

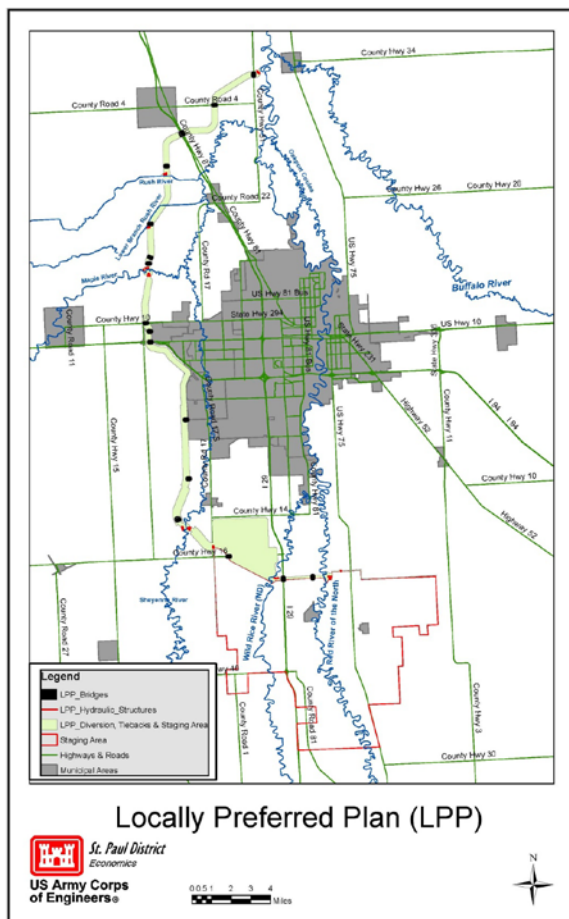
# FARGO-MOORHEAD METROPOLITAN AREA, ND AND MN FLOOD RISK MANAGEMENT PROJECT

23 September 2011

**ABSTRACT:** The purpose of the Project is to provide cost effective, environmentally-sensitive, and technically feasible flood risk management for Fargo, North Dakota, Moorhead, Minnesota, and the surrounding metropolitan area. The project consists of a diversion channel in North Dakota, tie-back levees, a staging area, and a storage area to reduce the existing and future flood risk and damages to public and private infrastructure in the metropolitan area. The cities of Fargo, ND, and Moorhead, MN, are the non-Federal sponsors.



The Fargo-Moorhead metropolitan area has a relatively high risk of flooding. The highest river stages usually occur as result of spring snowmelt, but summer rainfall events can also cause significant flood damages. The Red River of the North has exceeded the National Weather Service flood stage of 18 feet in 48 of the past 109 years, and every year from 1993 through 2011. Average annual flood damages for the metropolitan area are currently estimated at over \$194.8 million.



The Locally Preferred Plan (LPP) is the plan that provides the locally desired level of benefits and follows the locally preferred alignment in North Dakota. The LPP includes the following:

- 36-mile, 20,000 cfs diversion channel
- 50,000 acre-feet storage area
- 150,000 acre-feet staging area
- 10 miles of tie-back levees
- Control structures on the Red and Wild Rice Rivers and Wolverton Creek
- Aqueduct and spillway structures on the Sheyenne and Maple Rivers
- Drop structures on the Lower Rush and Rush Rivers
- Non-structural mitigation for impacts in the storage area

Unavoidable environmental impacts would be mitigated with construction of fish passage channels along the Red and Wild Rice River structures; construction of additional fish passage projects in the Red River basin; stream restorations on tributaries near the project; conversion of floodplain agricultural land to floodplain forest; and creating wetlands within the diversion channel footprint.

The estimated total cost for the LPP is \$1,781,348,000 (based on October 2011 price levels). The Federal share of the total first costs is estimated at \$801,542,000, and the non-Federal share is estimated at \$979,806,000. The flood risk management features have an estimated total first cost of \$1,745,033,000, with the Federal and non-Federal shares at \$783,384,000 and \$961,649,000, respectively. The recreation features have an estimated total first cost of \$36,315,000, with the Federal and non-Federal shares estimated at \$18,157,500 and \$18,157,500, respectively. The non-Federal sponsors are responsible for operation, maintenance, repair, rehabilitation and replacement, at an estimated annual cost of \$3,631,000. Average annual flood risk reduction benefits are estimated at \$174,817,000. The LPP has an overall benefit-to-cost ratio of 1.76.

**REPORT DOCUMENTATION:** Pertinent documentation on the project, the results of the CWRB, and subsequent Washington-Level Review Actions, are linked below:

- [CWRB Agenda](#)
- [Project Summary](#)
- [CWRB Briefing Slides](#)
- [CWRB Lessons Learned](#)
- [CWRB Meeting Record](#)
- [State & Agency Review Comment Letters](#)
- [Documentation of Review Findings](#)
- [Signed Chief of Engineers Report](#) -- 19 December 2011
- [Advance Copy to Congressional Committees](#)
- [ASA\(CW\) Memo to OMB](#)
- [OMB Response](#)
- [ASA\(CW\) Transmittal to Congress](#)
- [Signed Record of Decision](#)
- Authorization

**ADDITIONAL INFORMATION:**

[Mississippi Valley Division](#)

[St. Paul District – Fargo-Moorhead Metro Study](#)

[Fargo-Moorhead Feasibility Study](#)