Aware

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January 2013

New Year, New Challenges, Renewed Partnerships

*By **Laura Furgione**, Acting NWS Director*

Laura Furgione, Acting NWS Director

As we start another year, I would like to reflect on some of the weather events that impacted our Nation during 2012 and express my thanks to you, our partners in the emergency management community, for your continued partnership as we work together to build a Weather-Ready Nation.

As you well know, 2012 proved to be a very active year in terms of high-impact weather events. We saw everything from tornado outbreaks in the Midwest and Southeast to wildfires in the West to powerful winter storms in Alaska, record hail in Hawaii, relentless rainfall in California and the Pacific Northwest and, perhaps most notable, hurricanes Isaac and Sandy. These headline-grabbing events were the proverbial tip of the iceberg of what we experienced.

In every case, your support allowed us to fulfill our mission and keep people safe and informed. We are thankful for the work of the emergency management community.

No matter what challenges we face in the coming year, we know that by continuing to develop and strengthen our partnership with you, we can continue to provide the American people with the high level of service they have come to expect before, during, and after severe weather strikes. Here's to a safe 2013!

Billion Dollar U.S. Weather and Climate Events for 2012

In December, NOAA released preliminary information on extreme weather and climate events in the United States for 2012. These are events known to have reached the $1 billion threshold in losses. As of December 20, NOAA estimates that the nation experienced 11 such events, which combined are believed to have caused 349 deaths, with the most significant losses of life occurring during Hurricane Sandy (131), and the summer-long heat wave and associated drought (123) direct deaths.

- Southeast/Ohio Valley Tornadoes—March 2-3
- Texas Tornadoes—April 2-3
- Great Plains Tornadoes—April 13-14
- Midwest/Ohio Valley Severe Weather—April 28-May 1
- Southern Plains/Midwest/Northeast Severe Weather—May 25-30

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Satellite image of Hurricane Sandy: This Suomi satellite image shows Sandy along the Mid-Atlantic coastline with its center about 125 miles southeast of Atlantic City, NJ. Sandy was within several hours of landfall on the southern New Jersey coastline.

- Rockies/Southwest Severe Weather—June 6-12
- Plains/East/Northeast Severe Weather/Derecho—June 29-July 2
- Hurricane Isaac—August 26-31
- Western Wildfires—Summer-Fall
- Hurricane Sandy—October 29-31
- U.S. Drought/Heatwave—throughout 2012

Economic losses for two events, Sandy and the yearlong drought, are the big drivers this year in terms of costs. The final numbers are still being calculated. Given how big these events are likely to be, NOAA estimates 2012 will surpass 2011, exceeding $60 billion, CPI-adjusted to 2012 dollars, in terms of aggregate costs for annual billion-dollar disasters, despite fewer billion-dollar disasters in 2012 than in 2011.

The greatest annual loss to date occurred in 2005 when Hurricanes Katrina, Rita, Wilma, and Dennis struck Florida and the Gulf Coast states: costs exceeded $187 billion, CPI-adjusted to 2012 dollars. For more information, about the 2012 events, see the National Climatic Data Center Website.

Decision Support

Integrated Warning Team for Partners: NWSChat Makes it Happen

By Michael Lewis, WCM, NWS Northern Indiana

At the first Integrated Warning Team (IWT) workshop, one major action item stood out: Expand the use of NWSChat. This tool can serve as a primary way to keep all members of the warning team informed before, during, and after weather events strike. NWSChat also provides a forum to dynamically share ideas in a safe and secure environment.

The IWT workshop, hosted by NWS Northern Indiana on October 12, was organized in partnership with local television meteorologists, first responders, emergency management (EM) directors, and NWS meteorologists. The IWT concept has been incorporated throughout NWS to help partners better serve their communities. The focus of the Northern Indiana workshop was kept intentionally narrow to ensure a cost effective session with clear outcomes. The strategy was effective.

Since the event, NWS Northern Indiana implemented a means to continue the dialog that quickly evolved into a fully formed Community of Practice (COP). The solution provides a means to dynamically share ideas, post information, and update documents in a secure environment.

This COP is expanding rapidly: as of December 20, it included more than 30 members representing emergency management, law and fire enforcement, amateur radio leadership, communications specialists, and TV and NWS meteorologists

Early activities focused on inviting IWT members to apply for use of NWSChat and making use of this service. Keith Hosman, Planning and Communications Director for Henry County EM posted, "I find the NWSChat Live to be particularly useful." Within a week, NWS Northern Indiana received three new requests for NWSChat accounts and four members reactivated accounts.

