



Find your local weather

[News](#) | [Tools](#) | [About](#)



[Home](#) / [News & Features](#)

Biden-Harris Administration announces \$80 million through Investing in America Agenda to improve flood prediction capabilities

Funding supports NOAA's efforts to upgrade the National Water Model and expand Flood Inundation Mapping services

Focus areas: [Weather](#)

Topics: [Bipartisan Infrastructure Law](#), [flooding](#)

Share: [X](#) [f](#) [✉](#) [🖨](#)

September 27, 2023



ad closed due to flooding in Colusa County, California, following an atmospheric river storm that delivered heavy rain and snow across Northern California. Photo taken on January 12, 2023. (Image credit: California Department of Water Resources)

Earlier this month, the Department of Commerce and NOAA’s Office of Water Prediction awarded the Next Generation Water Prediction Capability contract to Raytheon, an RTX Business. The \$80 million, four-year contract will transform water prediction by enabling rapid deployment of advanced water models to provide coupled, continental scale, operational coastal and inland flood forecasting and inundation mapping services.

Floods can have devastating impacts across the country, harming local economies, damaging infrastructure, and putting lives at risk,” said U.S. Secretary Gina Raimondo. This investment, made possible by President Biden’s Investing in America Agenda — a key pillar of Bidenomics — will give first responders, emergency managers and the public better, fast information about where, when and how our communities will be affected by flooding.”

The contract is for the development of two capabilities:

- A new Water Resources Modeling framework supporting future versions of the National Water Model with state-of-the-science hydrologic and hydraulic model formulations, and
- Near real-time, high spatial resolution flood inundation maps and services for nearly 100% of the U.S. population leveraging both forecasts from National Weather Service River Forecast Centers and operational guidance from the National Water Model.



NOAA's new [experimental flood inundation maps are currently available to 10% of the population](#), shown in green. These services will expand to nearly 100% of the population by 2026. (Image credit: NOAA) [Download Image](#)

The contract also requires Raytheon to deliver an integrated, high-resolution hydrographic, topographic and bathymetric geospatial dataset underpinning both the National Water Model and Flood Inundation Mapping service capabilities, and a cloud-hosted Optimization and Evaluation Environment to configure the new National Water Model and Flood Inundation Mapping services.

These new capabilities will create a pathway to operationalize the new models and techniques developed by the [Cooperative Institute for Research to Operations in Hydrology](#) [↗](#), and ultimately will enable broader community engagement as envisioned in NOAA's [Weather, Water and Climate Strategy](#). In addition to running models that predict streamflow, floods and inundation, the new Water Resources modeling framework also will provide an avenue to deploy improved models of drought, soil moisture and water quality into operations.

"NOAA's National Weather Service is taking flood forecasting to the next level," said Dr. Michael Morgan, the Assistant Secretary of Commerce for Environmental Observation and Prediction. "This project is expected to enhance our ability to identify and communicate potential flooding and pass that life-saving information on to emergency managers, decision makers and the public."

The agency also awarded \$7.4 million, of which \$1.7 million is Bipartisan Infrastructure Law funds, to GAMA-1 Technologies to develop the Hydrologic Visualization and Information Services system in the cloud to serve as the platform for dissemination of high-resolution flood prediction services to the



[Bipartisan Infrastructure Law](#) website to learn about other current and future funding opportunities.



Media contact



Maureen O’Leary, NOAA Communications, Maureen.Oleary@noaa.gov, (202) 578-257



RELATED FEATURES //



New NOAA system ushers in next generation of hurricane modeling, forecasting



Calif. wildfires rage on: Get the latest fire weather forecasts, maps and safety info



Last updated September 27, 2023

[Have a comment on this page? Let us know.](#)



Science. Service. Stewardship.

[News](#) | [Tools](#) | [About](#)

[Resources for Tribal & Indigenous Communities](#) | [Bipartisan Infrastructure Law \(BIL\)](#) | [Inflation Reduction Act \(IRA\)](#) | [Protecting Your Privacy](#) | [FOIA](#) | [Information Quality](#) | [Accessibility](#) | [Guidance](#) | [Budget & Performance](#) | [Disclaimer](#) | [EEO](#) | [No-Fear Act](#) | [USA.gov](#) | [Ready.gov](#) | [Employee Check-In](#) | [Staff Directory](#) | [Contact Us](#) | [Need Help?](#) | [COVID-19 hub for NOAA personnel](#) | [Vote.gov](#)

Stay connected to NOAA



Help improve this site