

## NOAA launches new computer model for flood forecasting

August 16, 2016

The National Oceanic and Atmospheric Administration (NOAA) recently launched its National Water Model (NWM), a new hydrologic model that the agency claims will yield the “biggest improvement in flood forecasting the country has ever seen.” The new model will allow NOAA’s National Weather Service to incorporate the new information into its forecasts to determine when there could be too much or too little water.

Using a new NOAA supercomputer, the model will simulate how water moves throughout the nation’s rivers and streams using mathematical representations of different processes, such as soil moisture, runoff, stream velocity, and vegetation type. Additionally, by providing information on fine spatial and temporal scales, the NWM will allow NOAA to increase the number of locations where it can forecast conditions from 4,000 to 2.7 million.

The launch coincides with the current historic flooding in Louisiana after days of torrential rain inundated the Baton Rouge area with over 20 inches of rainfall. The flood is responsible for the death of at least nine people and has impacted over 40,000 homes, leading Louisiana Governor John Bel Edwards to announce an emergency declaration on August 14th.

The new model will eventually allow for street-level predictions of flooding and water quality, but in the meantime, it will improve flash flood forecasts and expand the current areas where flood forecasts are available.

Sources: CNN, E&E Daily, Louisiana.gov, National Oceanic and Atmospheric Administration, Weather.com

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