National Weather Service Update

2021 KEMA Conference



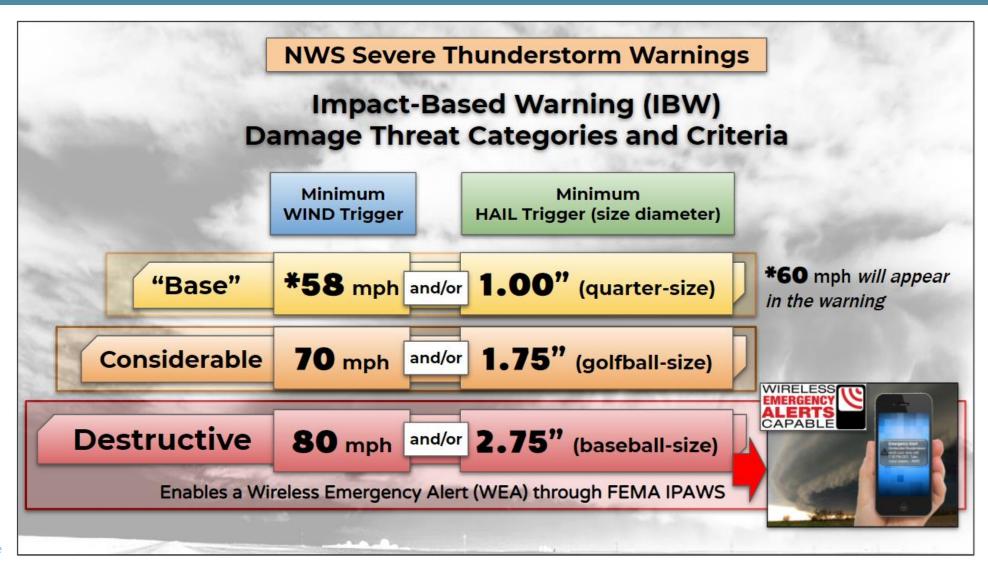
Information and Discussion about Recent and Future NWS Topics of Interest



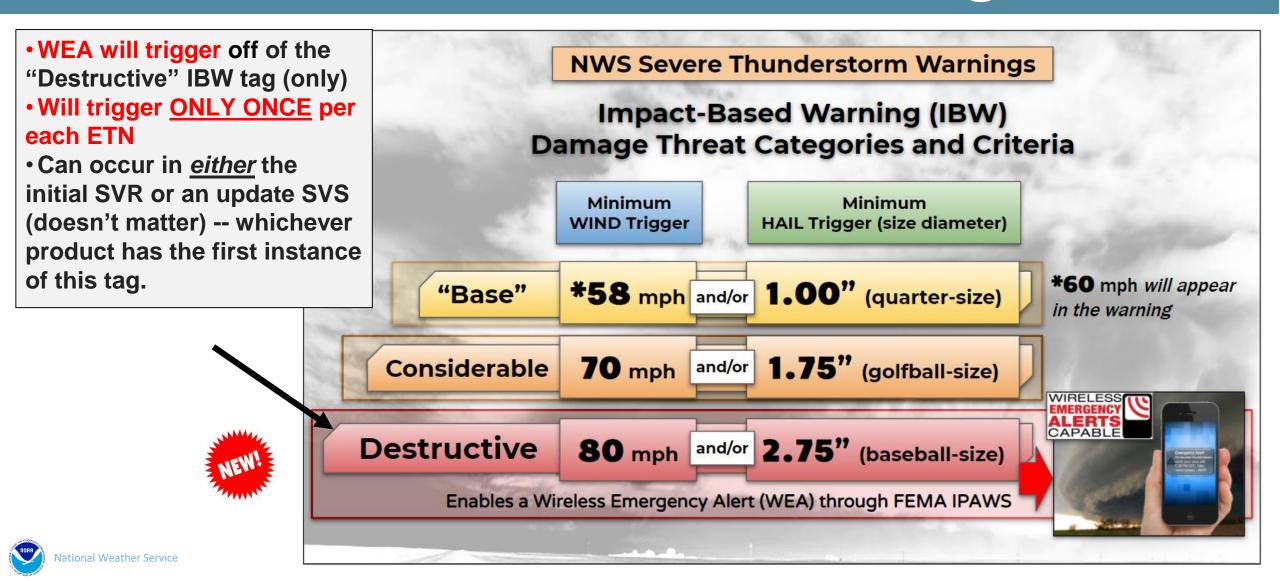
Destructive T-Storm Tags

Getting the Word Out When it Matters









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BULLETIN - IMMEDIATE BROADCAST REQUESTED
Severe Thunderstorm Warning
National Weather Service Hastings NE
956 PM CDT Fri Jul 9 2021
The National Weather Service in Hastings has issued a
* Severe Thunderstorm Warning for...
 Northern Franklin County in south central Nebraska...
 Northwestern Webster County in south central Nebraska...
 Southwestern Adams County in south central Nebraska...
 Southern Kearney County in south central Nebraska...
