

# Aware

*Aware is published by NOAA's National Weather Service to enhance communications between NWS the emergency management community and other government and private sector partners.*

January 2019

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## New Polling Technology Enhances Integrated Warning Team Meeting

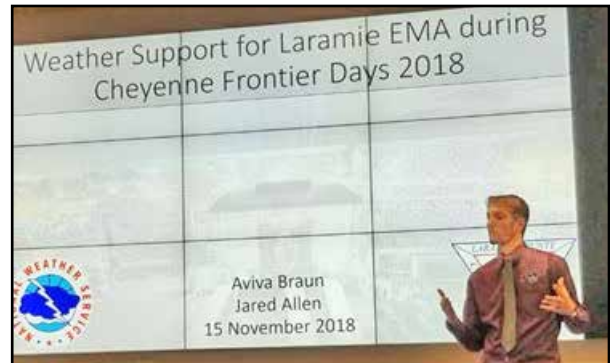
By [Tim Troutman](#), WCM, NWS Riverton, WY

On November 15, the five NWS Weather Forecast Offices (WFO) which serve Wyoming came together and organized a statewide partners Integrated Warning Team (IWT) meeting. The session was part of the Wyoming Office of Homeland Security Training and Exercise Planning Workshop. A wide cross section of Wyoming's county emergency management (EM) coordinators, public health, Air Force and Homeland Security staff attended.

The program featured interactive presentations with live polling and collaborative dialog. Topics covered included safety programs and new Geographic Information System (GIS) Impact Based Decision Support (IDSS) applications. NWS is testing these options for increased situational awareness.

Other topics discussed included the Hazard Simplification project, Wyoming Weather Safety Public Service Announcement project, GIS IDSS Situational Awareness for Emergency iProject, the Weather-Ready Nation Ambassador Initiative, and the Lightning Safety Toolkit Initiative. WFO staff received positive feedback regarding direct IDSS operations and onsite support during critical weather impact. Partners commented that having NWS staff onsite helped lead to a full evacuation of the stadium at Cheyenne Frontier Days when the venue fell under a tornado warning.

It's through these gatherings the NWS and the EM community collectively connect and strengthen the important relationship needed for clear communication and enhanced response. The WFOs requested core partner feedback via Menti live polling.



*Meteorologist Jared Allen, WFO Cheyenne, WY, speaks at a combined partner workshop.*

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## Critical First Steps in Annual Red River Basin Flood Preparations

By [Gregory Gust](#), WCM, NWS Grand Forks, ND

What does it take to spool up preparations for potential interstate, international, basin-wide flooding? When it comes to the perennial snowmelt floods in the Red River Basin (RRB), decades of disastrous flood experiences and billions of dollars in disaster recovery and flood mitigation projects have taught us a great deal. This year will be the 8<sup>th</sup> year of a more focused, IWT approach to basin flooding.

Each fall, the North Dakota U.S. Geological Survey (USGS) office organizes a basin-wide Cooperative Stream-Gaging Meeting after the beginning of the new "water year" on October 1. This date is usually before the first seasonal snowfall but not this time. The season's first meeting was held in Fargo on November 13; the first 4-16 inches of the new season's snowpack were already in place. This first look meeting drew about 25 agency representatives directly involved in weather and water measurements, weather and water forecasts, and local emergency management. The meeting's primary purpose was to assess the status of our current monitoring and forecasting systems and identify updates that would likely impact system or field operations through the coming snowmelt flood season.

The meeting also offered time to identify and prioritize changes to gaging sites and data networks that might be needed to ensure a successful flood preparation and response effort in the spring.

The North Central River Forecast Center (NCRFC) in Chanhassen, MN, and NWS Grand Forks, ND, provided reports on current and expected hydro-meteorological conditions. In addition, this year, Dr. Ronny Schroeder of the University of New Hampshire spoke on NASA funded efforts to improve Satellite Enhanced Snowmelt Flood Predictions in the basin, the results of which might be used for the first time this flood season.

The second critical partner meeting occurred in mid-January, when the Basin Commission held its annual International Summit. Due to the government shutdown, NWS staff were unable to attend. Traditionally, this summit gathers more than 300 representatives from government agencies, engineering firms, tribal and community leadership, academia, and the International Joint Commission, which oversees all boundary waters treaty concerns for the U.S. and Canada.

