2021 Report to Congress on Future Water Resources Development
February 2021



Report to Congress on Future Water Resources Development: Overview

This 2021 Report to Congress on Future Water Resources Development (2021 Annual Report) is in response to Section 7001 of the Water Resources Reform and Development Act (WRRDA) of 2014, as amended (33 U.S. Code § 2282d), which requires that the Secretary of the Army submit an annual report to Congress that identifies potential future water resources development studies and projects.

The Annual Report is compiled based on signed Chief's Reports recommending a water resources project for congressional authorization as well as non-Federally proposed feasibility studies, and modifications to authorized water resources development programs, projects or studies.

Section 7001 requires a notice to be published in the Federal Register requesting proposals for proposed feasibility studies and proposed modifications to authorized water resources development projects and feasibility studies to be submitted by non-Federal interests. Section 7001 stipulates that the Annual Report should only include those feasibility reports, proposed feasibility studies, and proposed modifications to authorized water resources development programs, projects, and feasibility studies that:

- (i) are related to the missions and authorities of the U.S. Army Corps of Engineers (USACE);
- (ii) require specific congressional authorization, including by an Act of Congress;
- (iii) have not been congressionally authorized;
- (iv) have not been included in any previous annual report; and,
- (v) if authorized, could be carried out by USACE.

On May 1, 2020, USACE published the annual Federal Register notice for proposals from non-Federal interests. The deadline for submitting proposals was August 31, 2020 (122 days). The Federal Register notice for proposals was published on the USACE Headquarters (HQUSACE) website, with information distributed to all USACE Civil Works districts and divisions. HQUSACE hosted two public information sessions about the proposal process on July 23 and August 20, with each session's information posted to the HQUSACE website.

This year, 26 proposals were received. All submitted proposals were evaluated against the five criteria in Section 7001 and are presented in one of two tables in the 2021 Annual Report.

The first table, included in the main report, contains 9 non-Federal proposals that meet the five criteria and 1 signed Chief's Report recommending authorization of a water resources development project. The second table, included as an appendix, contains 17 non-Federal proposals that did not meet the five criteria with an explanation of which specific criteria were not met.

Of the 26 non-Federal proposals submitted for the 2021 Annual Report, 10 were

submitted as proposals for new feasibility study authorization, 3 were proposals for a modification to existing study authority, and 5 were for modifications to an existing project authority. In addition, 8 proposals were for modifications to environmental infrastructure program authorities. All 26 proposals provided by non-Federal interests for the 2021 Annual Report are available on the HQUSACE website at https://www.usace.army.mil/Missions/Civil-Works/Project-Planning/Legislative-Links/wrrda2014/ proposals/.

The primary reason proposals are included in the Appendix is that authority already exists to perform the requested work. It is important to note that where authority already exists to undertake the efforts described in the proposals, inclusion in the Appendix to the 2021 Annual Report does not preclude the Army from carrying out the proposal (i.e., either by performing the proposed study or by undertaking the proposed construction).

Sections 1037, 1046(d), 2009, 2104, 3025, 3026, 4002(b), 4003(d), 4007, 4009, 4011, and 4014 of WRDA 2014 also provided for the inclusion in the Annual Report of certain recommendations that require Congressional authorization. The Secretary does not have any such recommendation to report at this time.

Based on the information received from the non-Federal interests, each proposed feasibility study and proposed modification to an authorized water resources development program, project, or feasibility study included in this main report meets the criteria established in Section 7001 of WRRDA 2014, as amended. The information contained in proposals provided by non-Federal interests has not been revised or developed by the Army and the proposals are not endorsed by the Army. This report is in response to the requirements of Section 7001 only and does not reflect program, policy, or budgeting priorities.

Evaluation Criteria and Methodology

In order to provide more transparency to non-Federal interests, the Federal Register notice and HQUSACE website details the process under which proposals are evaluated against the criteria in developing the Annual Report.

Criteria 1. Related to USACE missions and authorities

Proposals are considered related to the missions and authorities of USACE when they involve a proposed or existing USACE water resources project whose primary purpose is flood and storm damage reduction, commercial navigation, or aquatic ecosystem restoration. These are the three main missions of the civil works program.