* Until 1045 PM CDT.
* At 956 PM CDT, a severe thunderstorm was located over Hildreth, or
 16 miles southeast of Holdrege, moving east at 30 mph.
 HAZARD...60 mph wind gusts and half dollar size hail.
 SOURCE...Radar indicated.
 IMPACT...Hail damage to vehicles is expected. Expect wind damage
           to roofs, siding, and trees.
* This severe thunderstorm will be near...
 Hildreth around 1000 PM CDT.
 Upland around 1015 PM CDT.
Other locations in the path of this severe thunderstorm include
Campbell and Bladen.
PRECAUTIONARY/PREPAREDNESS ACTIONS...
For your protection move to an interior room on the lowest floor of a
building.
LAT...LON 4037 9916 4044 9851 4011 9860 4023 9918
TIME...MOT...LOC 0256Z 273DEG 28KT 4034 9910
HAIL...1.25IN
```

- Where are the tags in the 1st place?
 - Severe Weather Warnings
 - Tornado Warnings
 - Flash Flood Warnings
 - Special Weather Statements

```
LAT...LON 4037 9916 4044 9851 4011 9860 4023 9918
4027 9918
TIME...MOT...LOC 0256Z 273DEG 28KT 4034 9910

HAIL...1.25IN
WIND...60MPH

Example of a "base tag"
```

WIND...60MPH

NWS Warning Tag

THUNDERSTORM DAMAGE THREAT...DESTRUCTIVE

HAIL THREAT...RADAR INDICATED

MAX HAIL SIZE...3.00 IN

WIND THREAT...OBSERVED

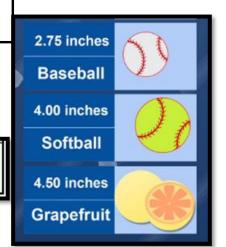
MAX WIND GUST...80 MPH

Remember: Wind Speed and Hail Size

Hurricane Force over 75 mph Severe and extensive damage. Roofs can be peeled off. Windows broken. Trees uprooted. RVs and small mobile homes overturned. Moving automobiles can be pushed off the roadways. Corn down.

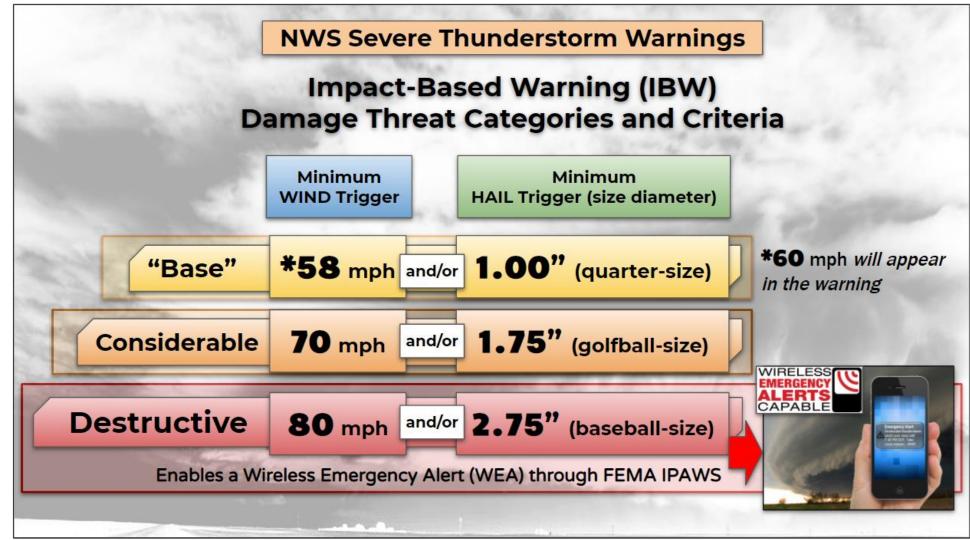
National Weather Service

becomes



Your Phone









WEA Product Activation - Reminder

NWS WEA Activation Schedule		
Tornado Warning	New warning Threat is upgraded to catastrophic Any additional updates with catastrophic	
Flash Flood Warning	New warning if threat tag is considerable or catastrophic (most are not) Threat is upgraded to considerable Threat is upgraded to catastrophic	
Severe Thunderstorm Warning	Activate for first occurrence (i.e. new or updated warning) of a <u>destructive threat</u>	
Hurricane/Typhoon Warning	Activate for new warning	
Storm Surge Warning	Activate for new warning	
Extreme Wind Warning	Activate for new warning	
Tsunami Warning	Activate for new warning	
Dust Storm Warning	Activate for new warning.	