While the NWSChat discussion board provides the simplest way to share information, the Department of Homeland Security has also developed a First Responder Community of Practice Website, a free resource for organizations with first response and public safety requirements. Registered members can join or create communities around particular topics, projects, or areas of interest. Members have the ability to:

- **Network**: Create a profile and connect with fellow first responders and others working in homeland security and preparedness across the nation. Your personal profile can include a photo, a biography, as well as list your education, certifications, and discipline. You also can invite colleagues to join the site.
- **Collaborate**: Join communities that interest you or start your own. Post, read, share, and contribute to content on wikis, blogs, discussion boards, and document libraries. For one-on-one collaboration, you can chat in real-time and email fellow members.
- **Find and share resources**: Search, store, and access documents, articles, and Website URLs from anywhere at any time.
- **Maintain awareness**: Subscribe to site activities such as discussion thread replies, blogs, recently uploaded documents, calendar events, and messages. The site sends email notifications when subscribed content is updated.

NWS Northern Indiana is using the COP to continue the discussion and share ideas, all with the goal of better serving our communities. The COP will help members capitalize on a multiplicity of perspectives and expand their knowledge base.

Better Ways to Plan Transportation Decision Support Services

By Audrey Rubel, NWS Alaska Regional Communications Manager

On an early November day, managers from the NWS Fairbanks, AK, forecast office met with representatives from the state's Department of Transportation (AK DOT). The topic: how NWS can help transportation officials better plan their road clearing efforts.

AK DOT operational staff members understand the critical role weather often plays in their decisions. For example, if the city has 4 inches of snow in a 12 hour time frame and temperatures at or below -30°F, AK DOT authorizes additional crew and more overtime, at significant expense.

Repeated triggering of critical snowfall responses can lead to budget shortfalls. Extremely cold temperatures decrease equipment functionality and increase fuel usage in a town where fuel costs are among the highest in the nation. AK DOT workers stressed that they need 48 hours of notice on these thresholds to plan effectively and save taxpayer dollars.

"It was valuable to meet with our partners at the Department of Transportation at to hear what weather information they need and the time frames within which they need it," said NWS Fairbanks Meteorologist-in-Charge (MIC) **Tony Hall**.

Since AK DOT workers prefer to receive weather information via smart phones, forecast office personnel described the interactive NWS mobile alerting application and told them how to apply for use of it. Outside of NWS, the planned National Centers for Atmospheric Research maintenance decision support system will also provide useful information to the AK DOT and the forecast office in the form of surface temperature, dew point temperature, and relative humidity information.

*From left, NWS Fairbanks Warning Coordination Meteorologist (WCM) **John Lingaas**, MIC **Tony Hall**, and Science and Operations Officer **Melissa Kreller**. Photo by Administrative Support Assistant **Christy Splechter**.*

To ensure the dialog continues, Hall invited AK DOT staff to visit the Fairbanks forecast office so they can better understand NWS operations.

Border Patrol Gets Help Preventing Illegal Immigration, Drug Smuggling

*Tijuana Mexico and U.S.-Mexico Border overlooking the Tijuana drainage. This area is particularly challenging due to incomplete fencing, steep terrain, canyons, and frequent dense fog. Photo by WCM **Alex Tardy**.*

By Alex Tardy, WCM, NWS San Diego, CA

Fog is typically thought of as benign weather with impacts largely related to vehicle, aviation, or marine vessel traffic. The U.S. Border Patrol does not find it innocuous; fog can make it difficult for patrol agents to spot border crossings, potentially endangering homeland security.

The U.S. Border Patrol, part of the Department of Homeland Security, averages 40 arrests in the San Diego sector per day. The patrol has 400 to 500 agents at each of the five sectors that cover the San Diego County, U.S.-Mexican border and the Orange County coastline. Weather conditions such as dense fog make water and land border patrolling significantly more challenging.

This reduced effectiveness can directly impact illegal immigration enforcement and drug trafficking, vital components of homeland security.

When these conditions occur, the U.S. Border Patrol tries to increase staffing by using other sector resources, but the Patrol prefers to have 48 hours lead time to mobilize extra staff.

Patrol agents are finding that border crossers closely track weather forecasts and current conditions, making it all the more critical the Border Patrol stay one step ahead by obtaining accurate advance visibility forecasts. The San Diego forecast office strives to meet this need by maintaining close communications with the Border Patrol.

Decision Support Boot Camp Readies Staff for Emergencies

By NWS News Staff, NWS Headquarters, Silver Spring, MD

This fall, NWS held a Decision Support Services (DSS) Boot Camp, the first Weather-Ready Nation deliverable for the NWS Operations Proving Ground. The boot camp was designed to boost understanding of partner requirements and build capacity for effective onsite decision support.

