

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.

October 2014

From the Top: NWS Improves Quantitative Precipitation Forecast Verification

By NWS Insider Staff, Silver Spring, MD

I am pleased to announce that starting October 15, the NWS Weather Prediction Center (WPC) began using a new method for verifying the Day 1 Quantitative Precipitation Forecast, which will be the basis for its Government Performance and Results Act (GPRA) goal. GPRA goals are tracked by Congress and designed to improve our effectiveness as a federal agency and inspire public trust in our services.

The new verification method uses a precipitation analysis that is quality controlled by the NWS River Forecast Centers (RFC). The RFCs leverage

Louis Uccellini, NWS Director



forecaster and hydrologist expertise to develop the best estimate of observed rainfall. This change reinforces the vital role RFC staff play in our hydrologic services mission. The previous method required manual quality control performed by WPC forecasters.

This innovation demonstrates one of the steps NWS is taking to develop an integrated field structure – where field offices and the National Centers for Environmental Prediction collaborate to produce high-quality, consistent products on the national scale. This method ensures we use a collaborative analysis that leverages field expertise and benefits the entire weather, water and climate enterprise.

To mitigate any potential risks associated with implementing the new verification method, WPC forecasters will continue their manual analysis in parallel with the new RFC-based method until March 1, 2015. WPC, in conjunction with the NWS continental U.S. regional directors, will make a final recommendation for implementation by April 5, 2015. Please see the implementation plan for more details.

My thanks to everyone who worked to make this change possible. It represents another step in our efforts to increase consistency and improve services as we evolve NWS and build a Weather-Ready Nation.

News and Updates: NWS Customer Satisfaction Results Improve in 2014

By Sal Romano, Meteorologist, NWS Performance and Awareness Branch

NWS scored an 84 out a 100 in this year's Annual Customer Satisfaction Survey, up 2 points from last year and well in the "excellent" range.

The survey consisted of a core section containing questions about hazardous services, Weather-Ready Nation, decision support services, dissemination, outreach and weather education, and demographics. Respondents could also complete an optional section covering aviation services.

The independent survey firm Claes Fornell International (CFI) Group administered the survey, which drew 31,384 respondents, plus 271 Weather-Ready Nation Ambassadors. Of those respondents, 5,445 also completed the aviation services section. CFI conducted the survey from September 9-25, 2014. As in previous years, the NWS Central Region drew the largest number of respondents, followed by Eastern, Southern, Western, Alaska and the Pacific Region.

NWS posted a link to the survey on its national, regional and local websites. In addition, CFI paid 1,000 people to serve as panelists and take a similar survey. These panelists more closely represent U.S. demographics according to the 2010 U.S. Census.

The score for the 1,000 Internet panelists was 79, still a strong score. The aggregate federal government satisfaction score for 2013 was 66. The 2014 average score is not yet available.

CFI measures customer satisfaction with the American Customer Satisfaction Index, the standard methodology used across public and private sectors to evaluate public opinion and help prioritize organizational changes to improve customer experience.

A CFI representative will brief the NWS 2014 Customer Satisfaction Survey results at NWS headquarters in November. CFI will also provide a report on the survey results online.

Decision Support: Friday Briefings Keep Partners Prepared for Weekend Weather

By <u>Johnathan Lamb</u>, Meteorologist, NWS Charleston, SC

For several years, NWS Charleston, SC, has provided weekly weather briefings to emergency managers (EM) and other key partners. The briefings, held on Monday mornings, discuss expected weather conditions for the next 7 days, with an emphasis on potential high-impact events such as severe weather, tropical cyclones or winter weather.

In 2013, the Charleston office launched a weekend briefing each Friday morning. The Friday briefings offer a heads up to decision-making partners when there is the potential for weather impacts over the weekend, a time when EM staffing and weather awareness may be much lower.

Briefings are offered as a PowerPoint presentation provided via GoToWebinar in concert with an audio teleconference.