Snow Squall Warning	Activate for new warning	



Snow Squalls

A "Flurry" of Flurries



Snow Squall— New/Ongoing

- NWS is seeking input regarding Snow Squalls and WEA
 - NWS proposes adding "TAGS" to characterize snow squall impacts

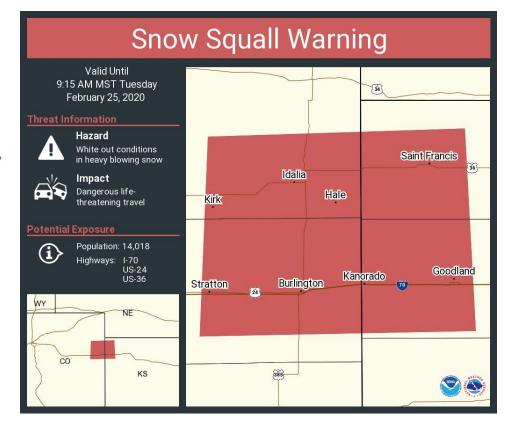
What is a Snow Squall Warning?



Snow Squall— New/Ongoing

- NWS is seeking input regarding Snow Squalls and WEA
 - NWS proposes adding "TAGS" to characterize snow squall impacts
- What is a Snow Squall Warning?
 - 30-60 minute warning polygon
 - Intense, short lived burst of heavy snow
 - Gusty winds Very low visibility







Snow Squall— New/Ongoing

- "General" Tag: Will NOT trigger WEA
 - Used frequently when snow squalls observed/expected but mitigating actions can reduce the threat to safe travel
- "Significant" Tag: WILL Trigger WEA
 - Substantial threat to safe travel, such that WEA is warranted to alert all devices in the path of the squall
 - Same as Flash Flood Warnings

SNOW SQUALL...OBSERVED
SNOW SQUALL IMPACT...SIGNIFICANT

Survey is open until October 15th

https://www.surveymonkey.com/r/PropIBWTagsforSnowSquallWarnings2021



Special Weather Statement

Starting to Make a Comeback



Special Weather Statement Changes - New

- 1. Format change to "Hazard – Source – Impact"
- 1. Generic, editable headline atop all SPSs
- 1. The Significant Weather Advisory is NO LONGER included in the headline (it is "retired")

```
Special Weather Statement
National Weather Service Dodge City KS
709 PM CDT Sat Aug 21 2021
KSZ086-087-220045-
Seward KS-Meade KS-
709 PM CDT Sat Aug 21 2021
... A strong thunderstorm will impact portions of east central Seward
and west central Meade Counties through 745 PM CDT...
At 709 PM CDT, Doppler radar was tracking a strong thunderstorm near
Plains, or near Kismet, moving northeast at 20 mph.
HAZARD...Winds in excess of 40 mph and penny size hail.
SOURCE...Radar indicated.
IMPACT...Gusty winds could knock down tree limbs and blow around
         unsecured objects. Minor damage to outdoor objects is
         possible.
```



Special Weather Statement Changes - New

- Landspout wording will be included in the SPS (if necessary)
 - Additional explanation included as well (not shown)

Two tags added for landspouts

Landspout...Possible Landspout...Observed

Special Weather Statement National Weather Service Green Bay WI 140 AM CDT Mon May 18 2020

WIZ031-037>039-074-180730-Southern Oconto County WI-Waupaca WI-Shawano WI-Outagamie WI-Brown WI-140 AM CDT Mon May 18 2020

...A strong thunderstorm will impact portions of northwestern Brown, east central Waupaca, southern Oconto, northern Outagamie and eastern Shawano Counties through 230 AM CDT...

At 140 AM CDT, Doppler radar was tracking a strong thunderstorm capable of producing a landspout 7 miles north of New London, or 19 miles northeast of Waupaca, moving northeast at 20 mph.

HAZARD...Landspouts, winds in excess of 40 mph, and nickel size hail.

SOURCE... Radar indicated.

IMPACT...Minor damage to outdoor objects is possible. Gusty winds

LANDSPOUT...POSSIBLE
MAX HAIL SIZE...0.88 IN
MAX WIND GUST...40 MPH



Special Weather Statement on Twitter - New



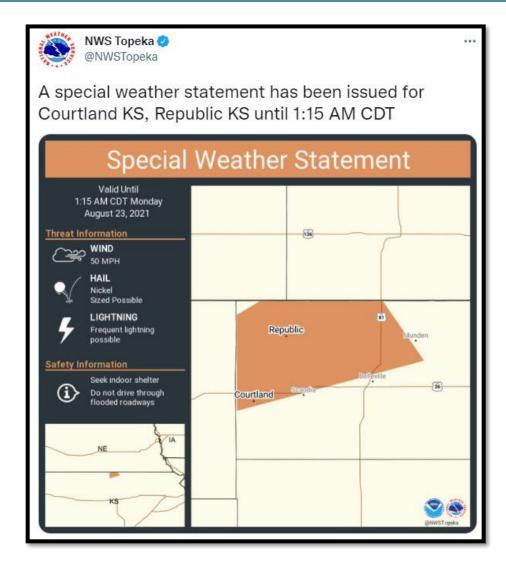
Special Weather Statement "auto-Tweet"

Familiar format

September 22



Thoughts/issues?