Proposals for related purposes, such as for recreation, hydropower, or water supply, may be eligible for inclusion in the main report only if undertaken in conjunction with a project or effort whose primary purpose is one (or more) of the three main missions of the civil works program.

Certain environmental infrastructure proposals (i.e., proposed modifications for an environmental infrastructure program), despite not being primarily a flood and storm damage reduction, commercial navigation, or aquatic ecosystem proposal, may be included in the main report per Section 1332 of the Water Resources Development Act of 2018 or Section 1157 (b) of the Water Resources Development Act of 2016, which amended Section 7001 of WRRDA 2014.

Criteria 2. Require specific congressional authorization, including by an Act of Congress

Proposals seeking construction authorization for a water resources development project or modification to existing construction authorization require congressional authorization if the proposal is:

- The recommendation of a signed Chief's Report;
- The recommendation of a non-Federal feasibility report submitted for review to the Secretary of the Army under Section 203 of WRDA 1986, as amended, under Administration review;
- The recommendation (tentatively selected plan) of an ongoing feasibility study that is expected to result in a Chief's Report;
- A proposed modification to an environmental infrastructure project that was authorized prior to the date of enactment of the Water Resources Development Act of 2016 (December 16, 2016);
- A proposed modification to an environmental infrastructure program authority; or
- A proposed modification to an authorized water resources development project.

Proposals seeking study authorization or modification to study authorization require specific congressional authorization if the proposed study is:

- A new feasibility study without existing study authority; or
- A proposed modification to study authority that would require congressional modification of the existing study authority.

The following types of proposals are not considered eligible to be included in the Annual Report because they do not require specific congressional authorization, although they will be included in the appendix for transparency:

- Proposals for study or construction of water resources development projects that do not require additional authorization from Congress.
- Proposals for modifications to non-Federal projects where USACE has provided previous technical assistance. Authorization to provide technical assistance does not provide authorization of a water resources development project.
- Proposals for construction of a new water resources development project that is not the subject of either a currently authorized USACE project, or a completed or ongoing feasibility study.
- Proposals that are not related to a study or project authorization; for example, changes to a law or policy.

Criteria 3. Have not been congressionally authorized

A proposal is considered to have not been congressionally authorized if none of the basic elements contained in the proposal was included in any previous authorization.

<u>Criteria 4. Have not been included in the report table of any previous Annual Report to Congress on Future Water Resources Development</u>

Proposals included in the main report table in any previous Report to Congress on Future Water Resources Development are not eligible to be included in the main report table in this report. However, they will be included in the appendix for transparency. Proposals previously included in the appendix of a previous report may be resubmitted for consideration for inclusion in the main report table of a subsequent section 7001 annual report.

Criteria 5. If authorized, could be carried out by USACE

Unless some institutional impediment exists (e.g., state law), proposals meeting the other criteria are generally considered to be implementable by USACE if authorized by Congress. As discussed below, additional steps are required before USACE can begin implementation of any water resources development project.

Requirements for Project Implementation

The Federal Register notice identified specific requirements that all authorized water resources development projects must generally meet before USACE can proceed to construction, whether the project is authorized following USACE's traditional Chief's Report process or authorized with reference to the project's inclusion in the Annual Report to Congress on Future Water Resources Development.

Before USACE can proceed to construct an authorized project: (1) the Congress has authorized the project for construction; (2) the Secretary has approved a current decision document with the Administration's position on the project (this may occur prior to or subsequent to authorization), and, if appropriate, has transmitted that decision document and position to the Congress; and (3) the Congress has appropriated funds for construction of the project.

The Secretary's approval of a current decision document is the basis for Administration support for budgeting decisions for projects. Current decision documents provide updated information on the scope of the potential project and an explanation of the basis for a finding of a Federal interest, including an assessment of whether the proposal is:

- Technically sound, economically viable and environmentally acceptable.
- Compliant with environmental and other laws including, but not limited to, the National Environmental Policy Act, the Endangered Species Act, the Coastal Zone Management Act, and the National Historic Preservation Act.
- Compliant with statutes related to water resources development including, but not limited to, the various water resources provisions pertaining to the authorized

cost of projects, level of detail, separable elements, fish and wildlife mitigation, project justification, matters to be addressed in planning, and the 1958 Water Supply Act.