Participants included forecasters from all four NWS regions in the contiguous United States as well as four Emergency Response Specialists (ERS) from NWS Weather-Ready Nation pilot projects. By offering a balanced mix of presentations, large and small group discussions, and facilitated interactive exercises, the workshop challenged the group to sharpen skill sets they need to deliver quality services during high impact events. The workshop, which has evolved to incorporate feedback from prior years, included sessions covering:

- Understanding the Incident Command Services structure
- Navigating the disaster life cycle
- Communicating risk
- Building and delivering effective presentations
- Adopting successful media interviewing techniques
- Customizing services to incident-specific risk reduction thresholds
- Adapting services to partner operations and needs

This year, the boot camp increased emphasis on the disaster life cycle and risk communication principles as well as technological tools and social media practices. The workshop also offered increased

opportunities to practice briefing and interview skills. In addition, the meeting used live weather for the incident simulation.

Boot Camp ended with a full-day incident simulation that let participants practice what they learned. During the course, potential ERS interacted with NWS employees and partners who have been dispatched to support vital events. This opportunity increased these candidates' understanding of partner requirements and helped build a common operating picture spanning internal and interagency boundaries. Every session of the workshop was built on five foundational components of effective decision support:

- Cultivating relationships with core partners based on mutual trust and respect
- Learning and understanding partners' evolving and incident dependent decision thresholds
- Educating partners about NWS expertise and services
- Designing emergency response services around partners' needs and operations
- Providing value-added risk communication in critical situations

Participants gave boot camp high marks: "The practice session really cemented the message of the workshop and gave participants a consequence-free space to experiment."

Dissemination Updates

Improving Radar: Collaborative Weather Radar Network Fills Gaps

By Ron Trumbla, NWS Southern Region Public Affairs Specialist, Fort Worth, TX

With the existing network of NWS WSR-88D Doppler radars, curvature of the Earth and distance reduce radar accuracy. As the distance from the radar site increases, data comes from higher elevations, reducing NWS's ability to detect weather developments below.

One way to improve accuracy is to install clusters of near-ground Collaborative Adaptive Sensing of the Atmosphere (CASA) radars, which fill in low level gaps, supplementing the existing radar network. The result: faster, more accurate local severe weather information.

To test the concept, the University of Texas-Arlington campus is taking part in the CASA Dallas/Fort Worth Urban Demonstration Network—the first in a series of collaborative radar units. The network is part of a 5-year urban demonstration that could include up to eight dual polarization Doppler radars in the Dallas/Fort Worth area by fall 2013.

The CASA Network will offer the NWS Fort Worth, TX, office real-time data. "We expect the CASA Network to provide us with a higher-resolution depiction of winds, heavy rain and hail in thunderstorms, which will lead to more timely, specific warnings for severe thunderstorms, flash flooding and tornadoes," said NWS Fort Worth MIC Tom Bradshaw. "The CASA radars will also provide a dataset for high resolution computer models that could better predict the location and intensity of thunderstorms several hours in advance."

As part of a 10-year, $40 million demonstration project funded by a National Science Foundation grant, the CASA concept has already been tested successfully in a rural Oklahoma setting. "The data from the Oklahoma phase of the project has already

Helicopter delivery of first CASA radar unit to University of Texas-Arlington Campus. Photo by NWS Dallas/Fort Worth staff.

proved amazing," said NWS Fort Worth WCM **Mark Fox**. "We are quite excited about the prospect of combining the new CASA data with the information currently available through NEXRAD."

The North Central Texas Council of Governments provided additional funding for the urban demonstration project. Along with the university location, the CASA team plans to install three more radar units in Fort Worth, Denton, and Addison, TX, in time for the upcoming spring storm season.

Emerging Services

Emerging Services Seminar Services Expands Operation Horizons

By Wendy Marie Thomas, Meteorologist, NWS/OCWWS

In 2012, the NWS Office of Climate, Water, and Weather Services formed an Emerging Services Team to support the delivery of a Weather-Ready Nation. The Emerging Services Team's vision is: "A National Weather Service that provides climate, water, and weather services that integrates new or previously under used technologies, data and collaborations to meet the nation's evolving needs for impact-based decision support services."