Non-Weather Emergency Messages

It's Been 20 Years in the Making



 Approved authorities can tap into NOAA Weather Radio All-Hazards for Non-Weather Emergency Messages (NWEM)



- NOAA Weather Radio All-Hazards Alarm
- Emergency Alert System
- Wireless Emergency Alerts

ADR	Administrative Message
AVA	Avalanche Watch
AVW	Avalanche Warning
BLU	Blue Alert
CAE	Child Abduction Emergency
CDW	Civil Danger Warning
CEM	Civil Emergency Message
EQW	Earthquake Warning
EVI	Evacuation Immediate
FRW	Fire Warning
HMW	Hazardous Materials Warning
LAE	Local Area Emergency
LEW	Law Enforcement Warning
NUW	Nuclear Power Plant Warning
RHW	Radiological Hazard Warning
SPW	Shelter In Place Warning
TOE	Telephone Outage Emergency
VOW	Volcano Warning
DMO	Practice/Demo Warning

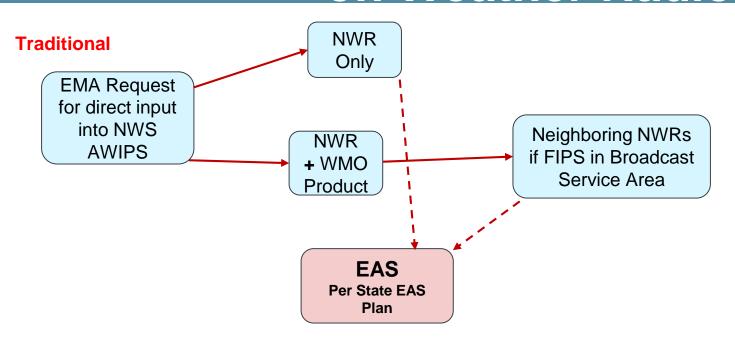


Source: https://www.fema.gov/sites/default/files/documents/fema_aa-complete_06-2021.pdf

- Kansas Approved Alerting Authorities (June 2021)
- Follow the State EAS Plan
 - https://www.kansastag.gov/AdvHTML_doc_upload/State%20Emergency%20Alert%20System %20Plan%202013.pdf
- Configure you software properly
- Coordinate with local NWS office
- You can practice!



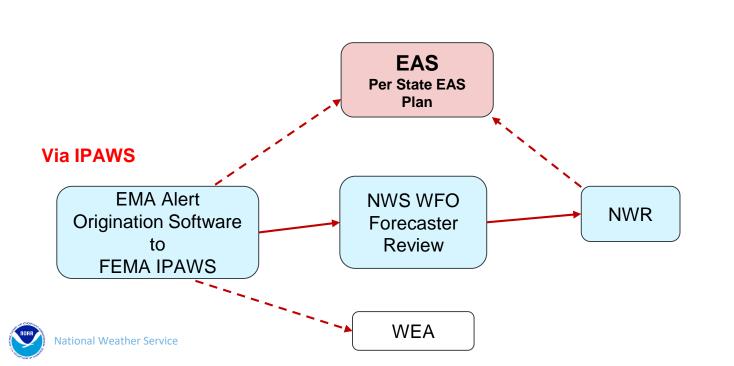
200375	KS Anderson County
201569	KS Baldwin City
200395	KS City of Coffeyville
201924	KS Clark County
200848	KS Coffey County Emergency Management
201183	KS Cowley County Emergency Communications
201942	KS Elk County
201388	KS Ford County Communications
200294	KS Fort Riley
200975	KS Franklin County
200760	KS Graham County Sheriff's Office
201501	KS Greenwood County Emergency Management
202027	KS Harvey County
200919	KS Hutchinson-Reno County Emergency Communications Center
200078	KS Johnson County Kansas Division of Emergency Management
200548	KS Kansas Division of Emergency Management
201145	KS Kingman County Sheriff's Office
201945	KS Labette County Emergency Management
201120	KS Lyon County Emergency Communications Center
201865	KS Neosho County
200353	KS Pottawatomie County Emergency Management
202038	KS Rice County Emergency Management
200840	KS Riley County Emergency Management
200029	KS Sedgwick County Emergency Management
201318	KS Shawnee County Emergency Management
202045	KS Wilson County
200075	KS Wyandotte County Emergency Management Agency





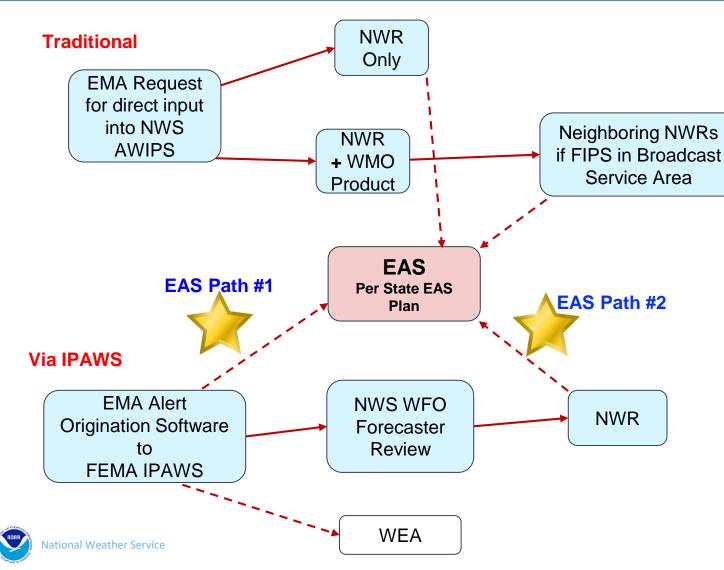
- It is possible to trigger EAS twice!
