



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

REPLY TO
ATTENTION OF:

CECW-MVD (1105-2-10a)

22 DEC 2004

SUBJECT: East St. Louis and Vicinity, Illinois

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration and recreation in the vicinity of East St. Louis, Illinois. It is accompanied by the report of the district and division engineers. These reports constitute a general reevaluation of the flood damage reduction project authorized in Section 204 of the Flood Control Act of 1965, and modified by Section 137 of the Water Resources Development Act (WRDA) of 1976 and Section 310 of WRDA of 2000, for East St. Louis and Vicinity, Illinois. Preconstruction engineering and design activities for this project will be continued under authority of Section 310 of WRDA 2000.
2. The reporting officers recommend further modification to the authorized project. The recommended plan is an extensive restoration of the ecosystem in the vicinity of East St. Louis, Illinois, on the Mississippi River. The recommended plan will restore approximately 1,700 acres of bottomland forest habitat, 1,100 acres of prairie wetland habitat, 840 acres of marsh and shrub swamp habitat, 460 acres of lake habitat, and 380 acres of riparian forest. In addition, the recommended plan also includes restoration of 10.4 miles of floodplain stream, installation of 650 wood duck boxes and 870 prairie bird perches, improvement of 20 acres of lacustrine overwintering and shoreline habitat, construction of 130 tributary sediment detention basins and riffle and pool complexes in 178 miles of streams, 15.5 miles of earthen embankments, and associated water control features (i.e., culverts, flap gates, and new channels). All project features are located within the State of Illinois. Because the recommended plan would not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures are required. The recommended plan is the national ecosystem restoration plan.
3. Based on October 2004 price levels, the total first cost of the recommended plan is estimated at \$191,158,000. The total first cost of the project includes approximately \$190,854,000 for ecosystem restoration and approximately \$304,000 for recreation. In accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, ecosystem restoration features would be cost shared 65 percent Federal and 35 percent non-Federal. Thus the Federal cost of the ecosystem restoration features is estimated at \$123,655,000 and the non-Federal cost is estimated at \$67,199,000. The estimated total first cost also includes a separable

CECW-MVD

SUBJECT: East St. Louis and Vicinity, Illinois

recreational trail. This feature is estimated at \$304,000; and based on the cost sharing requirements of WRDA of 1986, the costs would be shared 50 percent Federal and 50 percent non-Federal. To assure that expected outputs of the ecosystem restoration project feature are realized, the project also includes about \$2,221,000 for monitoring and adaptive management. Thus the overall Federal share of the estimated total first cost of the project would be \$123,807,000 and the non-Federal share would be \$67,351,000. Average annual recreation benefits are estimated at \$25,000 and average annual costs are estimated at \$18,000, for a recreation benefit-to-cost ratio of 1.4 to 1. The average annual cost for ecosystem restoration is approximately \$11,066,000. The total annual operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) costs of the recommended project are estimated at \$109,000 per year. This includes \$108,000 for ecosystem restoration OMRR&R and \$1,000 for recreation OMRR&R. Total average annual costs, including initial construction and OMRR&R, are estimated at \$11,193,000, based on an interest rate of 5.375 percent and a 50-year period of analysis.

4. During the reevaluation of this authorized project, it became apparent that problems and opportunities in the project area had changed significantly since authorization. While interior flooding problems still exist, other more significant problems and changes (e.g., the environmental degradation of significant resources in the study area, urbanization, changes in the transportation infrastructure, etc.) were identified. While the authorized project was designed to eliminate interior flooding from a 50-year storm event, the plan recommended herein is designed to reconnect watershed functionality by using stormwater for the restoration of significant ecosystem resources. The recommended plan also provides incidental flood damage reduction benefits estimated at \$1,445,000 annually.

5. To ensure that an effective environmental restoration plan was recommended, cost effectiveness and incremental analysis techniques were used to evaluate alternative restoration plans. The recommended plan provides both feeding and resting resources for the federally-threatened bald eagle and will protect and propagate the decurrent false aster. The project contributes to the life cycle requirements of more than 50 migratory bird species covered by international treaties and the state-threatened Illinois chorus frog. The palustrine wetland resources to be restored are considered scarce with over 85 percent of the wetlands in Illinois and other midwestern states lost since the 1780's, and the decline is continuing. The plan connects 5 habitat areas and enlarges 3 isolated habitats to improve overall resource sustainability. The project produces approximately 8,332 average annual habitat units. The recommended ecosystem restoration project features are justified on restoration of habitats considered especially valuable due to scarcity and dependence of certain species on these resources.

6. Washington level review indicates that the plan recommended by the reporting officers is environmentally justified, technically sound, cost effective and socially acceptable. The plan conforms with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land 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.

CECW-MVD

SUBJECT: East St. Louis and Vicinity, Illinois

~~7. I concur in the findings, conclusions, and recommendation of the reporting officers.~~

Accordingly, I recommend implementation of the modifications to the authorized project in accordance with the reporting officers' plan with such modifications as in the discretion of the Chief of Engineers may be advisable. The recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Public Law 99-662, as amended by Section 210 of Public Law 104-303, and in accordance with the following requirements which the non-Federal sponsor must agree to prior to project implementation:

a. Provide 35 percent of the total project costs allocated to ecosystem restoration as further specified below:

(1) Provide 25 percent 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 project;

(2) Provide, during the first year of construction, any additional funds needed to cover the non-Federal share of design costs allocated by the Government to ecosystem restoration;

(3) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or ensure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the ecosystem restoration features;

(4) Provide or pay to the Government the cost of providing all retaining dikes, waste weirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for construction, operation, and maintenance of the ecosystem restoration features;

(5) Provide during construction, any additional costs as necessary to make the total non-Federal contributions equal to 35 percent of total project costs allocated to ecosystem restoration;

b. Provide 50 percent of total project costs allocated to recreation 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;

CECW-MVD

SUBJECT: East St. Louis and Vicinity, Illinois

(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 the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost-sharing provisions of the agreement;

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

e. Operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, at no cost to the Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and any specific directions prescribed by the Government;

f. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the non-Federal sponsor owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project;

g. Comply with Section 221 of Public Law 91-661, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

h. Hold and save the Government free from all damages arising from the construction, operation, maintenance repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors;

i. Keep and maintain books, records, documents, and 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 and other evidence are required, to the

CECW-MVD

SUBJECT: East St. Louis and Vicinity, Illinois

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;

j. Perform, or cause to be performed, 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), 42 USC 9601-9675, that may exist in, on, or under lands, easements of rights-of-way necessary for the 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;

k. Assume, as between the Federal Government and the Non-Federal Sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA- regulated materials located in, on, or under lands, easements, or rights-of-way that the Government determines necessary for the construction, operation, or maintenance of the project;

l. 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, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA;

m. Prevent obstructions of, or encroachments on, the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the ecosystem restoration benefits, hinder its operation and maintenance, or interfere with its proper function, such as any new development on project lands or addition of facilities that might reduce the benefits of the project;

n. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation, and maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

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

CECW-MVD

SUBJECT: East St. Louis and Vicinity, Illinois

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 substantive 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));

q. Provide and maintain recreation features, such as access roads, parking areas and other public use facilities, open and available to all on equal terms.

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 non-Federal sponsor, the State of Illinois, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded the opportunity to comment further.



CARL A. STROCK
Lieutenant General, U.S. Army
Chief of Engineers