

Roseau River, Roseau, Minnesota

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Abstract: The project is located in the city of Roseau, Minnesota, and the surrounding area. Roseau is located 10 miles south of Canada and 65 miles east of North Dakota. The Roseau River bisects the city, and then flows north toward Canada, draining more than 1,100 square miles in the United States and an additional 900 square miles in Canada. The city of Roseau is vulnerable to flooding from both spring snowmelt and rainfall events. It relies heavily on temporary emergency levees, which are in poor condition, leaving the city vulnerable to levee failures and catastrophic flooding.

The recommended plan is the locally preferred plan (LPP) which includes the features of the NED plan and two large storage areas to

eliminate downstream stage increases. The flood damage reduction features of the recommended plan consist of a 4.5-mile long diversion channel, 5.1 miles of levees along the diversion channel with a height of 5 feet or less, 2 storage areas, east and west of the diversion channels, with a total surface area of about 1,089 acres, a flow restriction structure to divert river flood flows into the diversion channel, an inlet control structure, 4.1 miles of levees with a height of 5 feet or less to contain peak flows within the storage areas, constructing 2 highway bridges and 1 railroad bridge, with the cost of the railroad bridge to be cost shared as a project construction cost. The plan also contains recreation features including 7 miles of multipurpose trails along the project corridor, 9 miles of off-road vehicle trails, a canoe trail along the river, interpretative sites, and a trailhead. The project does not require any separable mitigation as the project has been designed to offset any adverse impacts which occur. The NED plan would provide the same flood damage reduction benefits as the LPP plan, but does not include the two storage areas, east and west of the diversion channels. An environmental assessment was completed which resulted in a Finding of No Significant Impact (FONSI).

The total first cost of the recommended LPP is estimated at \$25,100,000 including approximately \$23,400,000 for flood damage reduction and \$1,700,000 for recreation. The total first cost of the NED plan, estimated at \$22,170,000. The Federal share of the NED plan is estimated at \$13,820,000 and the non-Federal share is estimated at \$8,350,000. The additional cost associated with the flood damage reduction features of the LPP is estimated at \$2,930,000 and is a non-Federal responsibility. The city of Roseau, Minnesota, is the non-Federal cost sharing sponsor for all features of the plan and will also be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at \$70,000 per year.

Equivalent annual benefits for flood damage reduction are estimated at \$2,350,000 and for recreation are estimated at \$2,160,000, for a total of \$4,510,000. This results in equivalent annual net benefits of \$970,000 for flood damage reduction and \$2,050,000 for recreation for total equivalent annual net benefits of \$3,020,000. The benefit-to-cost ratio for flood damage reduction is 1.7; and the benefit-to-cost ratio for recreation is 19.8; and the overall project benefit-to-cost ratio is 3.0 to 1. There is greater than a 95 percent probability that the diversion channel and associated features would protect the city of Roseau from a flood which has a 1.0 percent chance of occurring in any year (100-year flood). The diversion channel will also reduce damages for events larger than the 1.0 percent event and will assist the city during those events by decreasing stages, increasing the chances of successful emergency flood fighting. The diversion channel and associated features would reduce expected annual flood damages in the city of Roseau by nearly 86 percent. The project would also reduce the threat to loss of life and reduce disruptions to health and safety services. The City is in support of the recreation features and these will provide opportunities currently unavailable to the citizens in the region.

Report Documentation: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- [CWRB Briefing Agenda](#)
- [Project Summary](#)
- [CWRB Briefing Slides](#)
- [CWRB Lessons Learned](#)
- [CWRB Meeting Record](#)
- [Comment Letters](#)
- [Documentation of Review Findings](#)
- [Signed Chief of Engineers Report](#)
- [ASA\(CW\) Memo to OMB](#)
- [OMB Clearance](#)
- [Congressional Notification](#)
- [Finding of No Significant Impact](#)
- Authorization
 - [Section 1001 \(27\) WRDA 2007](#)
 - [Full WRDA Text](#)

Additional Information:

[Mississippi Valley Division](#)

[St. Paul District](#)

[Roseau River Flood Damage Reduction Project Information](#)

[Roseau River Feasibility Study](#)