



# NWS Hazard Simplification (Haz Simp) Project Update

May 2023



# Consolidation and Reformatting Overview

## Product Consolidation

### Winter

- Three Winter Weather Advisories to one
- Three Winter Storm Watches to one

### Marine

- Four Small Craft Advisories to one

### Flood

- Five Flood Advisories to one
- In most cases, Flash Flood Watch and Flood Watch consolidated to Flood Watch

### Non-Precipitation

- Wind Chill product suite consolidated with Extreme Cold product suite
- Excessive Heat Watch and Warning rename to “Extreme” Heat
- Hard Freeze Watch and Warning removed

## Product Reformatting

“What, Where, When, Impacts” (3W)

### Winter Storm Watch

**WHAT**...Blizzard conditions possible. Winds gusting to 50 to 60 mph could cause whiteout conditions.

**WHERE**...Plymouth County

**WHEN**...Until 8 PM EDT this evening.

**IMPACTS**...Travel could be dangerous. Wet snow and strong winds could result in power outages and tree damage.

### Impact-Based Warnings (IBW)

### Flash Flood Warning

**HAZARD**...Heavy rain producing flash flooding.

**SOURCE**...County officials and radar estimates.

**IMPACT**...The Howard 911 Center reported flooding on Main Street in Ellicott City. Please seek higher ground immediately.

FLASH FLOOD...RADAR INDICATED

FLASH FLOOD DAMAGE THREAT...CONSIDERABLE

**Damage threat tags with WEA trigger for highest levels**





"How far in advance can I issue this?"

**WATCH**

"Watch out!"

**"WA-WA!"**

**WARNING**

"Which is worse?"

"Is this a downgrade?"

**ADVISORY**

"You're advising me to do - what?"

**Social science says...**  
Advisory term confusing

**Examples:**

**SNOW:** Hazardous travel in snow and blowing snow from 9AM to 8PM

**HEAT:** Heat index values up to 100F until 4PM

## NWS Leadership Decisions

**November 2020:** Replace Advisory & SPS with **plain language headlines**

**November 2021:** Lead new headlines with **HAZARD IN ALL CAPS**

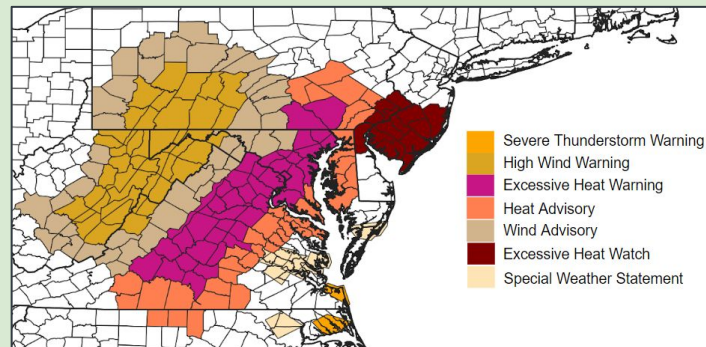


**"Advisory" is everywhere!**

Conveying plain language in our displays without introducing a third term

### Hazardous Weather Conditions

- [Hazardous Weather Outlook](#)
- [Heat Advisory in effect from July 28 12:00 PM EDT until July 28 08:00 PM EDT](#)



# Plain Language - Example Headlines

**SNOW:** Hazardous travel in snow and blowing snow from 9AM to 8PM



**HEAT:** Heat index values up to 100F until 4PM



**HIGH SURF:** Unusually high surf from 6AM to 12PM



**FLOOD:** Ponding of water in low-lying and poor drainage areas from 3PM to 8PM

**STRONG THUNDERSTORM:** Gusty winds and hail will impact XX county through 2PM



**FIRE WEATHER CONDITIONS:** Gusty winds will cause fires that are difficult to control from TIME 1 to TIME 2



**BLOWING SNOW, ICE, WINTRY MIX, FREEZING FOG, COLD, FROST, POOR VISIBILITY, DUST, BLOWING DUST, ASHFALL, WIND, LAKE WIND, FREEZING SPRAY, HIGH WATER, LOW WATER**



## Winter Weather Advisory transition

To....

## Plain Language

/O.NEW.KBMX.WW.Y.0001.200208T1000Z-200208T1700Z/  
 Cherokee-  
 Including the city of Centre  
 815 PM CST Fri Feb 7 2020

...WINTER WEATHER ADVISORY IN EFFECT FROM 4 AM TO 11 AM CST SATURDAY...

- \* WHAT...Total snow accumulations of up to one inch.
- \* WHERE...Northern Cherokee County.
- \* WHEN...From 4 AM to 11 AM CST Saturday.
- \* IMPACTS...Plan on slippery road conditions.

/O.NEW.KBMX.WW.S.0001.200208T1000Z-200208T1700Z/  
 Cherokee-  
 Including the city of Centre  
 815 PM CST Fri Feb 7 2020

...SNOW: Hazardous travel from 4 AM to 11 AM CST Saturday...

- \* WHAT...Total snow accumulations of up to one inch.
- \* WHERE...Northern Cherokee County.
- \* WHEN...From 4 AM to 11 AM CST Saturday.
- \* IMPACTS...Plan on slippery road conditions.

