## The Weather Whisper

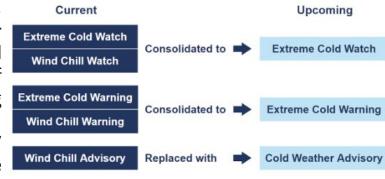
## WHAT'S INSIDE?

- Winter 2024-25 Outlook
- Spotter Feature Measuring Snow

# Changes to NWS Cold Weather Products

The National Weather Service has simplified its suite of cold weather products to improve messaging and decision-making services. As of October 1, 2024, the following changes have taken effect:

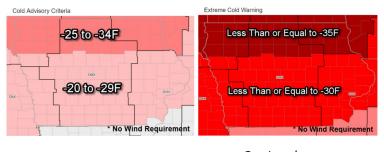
- Wind Chill Watch/Warning/ Advisories are now Extreme Cold Watch/Warning or Cold Weather Advisories.
  - Note, wind chills will not go away, but emphasis will be placed on "cold is cold" for public safety.
- Criteria Change for counties north of (but not including)
   Highway 20 (see map on right).
  - Cold Weather Advisory -Feels Like Temperature of -25°F to -34°F. No wind requirement.



**Above:** Changes to cold weather headlines as of Oct 1, 2024. **Below:** Criteria change for Cold Weather Advisory and Extreme Cold Watch/Warning for areas north of Highway 20. (Click on images to view larger.)

#### **Hazard Simplification Overview**

On or about October 1, 2024, the NWS is simplifying its suite of cold weather products to improve messaging of these hazards and provide better decision support services



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- Extreme Cold Watch/Warning Feels Like Temperature of -35°F or colder. No wind requirement. (Counties north of Highway 20).
- The criteria for counties including and south of Highway 20 remains the same (Feels Like Temperature/Apparent Temperature of -30°F or colder for Extreme Cold Watch/Warning and -20°F to -29°F for a Cold Weather Advisory).
- New Cold Weather Products will be issued within the Non-Precipitation product (NPW) and no longer the Winter Storm product (WSW).

#### Why this may be important to you?

• Some entities (school districts) may use wind chill criteria and/or headlines for closure decisions. Any entity that has decisions based on wind chills only will want to review/update plans to account for the NWS product changes.

#### Motivations for changes:

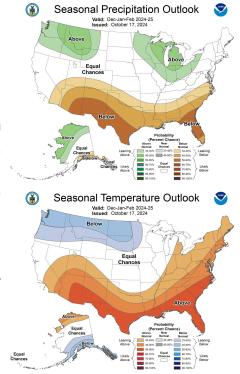
- New suite of cold weather products will allow the NWS to communicate cold is dangerous, with or without wind.
- Simplify messaging.
- Develop **new**, **consistent guidance** based on *climatology* **and** adjusted for *impacts*.

Read more about the changes <u>here</u>.

### Winter 2024-25 Outlook

Brooke Hagenhoff, Lead Meteorologist

In mid-October our colleagues at the Climate Prediction Center (where they specialize in long range, seasonal forecasts) released the <u>US winter outlook</u>. Developing La Niña conditions are expected through the winter. What does that mean for lowa? The influence of La Niña is most impactful in northern and southern states and along the east coast. Towards the central US, La Niña has less of a signal making it difficult to draw conclusions about what to expect this year. What we DO know is that recent La Niña patterns have generally favored a warmer start to the winter season for our area, followed by colder and snowier conditions over the second half of winter with a later onset of spring.

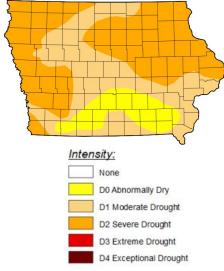


**Top Right:** Precipitation outlook for Winter 2024-25. **Bottom Right:** Temperature outlook for Winter 2024-25. Click on images to view larger.

### Worsening Drought

Ashley Bury, Meteorologist

Unfortunately, minimal rainfall across Iowa since the start of the fall season has led to a significant change in drought conditions. Compared to the drought condition map on September 24th, 2024 (as seen in October's newsletter), the latest map from October 29th depicts a large jump in Moderate Drought, covering about 88% of the state. Severe Drought conditions have also been introduced over about 50% of the state since September, particularly covering portions of western and northern Iowa. The November Precipitation Outlook per the Climate Prediction Center indicates equal chances for above or below rainfall over Iowa, which unfortunately does not look favorable for improving conditions anytime soon.



lowa drought conditions as of 10/31/24 Note, data cutoff was Tues 10/29, so 10/30 rain not included...

# Spotter Feature of the Month: Measuring Snow

The spotter feature of the month series exists to highlight one or more phenomena each month to educate our spotters and Weather Ready Nation Ambassadors on various weather they may see and can <u>report to their local NWS</u>!

#### **Measuring Snow**

While it has been a warm fall, winter is on the way and that means it's time to review how to measure snow! Winter Weather Awareness Day for Iowa is coming up on November 7th. Here are a few tips to measure snow accurately:



- 1. Measure on a flat, solid surface. Light colored is best to reduce melting.
- Find an open area away from trees or buildings but sheltered from wind/drifting.
- 3. Measure in multiple locations to find an average.
- 4. Send us your report!

On the Cover:

The aurora viewed from NWS Des Moines on October 10, 2024. A <u>G4 level geomagnetic storm</u> impacted the planet and resulted in the aurora being visible across much of the northern and central US, with some sightings into southern states!

