

Hydrologic Modeling at the National Water Center: Operational Implementation of the WRF-Hydro Model to support National Weather Service Hydrology

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The NWS National Water Center (NWC) is collaborating with NCEP, NCAR, and NWS field offices to implement a new nationwide, high resolution, operational hydrologic and streamflow model—WRF-Hydro. Running on the NOAA WCOSS supercomputer system, and scheduled for implementation in late FY16, this model will provide revolutionary water resource prediction capabilities on a 1km/250m grid and across 2.6 million river basins. WRF-Hydro will form the core of the cross-agency NWC Centralized Water Forecasting Project. It will further the NWS' mission to protect lives and property by providing flood, drought and water resource forecast guidance and situational awareness to NWS field offices and Centers, and partner agencies like the Federal Emergency Management Agency (FEMA). This talk will provide an overview of this research-to-operations effort, describing the configuration and performance of the model along with the products produced.