



US Army Corps  
of Engineers  
St. Paul District

# Information Paper

## Red River of the North Basin: Basin-Wide Feasibility Study



*The Red River of the North is an international watershed.*

### Contact

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### Location/Description

The Red River of the North basin covers 45,000 square miles and occupies substantial portions of North Dakota, northwestern Minnesota, southern Manitoba and a small portion of northeastern South Dakota. The river flows to the north, feeding into Lake Winnipeg in Manitoba. Flooding, nutrient loading and loss of native habitat are significant issues in the Red River of the North basin.

Land use in the basin is primarily agricultural, but several urban centers are located along the Red River main stem and tributaries. While extensive drainage systems have resulted in extremely rich agricultural areas, portions of the basin still support the ecologically abundant prairie-pothole region. Flooding is a major concern for residents in the basin; frequent floods have impacts on urban and rural infrastructure and agricultural production.

The basin-wide study integrates several ongoing planning efforts which build upon International Red River Board and Red River Basin Commission initiatives. Study tasks include collecting basin-wide Light Detection and Ranging (LiDAR) mapping data, refining hydrologic and hydraulic models to be used for project planning and flood forecasting, updating the floodplain information and management tools available on the Red River Basin Decision Information Network, developing a basin-wide flood storage strategy and developing a comprehensive watershed management plan. The study supports local officials' efforts to set reasonable and attainable goals that provide both local and regional benefits.

### Status

The feasibility cost share agreement was signed June 4, 2008, with the Minnesota Red River Watershed Management Board and the North Dakota Red River Joint Water Resource District acting as non-Federal sponsors. LiDAR data collection was completed in 2010. Hydrologic modeling of individual sub-basins was completed in 2015. Integration of these models with the main-stem hydraulic model will be complete in 2017. Retention modeling began in 2015 and will extend into 2017. A comprehensive watershed management plan, which will address basin-wide goals and objectives for flood risk management, water quality, water supply, recreation, soil health and natural resource enhancement, will be complete in 2017.

Watershed planning tools including a LiDAR viewer, flood mapping, hydrologic models, and a drought planning tool are available at <http://www.rrbdin.org/>.

### Authority

The study is authorized by a resolution of the Senate Committee on Public Works, September 30, 1974.

### Fiscal

Total study cost is estimated to be \$18 million. Costs are to be shared 50-50 between the Federal government and non-Federal sponsors, with the sponsors providing their share as work-in-kind. Federal allocations through October 2016 are \$8.5 million.