



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

JUL 29 2019

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SUBJECT: South Platte River and Tributaries, Adams and Denver Counties, Colorado

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration for the South Platte River and flood risk management for the Weir Gulch and Harvard Gulch tributaries in Adams and Denver Counties, Colorado. It is accompanied by the report of the Omaha District Engineer and Northwestern Division Engineer. This report was completed as an interim response to a resolution adopted on 24 September 2008 by the Committee on Transportation and Infrastructure, U.S. House of Representatives, Docket 2813, Adams and Denver Counties, Colorado. This resolution requested a review of the report of the Chief of Engineers on the South Platte River and Tributaries, Colorado, Wyoming and Nebraska, published as House Document 669, 80th Congress, and other related reports to determine whether any modifications of the recommendations therein are advisable in the interest of flood damage reduction, floodplain management, water supply, water quality improvement, recreation, environmental restoration, watershed management, and other allied purposes, in Adams and Denver Counties, Colorado. Preconstruction, engineering and design activities, if funded, will continue under the same authority.

2. The reporting officers recommend authorization of a project that will make significant contributions to both the National Environmental Restoration (NER) and National Economic Development (NED) accounts. The NER portion of the recommended plan includes the restoration of aquatic, wetland, and riparian habitats along 6.5 miles of the South Platte River. This plan would restore critical habitat connectivity throughout the heart of the Denver, Colorado metropolitan area with ancillary recreation features incorporated throughout the plan. The NED portion of the recommended plan includes widening or enlarging an approximately 2.75 mile-long system of open channel and culverts along the Weir Gulch waterway and removing approximately 360 properties from the one percent Annual Exceedence Probability (AEP) defined 100-year floodplain, which will reduce the population at risk within the Weir Gulch community by over 60 percent. The Weir Gulch portion of the recommended plan also includes ancillary recreation features. Included in the NED portion of the recommended plan is a nonstructural flood risk management plan for the Harvard Gulch watershed that would provide added protection for 176 structures throughout the community. Based on the Fiscal Year (FY) 2019 price levels, a 2.875-percent discount rate, and a 50-year period of analysis, the estimated project cost of the combined NER/NED plan is \$520,630,000, providing 87.4 average annual habitat units by restoring or connecting approximately

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recommended plan to this community. Integrated within the flood risk management plan for the Weir Gulch study area is a recreation plan consisting of trails, crossings, signage, gateways, pocket parks, community gardens, and site amenities that would significantly improve the existing recreation infrastructure throughout the community, providing recreational opportunities more in line with opportunities found throughout other local communities.

c. Harvard Gulch: The NED plan for the Harvard Gulch study area would reduce the community's flood risk by providing nonstructural flood risk management measures for 176 structures, which are mainly within the primary commercial hubs of the study area that act as the economic core to the community. The measures that would be implemented under this plan are basement fillings of 11 residential structures, elevations of 88 residential structures, and dry flood proofing of 77 commercial structures. Overall, the Harvard Gulch nonstructural flood risk management plan would substantially reduce the existing flood risk for over 30 percent of the structures within the one percent AEP defined 100-yr floodplain.

3. The recommended plan has been determined to be economically justified and environmentally acceptable. The NER component of the plan includes post-construction monitoring and adaptive management for a period of up to 10-years to ensure project performance. Because the recommended plan would not have any significant adverse effects, no compensatory mitigation measures would be required. The potential for site contamination within parts of the project area has been identified and communicated to the non-federal sponsor. The non-federal sponsor has acknowledged and accepted their responsibility to provide a contamination-free, clean site for the project and for 100 percent of any applicable remediation and clean-up costs. The recommended plan is the environmentally preferred plan.

4. The city and county of Denver is the non-federal cost-sharing sponsor for all features of the recommended plan. Based on FY 2019 price levels, the estimated first cost of the recommended plan is \$520,630,000. Of the estimated first cost of the recommended plan, the first cost of the ecosystem restoration features is estimated at \$345,705,000, the first cost of the flood risk management features is estimated at \$118,212,000, the first cost of the recreation features is estimated at \$32,282,000, the first cost of the monitoring is \$895,000, and the first cost of adaptive management is \$23,536,000.

5. In accordance with the cost sharing provisions in Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2213), the federal share of the estimated first project cost of the recommended plan is estimated to be \$325,541,000, and the non-federal share is estimated to be \$195,089,000. Cost

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and policies, including Section 103 of WRDA 1986, as amended (33 U.S.C. 2213), and to the non-federal sponsor agreeing, prior to project implementation, to perform the required items of local cooperation, including, but not limited to, the following:

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

(1) Provide, during design, 35 percent of design costs allocated to flood risk management, 35 percent of design costs allocated to ecosystem restoration, and 50 percent of design costs allocated 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;

(3) Provide, during construction, a contribution of funds equal to 5 percent of total project costs allocated to flood risk management;

(4) 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 as determined by the federal government to be required or to be necessary for the construction, 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;

(5) Provide, during construction, any additional funds necessary to make its total contributions equal to at least 35 percent of total project costs allocated to flood risk management, 35 percent of total project costs allocated to ecosystem restoration, and 50 percent of total project costs allocated to recreation;

b. Provide, during construction, 100 percent of the total project costs allocated to recreation associated with the ecosystem restoration features that exceed 10 percent of the federal share of total project costs allocated to ecosystem restoration;

c. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments), such as any new

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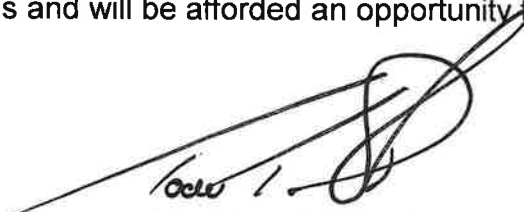
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in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project; and

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

10. The recommendations contained herein reflect the information available at this time and current departmental policies governing the formulation of individual projects. These recommendations do 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 recommendations may be modified before they are transmitted to Congress for authorization and implementation funding. However, prior to transmittal to Congress, the non-federal sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications in the recommendations and will be afforded an opportunity to comment further.

*GREAT PROJECT !!
I fully support THE
BENEFITS IT WILL PROVIDE
THE GREATER DENVER METRO
AREA !!*



TODD T. SEMONITE
Lieutenant General, USA
Chief of Engineers