



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
441 G Street N.W.
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CECW-PC (1105-2-10a)

OCT 24 2006

SUBJECT: Licking River Basin, Cynthiana, Kentucky

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood damage reduction for the communities of Cynthiana, Millersburg, and Paris, in the Licking River Basin, Kentucky. It is accompanied by the report of the district and division engineers. These reports respond to a resolution by the Committee on Environment and Public Works of the United States Senate adopted on January 21, 1987. The study resolution requested review of prior reports of the Chief of Engineers regarding flood control and other allied purposes in the Licking River Basin, Kentucky. Preconstruction engineering and design activities for the proposed project will be continued under the cited authority.
2. The reporting officers recommend reduction of flood damages by constructing two dry bed detention basins on tributaries of the South Fork of the Licking River. The two dry bed detention basins would be created by constructing roller compacted concrete dams on the Hinkston Creek and Strodes Creek tributaries. The Hinkston Creek detention structure, located just upstream of the Town of Millersburg, would have a height of about 30 feet, a length of about 680 feet, and would create a pool with a volume of about 8,188 acre-feet given an occurrence of the 0.2 percent chance (500-year) flood. The detention facility would include a 200-foot-long spillway, a 16-foot-wide by 12-foot-high gravity outlet, and a 1,500-foot-long access road. The Strodes Creek detention structure, located about 16 miles upstream of the town of Paris, Kentucky, would have a height of about 25 feet, a length of about 700 feet, and would create a pool of about 3,923 acre-feet during the 0.2 percent chance flood. It would include a 150-foot-long spillway, a 12-foot-wide by 10-foot-high gravity outlet, and an 8,000-foot-long access road. Mitigation for unavoidable environmental impacts associated with the proposed project would consist of 90 acres of hardwood plantings on project lands to offset the impacts of the detention structures on the existing riparian hardwood corridors in the vicinity of the proposed project.
3. At October 2005 prices, the estimated first cost of the recommended plan is about \$17,460,000. Based on requirements of WRDA 1986 as amended, cost sharing for the initial project would be 65 percent (\$11,350,000) Federal and 35 percent (\$6,110,000) non-Federal. The non-Federal sponsor, the City of Cynthiana, representing a consortium of local and State interests, would provide a minimum of 5 percent of the total project cost in cash and also provide all lands, easements, rights-of-way, including suitable borrow and dredged or excavated material disposal sites, and all relocations. Further, the non-Federal sponsor would be responsible for 100

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percent of the operation, maintenance, repair, replacement, and rehabilitation of project features. The non-Federal sponsors are responsible for the operation, maintenance, repair, replacement and rehabilitation of the project after construction, a cost currently estimated at \$25,000 per year.

4. Average annual flood damage reduction benefits associated with the recommended plan, reflecting a 50-year period of economic analysis and a 5.125 percent discount rate, total \$3,350,000. With annual costs of \$1,096,000, the resulting benefit-to-cost ratio would be 3.1 to 1.0. Net benefits would total \$2,254,000. The proposed plan is the national economic development (NED) plan. The proposed project would reduce expected annual damages from flooding in the communities of Cynthiana, Millersburg, and Paris, Kentucky by about 86 percent.

5. 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 Resource 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.

6. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that improvements for flood damage reduction for the Licking River, Cynthiana, Kentucky be authorized in accordance with the reporting officers' recommended plan, 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 WRDA 1986 as amended. Federal implementation of the authorized project would be subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, including but not limited to:

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total project costs allocated to flood control, and provide 35 percent of total project costs allocated to ecosystem restoration, as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to the project 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;

(3) Provide, during construction, a cash contribution equal to 5 percent of total project costs allocated to 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

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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 the construction, operation, and maintenance of the project; and

(6) Provide, during construction, any additional costs as necessary to make its total contribution equal to at least 35 percent of total project costs allocated to flood control and 35 percent of the total project costs allocated to environmental restoration.

b. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the local 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.

c. Assume responsibility for operating, maintaining, replacing, repairing, and rehabilitating (OMRR&R) the project or completed functional portions of the project, including mitigation features without cost to the Government, in a manner compatible with the project's authorized purpose and in accordance with applicable Federal and State laws and specific directions prescribed by the Government in the OMRR&R manual and any subsequent amendments thereto.

d. Comply with Section 221 of Public Law 91-611, 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.

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 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 or rights-of-

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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 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 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.

j. 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, reduce the level of protection the project affords, hinder its operation and maintenance, or interfere with its proper function, such as any new development on project lands or the addition of facilities which would degrade the benefits of the project.

k. 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.

l. Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, 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 Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), requiring non-Federal participation and implementation of flood plain management plans.

m. Participate in and comply with applicable Federal floodplain management and flood insurance programs;

n. Do 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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o. Inform affected interests, at least annually, regarding the limitations of the protection afforded by the project.

p. Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms.

7. 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 in the formulation of a national civil works construction program nor 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 sponsors, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

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

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