Weather-Ready Nation
National Oceanic and Atmospheric Administration

To achieve this goal, the team works internally, across NOAA, and externally with our federal partners. The team gathers background on current and emerging user needs to fine-tune existing services and create new services. Recent activities include the following:

- Collaborating with the Department of Transportation to conduct reviews on how we will support their agency's goal for improved road safety
- Partnering with the Centers for Disease Control and Prevention (CDC) on climate-sensitive health issues
- Communicating with the National Ocean Service (NOS) to build requirements for delivering air quality data to advance protection of marine mammals against this new health threat

To broaden awareness and engagement, NWS is launching an "Emerging Services Seminar Series." The first session is scheduled for Wednesday, January 23, 2013, 9-11 am. The location is tentatively set for Silver Spring, MD, SSMC IV: 1W611.

Each monthly seminar will host panel discussions with our federal partners and NOAA Line Offices. The meetings will introduce you to new user-needs, relay progress on current collaborations, and provide a forum for idea exchange. Talking together we will advance our service functions for today and tomorrow, and thereby support a more Weather-Ready Nation. As new and enhanced products are developed, they will be made available for public comment and review, per NOAA's Partnership Policy, before becoming operational.

The January 23 topic is **Introduction of Emerging Services Concept**. The panel will be led by David Caldwell, OCWWS Director, with Dr. David Green serving as moderator. Panelists are as follows:

- *John Balbus, M.D.*, Senior Advisor, National Institutes of Environmental Health Sciences (NIEHS) and co-chair Interagency Crosscutting Group on Climate Change and Human Health (CCHHG) United States Global Change Research Program
- *George Luber, Ph.D.*, Associate Director for Global Climate Change for the National Center for Environmental Health at the Centers for Disease Control and Prevention, CDC
- *Paul Pisano, Ph.D.,*Team Leader, Road Weather and Work Zone Management, Department of Transportation, Federal Highway Administration

We invite you to come listen, engage, and explore. For more information, please contact: Dr. David Green, EST Lead, or Wendy-Marie Thomas. We look forward to having you onboard on January 23 and in the future as participants or speakers.

Flooding/Hydrology

Preparing for 150-Year Flood Event Through Full Scale Exercise

By Alex Tardy, WCM, NWS San Diego, CA

The only way to know how to respond to a major flood, such as a 150-year event on the San Diego River in southern California, is to live it. On December 12, the San Diego County Emergency Operations Center (EOC) conducted a full-day exercise dubbed Raging Waters, which did simulate that kind of catastrophic event.

Planning for the exercise began in July 2012 and was followed by five meetings with the Federal Bureau of Investigation's Infragard, an information sharing program of the Department of Justice. The full EOC activation, run by the San Diego County Law Enforcement Communication Center, consisted of nearly 100 participants and featured full activation of San Diego Red Cross and Naval Base Coronado EOCs.

The NWS role included a presentation on past historical heavy precipitation events in San Diego County and the ARkStorm (U.S. Geologic Service) scenario. NWS also offered two weather briefings for the staged scenario using a hydrograph provided by WCM Alan Haynes of the California-Nevada River Forecast Centers (RFC). Following these sessions was a full weather briefing to the San Diego Red Cross chapter, which had about 50 attendees.

Participants get hourly briefings from each sector during the Raging Waters EOC activation functional exercise. Photo by NWS San Diego WCM ***Alex Tardy****.*

During the functional exercise, San Diego County Flood District staff provided updates on reservoir storage and flows as well as roads impacted by flooding. NWS provided short updates on tidal issues and additional rainfall during the 3-hour exercise. The weather scenario and briefings were well received. Also supporting the effort were Journey Forecasters **Jimmy Taeger** and **Steve Harrison**, who gained valuable EOC experience.

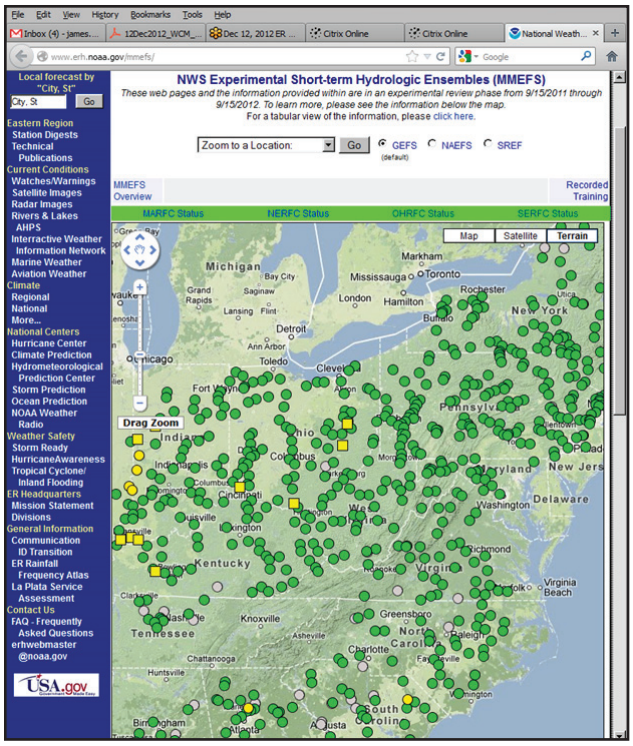
Two ICS section participants stated they particularly liked the weather briefings but wanted a longer exercise, more than 3 hours, with more time spent on identifying section roles.

