

Product Description

Outlooks

An Outlook is used to indicate that hazardous winter weather may develop. It is intended to provide information to those who need considerable lead time to prepare for the event. A Winter Storm Outlook is needed when there is **30% confidence** that a hazardous winter weather event could threaten life or property. This typically pertains to the day 3 through day 7 period - when confidence in a warning event is usually quite low. Outlooks will normally be very broad- often encompassing the entire forecast area unless there is very good reason to exclude any sections. The Winter Storm Outlook information is disseminated through the **Hazardous Weather Outlook (CAEHWOGSP)**.

Watches

WFO GSP will issue winter weather Watches when conditions are favorable for a hazardous winter weather event to develop over part, or all, of the forecast area, but the occurrence is uncertain.

This **50% confidence** threshold is typically first met within 48 hours of an approaching winter storm. Winter Weather Watches are, thus, usually issued for events falling in periods 2 through 4 of the current forecast cycle. Watches should usually encompass areas slightly larger than the main winter event threat locations in order to allow for some uncertainty with the forecast. Watches should also be issued as soon as confidence thresholds are met, and coordination allows, in order to achieve the longest lead time possible.

WFO GSP will use CAEWSWGSP to issue the following types of Watch products:

Winter Storm Watch - Conditions are favorable for either heavy snow, heavy sleet, damaging ice accumulations, or a combination of these factors, to develop within the next 48 hours. For the GSP CWFA, heavy snow is defined as 3 inches accumulating across the foothills and piedmont and 4 inches across the NC mountains in a 12-hour period, or 4 inches across the foothills and piedmont and 5 inches across the NC mountains in a 24-hour period. Damaging ice accumulations typically result from freezing rain accumulating 1/4 inch or more on exposed surface. It has been locally determined that 1/2 inch of sleet is considered "heavy" for Watch and Warning purposes.

Wind Chill Watch - Conditions are favorable for wind chill temperatures to fall to 20 below zero in the mountains, or 15 below zero in the foothills and piedmont, within the next 48 hours.

Blizzard Watch - Conditions are favorable for a blizzard to develop within the next 48 hours. A blizzard is falling or blowing snow accompanied by frequent wind gusts to 35 mph or greater, with visibility less than 1/4 mile for three hours or more.

Watches should be updated at least every 12 hours until a Warning or Advisory is issued, or the Watch is cancelled.

Warnings

WFO GSP will issue winter weather Warnings when there is an **80% or greater chance** of a hazardous winter weather event meeting or exceeding local Warning criteria

WFO GSP will use CAEWSWGSP to issue the following types of Warning products:

Blizzard Warning - Sustained wind or frequent gusts greater than or equal to 35 mph accompanied by falling and/or blowing snow, frequently reducing visibility to less than 1/4 mile for three hours or more.

Ice Storm Warning - Ice accumulation of 1/4 inch or more.

Winter Storm Warning - Heavy winter weather event producing either:

a. Heavy snow accumulating 3 inches across the foothills and piedmont and 4 inches across the NC mountains in a 12-hour period, or 4 inches across the foothills and piedmont or 5 inches across the NC mountains in a 24-hour period. Warnings are based on the average value (rounded up to

the nearest inch) of the forecast snowfall range.

b. Heavy sleet accumulating $\frac{1}{2}$ inch or more.

c. A heavy mixed precipitation event in which snow, sleet, and/or ice reach Warning criteria, or an event containing both winter weather and wind hazards in which weather or wind Warning criteria are met.

Wind Chill Warning - Wind chill temperatures reaching or exceeding minus 20 in the mountains, or minus 15 outside of the mountains.

WFO GSP can also issue Winter Warning products for events where objective Warning criteria are not met if a significant public impact is expected, e.g. early season or holiday travel snow or ice storms. Winter Weather Warnings must be updated at least once every 6 to 8 hours until the event ends, or the Warning is cancelled.

Advisories

WFO GSP will issue Winter Weather Advisories to provide advance notice of hazardous winter weather which could lead to life-threatening situations if caution is not exercised.

WFO GSP will use CAEWSWGSP to issue the following types of Advisory products:

Freezing Rain Advisory - Light ice accumulations (from freezing rain or freezing drizzle) totaling from a trace to less than $\frac{1}{4}$ of an inch. In practice, a Freezing Rain Advisory should be issued anytime freezing rain is occurring, or there is high confidence it will occur, and any glazing of sidewalks, roadways, or bridges is expected.

Winter Weather Advisory - Hazardous winter weather event producing either:

a. Light snow accumulations of at least one inch, but less than Warning criteria. Since snowfall amounts of $\frac{1}{2}$ inch are rounded to an inch for reporting purposes, snow advisories are appropriate for expected amounts of $\frac{1}{2}$ inch or greater across the foothills and piedmont and 2 inches across the mountains. Advisories can also be issued for "impact events" where a dusting of snow on very cold road surfaces can lead to numerous accidents.

b. Light sleet accumulations of less than $\frac{1}{2}$ inch.

c. Widespread or localized blowing snow reducing visibilities to $\frac{1}{4}$ mile or less with winds less than 35 mph.

d. Light snow and blowing snow where sustained winds, or frequent gusts, of 25 to 34 mph are accompanied by falling and blowing snow, occasionally reducing visibility to $\frac{1}{4}$ mile or less for three hours or more.

e. Winter weather events with multiple precipitation types in which at least one precipitation element meets or exceeds Advisory criteria. Or, a winter weather event Advisory-level event plus Advisory criteria wind speeds.

Wind Chill Advisory - Wind chill temperatures reaching or exceeding minus 5 in the mountains, or zero outside of the mountains.

WFO GSP will use CAENPWGSP to issue the following type of Advisory product:

Freezing Fog Advisory - Issued for fog that freezes upon contact with exposed objects to form a coating of rime and/or glaze.

Advisories should be updated at least once every 6 to 8 hours until the event ends, or is cancelled.

Special Weather Statements

When short-fuse weather conditions require wider dissemination and more immediate attention, a **Special Weather Statement** (CAESPSGSP) can be issued. For example, this might be useful when mesoscale bands with intense snowfall rates are expected to set up over a certain location.

Public Information Statements

The **Public Information Statement** (CAEPNSGSP) is the primary public product used to summarize the latest winter precipitation, high wind, or wind chill observations for the public and the media.