 - Be aware. Don't let this happen.







- It is possible to trigger EAS twice!
 - Be aware. Don't let this happen.





- It is possible to trigger EAS twice!
 - Be aware. Don't let this happen.

NEC001-110552-

BULLETIN - EAS ACTIVATION REQUESTED CIVIL DANGER WARNING NE ADAMS COUNTY EMERGENCY MANAGEMENT RELAYED BY NATIONAL WEATHER SERVICE HASTINGS NE 1152 PM CDT TUE AUG 10 2021

...ACTIVE SHOOTER IN PROGRESS...

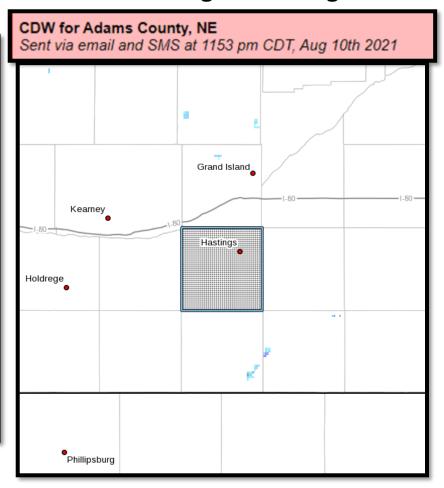
THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF ADAMS COUNTY EMERGENCY MANAGEMENT.

THERE IS AN ACTIVE SHOOTER CURRENTLY IN JUNIATA NE AROUND THE N. BRASS AREA. SHELTER IN PLACE IMMEDIATELY

SHELTER IN PLACE IMMEDIATELY AND LOCK ALL WINDOWS AND DOORS. THIS

IS FOR THE JUNIATA AREA AND 2 MILES EAST OF JUNIATA NEBRASKA

Civil Danger Warning







NEC001-110929-

BULLETIN - EAS ACTIVATION REQUESTED CIVIL EMERGENCY MESSAGE NE ADAMS COUNTY EMERGENCY MANAGEMENT RELAYED BY NATIONAL WEATHER SERVICE HASTINGS NE 329 AM CDT WED AUG 11 2021

...SHELTER IN PLACE LIFTED. NO THREAT REMAINS IN THE AREA...

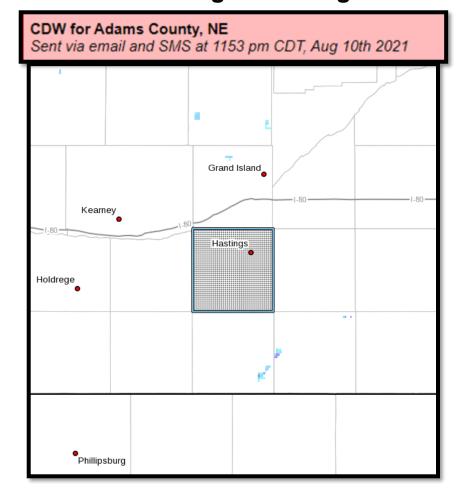
THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF ADAMS COUNTY EMERGENCY MANAGEMENT.

THE ACTIVE SHOOTER SCENE HAS BEEN CLEARED AND NO THREAT TO THE PUBLIC REMAINS. PLEASE STAY AWAY FROM THE AREA AS THE INVESTIGATION CONTINUES.

THERE IS NO LONGER A THREAT TO THE COMMUNITY AND THE SHELTER IN PLACE HAS BEEN LIFTED. PLEASE CONTINUE TO STAY AWAY FROM THE AREA

AS THE INVESTIGATION CONTINUES.