This year's meeting, held January 15-17, 2019, in Grand Forks ND, was expected to touch on many of the topics raised in the stream-gaging meeting and then address numerous other water quantity and quality issues among the represented jurisdictions. Extensive media coverage of this event normally highlights NWS spring flood outlook and provides a springboard for updates throughout the coming months. Again, missing from this year's meeting.

The next partner meeting is scheduled for mid-February and cosponsored by the U.S. Army Corps of Engineers and NCRFC. While winter weather remains fickle and challenging, our seasonal snowmelt flood forecasts and related flood fight efforts are becoming increasingly more accurate thanks to such close partnerships.



*Stream gages within the U.S. and Canadian portions of the Red River of the North Basin: flow is northward, through Winnipeg.*

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## Richard Brundage and WFO San Diego Team Up to Hosts Partner Training Seminars

By [Alex Tardy](#), WCM, NWS San Diego, CA



*Seal Beach police department hosted partners from Los Angeles, Riverside, Orange and San Diego counties.*

Richard Brundage, the author of *Heart of Communication*, worked with NWS San Diego, CA, to host two full-day workshops on media crisis communication training. The workshops were hosted by Solana Beach lifeguards and the Seal Beach police department. About 50 people attended the two classes held in December, mostly from school districts and government agencies. The Seal Beach class consisted of numerous agency public information officers.

A total of eight classes have been held in NWS San Diego partner region with overwhelming positive feedback. The four new meteorologists at WFO San Diego were also able to attend this critical training.

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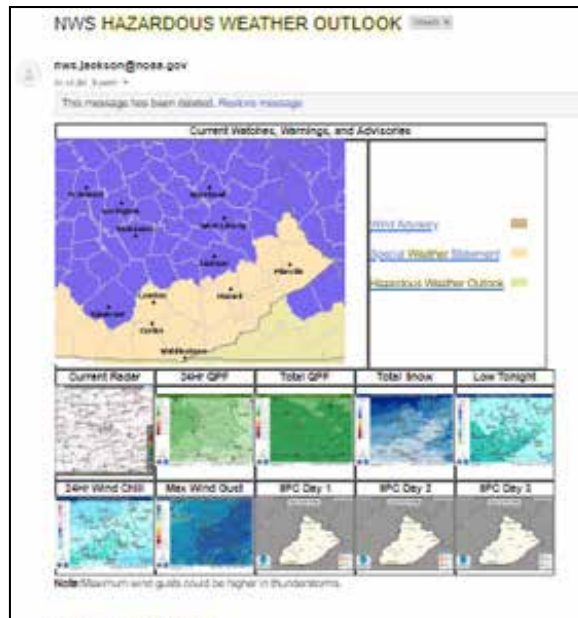
## EMs Waking Up to Hazardous Weather Info at Fingertips

By [Jonathan Guseman](#), WCM, NWS Jackson, KY

At the request of several county and city EMs, NWS Jackson, KY, looked into developing a way to provide hazardous weather information directly to EMs at the beginning of their day. These automated daily emails were made possible with programming by WFO Charleston, WV, Information Technology Officer (ITO) Kevin McGrath.

After participating in an IWT meeting and tabletop exercise conducted by NWS Charleston WCM Tony Edwards, NWS Jackson WCM Jonathan Guseman adopted the idea of sending EMs automated daily emails that include the Hazardous Weather Outlook and accompanying graphics. These emails have been praised by EMs across the four state area.

Thanks to the effort of NWS Jackson ITO Buddy Whorrall, a script/cron was tailored to email the Hazardous Weather Outlook and accompanying graphics to EMs across eastern Kentucky daily at 6:30 am, given the possibility of inclement weather within the next 7 days. EMs have expressed their appreciation to WFO staff for sending this information daily. The new option seems especially helpful for EMs responsible for locations that cross NWS County Warning Area boundaries.



*Example of an email containing the Hazardous Weather Outlook*

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## NWS Jackson Hosts Media Workshop

By [Felecia Bowser](#), WCM, NWS Jackson, MS

Last fall, meteorologists at NWS Jackson, MS, hosted their annual Media Workshop. The theme of this year's workshop was "Working Together to Serve the Citizens of the ArkLaMiss." The goal of the conference was to renew old partnerships and build new relationships among the NWS Jackson meteorologists and local media outlets. At least one representative from each of the major media outlets based in the NWS Jackson County Warning Area attended.

