



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

12 SEP 2019

DAEN

SUBJECT: Jefferson County Ecosystem Restoration Feasibility Study, Jefferson County, Texas

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my interim report on ecosystem restoration along the gulf coast in Jefferson County, Texas. It is accompanied by the report of the district engineer and division engineer. This report is in partial response to Resolution 2620 by the Committee on Transportation and Infrastructure of the United States House of Representatives, adopted February 16, 2000 and entitled "Sabine Pass to Galveston Bay, Texas." The resolution requests the Secretary of the Army review, in accordance with Section 110 of the Rivers and Harbors Act of 1962 (Public Law 87-874) the feasibility of providing shore protection and related improvements with the objective of protecting and restoring environmental resources on and behind the beach, in the area between Sabine Pass and the entrance to Galveston Bay, Texas. Preconstruction engineering and design activities, if funded, would commence under the authority provided by this resolution.
2. The reporting officers recommend authorization of the National Ecosystem Restoration (NER) Plan, which includes construction of 5,170 linear feet of armoring along the southern bank of the Gulf Intracoastal Waterway (GIWW), and restores 6,048 acres of brackish marsh habitat in six restoration units, consisting of planting native species and removing invasive species within the restoration units, in an area referred to as "Keith Lake." The recommended plan utilizes dredged material from the federally authorized Sabine Neches Waterway (SNWW) navigation channel. The recommended plan would restore marsh and GIWW shoreline features that stabilize and sustain critical marsh resources. The armoring along the GIWW would counteract some effects of erosion that occur along the GIWW by dissipating wave energies, reducing land loss and reducing saltwater intrusion within the project area. The armoring also supports reestablishment of emergent marsh along the GIWW shoreline via sediment retention.
3. The NER Plan includes restoration measures on 6,048 acres, of which 638 acres are on U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuge lands. These lands were included in plan formulation in collaboration with the USFWS, in accordance with planning criteria directing inclusion of all necessary actions, including those under the authority of another federal agency. Because the USFWS manages National Wildlife Refuge lands, construction and the operation and maintenance of restoration measures on the 638 acres of USFWS lands will remain the responsibility of the USFWS. The cost of the restoration measures on National Wildlife Refuge lands, estimated at \$5,737,000, will not be shared with the non-federal sponsors. The USFWS, however, advises that timely implementation of its component of the NER plan may necessitate further authorization and funding. The reporting officers recommend that the

remaining components of the NER Plan proceed even if the USFWS National Wildlife Refuge component cannot be constructed, because the National Wildlife Refuge component only accounts for 11 percent of the benefits of the NER Plan, and the remaining components are likewise environmentally justified, technically sound, cost effective, and socially acceptable.

4. The NER Plan incorporates post-construction monitoring and adaptive management for a period of 10 years at a total cost of \$2,303,000, to ensure project performance in the areas outside of the National Wildlife Refuge. The USFWS would undertake operation and maintenance responsibilities under its authorities on the National Wildlife Refuge lands within the NER Plan. Because the NER Plan would not have any significant adverse effects, no mitigation measures or compensation measures would be required, beyond best management practices and avoidance.

5. The non-federal sponsors are Jefferson County, Texas and Sabine-Neches Navigation District. The project first cost of the NER Plan is estimated to be \$62,252,000 at October 2018 price levels. The USFWS is responsible for the cost of restoration measures on the National Wildlife Refuge, estimated to be \$5,737,000. The cost for the remaining measures of the NER Plan estimated at \$56,515,000, will be shared between the Corps of Engineers and the non-federal sponsor, with the Corps of Engineers share estimated at \$36,735,000 (65 percent), and the non-federal share estimated at \$19,780,000 (35 percent). The lands, easements, rights-of-way, relocations and disposal sites (LERRD) costs are estimated at \$3,190,000. The non-federal sponsors would share the project cost of restoration of marsh and breakwater protection features on lands acquired for the project, including undeveloped lands held by the Texas Parks and Wildlife Department. Annualized operation, maintenance, repair, rehabilitation, and replacement (OMRR&R) costs are estimated to be \$66,000 at October 2018 price levels for the GIWW armoring feature.

6. The NER Plan was developed in coordination and consultation with federal, state, and local agencies.

7. In accordance with Corps of Engineers guidance on the review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This includes a District Quality Control review, an Agency Technical Review, and policy review taking place at Headquarters and Southwestern Division. Coordination with Corps of Engineers Headquarters concerning policy and legal matters took place throughout the planning phase. All comments from the above referenced reviews have been addressed and incorporated into the final documents.

