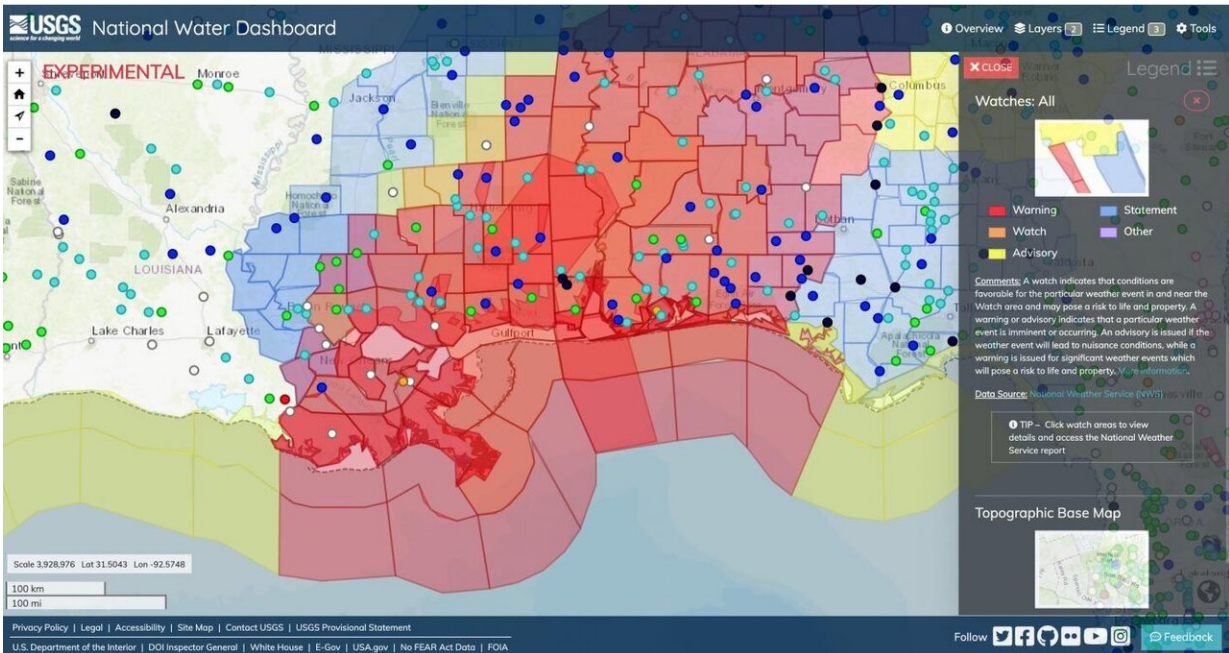


A mobile flood tool for the nation unveiled

November 2 2020



In addition to current conditions provided by USGS observation stations, the NWD allows you to connect with valuable forecast information from the National Weather Service. The red shaded areas display current hurricane watches, while the orange areas are warnings. Find and click on a blue circle. Doing so will provide the latest information about a streamgage site that is above normal flow status. If flooding is above NWS flood stage, the circle will have a magenta halo around it (no sites are experiencing NWS flood stage on the shown map). Credit: USGS