VTEC

Plain language headline

Bullet format

## Special Weather Statement (SPS) transition

To...

## Plain Language

North Snowy Range Foothills-  
 Including the cities of Arlington and Elk Mountain  
 1143 PM MDT Mon Sep 23 2019

...Strong westerly winds until this evening...

Strong westerly winds will pick up this morning by 7 AM and continue through the day, finally diminishing by 6 PM. Sustained winds around 30 mph with gusts of 45 to 50 mph are possible.

/O.NEW.KCYS.WI.S.0001.190923T0543Z-190923T0000Z/  
 North Snowy Range Foothills-  
 Including the cities of Arlington and Elk Mountain  
 1143 PM MDT Mon Sep 23 2019

...WIND: Strong westerly winds 7 AM to 6 PM CST Tuesday...

- \* WHAT...Sustained winds of 30 mph with gusts of 45 to 50 mph.
- \* WHERE...North Snowy Range Foothills.
- \* WHEN...Tuesday 7 AM to 6 PM.
- \* IMPACTS...High profile vehicles will be most impacted.

Now with VTEC

Plain language & time stamp

Now with "3W" bullets!



# VTEC/PIL Structure

(Valid Time Event Code/Product Identifier Label)

## Strategy for **Zone-based** Advisories and SPS':

- **Advisory example:** Winter Weather Advisory (WW.Y) transitions to WW.S but remains in the WSW
- **SPS example:** Dense fog SPS becomes FG.S in NPW

## Strategy for **Polygon-based** Advisories and SPS':

Current Product	PIL	VTEC Existing	VTEC New
<i>Winter use of SPS (e.g. heavy band of snow)</i>	SPS	None	WH.S*
<i>Dust Advisory</i>	DSW	DS.Y	DS.S
<i>Flood Advisory (Both Areal &amp; Forecast Points)</i>	FLS	FA.Y & FL.Y	FA.S & FL.S
<i>Severe use of SPS (e.g. thunderstorm)</i>	SPS	None	ST.S*
<i>Marine Weather Statement</i>	MWS	None	MA.S

\* WH and ST phenomenon codes will be introduced

SPS will only be used for VTEC-enabled Strong Thunderstorm and Winter Hazard in IBW format

# Updating Warnings with Warnings

Currently, NWS uses “Statement” products to update/expire/cancel short-fuse warnings.

Haz Simp will include a change to this practice:

- Follow-up information for these warnings will be issued using the same product (within the same PIL) as the initial warning.
- Use of the following Statements *as update tools* will be discontinued:
  - **Severe Weather Statement (SVS)** - updates Tornado Warning, Severe Thunderstorm Warning, and Extreme Wind Warning
  - **Flood Statement (FLS)** - updates the Flood Warning
  - **Flash Flood Statement (FFS)** - updates the Flash Flood Warning
  - **Marine Weather Statement (MWS)** - updates the Special Marine Warning

**Example:** A Tornado Warning follow-up will be issued as a TOR, not an SVS.

**NOTE:** This change will NOT impact the way Warnings and their updates go out on EAS and WEA.

# Initial Warning

# Updating Warnings Example

WUUS52 KCHS 171822  
**SVRCHS**  
GAC267-171915-  
/O.NEW.KCHS.SV.W.0110.191217T1822Z-191217T1915Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
Severe Thunderstorm Warning  
National Weather Service Charleston SC  
122 PM EST Tue Dec 17 2019

The National Weather Service in Charleston has issued a

\* Severe Thunderstorm Warning for portions of...  
Tattnall County in southeastern Georgia...

## Current: Warning update

WUUS52 KCHS 171845  
**SVSCHS**

**Severe Weather Statement**  
National Weather Service Charleston SC  
145 PM EST Tue Dec 17 2019

GAC267-171915-  
/O.CON.KCHS.SV.W.0110.000000T0000Z-191217T1915Z/  
Tattnall GA-  
145 PM EST Tue Dec 17 2019

...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT UNTIL 215 PM EST  
FOR TATTNALL COUNTY...

At 144 PM EST, a severe thunderstorm was located over Mendes, moving  
northeast at 40 mph.

## Future: Warning update

WUUS52 KCHS 171845  
**SVRCHS**

**Severe Thunderstorm Warning**  
National Weather Service Charleston SC  
145 PM EST Tue Dec 17 2019

GAC267-171915-  
/O.CON.KCHS.SV.W.0110.000000T0000Z-191217T1915Z/  
Tattnall GA-  
145 PM EST Tue Dec 17 2019

...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT UNTIL 215 PM EST FOR  
TATTNALL COUNTY...

At 144 PM EST, a severe thunderstorm was located over Mendes, moving  
northeast at 40 mph.







# The Path Forward Towards Implementation



**We are here**



**2022**

**2023**

**2024**

**2025+**

***DRAFT Technical, Dissemination, and Display specifications***

***Partner Engagement, Public Survey & FINAL specifications***

***Planning for outreach and training***

***Development and implementation***

**2021 Decision:** Replace "Advisory" with plain language headlines

**Submit internal specifications**

**Note: Above timeline is according to calendar year**

