



DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, DC 20310-2600

DAEN

13 MAR 2020

SUBJECT: Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico at Albuquerque, New Mexico

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood damage reduction along the Rio Grande in the vicinity of Albuquerque, New Mexico. It is accompanied by the report of the Albuquerque District Engineer and South Pacific Division Engineer. The Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico project was originally authorized by Section 401 of the Water Resources Development Act (WRDA) of 1986, Public Law 99-662. As of the date of this report, only the Corrales Unit, completed in 1997, has been constructed. Preconstruction engineering and design activities of the units described in this report, if funded, would be continued under the authority provided above.
2. The reporting officers recommend authorizing a plan to reduce flood damages by constructing the Mountain View, Isleta West, Belen East and Belen West Units in the vicinity of Albuquerque, New Mexico. The recommended plan for reducing flood damages includes construction of approximately 48 miles of engineered levee. The project includes the creation of approximately 266 acres of riparian habitat in the floodway to reduce the overall impact on endangered species to an acceptable level. This feature would be monitored for up to five years to ensure its performance. The recommended plan is the national economic development plan. All features are located in New Mexico.
3. The Middle Rio Grande Conservancy District (MRGCD) is the non-federal cost-sharing sponsor for all features. Based on October 2019 price levels, the estimated total first cost of the plan is \$293,136,000. In accordance with the cost sharing provisions of Section 103 of WRDA 1986, as amended (33 U.S.C. 2213), the federal share of the first costs of the flood damage reductions features would be about \$190,538,000 (65 percent) and the non-federal share would be about \$102,598,000 (35 percent). The cost of lands, easements, right-of-way, relocations, and dredged or excavated material disposal areas is estimated at \$412,000. The total cost includes \$7,988,000 for environmental mitigation, \$2,965,000 for environmental monitoring, and \$53,000 for adaptive management. MRGCD would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at about \$380,000 per year. In addition to the above, MRGCD would be fully responsible for performing the investigation, cleanup and response of hazardous materials on the project site, if any are discovered.

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4. Based on a 2.75-percent discount rate (FY 2020) and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be \$14,092,000, including OMRR&R. The selected plan is estimated to be 91 percent reliable in protecting portions of South Valley, Los Lunas, and Belen, New Mexico from a flood which has a one percent chance of occurrence in any year. The selected plan would reduce average annual flood damages by about 93 percent and would leave average annual residual damages estimated at \$8,000,000. The equivalent average annual benefits are estimated to be \$135,736,000 with net average annual benefits of \$121,644,000. The benefit-cost ratio is approximately 9.63 to 1.

5. In accordance with the Engineer Circular (EC 1165-2-217) on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included Agency Technical Review (ATR), Type I Independent External Peer Review (IEPR) and USACE Headquarters policy and legal review. Overall, the reviews resulted in improvements to the technical quality of the report. All concerns have been addressed and incorporated into the final report. A safety assurance review, Type II IEPR, will be conducted during the design phase of the project.

6. Washington-level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the 1983 U. S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administrative and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies have been considered. A Supplemental Environmental Impact Statement has been prepared and was made available to the public from September 2017 to November 2017 and from June 2018 to July 2018. Habitat restoration for endangered species impacts included in the recommended plan satisfies the Biological Opinion resulting from Endangered Species Act Section 7 consultation for the proposed action.

7. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce flood damages for Albuquerque, New Mexico be authorized in accordance with the reporting officers' recommended plan at an estimated cost of \$293,136,000 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 laws and policies, including Section 103 of WRDA 1986, as amended (33 U.S.C. 2213). The non-federal sponsor would provide the non-federal cost share and all lands, easements, right-of-way, relocations, and dredged or excavated material disposal areas. Further, the non-federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies, including but not limited to:

a. Provide a minimum of 35 percent, but not to exceed 50 percent, of project costs as further specified below:

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(1) Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during construction, a contribution of funds equal to 5 percent of project costs;

(3) Provide all lands, easements, and rights-of-way, perform or ensure the performance of all relocations, and provide relocation assistance, as determined by the Federal Government to be required for the initial construction or the operation and maintenance of the project, all in compliance with applicable provisions of the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655) and the regulations contained in 49 C.F.R. Part 24;

(4) Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of total project costs;

b. 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 laws and regulations and any specific directions prescribed by the Federal Government;

c. 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 project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

d. Inform affected interests, at least annually, of the extent of protection afforded by the project; participate in and comply with applicable federal floodplain management and flood insurance programs; comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12); and 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 project;

e. 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;

f. 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;

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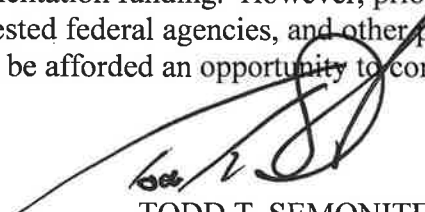
g. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (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 sponsors with prior specific written direction, in which case the non-federal sponsors shall perform such investigations in accordance with such written direction;

h. Assume, as between the Federal Government and the non-federal sponsors, 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; and

i. 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.

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 in the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to 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.

*GREAT PROJECT
THAT WILL BENEFIT
THE ENTIRE MIDDLE
RIO GRANDE VALLEY
IN NEW MEXICO.
OUTSTANDING BCR!!*



TODD T. SEMONITE
Lieutenant General, USA
Chief of Engineers