of freezing rain or freezing drizzle on road surfaces</li></ul> <p><b>Ocean Effect Snow Advisory...</b></p> <ul style="list-style-type: none"><li>• 3 inches averaged over a forecast zone in 12 hours</li></ul> <p><b>Snow Advisory or Sleet Advisory...</b></p> <ul style="list-style-type: none"><li>• 3 inches averaged over a CT, MA, RI forecast zone in 12 hours</li><li>• 4 inches averaged over a NH forecast zone in 12 hours</li></ul> <p><b>Snow and Blowing Snow Advisory...</b></p> <ul style="list-style-type: none"><li>• Sustained or frequent gusts of 25 to 34 mph accompanied by falling and blowing snow occasionally reducing visibility to <math>\leq \frac{1}{4}</math> mi for <math>\geq 3</math> hours</li></ul> <p><b>Wind Chill Advisory...</b></p> <ul style="list-style-type: none"><li>• Wind chill index between <math>-15^{\circ}\text{F}</math> and <math>-24^{\circ}\text{F}</math> for at least 3 hours using only the sustained wind (except <math>-20^{\circ}\text{F}</math> to <math>-29^{\circ}\text{F}</math> southern NH)</li></ul> <p><b>Winter Weather Advisory...</b></p> <ul style="list-style-type: none"><li>• Winter weather event having more than one predominant hazard (ie., snow and ice, snow and sleet, or snow, ice &amp; sleet) meeting or exceeding advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.</li></ul>
<b>WINTER STORM WARNING</b>	<p><b>When any of the following is expected within the next 12 to 36 hour:</b></p> <p><b>Blizzard Warning...</b></p> <ul style="list-style-type: none"><li>• Sustained winds or frequent gusts <math>\geq 35</math> mph AND considerable falling and/or blowing snow frequently reducing visibility <math>&lt; \frac{1}{4}</math> for <math>\geq 3</math> hours (Blizzard conditions need to be the <b>predominant condition over a 3 hour period</b>)</li></ul> <p><b>Heavy Snow Warning or Sleet Warning...</b></p> <ul style="list-style-type: none"><li>• 6 inches averaged over a forecast zone in a 12 hour period</li><li>• 8 inches averaged over a CT, MA, RI forecast zone in a 24 hour period</li><li>• 9 inches averaged over a NH forecast zone in a 24 hour period</li></ul> <p><b>Ice Storm Warning...</b></p> <ul style="list-style-type: none"><li>• <math>\frac{1}{2}</math> inch or greater accretion of freezing rain in any zone</li></ul> <p><b>Ocean Effect Snow Warning...</b></p> <ul style="list-style-type: none"><li>• 6 inches averaged over a forecast zone in a 12 hour period</li><li>• 8 inches averaged over a MA or RI forecast zone in a 24 hour period</li></ul> <p><b>Wind Chill Warning...</b></p> <ul style="list-style-type: none"><li>• Wind chill index <math>\leq -25^{\circ}\text{F}</math> for at least 3 hours using only sustained wind (except <math>\leq -30^{\circ}\text{F}</math> southern NH)</li></ul> <p><b>Winter Storm Warning...</b></p> <ul style="list-style-type: none"><li>• 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.</li></ul>
<b>WIND ADVISORY</b>	Sustained winds 31-39 mph (27-34 kts) for at least 1 hour; OR any gusts to 46-57 mph (40-49 kts)

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<b>HIGH WIND WARNING</b>	Sustained winds 40-73 mph ( $\geq 35$ kts) for at least 1 hour; OR any gusts $\geq 58$ mph ( $\geq 50$ kts)
<b>SMALL CRAFT ADVISORY</b>	Sustained winds 25-33 kts AND/OR Seas $\geq 5$ feet within 24 hours
<b>GALE WARNING</b>	Sustained winds 34-47 kts within 24 hrs from a non-tropical system
<b>STORM WARNING</b>	Sustained winds $\geq 48$ kts within 24 hours from a non tropical system
<b>TROPICAL STORM WARNING</b>	Sustained winds $\geq 39$ mph but $< 74$ mph (34-63 kts) within 24 hours
<b>INLAND TROPICAL STORM WARNING</b>	Sustained winds $\geq 39$ mph but $< 74$ mph within 24 hours
<b>HURRICANE WARNING</b>	Sustained winds $\geq 74$ mph (64 kts) within 24 hours
<b>INLAND HURRICANE WARNING</b>	Sustained winds $\geq 74$ mph (no gust criteria) within 24 hours
<b>SPECIAL MARINE WARNING</b>	Brief/sudden occurrence of sustained wind or frequent gusts $\geq 34$ knots, usually associated with thunderstorms; also issued for waterspouts
<b>SEVERE THUNDERSTORM WARNING</b>	Thunderstorms with wind gusts $\geq 58$ mph (50 kts) AND/OR hail $\geq 3/4$ " in diameter
<b>TORNADO WARNING</b>	Likelihood of a tornado within the given area based on radar or actual sighting; usually accompanied by conditions indicated above for "Severe Thunderstorm Warning"
<b>FLOOD ADVISORY</b>	Expected inundation of some low lying and poor drainage areas, resulting in a nuisance to the public but not a threat to life and property.
<b>FLASH FLOOD WARNING</b>	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
<b>FLOOD WARNING</b>	Expected overflow or inundation by water which causes or will cause damage and/or a threat to life
<b>RIVER FLOOD WARNING</b>	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
<b>COASTAL FLOOD WARNING</b>	Coastal flooding expected within 12 hours; widespread serious coastal flooding which damages property AND/OR is a threat to life
<b>EXCESSIVE HEAT WARNING</b>	Daytime heat indices of $\geq 105^{\circ}\text{F}$ for 2 or more hours
<b>HEAT ADVISORY</b>	Daytime heat indices of $100^{\circ}\text{F}$ - $104^{\circ}\text{F}$ for 2 or more hours
<b>HEAT WAVE</b>	Issued for non-criteria warning/advisory heat. A heat wave is defined as 3 or more days of $\geq 90^{\circ}\text{F}$ temperatures.
<b>DENSE FOG ADVISORY</b>	Widespread visibility $\leq 1/4$ mile for at least 3 hours
<b>FREEZING FOG ADVISORY</b>	Very light ice accumulation from predominantly FZFG
<b>FROST ADVISORY</b>	Issued under clear, light wind conditions with forecast minimum shelter temperature $33$ - $36^{\circ}\text{F}$ during growing season
<b>FREEZE WARNING</b>	When minimum shelter temperature drops to $< 32^{\circ}\text{F}$ during growing season
<b>HIGH SURF ADVISORY</b>	When high surf poses a danger to life in the form RIP currents or breaking seas
<b>RED FLAG WARNING</b>	High degree of confidence that dry fuels and weather conditions support

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extremefire 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)