



# Aware

Aware is published by NOAA's National Weather Service to enhance communications between NWS and the Emergency Management Community and other government and Private Sector Partners.

June 2020

## Enhancing Heat Services through Provision of Wet Bulb Globe Temp. Forecasts

By [Lisa Schmit](#), NWS Twin Cities/Chanhassen, MN

As part of an ongoing effort to enhance heat services and Impact-based Decision Support Services to partners, the NWS is now providing experimental Wet Bulb Globe Temperature (WBGT) forecasts. This new product is a direct response to increasing requests from Core Partners.

Both the Heat Index and WBGT account for temperature and humidity, but the WBGT also takes wind speed and sky cover into account. This addition makes the WBGT a more precise way to determine how our bodies respond to the heat when engaging in strenuous outdoor activities.


This product is most helpful for people involved in active outdoor work or play such as construction workers, athletes and marching band members.


The WBGT has been used for decades in many military agencies, by the Occupational Safety and Health Administration (OSHA), and by organizations that facilitate marathons. The American College of Sports Medicine bases its guidelines for the intensity of sport practices on WBGT as well, resulting in the WBGT's use by athletic programs and many school districts.


This product is useful for deciding when to modify exercise or outdoor work. Guidelines vary geographically since not only temperatures, but also the body's response to heat fluctuates by region. The WBGT forecasts will not replace Heat Index forecasts, rather they will serve as a supplemental parameter in heat impact decision-making. You can view experimental [WBGT forecasts on our website](#). For more information, see the [Public Information Statement](#).


	WBGT	HEAT INDEX
Measured in the sun	●	●
Measured in the shade	●	●
Uses temperature	●	●
Uses relative humidity	●	●
Uses wind	●	●
Uses cloud cover	●	●
Uses sun angle	●	●

  
**solar radiation**

  
**temperature**

  
**relative humidity**

  
**wind speed**

## Proposed Changes to Watch/Warning/Advisory System; Make Your Voice Heard!

By [Kevin M. Smith](#), Meteorologist, NWS Pocatello, ID

Over the past few months, the NWS Hazard Simplification (Haz Simp) Team has been socializing a proposal to make major changes to our Watch, Warning, and Advisory system.

The proposed new system would have only two primary headline terms: Watch and Warning. The Advisory, Special Weather Statement (SPS), and Short Term Forecast (NOW) headlines would be discontinued in favor of

plain language statements. All of these statements would feature a “What,” “Where,” “When,” “Impacts,” and “Precautionary/ Preparedness Actions” bulleted format. The statements also include computer codes to enable partners to process these messages automatically.

Public feedback will be critical in making a decision on this proposed change. We invite EVERYONE to learn more and make your voice heard by participating in a [brief public survey](#).

In addition, a few weeks ago NWS advertised a series of interactive webinars to communicate the proposed changes to NWS Partners. We thank those of you who took part in the first three webinars and encourage those who have not yet joined to attend one of the two remaining opportunities:

- ◆ 11 am EDT, Thursday, July 9, 2020: [Register Now](#)
- ◆ 12 pm EDT, Thursday, July 23, 2020: [Register Now](#)

We encourage you to use [this flyer](#) to share the survey with others. You can also download [this handout](#) which summarizes the proposed changes. Thank you for your participation and valuable feedback!

For more information on the Haz Simp Project, visit [www.weather.gov/hazardsimplification/](http://www.weather.gov/hazardsimplification/). Questions, comments, concerns, or other feedback are encouraged and should be sent to [hazsimp@noaa.gov](mailto:hazsimp@noaa.gov).



## NWS Tampa Bay Presents Hurricane Tabletop Exercise

By [Dustin Norman](#), Meteorologist, NWS Tampa Bay Area, FL



*NWS Ruskin, FL, Meteorologist Dustin Norman runs through the virtual tabletop exercise.*

Every May, Port Tampa Bay and NWS Tampa Bay Area present a tabletop exercise with the goal of sharpening the preparedness and response actions of port tenants along with local, state and federal partners. This year, we conducted the exercise remotely.

After offering several years of catastrophic hurricanes simulations, it was time to switch up this year's exercise. NWS Meteorologist Dustin Norman developed a multi-faceted 3-phase exercise that combined historic flooding, tornadoes, and a hazmat incident. With the help of NWS Science and Operations

Officer Bryan Mroczka, radar imagery from Hurricane Harvey was mapped onto the KTBW radar, which simulated a very slow-moving tropical storm.

During a period of significant flash flooding, a tornado warning was issued for the port and adjacent parts of Tampa. Damage from the tornado not only involved scattered shipping containers, but it also resulted in a 30-minute chlorine leak from a tank at the wastewater treatment plant.

The NWS then provided a Hybrid Single Particle Lagrangian Integrated Trajectory Model (HYSPLIT) run on the toxic plume to assist Tampa Fire Rescue and the Tampa Emergency Operation Center with information needed to make educated decisions on downwind evacuation orders. The combination of several hazards, combined with a serious hazmat incident, introduced dynamics that successfully tested even the most seasoned of officials.

Partners included the U.S. Coast Guard, U.S. Customs, local/state emergency management, Tampa Fire/Police, Hillsborough County Sheriff, and members from the Port Heavy Weather Advisory Group, just to name a few. In total, over 165 registrants ranging from a plethora of fields took part in this year's exercise.

