



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.

March 2014

From the Top

Better Hydrology Services

Louis Uccellini, NWS Director

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Director



On February 14, 2014, NOAA accepted the newly-constructed National Water Center (NWC) on the University of Alabama campus in Tuscaloosa, AL, from its contractor.

This transfer culminates nearly 4 years of planning, design and execution for this major project. In the next few weeks, NWS will install network infrastructure and furniture. We expect the NWC to be ready for occupancy in April.

The Center represents an unprecedented opportunity for NWS's hydrology program. NWS leadership envisions a much more effective hydrology program with the NWC providing the leadership, support and organization for hydrologic research, development, outreach and field operations.

NWC will align NWS resources into a water enterprise that supports grand challenges in water resources, such as hydrologic extremes, water security, and water/ecosystem interactions, as well as emergency services. These goals are fully aligned with, and an integral



National Water Center, Tuscaloosa, AL

component of, the Impact-Based Decision Support Services goals in our strategic plan.

The Center will provide the foundation upon which NOAA's water program can deploy the state-of-the-science technologies recommended in the 2012 National Academy of Sciences report "Weather Services for the Nation: Becoming Second to None."

NWC will test, measure, evaluate and implement new techniques and science to advance field operations and services. The Center will serve as the catalyst for Integrated Water Resources Science and Services as NOAA, the U.S. Geological Survey, the U.S. Army Corps of Engineers, and others leverage resources, seamlessly share information, and improve joint capabilities.

The Center will be the focus of hydrologic science and model development and implementation, and will provide the NWS local offices with national-scale hydrologic, forecast guidance, products and services.

Congratulations to all of those who made this success possible. With the construction complete, we shift our focus to making the most of the significant potential the NWC represents to NOAA, our partners, and our users. That potential begins with developing an Initial Operating Capability that includes an interagency partnership with FEMA

and our other federal partners over the next year.

Decision Support

Getting the Public to Respond to Emergencies

Pat Vesper, MIC, NWS Midland, TX

On February 26, NWS Midland, TX, led the first ever West Texas and southeast New Mexico Integrated Warning Team (IWT) workshop. This half day event was the culmination of 9 months of planning by NWS Midland staff members, local area emergency managers (EM) and media partners. Participants gave the session top marks.

In all, the workshop drew 125 attendees, including staff from NWS Amarillo, Lubbock, Midland and San Angelo, TX. The workshop brought together local, regional, and state EMs, educators from area independent school districts, elected officials, congressional liaisons, local media partners, public information officers from various agencies, local 9-1-1 supervisors, state health officials, social science researchers, and an array of emergency responders from the WFO Midland's 26 county warning area.

The workshop focused on more effective ways to protect communities and the importance of communication among all members of the IWT during weather and non-weather related emergencies.

Researchers from Texas Tech University presented their findings on what prompted people to protect themselves during the deadly Joplin, MO, and Tuscaloosa, AL, tornados.

A media panel comprised of area on-air meteorologists discussed how on-air weather professionals work with NWS and described the actions they take during severe weather events.

A local weather scenario helped better define the roles and actions of IWT member during severe weather.

A representative from the Texas Department of Emergency Management illustrated how social media can benefit all our agencies in emergency situations.

Five Ways to Prepare for Severe Weather

[Andy Foster](#), Lead Forecaster, NWS Springfield, MO

NWS Springfield, MO, and its local EM and media partners held an Integrated Warning Team (IWT) workshop on February 25. This 1-day event brought together EMs, media, SKYWARN, and other groups including Missouri state parks and health care officials. The goal was to promote a unified message that maximizes public warning response. There were three main objectives:

- ◆ Build relationships among key players
- ◆ Identify challenges and solutions to improve warning communication
- ◆ Integrate social science findings and concepts

Kathy Sherman-Morris, of Mississippi State University, provided a social science perspective, which served as the backdrop for numerous



Integrated Warning Team (IWT) workshop targeted specific EM issues.

discussions. The group identified ways to enhance communication among IWT members, create a consistent warning message, and improve warning response through collaborative initiatives. Specific topics discussed included:

- ◆ Developing a standard outdoor siren policy
- ◆ More efficiently sharing storm reports using NWSChat
- ◆ Using common weather hazard awareness resources
- ◆ Exploiting the use of social media with consistent messaging
- ◆ Solidifying pre-event services and communication

This IWT was a launching point. Project groups will address the identified action items and initiatives. The IWT group will keep the discussion going and identify solutions to improve the warning system.