Under the traditional authorization process, the Chief's Report serves as the current decision document that is transmitted to Congress prior to authorization. Projects, or modifications to projects, authorized based on a proposal submitted under Section 7001 that do not have a completed and transmitted USACE decision document lack a basis for Administration support for implementation. Clearly identifying these requirements for implementation within the Annual Report to Congress (main report table) allows for a more transparent process should any of the non-Federal project, or project modification, proposals become authorized based on this Annual Report.

The Federal Register notice also noted two other important considerations for non-Federal sponsors preparing proposals. First, if Congressional authorization of a new feasibility study results from inclusion in this report, it is anticipated that such authorization would be for the study only and not for construction. Second, a Post Authorization Change Report (PACR) may be required to support potential project modifications, updates to project costs, and increases to the maximum cost of a project established by section 902 of WRDA 1986, as amended (902 limit). Although some PACRs may not include feasibility analysis, where they support project modifications they may be considered for inclusion in the report if the recommendations require authorization.

2021 Main Report Table:

- Signed Chief's Reports
- Proposals from Non-Federal Interests meeting the criteria of WRRDA 7001

2021 Appendix Table:

Proposals from Non-Federal Interests not meeting the criteria of WRRDA 7001

2021 Main Report Table Chief's Reports

Name of Report	State(s)	Non-federal Interest	Status Notes	Purpose (Summarized from Chief's Report)	Benefits (Summarized from Chief's Report)	Estimated Federal Cost*	Estimated Non-Federal Cost*	Total Estimated Costs* (October 2020 price levels)	Requirements for Implementation (All must be authorized by Congress in law and receive appropriations in law)
Projects which have signed Chief's R Fairfield & New Haven Counties, CT		Connecticut Department of Energy and Environmental Protection	Signed Chief's Report under Review	Coastal Storm Risk Management	Recommendation of a plan to reduce the potential damage caused by coastal storms and improve safety and coastal resiliency of the Long Wharf study area in the City of New Haven, CT. The recommended plan consists of construction of floodwall, deployable flood gates (closure structures), deployable road closure structures, and one pump station.	\$86,542,000	\$46,599,000	\$133,141,000	To complete the feasibility study process, the Secretary will transmit the Chief's Report and accompanying documents, including the administration's position on the project, to the Congress.