Short Lead-Time Probabilistic Hydrologic Forecasting Goes Live

By James Noel and Thomas Adams, Hydrologists, NWS OHRFC

After a 2-year trial, during which NWS received overwhelming positive feedback, NWS will shift its Meteorological Model-based Ensemble Forecast System (MMEFS) from experimental to operational on January 8, 2013. The change applies to all Eastern Region RFC and the Southeast RFC.

The NWS Ohio, Middle Atlantic, Northeast, and Southeast RFCs produce short lead-time probabilistic hydrologic forecasts. Probabilistic forecast horizons range from 87 hours to 7 days depending on the numerical weather prediction model ensemble system used. The MMEFS is a collaborative project



Meteorological Model-based Ensemble Forecast System (MMEFS)

involving these RFCs, the NWS National Centers for Environmental Prediction (NCEP), and NWS Eastern Region Headquarters. The system uses precipitation and temperature output from the NCEP 21-member Global Ensemble Forecast System and Short-Range Ensemble Forecast System as well as the Environment Canada 21-member Global Environmental Multiscale Model.

RFCs use output from the weather prediction models as input to hydrologic models within the Community Hydrologic Prediction System (CHPS). Within CHPS, RFCs use Ensemble Streamflow Prediction techniques to generate hydrologic forecast ensembles at 6-hour time intervals for 87-hour to 7-day lead times.

The MMEFS runs up to eight times per day to produce ensemble hydrologic forecasts. The ensemble hydrologic forecasts are analyzed to produce predictions of the uncertainty in the forecasts, resulting in a variety of graphical and text products. Primary users of these products include:

- U.S. Army Corps of Engineers
- U.S. Geological Survey
- Federal Emergency Management Agency
- Local Emergency Managers
- Energy companies

A best practice adopted by some local EMs is use of the 25 percent chance of exceedance as an alert for possible flooding. The NWS has shared this best practice with EMs across the Ohio Valley.

The MMEFS has proven to be a valuable asset for situational awareness during briefings, particularly during the traditional flood season. Users can select any Advanced Hydrologic Prediction Service forecast point for detailed ensemble and probabilistic forecasts out to 7 days.

Hurricanes/Tropical Storms

Brick pavers dislodged from Sandy's storm surge. From Flickr, SandyResponseNPS

Incident Meteorologist Program Directly Supports Sandy Recovery

By Heath Hockenberry, NWS National Fire Weather Program Manager

Hurricane Sandy had devastating impacts on the Mid-Atlantic region. In addition to all the hours put in by NWS forecast and related staff, the NWS Incident Meteorologist (IMET) program also stepped up to help the stricken area. The IMET program provides front-line meteorological support during incidents of national significance. After Sandy, the program supplied three forecast personnel to assist the National Park Service (NPS) Incident Management Team (IMT) on Staten Island, NY.

The Park Service response to this incident was monumental, with over 500 personnel from across the country supporting emergency response and stabilization of 19 national parks in the New York/New Jersey area including the well-known Statue of Liberty, Ellis Island, and Governors Island monuments as well as popular shore areas at Fire Island, Jamaica Bay, and Sandy Hook.

NWS IMETs **John Quagliariello**, **Kelly Hooper,** and **Terry Lebo** were

deployed to assist the NPS at its incident command post at Fort Wadsworth, Staten Island. Their duties included forecasts, operational briefings, weather watch, and localized warning services. Critically important were coastal flooding predictions for severely damaged beaches, marine forecasts for ferry service, precipitation estimates, and strong wind forecasts for exposed field personnel. Long range temperature forecasts were also important because of freeze impacts on the Ellis Island historical archives.

The highest impact weather event to occur post-Sandy was a powerful nor'easter on Nov. 7 which produced 3"-7" of snow and 35 mph wind gusts, along with minor coastal flooding at some parks. Based on forecasts and briefings leading up to this event, the Park Service IMT was able to keep all personnel in safe locations until the storm passed.

More typically, IMETs are dispatched to command posts for large wildfires to help firefighters plan suppression efforts. A growing trend is the use of IMETs and other Decision Support Meteorologists at local and state EOCs during large-scale weather events such as hurricanes. So far in 2012, IMETs have been dispatched 174 times to high impact fires and events.