Civil Danger Warning





Simplification Update

NWS is Finally Making the Move



Flood Product Simplification- New

Flood Watch, Flood Watch for

Watch, Flood Warning, Flood Warning for Forecast Points, Flood Advisory,

Flood Advisory for Forecast Points

Forecast Points, Flash Flood

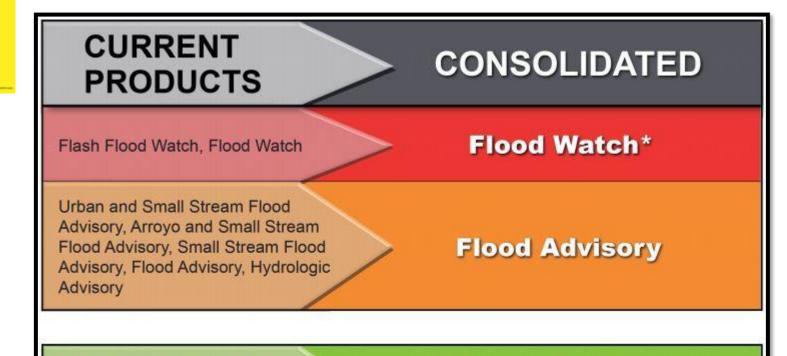
WORK IN PROGRESS

and I amount to the or

Just one "watch"

Just one "advisory"

 Reformat to "What", "Where", "When", and "Impacts"



Reformatted into What,

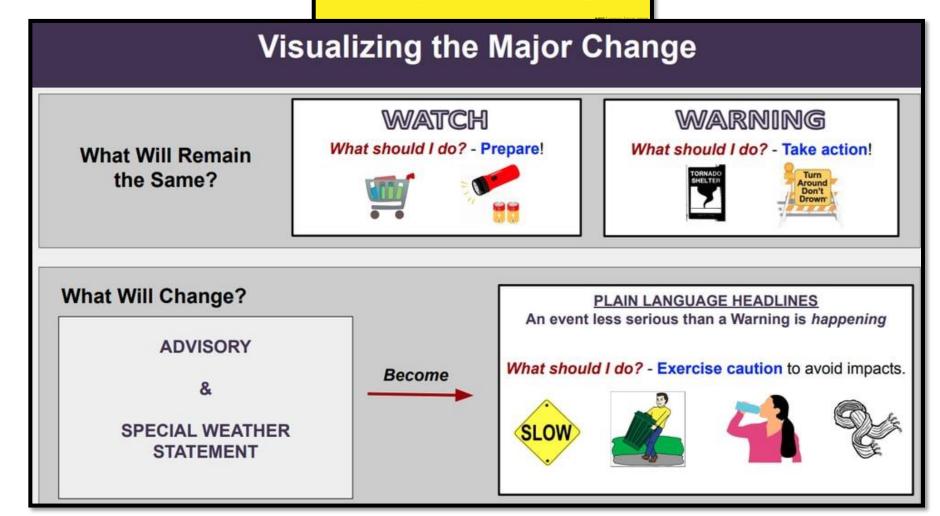
Additional Details

Where, When, Impacts,



More Changes in 2024 – Reminder

WORK IN PROGRESS





More Changes in 2024 – Reminder

Examples using Special Weather Statement and Plain Language Wording

"Wind Advisory in effect"

could become...

"WINDY: Westerly winds today gusting to 40 mph"

"Coastal Flood Advisory in effect"

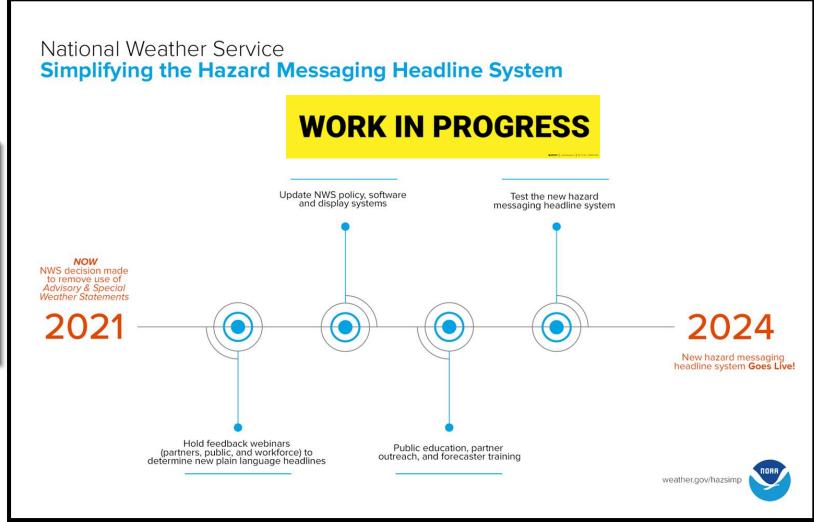
could become...

"CAUTION:Coastal flooding expected today"

"Wind Chill Advisory in effect"

could become...

"VERY COLD TONIGHT: Wind chills between -5F and -10F"





NWSChat Update

We Know it's an Issue...but NWS is Working on it.



