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

CECW-MVD (1105-2-10a) DEC 30 2011

SUBJECT: Minnesota River, Marsh Lake Ecosystem Restoration Project, Minnesota

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration along the Minnesota River at Marsh Lake, a part of the Lac qui Parle Reservoir, west of Appleton, Minnesota. It is accompanied by the report of the district and division engineers. These reports were completed under authorities granted by a May 10, 1962, resolution of the Committee on Public Works of the U.S. House of Representatives. This resolution requested the review of "the report of the Chief of Engineers on the Minnesota River, Minnesota, published as House Document 230, 74th Congress, First Session and other pertinent reports, with a view to determining the advisability of further improvements in the Minnesota River Basin for navigation, flood control, recreation, low flow augmentation, and other related water and land resources." Preconstruction engineering and design activities for the Marsh Lake Ecosystem Restoration Project will continue under the authority provided by the resolution above.

2. The Marsh Lake ecosystem function and connectivity has degraded over time primarily as a result of artificial changes to the hydrologic conditions at the site. The ecosystem significance of the area is demonstrated on the national, regional and local level. Marsh Lake provides critical stop-over refuge for migratory waterfowl moving through the Mississippi River flyway as well as breeding grounds for the largest white pelican population in North America. Many other fish and bird species are also dependent on the resource for life requisites including both migrating and nesting bald eagles. Ecosystem values provided by Marsh Lake have increased in importance over time as 90 percent of the wetland areas within the watershed have been drained.

3. The reporting officers recommend authorization of a plan to restore aquatic ecosystem structure and function as well as implementation of ancillary recreation features to Marsh Lake and surrounding resources in the upper portion of the Lac qui Parle reservoir. The recommended plan consists of ecosystem restoration features including returning the Pomme de Terre River to its historic channel, modifying the Marsh Lake Dam for fish passage, construction of a drawdown water control structure at the Marsh Lake Dam, installation of gated culverts at Louisburg Grade Road, and the breaching of a dike at an abandoned fish pond adjacent to the Marsh Lake Dam. The plan also contains recreation features including shoreline fishing access structures, interpretive signage, a canoe landing, benches, picnic tables, trash receptacles, toilets, and parking lot improvements. The project requires mitigation to offset adverse impacts to Marsh Lake Dam through photographic documentation of the existing site conditions prior to construction since Marsh Lake Dam was determined individually eligible to the National Register of Historic Places. The recommended plan is the National Ecosystem Restoration Plan. Implementation of the recommended plan will have a substantial beneficial impact on fish and

wildlife species in the area. While the project will not directly affect federally-listed endangered or threatened species, the reduction of the suspended sediments in the waters of Marsh Lake and improved water clarity will benefit a wide-range of fish and wildlife species including species of concern such as the bald eagle, that are known to use the Marsh Lake site.

4. Based on an October 2011 price level, the estimated project first cost is $9,967,000. The project first cost includes approximately $9,463,000 for ecosystem restoration and approximately $504,000 for recreation. In accordance with the cost sharing provisions of Section 103(c) of the Water Resources Development Act of 1986 (WRDA 1986), as amended (33 U.S.C. 2213(c)), ecosystem restoration features are cost-shared at a rate of 65 percent Federal and 35 percent non-Federal; and recreation features are cost-shared at a rate of 50 percent Federal and 50 percent non-Federal. Thus, the Federal share of the project first costs is estimated to be $6,403,000 and the non-Federal share is estimated at $3,564,000, which equate to 64 percent Federal and 36 percent non-Federal. The costs of lands, easements, rights-of-way, relocations, and excavated material disposal areas is estimated to have no cost, given the existing Federal ownership over the project area. The State of Minnesota, Department of Natural Resources is the non-Federal cost share sponsor for the recommended plan. The State of Minnesota, Department of Natural Resources would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at $35,000 per year.

5. Based on a 4.0-percent discount rate and a 50-year period of analysis, the total equivalent annual costs of the project, including OMRR&R, are estimated to be $490,000.

a. The equivalent average annual costs of ecosystem restoration features are estimated to be $464,000, including OMRR&R. The cost of the recommended aquatic ecosystem restoration features is justified by the restoration of about 8,400 average annual habitat units which includes restoration of approximately two linear miles of historic riverine habitat.

b. The equivalent average annual costs of recreation features are estimated to be $26,000, including OMRR&R. The annual benefits of the proposed recreation features are estimated at $230,000. The benefit-to-cost ratio for recreation is 8.9 to 1.

6. The recommended plan was developed in coordination and consultation with various Federal, State, and local agencies using a systems approach in formulating ecosystem restoration solutions and in evaluating the impacts and benefits of those solutions. Plan formulation evaluated a wide range of non-structural and structural alternatives under Corps policy and guidelines as well as consideration of a variety of economic, social and environmental goals. The recommended plan delivers a holistic, comprehensive approach to solve water resources challenges in a sustainable manner. The resulting recommended plan has received broad public support.

7. In accordance with EC 1165-2-209, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included Agency Technical Review (ATR) and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. An exclusion from the Independent External Peer Review (IEPR) was granted by the Director of Civil Works.

8. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to restore the ecosystem of Marsh Lake be authorized in accordance with the reporting officers' recommended plan at an estimated project first cost of $9,967,000 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 Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996, and WRDA 1986, as amended by Section 210 of WRDA 1996. Accordingly, the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 35 percent of total ecosystem restoration costs as further specified below:

1. Provide the non-Federal share of design costs allocated by the Government to ecosystem restoration in accordance with the terms of a design agreement entered into prior to commencement of design work for the ecosystem restoration features;

2. 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 project;

3. Provide, during the design and implementation phase, any funds necessary to make its total contribution equal to 35 percent of total project costs;

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

1. Provide the non-Federal share 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 recreation features;

2. 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;

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

4. Provide, during construction, 100 percent of the total recreation costs that exceed an amount equal to 10 percent of the Federal share of total ecosystem restoration costs;

c. Provide, during the design and implementation phase, 100 percent of all costs of planning, design, and construction for the project that exceed the Federal share of the total project costs;

d. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, 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 by Federal law;

e. 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 outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

f. Shall not use the project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

g. 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 Code of Federal Regulations (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;

h. 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;

i. 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;

j. Hold and save the United States free from all damages arising from the design, 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;

k. 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 CFR Section 33.20;

l. 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.*);

m. 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;

n. 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;

o. 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;

p. Provide, during the design and implementation phase, 35 percent of all costs that exceed $50,000 for data recovery activities associated with historic preservation for the project; and

q. 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.

9. 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 Congress, the 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.

MERDITH W. B. TEMPLE
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Acting Chief of Engineers