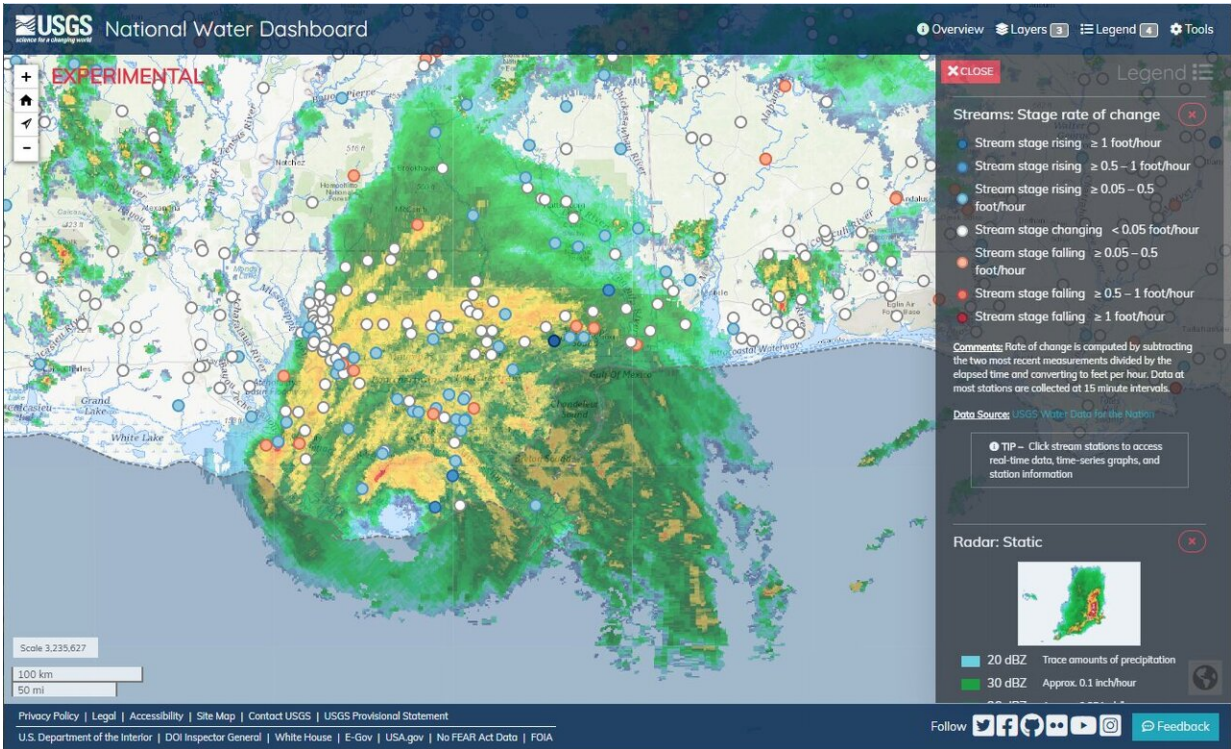
The U.S. Geological Survey announced Friday the completion of a new mobile tool that provides real-time information on water levels, weather

and flood forecasts all in one place on a computer, smartphone or other mobile device.

The new USGS National Water Dashboard, or NWD, provides critical [information](#) to decision-makers, emergency managers and the public during flood events, informing decisions that can help protect lives and property.

"The National Water Dashboard is a much-needed advancement that will help keep communities across the country safe during [extreme weather conditions](#)," said Tim Petty, Ph.D., Department of the Interior Assistant Secretary for Water and Science, from an agricultural round table with the Water Subcabinet in Janesville, Wisconsin. "The development of a comprehensive tool that can provide real-time, critical information on mobile devices is great news for areas in our country that are prone to flooding or drought. In addition to giving the public key information on what's happening in their communities, it will also help improve the response of federal, state and local agencies during storms, floods and drought conditions."

"Our vision is the National Water Dashboard will be a one-stop resource for all available USGS [water](#) data used by the public to make decisions that can preserve life and property," said Jim Reilly, Ph.D., director of the USGS. "The USGS will continue to build out this tool incorporating future advances in water information so the public will have the latest and best information on hazards and resources."



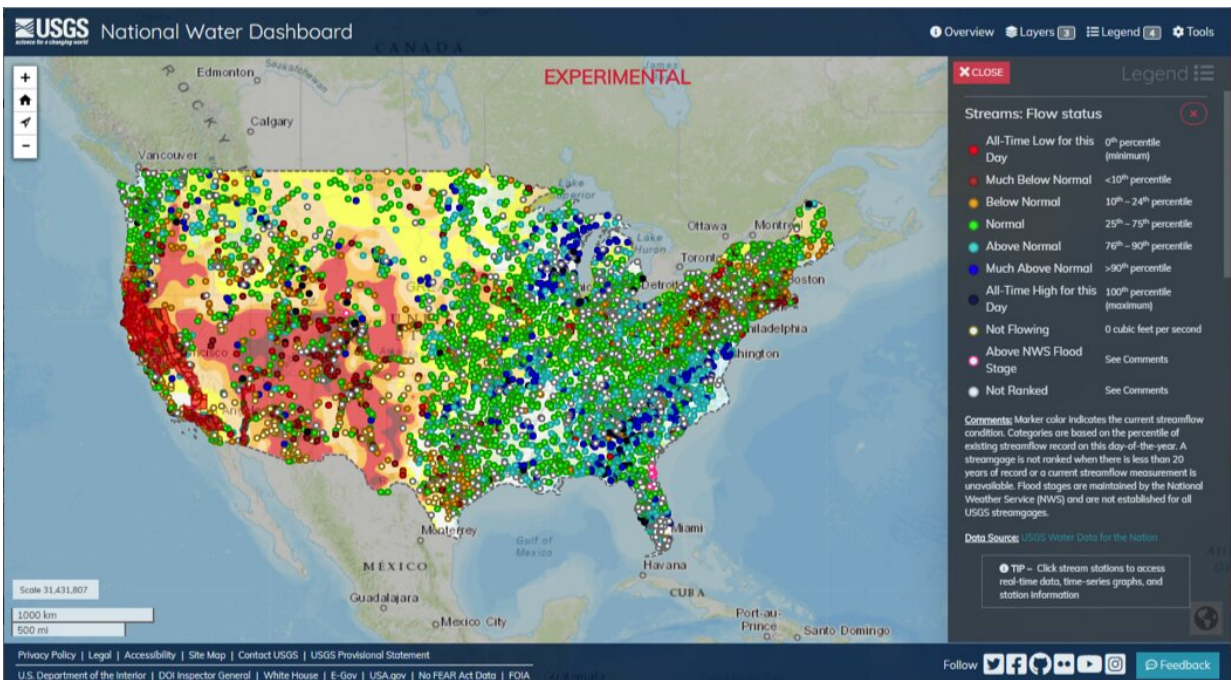
Hurricane Zeta's landfall on the Gulf coast. Flow conditions can be explored by clicking on the option in the Layers menu, along with other dataset choices such as weather radar and GOES satellite data. Blue circles show where streamgage water levels are rising, while orange/red dots show sites where levels are receding. Clicking on the legend button will bring up information about the symbols used in the map. Credit: USGS