If you are interested in learning more about the NPS response to Sandy, visit its Facebook page at www.facebook.com/HurricaneResponseNPS.

Outreach Innovations

Webinar Secondary Hosting Makes WFO More Visible

By Rick Shanklin, WCM, NWS Paducah, KY

How can a WFO expand its availability, visibility, and effectiveness? For WFO Paducah the answer was to use Webinars for its annual round of winter weather workshops. WFO Paducah's hosting of the webinar was great, but we saw the real success of this format when local emergency managers and other key decision makers hosted the Webinars locally. As a result of partner support, WFO Paducah's three Webinars on NWS products and services for decision makers, including focus sessions for school administrators, landed more than 500 participants! The participants consisted of NWS partners ranging from school officials to emergency managers and transportation cabinet officials.

Participants ready for the WFO Paducah Winter Weather Workshop.

WFO Paducah encouraged emergency managers and others to host the Webinars at a local facility, such as at their Emergency Operations Center. Many of the 58 counties serviced by WFO Paducah did just that with excellent results. Key decision makers from various hazardous weather response oriented agencies gathered at these secondary host locations. To help ensure success, WFO Paducah conducted a test Webinar session prior to the actual event.

One of the Webinar sessions was open to on-site attendees at West Kentucky Community and Technical College. While the combined webinar/on-site session required some multitasking, the return was clear: more than 300 people attended this one session.

WFO Paducah received many positive comments on the expanded availability and customer focused value of the sessions. The Webinars provided an improved skillset to these key decision makers while also benefiting WFO Paducah through enhanced communication and ground truth reports.

Help Keep Kids Safe and Improve the Young Meteorologist Program

By Ron Gird, NWS Outreach Program Manager

With the official launch of the Young Meteorologist Program (YMP) in fall 2012, NWS is entering a new phase of the program: feedback and evaluation. We want to hear from individuals and organizations using YMP in their outreach and education activities.

Feedback and evaluation has been an important part of YMP. Long before we officially launched the program, NWS engaged teachers and students in a testing phase. The feedback received was vital in the program's final development and the official launch of YMP.

Feedback and evaluation will enable us to improve the program and make it more relevant to students and teachers. Your comments will also help us promote and market this valuable resource. At the YMP Press Room site, you'll find several background articles written by the American Meteorological Society that may help you formulate your feedback.

There are two methods for providing feedback: Go to the game site, youngmeteorolgist.org, and follow the links to "More information/contact us/feedback," or email me directly, Ron Gird@noaa.gov. Either way, please share your thoughts. You are important to the success and growth of the program.

Partner Appreciation Day Enhances Weather Ready Nation

By Barry Goldsmith, WCM, NWS Brownsville, TX

On November 7, NWS Brownsville, TX, opened its doors to nearly two dozen core EM and media partners. Several indoor and outdoor tours, dubbed *From Observations to Operations for a Weather-Ready Nation*, highlighted the event.

The first tour took visitors outside to learn how NWS collects observations from the Automated Surface Observing System and upper air radiosonde/weather balloon releases. The tour included an overview of the Brownsville WSR-88D radar. The tour then moved indoors where forecasters explained how observations and computer model data are combined to produce 7-day forecasts. Staffers also explained how radar data are interpreted to determine the potential hazards of wind, hail, tornadoes, and flooding from local storms.

Partners Appreciation Day. Photos by WFO Brownsville staff.

The tour ended with a presentation on the Weather-Ready Nation program and a request for partners to work with NWS on a project called Adopt-A-Community. This new program will help NWS forecasters build stronger relationships with emergency management personnel, the media, and the private sector.

"Building a Weather Ready Nation requires more than improved warning lead times and long range forecasts," said Forecaster and Outreach Team Leader **Maria Torres**. "It is just as important to strengthen the bonds between people."

In addition to the Brownsville staff, participants included representatives from the following organizations:

- Texas Division of Emergency Management District 3
- Hidalgo County and city emergency managers from McAllen and South Padre Island
- U.S. Customs and Border Protection Office of Incident Management, Rio Grande Valley Sector
- Texas State Department of Health Services
- Texas Association of Local Health Providers
- Cameron County Health and Human Services
- South Texas Emergency Care
- American Red Cross
- Texas Commission on Environmental Quality
- Texas Forest Service
- KRGV-TV Channel 5

The office presented a NWS Special Service Award to the city of Brownsville for its support of Partners Appreciation Day.