Meteorologist-in-Charge Bill Parker opened the session by introducing staff and encouraging NWS Jackson media partners to join the office's weekly weather briefing calls. The tone of the day was set by the office's new WCM, who led the group through an ice-breaker session. Next WFO Jackson management and forecasters presented on several key topics:

- ◆ Creation and evolution of Week 2 Hazard Graphic
- ◆ How the NWS and area media partners can jointly host better preparedness events
- ◆ Innovative collaboration techniques that can be used before, during and after severe weather events



*Media attendees that services NWS Jackson County Warning Area*

The second half of the conference included discussion of a possible Meteorologist Exchange Program, in which media personnel can shadow forecasters for a day and vice-versa. Next, our Science and Operations Officer delved into the differences between Dual-Pol and legacy radar estimates. The day concluded with a winter weather event scenario and subsequent discussion questions that led to lively dialogue between NWS Jackson staff and media partners.

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## Ensuring Public Safety During St. Jude Children’s Hospital Marathon

By [Gary Woodall](#), WCM, NWS Memphis, TN

WFO Memphis provided IDSS for the first responders and public safety officials in support of the St. Jude Children’s Hospital marathon. This half marathon and 10K race took place in Memphis on December 1. The scheduled start time was 7 am with activities continuing into the afternoon. The races attracted more than 26,000 registered participants, 40,000 spectators, and 4,000 volunteers.

IDSS planning began in early November with coordination discussions between WFO staff and the Memphis Office of Emergency Management (OEM). These discussions provided the framework of the IDSS schedule, key decision/trigger points and the briefing format. This framework was finalized during a team planning meeting held November 26, attended by approximately 60 agency representatives.

As the race day approached, it became evident that thunderstorms would threaten the Memphis area during the night of November 30, when the course was scheduled to be set up, roads blocked off and barricades installed. Concern also grew that the thunderstorms could remain in the area into Saturday morning, which would affect the safety of all involved.

WFO Memphis provided briefings to numerous members of the Memphis OEM, police and fire departments, as well as Shelby County Office of Preparedness, Tennessee EMA, State Homeland Security, and other government partners. We offered an in-person briefing at the final planning meeting on November 26. NWS staff members also provided email briefings on November 26, 28 and 29.

The WFO prepared two email briefings on November 30 and one in the pre-dawn hours of December 1. In addition, staff members conducted a video briefing on the evening of November 30 via Google Hangouts. The briefings emphasized the timing and confidence regarding the thunderstorms. We also featured IDSS threat matrices and GraphiDSS images in the briefings. Based on the IDSS input, officials decided on the evening of November 30 to delay the start times by 30 minutes.

As feared, thunderstorms did persist in the Memphis area into the morning of December 1. WFO staff contacted the Memphis OEM to alert the officials of lightning within a 20 mile and 10 mile radius of Memphis. Based on this tactical IDSS, the race start times were delayed by an additional 30 minutes. As lightning left the 10- and 20-mile radii, the WFO provided phone updates to the Memphis OEM. The remainder of the event proceeded without incident.

“The forecast and expertise provided by the NWS was very timely and accurate. The information provided by NWS played a huge factor in informing our decision to delay the start of the races for safety concerns. The NWS forecast was spot on accurate, which allowed us to make the best decision for the safety of the participants and our staff. The decision to delay the start was the right decision,” *V.O. Little, ALSAC, Director of Safety and Security.*



*Radar image from 6:57 AM CST December 1, 2018, showing line of thunderstorms approaching the Memphis metro area. A Severe Thunderstorm Warning was in effect just south of Memphis at the time.*

**Aware**

NOAA’s National Weather Service, Analyze, Forecast and Support Office  
Managing Editor: [Melody Magnus](#), Editor: [Rich Bandy](#)  
Aware online: [www.weather.gov/publications/aware](http://www.weather.gov/publications/aware) ISSN 1936-8178  
Subscribe/Unsubscribe: [melody.magnus@noaa.gov](mailto:melody.magnus@noaa.gov)