



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

REPLY TO  
ATTENTION OF:

CECW-PC (1105-2-10a)

18 JUL 2006

SUBJECT: Wood River Levee System Reconstruction, Madison County, Illinois

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on proposed modifications to the Wood River Levee System located in Madison County in southwestern Illinois. It is accompanied by the report of the district and division engineers. These reports are in response to a resolution by the Committee on Transportation and Infrastructure of the House of Representatives, dated May 7, 1997. This resolution requested a review of the "report of the Chief of Engineers on the Mississippi River between Coon Rapids Dam, Minnesota, and the mouth of the Ohio River, published as House Document 669, Seventy-sixth Congress, Third Session, and other pertinent reports, to determine whether modifications of the recommendations contained therein are advisable at this time, for the purpose of reconstructing the facilities of the Wood River Drainage and Levee District along the Mississippi River in Madison County, Illinois, to return the levee and pump stations and other appurtenant features to their original degree of protection". Preconstruction engineering and design activities for the Wood River Levee System Reconstruction, Illinois, project will continue under authority provided by the resolution cited above.

2. The reporting officers recommend a plan for flood damage reduction for the Wood River Drainage and Levee District area along the Mississippi River in Illinois. The Wood River Levee System was authorized by the Flood Control Act of 1938 and modified by the Flood Control Act of 1965, with much of the construction taking place in the 1950s and 1960s. The reporting officers recommend a plan to restore the Wood River flood protection system to its original degree of protection. After an Environmental Assessment was completed a Finding of No Significant Impact was signed. There is no need for compensatory fish and wildlife mitigation. The plan recommends construction of certain measures to address design deficiencies and reconstruction measures to address the long-term degradation of materials, systems and components of the existing project that have exceeded their expected service life. The design deficiency measures include replacement of 163 existing relief wells and installation of 60 new relief wells which can be implemented under existing project authority. Congressional authorization is required to implement the reconstruction measures, which

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include construction or replacement work at 38 gravity drains, 26 closure structures (including abandonment of 3 railroad closure structures that are no longer used), and 7 pump stations.

3. Based on October 2005 price levels, the estimated first cost of the recommended plan is \$29,630,000, all for the purpose of flood damage reduction. Of this amount, \$12,900,000 is for the design deficiency correction measures that will be implemented when funding is provided. The cost sharing provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 202 of WRDA 1996, will be applied to the design deficiency correction measures, resulting in an estimated Federal share of \$8,400,000 and an estimated non-Federal share of \$4,500,000. The estimated first cost of the reconstruction measures is \$16,730,000. In accordance with Section 103 of WRDA 1986, as amended, \$10,900,000 is the estimated Federal share and \$5,830,000 is the estimated non-Federal share. Total expected annual costs, based on a discount rate of 5.125 percent and a 50-year period of analysis are estimated to be \$2,035,000, including \$252,000 for operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). The expected annual benefits are estimated to be \$6,547,000, with net annual benefits of \$4,513,000. The benefit-to-cost ratio is 3.2 to 1 for the overall project. For the design deficiency correction measures alone, the annual cost and benefits are \$772,000 and \$2,664,000, respectively, with a benefit-to-cost ratio of 3.4 to 1. For the reconstruction measures alone, the annual costs and benefits are \$1,222,000 and \$3,823,000, respectively, with a benefit-to-cost ratio of 3.1 to 1. All measures are incrementally justified.

4. Washington level review indicates that the plan recommended by the reporting officers is technically sound, economically justified, environmentally 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 guidelines. Also, the views of interested parties, including Federal, State and local agencies, have been considered.

5. I generally concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I approve the design deficiency correction measures for the Wood River Levee System for implementation under the existing project authorization. Furthermore, I recommend that the plan for the reconstruction measures for the Wood River Levee System be authorized at an estimated total first cost of \$16,730,000, with such modifications as in the discretion of the Chief of Engineers may be advisable. These recommendations are subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA of 1986, as amended by Section 202 of WRDA of 1996, and in accordance with the following requirements which the non-Federal sponsor must agree to prior to implementation of either the design deficiency or reconstruction features of the project:

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(a) Provide a minimum of 35 percent, but not to exceed 50 percent, of total project costs allocated to structural flood control, as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to flood control in accordance with the 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 control;

(3) Provide, during construction, a cash contribution equal to 5 percent of total project costs assigned to structural flood control;

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

(5) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, 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 project;

(6) Provide, during construction, any additional funds as necessary to make the total non-Federal contributions equal to 35 percent of total project costs allocated to structural flood control.

(b) For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, at no cost to the Government, in accordance with applicable Federal and State laws and any specific directions prescribed by the Government;

(c) Grant 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;

(d) 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-

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662, as amended, which provides that the Secretary of the Army shall not commence 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;

(e) 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;

(f) Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs;

(g) Perform, or cause to be performed, any investigations for 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; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government;

(h) 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;

(i) Agree that, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be 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;

(j) Participate in and comply with applicable Federal floodplain management and flood insurance programs;

(k) 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 have prepared within one year after the date of signing the project cooperation agreement, a floodplain management plan. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal

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interests to preserve the level of flood protection provided by the project. As required by Section 402, as amended, the non-Federal interest shall implement such plan not later than one year after completion of construction of the project. The non-Federal sponsor shall provide an information copy of the plan to the Federal Government upon its preparation;

(l) Prevent future encroachments on project lands, easements, and rights-of-way, which might interfere with the proper functioning of the project;

(m) Not less than once each year, inform affected interests of the limitations of the protection afforded by the project;

(n) Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain, and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

(o) 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), as amended by Public Law 102-240, Section 1055 (re: rural electrification), as amended by Public Law 105-117, Section 104 (re: Alien not lawfully present in United States), and the Uniform Regulation 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;

(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, as well as 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, the Davis-Bacon Act (40 U.S.C. 276a et. seq.), the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et. seq.) and the Copeland Anti-Kickback Act (40 U.S.C. 276c); and

(q) Not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.

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6. 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, Wood River Drainage and Levee District as the non-Federal sponsor, the State of Illinois, interested Federal agencies, and other parties will be advised of any modifications and will be afforded the opportunity to comment further.

A handwritten signature in black ink, appearing to read 'Carl A. Strock', with a long horizontal flourish extending to the right.

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