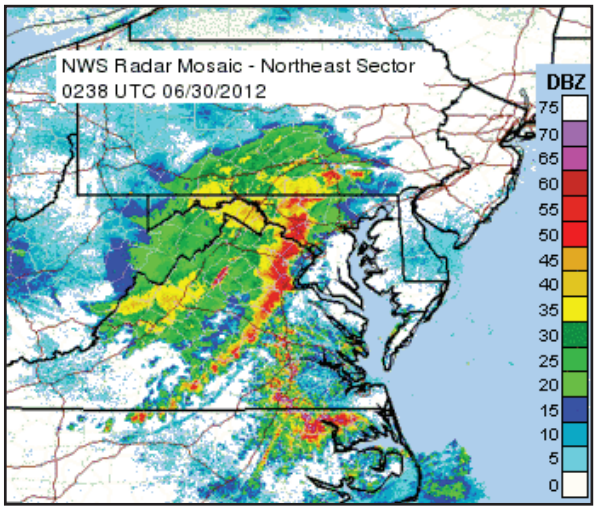
Service Assessments

NWS to Release Historic Derecho Service Assessment

By Sal Romano, Service Assessment Meteorologist, NWS Performance Branch

"The Historic Derecho of June 29, 2012," service assessment presents findings and recommendations regarding NWS performance during the derecho that struck the Ohio Valley and Mid-Atlantic states. The derecho traveled for 700 miles, impacting 10 states and Washington, D.C. The hardest hit states were Ohio, West Virginia, Virginia, and Maryland as well as D.C. The winds generated by this system were intense, with several measured gusts exceeding 80 mph.

Unfortunately, 13 people were killed as a result of the extreme winds, mainly by falling trees. An estimated 4 million customers lost power for up to a week. The region impacted by the derecho was also in the midst of a heat wave. The heat, coupled with the loss of power, led to a life-threatening situation. Heat claimed 34 lives in areas without power following the derecho. NWS expects the service assessment document to be signed by the NWS Director in January 2013. It will then be included on the Service Assessment Website.



Radar mosaic from the June 29, 2012, derecho.

Severe Weather

National Severe Weather Workshop 2013 Joins National Tornado Summit

By Greg Carbin, WCM, SPC, and John Ferree, Meteorologist, OCWWS

The NWS Storm Prediction Center will join forces with the Oklahoma Insurance Department, the State of Oklahoma Emergency Management, and the National Association of Insurance Commissioners, to collaborate on the National Tornado Summit and National Severe Weather Workshop (NSWW) in Oklahoma City, March 10-12, 2013. The 11th NSSW will feature presentations at seven breakout sessions during the Summit which will take place at the Cox Convention Center in downtown Oklahoma City.

The NSWW is a NOAA/NWS/SPC-sponsored workshop on the effective transmission of messages about meteorological risk.

After a public Weather Fair titled Our Weather, Your Life, on Sunday, March 10, the business portion of the National Tornado Summit will open on Monday morning, March 11. General session speakers will include prominent leaders in government and industry. Breakout sessions and panel discussions will be interspersed with the general sessions across the 2-day event. NOAA/NWS speakers and topics will be featured in both the general and breakout sessions, along with topics on insurance and emergency management as related to weather. Tours of the National Weather Center in Norman will be offered to workshop participants on Monday afternoon before the day concludes with an evening mixer in downtown Oklahoma City. On Tuesday, morning workshops will be followed by a luncheon featuring a keynote speaker. The afternoon agenda includes a panel discussion on storm damage assessment. The NSSW and Summit will conclude late Tuesday afternoon. Similar to past NSWW events, exhibits and information kiosks will be set up by enterprising companies.

Check the NSSW Website for updates and to register for the Tornado Summit/NSWW. For additional information about the workshop agenda, please contact Gregory.Carbin@noaa.gov.

Winter Weather Messages

Simplified, Clarified Headlines Tested in Winter Weather Hazard Messages

By Eli Jacks, NWS Fire and Public Weather Services Branch Chief

In support of our Weather-Ready Nation initiative, NWS wants to start a conversation on how to simplify and clarify our products. NWS uses the terms Watch, Warning, and Advisory (WWA) to describe how likely we believe a weather or flooding event is to occur, how severe we think the associated impacts will be, and when the impacts will occur. Results from surveys, service assessments, and feedback from some of our partners indicate many people do not fully understand what these terms mean or how to properly respond to stay safe and protect their property. The public may also be confused on the distinction between WWA headlines for specific hazards. Examples of similar sounding hazard products include Winter Storm Warning, Winter Storm Watch, and Winter Weather Advisory.

Watch a brief narrated slide show to learn more about this test.