Information from the NWD will help inform forecasting, response and recovery efforts for agencies such as the National Weather Service, the Federal Emergency Management Agency, the U.S. Army Corps of Engineers, and other federal, state and local agencies. The tool can be used by forecasters and local emergency managers as they issue flood- and evacuation warnings, verify safe evacuation routes and coordinate emergency response efforts. The NWD can assist the USACE as they manage water supplies in river basins and operate flood-control

reservoirs. During a drought, the tool can help state resource managers identify areas where water supplies are at risk.

"The National Water Dashboard is an exceptional tool for staying up to date on real-time USGS water information coupled with forecasts and warnings from NOAA's National Weather Service," said retired Navy Rear Adm. Tim Gallaudet, Ph.D., assistant secretary of commerce for oceans and atmosphere and deputy NOAA administrator. "Giving individuals access to water information whether it be a flood or drought, on their mobile device, will help protect lives and property."

The NWD presents real-time stream, lake and reservoir, precipitation and groundwater data from more than 13,500 USGS observation stations across the country. This information is shown along with NOAA weather data such as radar, watches and warnings, past precipitation totals, precipitation forecasts and drought conditions from other open water-data sources. The NWD also links to the USGS WaterAlert system, which sends out instant, customized updates about water conditions.



The NWD allows users to monitor a wide variety of natural hazards, including real-time fire warnings from the National Weather Service. The Drought Monitor is a useful index to understand the impact of drought conditions on streamflow statewide or within individual basins. This image from October 27, 2020, shows areas in the Western and Northeast U.S. that are experiencing lower flows and significant drought conditions. The dark red boxes along the West Coast are the current fire warnings posted from the National Weather Service that are a result of the ongoing extreme drought conditions. The red colored dots represent the low streamflow conditions at USGS gauges. Credit: USGS

"The National Water Dashboard builds on the USGS Texas Water Dashboard that was created in 2016," said Don Cline, Ph.D, USGS Associate Director for Water Resources. "Expanding this tool nationwide will increase the ease and ability for the public to have access to USGS [real-time](#) water data at all times to help make informed decisions regarding the safety of their families and homes."

"The U.S. Army Corps of Engineers values the continued partnership and active engagement within our Federal family," said Chandra S Pathak, Policy Advisor and Senior Engineer for the U.S. Army Corps of Engineers Engineering and Construction Division. "The new USGS National Water Dashboard is well suited to support the ever-evolving needs for increased hazard risk awareness and mitigation actions toward preparedness and response."

More information: National Water Dashboard:
[dashboard.waterdata.usgs.gov/a ... /nwd/?region=lower48](https://dashboard.waterdata.usgs.gov/a.../nwd/?region=lower48)

Provided by United States Geological Survey

Citation: A mobile flood tool for the nation unveiled (2020, November 2) retrieved 19 April 2024 from <https://phys.org/news/2020-11-mobile-tool-nation-unveiled.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.