NWSChat Changes - New/Ongoing

- BOTTOM LINE: Attempt to make platform more stable until it is replaced
 - Mostly changes to background/operating structure
 - Some MINOR changes to operational interface (NWSChat Live)
- Expected late November 2021



- NWS is testing "Slack" (maybe 2023)
 - Stay tuned





Forecasting the Plume

More Interagency Collaboration is the Forecast



Plume Model – Ongoing

NWS moving to leverage partners

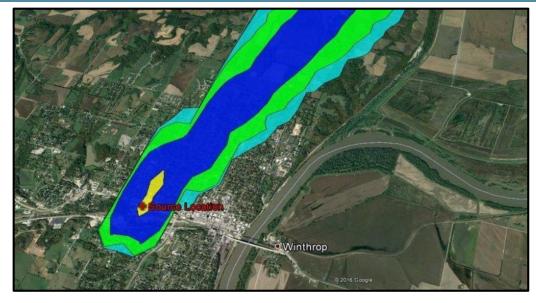
 NWS plumes can be used for general/quick aerosols (smoke) for planning

Need more specifics?

Get KDEM/CAMEO model for expertise

NWS and IMAAC

 Interagency Modeling and Atmospheric Assessment Center



Atchison, KS - October 21, 2016





Weather Support for Events

We Think There are More Events Out There



Event Support – Ongoing

Submit your Fall/Winter Events for Weather Support











Event Support – Ongoing

Event Support Confirmation Email

NWS Forecast Page

Weather Support Requested For

Aksarben Stock Show

Fonner Park

at 700 E Stolley Park Rd, Grand Island, NE 40.9059304282825 -98.3282345974993

Mon Sep 20 2021 06:00:00 GMT-0500 (Central Daylight Time)

untii

Mon Sep 27 2021 20:00:00 GMT-0500 (Central Daylight Time)

IDSS Forecast Point Weather Information

NWS Forecast Page For Your Event

This resource should be referred to for forecast outlook information.

NWS Weather Support Contact Information

For immediate weather concerns or questions, contact the NWS Hastings, NE at 800-528-2914

Prior to your event, please contact the NWS at any time via the phone number above or the contact emails below to discuss event details and the weather information that will be most valuable for public safety including sheltering options and time-to-shelter requirements.

The primary and backup contacts for non-time-sensitive support and pre-event planning are

Michael Moritz - michael.moritz@noaa.gov , Jeremy Wesely - jeremy.wesely@noaa.gov

Use this link to access the NWS Hastings, NE webpage

Another useful link is to the local Weather Story Graphics

Event IDSS Request Form Submission Details

Event Name: Request: Aksarben Stock Show Location: 700 E Stolley Park Rd, Grand Island, NE

Venue Name: Fonner Park

Primary Contact Info: Jon Rosenlund: jonr@grand-island.com

Secondary Contact Info: Bill Ogg: bogg@statefair.org

Briefing Contact Time: 0600 each day of the event

Start Date/Time (UTC): 2021-09-20 11:00 UTC End Date/Time (UTC): 2021-09-28 01:00 UTC

Hours of Operation (if different than start/end): 0800-2000 Central

Estimated Attendance: 2,500 - 5,000

Assigned Lat/Long: 40.9059304282825, -98.3282345974993

Detailed Notes and Requests: Similar information as the State Fair: Severe weather potential, temp, wind,

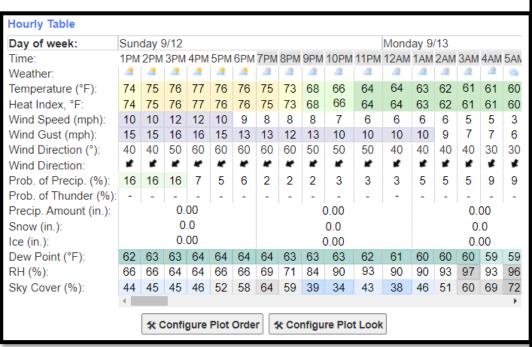
precip (potential and type)

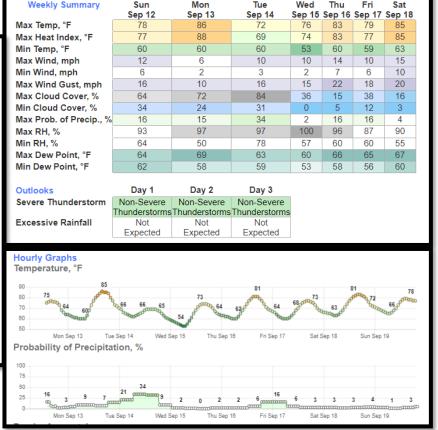


Event Support – Ongoing

NWS Forecast Page

Always updated – Can be Bookmarked – Shared – Various Formats





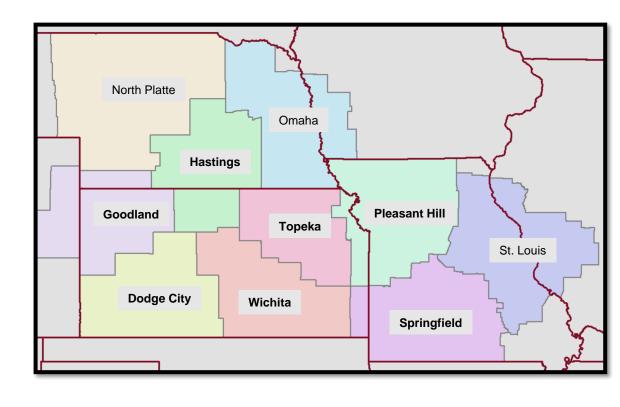


Trying to Communicate More Often

It's Hard for Introverted Meteorologists to Get Out Information Sometimes



- Filling the void of Information before, during and after warnings
 - Summer 2021 Test
- More NWSChat posts
- More social media posts
- Livestream and Open Webinars
- Meteorological Discussions





Did you notice any difference?