National Impact Based Warning Demonstration for 2014 Set To Begin

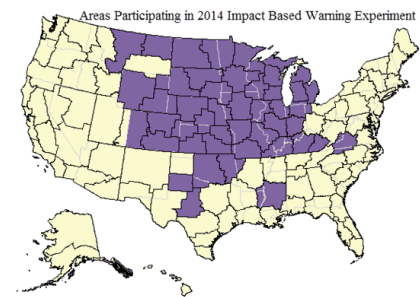
[John Ferree](#), NWS Severe Storms Services Leader, Norman, OK

Experimental Impact Based Warnings (IBWs) are back in 2014 with more offices issuing them and a few improvements. After a demonstration in 2012 with five NWS Weather Forecast Offices (WFOs) in Kansas and Missouri, the program was expanded to all 38 Central Region WFOs in

2013. In 2014, the demonstration will include eight new WFOs, bringing the total to 46 NWS offices.

The new offices added to the test are WFOs Norman and Tulsa, OK; Jackson, MS; Lubbock and San Angelo, TX; Blacksburg, VA; and Great Falls and Glasgow, MT.

NWS will stratify Severe Thunderstorm Warnings (SVR), Tornado Warnings (TOR) and Severe Weather Statements (SVS) into categories, distinguishing extreme cases from base convective warnings. These products will include enhanced wording to convey information about associated impacts, specific hazards expected, and recommended actions, both within the bullet statements and as part of the tag line codes. [More information about these products is online.](#)



Our goal continues to be improving the communication of tornado and severe thunderstorm threats to partners and constituents, and increasing community response to weather information.

Evaluators are assessing the effectiveness of NWS, EMs and the media at communicating and managing severe convective weather risks with these enhanced products. For NWS staff, this process involves:

- ◆ Assessing potential impacts
- ◆ Packaging situational understanding about a storm event and its urgency
- ◆ Transferring this knowledge to NWS partners, primarily EMs and the media
- ◆ Assessing whether and how that knowledge affects critical decisions made by these partners and by the public.

The most significant change for 2014 is to make impact statements for “CONSIDERABLE” (Particularly Dangerous Situation) and “CATASTROPHIC” (Tornado Emergency) identical. This change is based on social science review of the 2013 IBW demonstration which determined that these terms serve as markers of confidence for tornado occurrence. While both of these terms communicate elevated categories of tornado damage and risk, NWS will only use the term CATASTROPHIC when a tornado actually is striking a community.

Outreach Insight

NWS Released Oklahoma Tornadoes Assessment

Sal Romano, NWS Performance Branch

On March 21, NWS released its [Service Assessment](#) of the devastating weather events affecting the Oklahoma City area May 19-31, 2013. Although the report focuses on three specific days, May 19, 20, and 31,



the entire period was characterized by an active weather pattern and multiple tornadoes across several NWS Weather Forecast Offices. The report also reviews the historic flash flooding in Oklahoma City on May 31. In all, there were 47 direct weather fatalities attributed to this event and billions of dollars in damage to central Oklahoma.

Facebook Poster Contest Spreads Awareness

Daniel Noah, WFO Tampa Bay

NWS Tampa Bay took part in the Florida Division of Emergency Management 2014 Severe Weather Awareness Week poster contest during the week of February 24. The public was encouraged to help select the winners via [the Kids Get A Plan Facebook](#) page. Over 700 creative entries from elementary students were submitted and the 7 winners were honored during a special event at each of their schools.

Tweets and Video Boost Safety Outreach

Jonathan Guseman, General Forecaster, NWS Lubbock, TX

Texas Severe Weather Awareness Week took place from March 2-8 this year, with all NWS Texas offices taking part via Twitter and other social media. Tweets targeted specific severe weather topics each day of the awareness week such as thunderstorm hazards, family preparedness, and dangers from severe thunderstorms.

In addition to taking part in media interviews and posting news headlines on our web page, NWS Lubbock created a [YouTube video](#) advertising the statewide event. The video included safety recommendations for Texas citizens along with NWS activities throughout the week.

NWS Lubbock held one of the most successful awareness events at the Science Spectrum where Lubbock staff presented with other key partners such as the Texas Tech University Student Chapter of the American Meteorological Society and KCBD News Channel 11. This day-long event included hands-on weather experiments, severe weather preparedness displays,



TTU students displaying a Ka-band Mobile Doppler Radar.

and weather instrumentation from the Texas Tech University Severe Storm Research Team, such as their Ka-band radar and Sticknets. Attendees also had the opportunity to attend severe weather safety talks and SKYWARN storm spotter training hosted by NWS Lubbock forecasters.

Preceding Severe Weather Awareness Day, several NWS Lubbock forecasters also conducted outreach with local schools through use of the Science Spectrum’s Interactive Television (ITV) program. This tool provides an efficient way to interact with several classrooms at once, reaching hundreds of students across West Texas via the Internet. During the week, 13 schools dialed into the program and approximately 250 students learned about all facets of the weather while participating in numerous interactive experiments. There was also a weather-based version of the popular game show Who Wants to Be a Millionaire.

Aware

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