---

## Beach Hazards/Rip Currents More Deadly than Hurricanes?

For more information, contact Meteorologist [Carl Barnes](#), WCM [Erik Heden](#), WFO Newport/Morehead City, NC or Meteorologist [Michael Kochasic](#), WFO Wilmington, NC

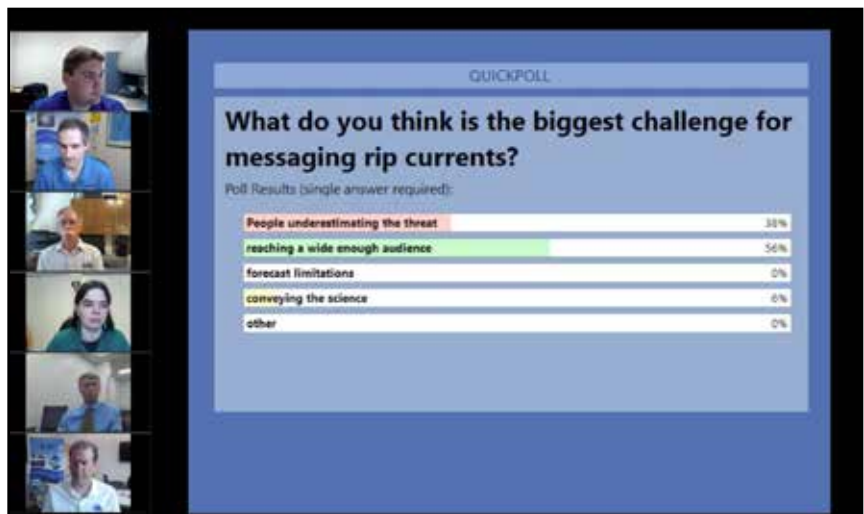
Many assume hurricanes are the most deadly weather threat in North Carolina (and much of the southern East Coast), but rip currents and dangerous surf claim more lives on average. In response, to help ensure a Weather-Ready Nation initiative and strengthen partner relationships, NWS Weather Forecast Offices (WFO) in Newport/Morehead City and Wilmington, NC, recently hosted the Coastal Carolinas Beach Hazards/Rip Current Integrated Warning Team (IWT) meeting virtually through GoToMeeting.

The IWT consisted of 3 sessions: hazard messaging, forecasting risk, and science/service improvements.

Sessions began with several pre-selected partners providing insight into their organizational operations and public safety initiatives. The second half of each session was devoted to questions and discussion. Presenters used webcams and screen sharing for presentations. Attendees were engaged through interactive features such as poll questions, the "ask question" feature, and the option to raise their virtual hand.

Response to a feedback survey was positive. Participants appreciated the diversity of attendees and gained insight into other organizational strategies to ensure beach safety. We plan to seek more virtual knowledge sharing sessions in the future.

Nearly 60 Carolina partners attended, including lifeguards, inland and coastal broadcast meteorologists, county emergency managers, community officials, North Carolina State Parks and National Park Service representatives, state emergency management officials, members of the academic/research sector, print media and meteorologists from surrounding offices.



*Poll questions were used to make the session interactive. From top are NWS Meteorologists Michael Kochasic and Carl Barnes, North Carolina Sea Grant Rep Spencer Rogers, NWS Meteorologist Victoria Oliva, Bern, NC, WCTI News Channel 12 News Meteorologist Les Still and NWS WCM Erik Heden.*

---

## NWS Des Moines Launches Weather Education Web Page and Webinars!

For more information, contact Meteorologist [Kurt.Kotenberg](#) or WCM [Chad.Hahn](#), NWS Des Moines

With in-person school cancelled for the rest of this school year across Iowa and more children home during the summer, there is an urgent demand from local teachers and parents for fresh online learning resources.

To help fill this need, NWS Des Moines launched a new weather education web page. With weather and climate education resources spanning from tornadoes to Iowa climate data, this web page is designed to align with state core science standards.



Taking our education outreach program one step further, NWS Des Moines has been hosting DMX Weather Classroom webinars. These webinars serve to supplement educational material on our website, and are geared towards aligning with the Iowa Core science standards. A typical webinar consists of about 15 minutes of lesson/presentation, followed by about 15 minutes of open-ended questions and answers time for webinar attendees. Our most recent webinar was an Iowa Climate Roundtable Discussion that featured Dr. Justin Glisan, State Climatologist (Iowa), Dr. Dennis Todey, Director, USDA Midwest Climate Hub, and Ray Wolf, NWS Quad Cities Science and Operations Officer.

As next steps for this new education program, NWS Des Moines is going to work towards meeting the new challenge of providing weather education in a virtual environment. From scheduling one-on-one “teaching” sessions for a classroom, to recording full standards-aligned lessons, the goal of this weather education program will be to continue to provide the knowledge and tools needed to understand weather, water, and climate science.

**Aware**

NOAA’s National Weather Service, Analyze, Forecast and Support Office  
Managing Editor: [Melody Magnus](#), Editors: **Mark Tew**, **Rich Bandy**  
Aware online: [www.weather.gov/publications/aware](http://www.weather.gov/publications/aware) | ISSN 1936-8178  
Subscribe/Unsubscribe: <https://nws.weather.gov/products/Mail/list.php?id=2>