April 2022

## NWS Introduces the Experimental National Water Prediction Service (NWPS)

By: NWS Staff



The National Weather Service (NWS) is improving the information delivery of water resources by combining Advanced Hydrologic Prediction Service (AHPS) and Office of Water Prediction (OWP) web features into an experimental unified National Water Prediction Service (NWPS) website. The AHPS <a href="webpage">webpage</a> hosts NWS river observations and forecast information, providing near real-time river data and forecast information, probabilistic information, static Flood Inundation Maps (FIMs), and quantitative precipitation estimates. National Water Model (NWM) guidance is hosted by the OWP on a <a href="separate site">separate site</a>, which provides an interactive map and an Image Viewer for NWM output, as well as general information about the

OWP, the NWM, and FIM. The experimental NWPS will combine these resources with new tools to provide partners and the American public with water forecasts and information necessary to make critical water decisions.

NWPS functionality will be tested in late April, and a 30-day parallel test of AHPS and NWPS runs from April-May. These tests provide an opportunity for partners and the public to provide feedback. The final deployment of NWPS is proposed for September 2022. Once deployed as operational, NWPS would be the primary source of NWS water data and forecast information, replacing the current AHPS webpage.

The highlights of the experimental NWPS features include the following:

- Combined features of AHPS and OWP
- Mobile-friendly interface
- Dynamic maps with more flexible query and viewing options for real-time river observations and forecasts, precipitation estimates, and improved meteorological and hydrological data support
- Gauge location pages with hydrographs generated upon request, probabilistic graphics, and flood inundation maps (where available)
- National Water Model hydrographs at the scale of individual river reaches, providing complementary guidance for all rivers and streams nationally
- Application Program Interface (API) data services to allow users to include NWPS information directly into their own applications and services

To learn more about the features of the experimental NWPS and the journey of modernizing Hydrologic Web Information Dissemination, visit the NWPS <u>StoryMap</u>. For questions or suggestions, please contact sudhir.shrestha@noaa.gov.

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## Aviation Weather Center's Experimental Upgraded Website Seeking Comments

By: Monica Parker, Aware Editor

The Aviation Weather Center's website is undergoing a significant upgrade to improve its consistency, supportability, mobile friendliness, performance, and ease of use. The <u>preview site</u> for this experimental upgrade is now available and accepting comments through October 31, 2022 on the proposed replacement of the existing Aviation Weather Center website (<a href="https://www.aviationweather.gov">https://www.aviationweather.gov</a>).

The information on the upgraded website will remain similar to its current content but with improved navigation and presentation for mobile devices. The new website also merges the legacy Helicopter Emergency Medical Services (HEMS) tool into the same framework as the Graphical Forecasts for Aviation while keeping its focus on low-altitude flight.

To learn more information on the features or usage of the upgraded preview site, or to send in your questions or comments via online survey, visit the Public Information Statement <a href="here">here</a>. Further questions can also be directed to <a href="jennifer.stroozas@noaa.gov">jennifer.stroozas@noaa.gov</a> or <a href="mailto:austin.cross@noaa.gov">austin.cross@noaa.gov</a>.

## NWS Morehead City and Wilmington Co-Host 2022 Beach Hazards and Rip Current IWT

By: NWS Staff



On April 5 and 6, 2022, Weather Forecast Office (WFO) Wilmington, NC and WFO Morehead City, NC hosted a two-day "2022 Carolinas Beach Hazards and Rip Current" Integrated Warning Team (IWT) workshop.

Rip currents are the #1 weather related killer in the Coastal Carolinas, and there are continued efforts to increase awareness and inform the public on how to keep themselves and others safe at the beach. This is the third annual IWT between WFO Wilmington and WFO Morehead City.

This year, the workshop hosts expanded their reach to several inland WFOs, as statistics show that most fatalities at Eastern NC and SC beaches are visitors from inland locations. The host offices invited forecasters and external partners from Louisville, KY, and Binghamton, NY to join in the efforts to expand messaging from inland WFOs.

This webinar was unique in the availability of ASL interpreters throughout the entirety of the workshop. The deaf and hard of hearing community doesn't have access to all of the rip current information typically provided, requiring a more inclusive method of providing this large community with safety information.

Around 150 partners attended, with presentations from NWS meteorologists from WFO Morehead City, NC, Wilmington, NC, and Louisville, KY, as well as lifeguards, coastal and inland broadcast meteorologists, and county emergency management. Research Professor Dr. Robert Brander, of the University of New South Wales in Australia, also presented. The overall goal of his research is to understand the physical-social interaction of beach hazards in order to reduce the incidence of drowning and injury on beaches and other coastal environments.

The IWT was divided into two sessions on two separate days. Day 1 focused on the messaging aspect of rip currents and beach hazards, while Day 2 focused on the science and operations aspect.

Presenters utilized 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 hand for more in-depth conversations. Questions and discussion occurred during the second part of each session. Feedback from the

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workshop was unanimously positive, with attendees expressing gratitude for the NWS's efforts to increase awareness for the #1 weather related killer in the Eastern Carolinas.

To view the recordings of the webinar, click here for <u>Day 1</u>, and here for <u>Day 2</u>.

Mark Willis, MIC at WFO Wilmington, NC said:

"I wanted to first express gratitude for the team that has continued to organize and grow this workshop over the last few years. It takes an incredible amount of preparation and coordination to pull off, and the efforts of the planning team - and the presenters - do not go unnoticed as we find innovative ways to attack our area's number one weather related killer. Rip currents and other beach hazards present a significant threat to our communities and the visitors thereof, and I think we can all be proud of our collective efforts over the years to mitigate the problem. The third annual Carolinas Beach Hazards and Rip Current IWT showcased the very best of what our agency offers, and the momentum to do even more in this program is out the roof right now. It's an exciting time!"

## **NWS Reduces Weather Balloon Launches at Upper Air Locations**

Author: NWS Staff

Starting March 29, 2022 and until further notice, the National Weather Service is reducing the frequency of weather balloon launches at several upper air locations in the United States due to a global supply chain disruption of helium and a temporary issue with the contract of one hydrogen supplier.

The National Weather Service launches weather balloons from 101 upper air sites throughout the United States and the Caribbean, using helium to inflate the balloons at 12 of these sites. The agency converted the remaining sites to hydrogen, which is cost effective and a more reliable gas option.

Approximately 9% of the total upper air sites are currently affected by the gas shortage and temporary contract issue, including five of the twelve helium sites and four hydrogen sites. These issues are expected to impact additional upper air sites. To ensure there is enough gas on hand to launch balloons in support of forecasts during hazardous weather, the affected sites have either reduced launches to once per day or suspended flights during calm weather days. This temporary adjustment will not impact weather forecasts and warnings. The affected sites benefit from data collected by balloons launched from neighboring upper air sites. Be assured we will take all steps possible to mitigate the supply chain and contracting issues.

Radiosondes are instruments attached to weather balloons that send back a wide range of upper atmospheric data to support weather forecasts, including temperature, dew point, relative humidity, barometric pressure, wind speed, wind direction. Radiosondes are one of many technologies that collect earth observation data for use in weather modeling and forecasting. Data is also collected from instruments aboard commercial aircraft, surface observing stations, satellites, radars, and buoys.

The National Weather Service will continue converting sites to hydrogen where locations, leases, and safe operations allow, and as funding becomes available. If you or your organization have questions about these changes, please contact <a href="mailto:susan.buchanan@noaa.gov">susan.buchanan@noaa.gov</a>.



NOAA's National Weather Service, Analyze, Forecast and Support Office

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