8. Washington level review indicates the NER Plan recommended by the reporting officers, including implementation of only the measures outside of the National Wildlife Refuge if necessary, is environmentally justified, technically sound, cost effective, and socially acceptable. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principal and Guidelines for Water and Land Related Resources Implementation Studies. The plan complies with other administration and legislative policies

DAEN

SUBJECT: Jefferson County Ecosystem Restoration Feasibility Study, Jefferson County, Texas

and guidelines. The views of interested parties including federal, state, and local agencies have been considered.

9. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to improve, preserve, and sustain ecological resources along the Texas coast identified as the recommended plan in the Jefferson County Ecosystem Restoration Feasibility Report and Integrated Environmental Assessment, be authorized. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 103 of WRDA 1986, as amended (33 U.S.C. 2213). The non-federal sponsors would provide the non-federal share of costs and all lands, easements, rights-of-way, relocations and disposal sites (LERRD), and be responsible for all OMR&R, for the measures outside of the National Wildlife Refuge. This recommendation is subject to the non-federal sponsors agreeing to comply with all applicable federal laws and policies, including, but not limited to, the following:

a. Provide 35 percent of ecosystem restoration costs of the NER Plan outside of the National Wildlife Refuge as further specified below:

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

(2) Provide all lands, easements, and rights-of-way, and perform or ensure the performance of any relocations determined by the federal government to be necessary for construction, operation and maintenance of the cost shared 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 CFR Part 24;

(3) Provide, during construction, any additional funds necessary to make its total contributions equal to 35 percent of cost shared project costs.

b. Prevent obstructions or encroachments on the cost shared 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 outputs produced by the ecosystem restoration features, hinder operation and maintenance of the project, or interfere with the project's proper function;

c. Shall not use the ecosystem restoration features or lands, easements, and rights-of-way required for such features as a wetland bank or mitigation credit for any other project;

d. For so long as the cost shared 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 and state laws and regulations and any specific directions prescribed by the federal government;

DAEN

SUBJECT: Jefferson County Ecosystem Restoration Feasibility Study, Jefferson County, Texas

e. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the cost shared project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

f. 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 CERCLA, Public law 96-510, as amended (42 USC 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 cost shared 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;

g. 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 the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), Public Law 96-510 (42 USC 9601-9675) 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 cost shared project; and

h. Agree, as between the federal government and the non-federal sponsors, that the non-federal sponsors shall be considered the operator of the cost shared 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.

10. My report is an interim response to the study authority. The NER Plan increases suitable habitat for migratory birds along a key coastal portion of the Central and Mississippi Flyways important to numerous species. This area provides habitat for nearly 400 species of birds comprised of hundreds of millions of individuals, and are at the convergence zone of the Central and Mississippi Flyway corridors. The study area provides critical foraging and stopover habitat for migrating birds since this is the first or last stopover before migrating to or from Mexico, Central America, South America, and the Caribbean. The project lies within the Salt Bayou Watershed, which is the largest contiguous estuarine marsh complex in Texas and helps protect the rare and significant Chenier Plain. The Chenier Plains are a unique and rare landform that stretch nearly 125 miles from southwest Louisiana to southeast Texas and run parallel to the coastline. The Chenier Plains are rapidly degrading and losing productive habitats essential to the survival of numerous species and persistence of the unique landform that took thousands of years to develop. In Texas, the historic range of the landform extended to Galveston Bay; however, land development near the bay has significantly altered areas west of Jefferson County, leaving the remaining Texas portion of the Chenier Plains entirely within the county and the focused study area. This project is critical to numerous fish and wildlife species and will lead to an increase in overall habitat available to the species throughout their range. By submitting my

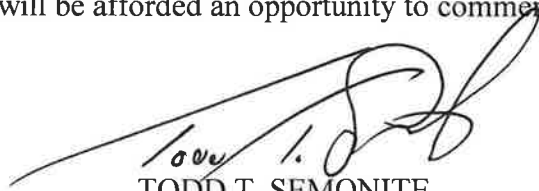
DAEN

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report as an interim response to the authorization, I am preserving an opportunity to recommend further measures to protect remaining habitat in the Chenier Plains in Texas. Preserving the opportunity to restore additional habitat in the future is supported by the Corps of Engineers Environmental Operating Principles and Campaign Plan goals.

11. 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, 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.

*Excellent Project!
Great combination of
Environmental Restoration,
Navigation, and Coastal
Storm Risk Management.
Good to Approve!!*



TODD T. SEMONITE
Lieutenant General, USA
Chief of Engineers