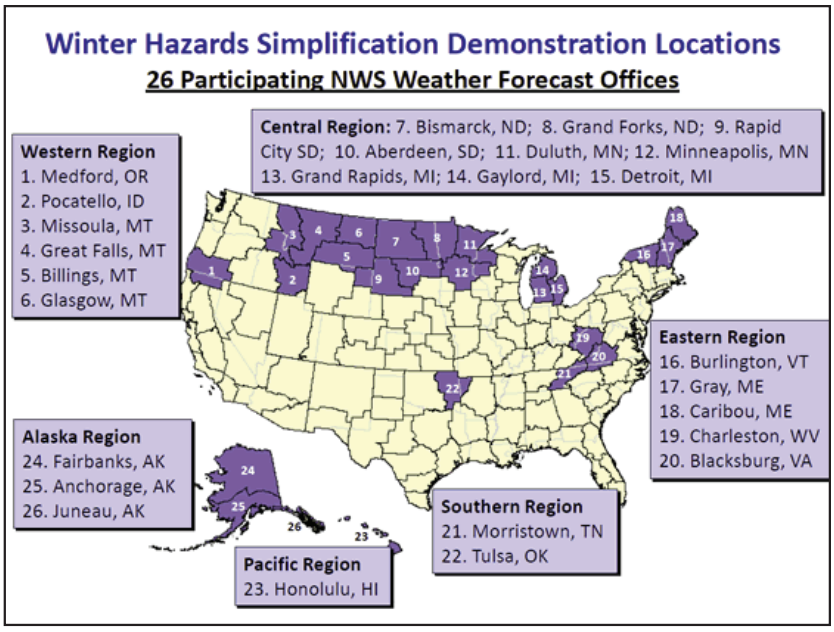
For this demonstration, NWS is proposing an alternative way to express headlines within hazard messages, with the focus on winter messages. The demonstration, which will run through March 31, 2013, provides the opportunity to compare headline text from a shortened version of our official WWA messages for winter weather hazards with a proposed alternative.

These alternative messages are being created at selected locations for demonstration purposes *only*. The alternative messages will *only* be accessible via this Web page and via special links from the NWS Home Page and the Home Pages of participating WFOs. These messages are *not* being disseminated. All official NWS winter weather hazard messages will be disseminated as usual, including all computer-readable header information, e.g., Valid Time Event Code (VTEC).

NWS relies on the official WWA terms and their associated products to alert the public to a significant weather or water hazard. Forecasters issue a Watch when they believe there is the *potential* for a significant hazard to occur, but its occurrence, location, and/or timing is still uncertain. The term Advisory is used for imminent hazards that only merit *caution*, in other words, hazards that are not implicitly dangerous, but could become dangerous if caution is not exercised. The term Warning is used when a *dangerous* hazard is imminent or already occurring.

Using these three primary terms as a base, our WWA products identify expected level of certainty, timing, and impact for specific weather and water hazards. For example, a Winter Weather Advisory can be used to inform users of the imminent arrival of a mixture of snow and sleet that may require driver caution. An Ice Storm Warning expresses the imminent expectation that dangerous amounts of ice will accumulate on roadways and power lines. NWS forecasters currently select among 14 official products to express expected winter weather hazards.

During this demonstration, NWS will present alternative terms and phrases for our winter weather hazard message headlines. The alternative language is being generated by software we've developed specifically for this demonstration. NWS is demonstrating this proposed alternative approach to hazard message simplification at 26 NWS WFOs this winter. For these sites, we are creating a side-by-side display to allow you to compare our current official headline text with proposed alternative text. These displays will be created continuously in real time based on our official products; however, they will be used for demonstration purposes only.



*Side-by-side comparisons of the proposed and current winter weather message formats are presented for this test on the **Website**.*

Based on an analysis of your comments, we will work with our partners and social scientists to determine next steps. If there is support for a simplified approach to winter hazards messaging, NWS will refine the concept based on the comments we receive. We will also work with our partners to determine the best way for their systems to ingest and process information contained in the new message formats. For more information, message comparisons, and contact links see our Hazards Message Simplification Website.

Climate, Water and Weather Links

- Aviation Weather, Information and Resources
- Education and Outreach Videos, Multimedia and More
- National Atmospheric and Oceanic Administration Home Page
- National Weather Service Home Page
- NOAA Weather Radio All-Hazards
- NWS Local Office Key Contact List
- Past Weather and Climate from the National Climatic Data Center
- StormReady Home Page, TsunamiReady Home Page
- Weather Safety and Awareness Brochures, Booklets, Posters
- Weather Events Calendar
- Weather Fatality and Injury Statistics
- Weather Ready Nation

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