



Probabilistic forecasts for Decision Support at the North Central River Forecast Center

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The North Central River Forecast Center (NCRFC) of the US National Weather Service has the responsibility for issuing river forecasts at 426 points over an area of nearly 890,000 km², covering the Upper Mississippi river basin, the US watersheds flowing to lakes Superior, Huron and Michigan, and rivers flowing from the US to the Hudson Bay in Canada. The NCRFC issues probabilistic outlook forecasts at all its forecast points starting on December. While focused primarily on the risks associated with flooding during the spring snow melt down, the RFC frequently issues probabilistic forecasts to deal with water resources operations during drought times. This presentation will focus on probabilistic forecasts issued to assess flooding risk at Red River of the North, to support navigation operations on the Mississippi river during drought conditions, and on support of reservoir operations for hydropower generation and recreation. The presentation will discuss the improvements over the current practice that will be possible to achieve once the NWS Hydrologic Ensemble Forecasting System is put into operations later this year.