An NWS forecaster gives the PowerPoint a personal touch by summarizing each slide. At the



Lead Forecaster John Quagliariello gives a routine Friday webinar briefing.

end of the brief presentation, generally no longer than 10 minutes, participants have time to ask questions. The presentation also is posted on the local office website, where the public can access it. Originally the briefings were composed by a member of the office management team or a small cadre of forecasters. By 2014, our local Decision Services Support (DSS) program expanded, and this briefing became part of the DSS Desk, manned by a forecaster who also works on the medium range forecast.

The office has introduced several techniques to increase the efficiency of the briefing process and ensure high quality briefings. Since the presentations use many standard NWS graphics, the staff created PowerPoint templates that automatically ingest the latest images from a batch download script. The templates cut down the time forecasters need to tweak image formats, which gives the staff more time to focus on fine-tuning the meteorological details and impacts of the forecast.

Partners can join a briefing with little or no advance preparation since the office uses the same GoToWebinar link every week. NWS Charleston also sends its partners an automated reminder email each Thursday from the office's calendar. EM partners report these briefings have become an efficient method for them to maintain weather situational awareness.

Decision Support: DSS Workshop Features Insider Website Tour

By Corey Bogel, Meteorologist, NWS Caribou, ME

How can NWS better serve EMs? Meteorologists from NWS Caribou, ME, recently hosted a DSS workshop for northern and eastern Maine EMs that led to a better understanding of how NWS can meet partners' needs.

The workshop delved into the office's website, offering an insider tour of how EMs can better use the online resources. The web presentation explained the NWS <u>Enhanced Data Display</u>, and offered an open discussion about the local severe weather impacts catalog. The open dialog helped NWS forecasters gain insights into the weather-related decisions and briefings EMs give to their partners every day.



Meteorologist Paul Fitzsimmons leads a discussion on NWS Caribou's Impact Catalog.

Following the session, Andrew Sankey, the director of the Hancock County Emergency Management Agency, said, "Your crew did an outstanding job sharing valuable information with us in an easyto-understand and use format. Thanks for making this possible."

The workshop came on the heels of a successful demonstration of threshold-based decision support services provided provided to Aroostook County emergency managers for the Acadian World Congress, a festival of Acadian and Cajun culture and history. The Congress drew 50,000 visitors in far northern Maine during the 17-day festival.

The NWS Caribou staff prepared email briefings to highlight specific thresholds for wind, thunderstorms, flash flooding and heat. NWS Caribou forecasters set these thresholds in consultation with

the Aroostook County EM. NWS provided onsite support to EMs for several days.

Outreach Innovation: University Students, Spotters, EMs Enhance NWS Open House

By Jonathan Guseman, Forecaster, NWS Lubbock, TX

NWS Lubbock hosted an open house for citizens of the Texas South Plains to experience what takes place in an NWS forecast office. The event was hosted by NWS staff and local spotters and university students. Despite occurring in the middle of one of the longest stretches of consecutive days with measurable precipitation in recorded history at Lubbock, nearly 200 individuals stopped by for the day's festivities.

NWS staff escorted attendees through three stations:

- Station 1: Presentation presenting an overview of NWS structure and functionality
- Station 2: Tutorial about the Advanced Weather Interactive Processing System (AWIPS) and the forecast and warning process
- Station 3: Explanation of weather instruments and hardware used by NWS Lubbock staff



NWS Lubbock meteorologists explaining the forecast and warning process.

After touring the three stations, visitors could drive over to see the office's weather radar (WSR-88D) and learn how it works.

Local spotters shared their experiences tracking severe thunderstorms and described the role they play in helping NWS Lubbock issue more timely and accurate warnings. In addition, local EMs and fire rescuers were on hand to display their mobile operation centers. Students and staff from the Texas Tech University Atmospheric Science Department performed various experiments and exhibited their Ka-band radar and Sticknets.