Example: Social Media Post from NWS Goodland



Storms Pushing Towards East Colorado

July 4, 2021 7:55 PM MT

Eastern areas should be in the clear

What, Where, When

Storms that moved across the eastern half of the region this afternoon and evening have pushed west.

Lightning & Threats

Lightning remains a threat for locations along and west of the Colorado border. Gusty winds and large hail cannot be ruled out at this time.

Actions

If you hear thunder or see lightning, take shelter in a building or a hard topped vehicle.





National Weather Service Goodland, Kansas



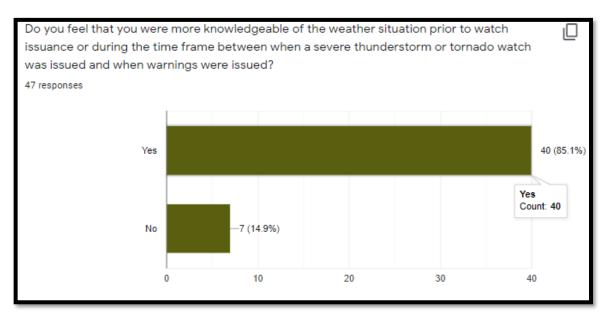
Example: NWSChat Posts from NWS Wichita (5/8/21)

20:25	<nwsbot> Storm Prediction Center issues Mesoscale Discussion #561[watch probability: 80%] Link: http://www.spc.noaa.gov/products/md/2021/md0561.html</nwsbot>
20:54	<nwsict-roger.martin> Good afternoon everyone. After coordinating with SPC, a Severe Thunderstorm Watch will be issued shortly for a small part of north-central KS to catch the initial storms that are expected to develop within the next couple of hours. The watch is a smaller, and shorter (time-wise), one as the expectation is that another watch will be needed later to catch the late evening/nighttime timeframe.</nwsict-roger.martin>
22:51	<nwsict-roger.martin> Right now, the environment favors higher-based cells with a limited tornado threat as they near/enter Russell/Barton Counties. The tornado threat may slightly increase in the 7-9pm timeframe along the I-70 corridor east of Russell/Great Bend. Still, the greatest hazards are expected to be large hail (possibly 2", or greater) and wind gusts to 70 mph.</nwsict-roger.martin>
23:56	<nwsict-roger.martin> [Radar Update] - We're closely watching storms in Ellis and Osborne Counties as they converge on Russell County</nwsict-roger.martin>

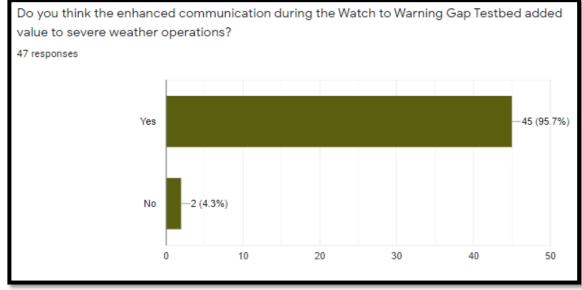


• "Tell them what you know when you know it" - Chance Hayes

85% of survey respondents were more knowledgeable in the Watch-Warning Gap timeframe



96% of survey respondents said the information added value to severe weather operations





COVID Practices – Ongoing

- Bottom Line: NWS is 100% committed to meeting your needs (and our mission)
- NOAA/NWS currently working through new policy

- Talk with your WCM/Local NWS office
 - Each office has some flexibility but also social, staffing and individual concerns to consider

Biden is requiring the vast majority of federal workers to get vaccinated or face disciplinary measures.





Questions or Comments?

NOAA National Weather Service Forecast Offices Warning Coordination Meteorologists

Andy Bailey – Pleasant Hill, MO Chance Hayes – Wichita, KS Ryan Husted – Goodland, KS Jeff Hutton – Dodge City, KS Mike Moritz – Hastings, NE Chad Omitt - Topeka, KS Steve Runnels – Springfield, MO

September 16, 2021 KEMA Conference Invited Speakers





