



DEPARTMENT OF THE ARMY  
OFFICE OF THE CHIEF OF ENGINEERS  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

CECW-MVD

DEC 19 2006

SUBJECT: Roseau River, Roseau, Minnesota

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the study of flood damage reduction along the Roseau River in the vicinity of Roseau, Minnesota. It is accompanied by the report of the district and division engineers. These reports are an interim response to a resolution by the Committee on Public Works of the United States Senate, adopted September 30, 1974. This resolution requested a review of reports on the Red River of the North Drainage Basin, Minnesota, South Dakota and North Dakota to determine if the recommendations contained therein should be modified at this time, with particular reference to flood control, water supply, waste water management and allied purposes. Preconstruction engineering and design activities for Roseau River project will continue under the authority provided by the resolution cited above.

2. The reporting officers recommend authorization of a plan for flood damage reduction and recreation for Roseau, Minnesota. The recommended plan would provide significant flood damage reduction to the city of Roseau along the Roseau River. 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 1089 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 recreation features include 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 recommended plan is a deviation from the national economic development (NED) plan and is the locally preferred plan (LPP). 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. The storage areas store peak flows and eliminate any downstream stage increases associated with the NED plan.

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3. The total first cost of the recommended LPP, based on October 2006 price levels, is estimated at \$25,100,000. The total first cost of the recommended project includes approximately \$23,400,000 for flood damage reduction and approximately \$1,700,000 for recreation. The total first cost of the NED plan, based on October 2006 price levels, is estimated at \$22,170,000 which includes \$20,470,000 for flood damage reduction and \$1,700,000 for recreation. In accordance with the cost sharing provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended, recreation features would be shared 50 percent Federal and 50 percent non-Federal. In accordance with the cost sharing provisions of Section 103 of WRDA of 1986, as amended, 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. Federal cost sharing in the recommended LPP is limited to the Federal share of the NED plan and the non-Federal sponsor would be required to provide 100 percent of the additional costs associated with design and construction of LPP. Thus the Federal cost of the flood damage reduction features is estimated at \$12,970,000 and the non-Federal cost is estimated at \$10,430,000 of which \$2,930,000 is the additional costs associated with the LPP. The overall Federal share of the estimated total first cost of the recommended project would be \$13,820,000 and the non-Federal share would be \$11,280,000. The city of Roseau, Minnesota, is the non-Federal cost sharing sponsor for all features of the plan. The city of Roseau would 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. This includes \$57,000 per year for flood damage reduction features and \$13,000 per year for recreation features. Equivalent annual costs, based on a discount rate of 4 7/8 percent and a 50-year period of analysis for flood damage reduction are estimated at \$1,380,000 and for recreation are estimated at \$110,000, including OMRR&R for a total of \$1,490,000. 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.

4. The reporting officers estimate that there is greater than 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.

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5. I generally concur in the findings, conclusions and recommendations of the reporting officers. Accordingly, I recommend that the plan described herein be authorized, with such modifications as in the discretion of the Chief of Engineers may be advisable. This recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 210 of WRDA 1996.

6. The Washington level review indicates that the plan recommended by the reporting officers is technically sound, economically justified, and environmentally and socially acceptable. The plan complies with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State, and local agencies have been considered.

7. Accordingly, I recommend implementation of the recommended project in accordance with the reporting officers' plan with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost-sharing, financing, and other applicable requirements of WRDA of 1986, as amended. Also, this recommendation is subject to the non-Federal sponsor's agreeing to comply with all applicable Federal laws and policies, including the following requirements:

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total flood damage reduction costs as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to flood damage reduction in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Government to flood damage reduction;

(3) Provide, during construction, a contribution of funds equal to 5 percent of total flood damage reduction costs;

(4) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated

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material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the flood damage reduction features;

(5) Provide, during construction, any additional funds necessary to make its total contribution for flood damage reduction equal to at least 35 percent of total flood damage reduction costs;

(6) Provide all incremental costs for the Locally Preferred Plan;

b. Provide 50 percent of total recreation costs as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to recreation in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Government to recreation;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the recreation features;

(4) Provide, during construction, any additional funds necessary to make its total contribution for recreation equal to 50 percent of total recreation costs;

c. Provide, during construction, 100 percent of the total recreation costs that exceed an amount equal to 10 percent of the Federal share of total flood damage reduction costs;

d. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefor, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

e. Not less than once each year, inform affected interests of the extent of protection afforded by the flood damage reduction features;

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f. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

g. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the flood damage reduction features;

h. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the flood damage reduction features;

i. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the flood damage reduction features afford, hinder operation and maintenance of the project, or interfere with the project's proper function;

j. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, are open and available to all on equal terms;

k. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

l. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

m. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

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n. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

o. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

p. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.);

q. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

r. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

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s. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

t. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

8. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the city of Roseau as the non-Federal sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.



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