*Note: Prices reflect October 2020 level

2021 Main Report Table

		Non-federal Interest									
Name of Proposal	State(s)	All proposals included in the Main Report demonstrated, to the extent practicable, local support and the financial ability to provide the non-Federal cost share.	Proposal Type	Purpose (Summarized from Proposal)	Benefits (Summarized from Proposal)	Estimated Federal Cost*	Estimated Non-Federal Cost*	Total Estimated Costs*	Requirements for Implementation (All must be authorized by Congress in law and receive appropriations in law)		
*NOTE: Information by non-Federal interests was not verified, revised or developed by USACE, Army, or OMB.											
Proposals submitted in 2020.											
Proposed modification of the authorized funding level for the environmental infrastructure project, Calaveras County, California, under section 219(f)(86) of WRDA 1992		Calaveras County Water District	Modification to an existing USACE Environmental Infrastructure Program authority	Calaveras County Water District is seeking to modify an existing environmental infrastructure authorization by increasing the project amount under Section 219(f)(86) of WRDA 1992 for Calaveras County from \$3,000,000 to \$13,280,000 for project purposes as detailed in the authorization for water supply and wastewater infrastructure improvement projects, including wastewater reclamation, recycling and conjunctive use projects. The Calaveras County Water District is requesting assistance through increasing its existing Section 219 authorization amount to help fund improvements to its deficient wastewater treatment and water reclamation facilities serving the community of Copperopolis near Lake Tulloch in rural Calaveras County, CA.	safety of Calaveras County Water District's homeowners and businesses – strengthening the local economy, and supporting new housing, retail businesses, recreation, and tourism. The non-monetary	\$9,960,000	\$3,320,000	\$13,280,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Tahoe 108 Program Authorization Amendment	CA, NV	Tahoe Regional Planning Agency	Modification to an existing USACE Environmental Infrastructure Program authority	The 2005 Consolidated Appropriation Act created the Tahoe 108 Program to provide assistance with environmental infrastructure projects within the Lake Tahoe Basin. Corps assistance under this program has helped fund planning, design, and construction for many environmental improvement projects that have been instrumental in the Tahoe Basin making progress towards its regional environmental restoration goals. Currently, the Tahoe 108 Program is reaching the ceiling of the original authorization of \$25M. Additional Tahoe 108 authorization could help fund future activities such as: Aquatic Invasive Species (AIS; Upper Truckee River and Marsh Restoration; Public Access Improvements; and Science, Monitoring, and Innovation.	An increase in the Federal funding limit, along with funds provided by the local sponsor for its matching cost share, would help Lake Tahoe's Environmental Improvement Program (EIP) partners to build upon the last ten years of federal support and continue to make progress on improving lake clarity through multi-benefit watershed restoration. Other benefits include: Leveraged non-federal funding: The Tahoe 108 program helps to leverage other state, local, and private funding sources to get EIP projects over the finish line. Future investment in the Tahoe 108 program and the EIP will result in direct monetary benefits from funding match from federal, state, local, and private partners. Prevention of negative impacts from Aquatic Invasive Species: Over the last decade, the nationally recognized Watercraft Inspection Program has prevented harmful invasive species from entering the lake. Protecting the Investment: Future support of the EIP also would help in protecting the investments and accomplishments of this collaborative partnership.	\$37,500,000	\$12,500,000	\$50,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Chicago Area Waterways System Restoration Feasibility Study	IL	Metropolitan Water Reclamation District of Greater Chicago	New feasibility study authority		Aquatic ecosystem restoration in the Chicago Area Waterways System has the potential to significantly improve local populations of aquatic organisms. A 2009 study done by LimnoTech for MWRD in support of the Chicago Area Waterway System Use Attainability Analysis, concluded that lack of habitat was the factor most limiting fish populations. Improved riparian conditions will also bring more birds and other wildlife to the area, which is already known as an important migratory bird corridor. A study released by the Friends of the Chicago River and Openlands in 2013 estimated that each dollar invested in Chicago River improvement "provides a 70% return through business revenue, tax revenue, and income while	\$1,500,000	\$1,500,000	\$3,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Calumet Region Environmental Infrastructure Authorization Increase	IN	Michael Repay	Modification to an existing USACE Environmental Infrastructure Program authority	The requested increase of the total federal authorization for the Calumet River, Section 219 Environmental Infrastructure Program from \$100,000,000 to \$125,000,000 will help fund continued construction assistance to eliminate or control combined sewer overflows, to remove failing septic systems, and to provide clean drinking water as well as additional infrastructure designed to protect area rivers and streams leading into Lake Michigan.	Many of the communities in Lake and Porter Counties rely on sewer systems built in the early 1900s and are primarily combined sewers and are undersized for the current population base. Consequences include: sewage backups into residential structures; street and overland flooding; discharges into the Little Calumet River, Grand Calumet River, Burns Waterway, Deep River, Salt Creek, and associated streams and ditches feeding into these waterways. Benefits of projects initiated under the Calumet Regional Environmental Infrastructure Authority include: reduced residential and commercial property owner and insurance losses due to backups and/or flooding; reduced disruption to transportation networks due to flooding; reduced environmental/health impacts due to the release of CSOs into area waterways. There are approximately 653,000 people living in Lake and Porter Counties. These counties are also home to major industrial interests.	\$25,000,000	\$8,333,333	\$33,333,333	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Feasibility Study for 200 year protection for the Lake Ponchartrain & Vicinity Project, Louisiana	LA	Coastal Protection & Restoration Authority (CPRA)	New feasibility study authority	A project-specific report would be prepared to determine if the measures necessary to provide a higher level of risk reduction above the authorized level for Lake Pontchartrain and Vicinity, Louisiana, and West Bank and Vicinity, Louisiana projects is technically feasible, environmentally acceptable and economically justified.	At risk on the East Bank are 768,000 people as well as \$56 Billion in homes and industry such as refineries, chemical plants and the number 1 port in the country by tonnage shipped. Impacts to the population and infrastructure have direct impact on operations of the ports of New Orleans, South Louisiana, and the energy sector. Following Katrina the community was displaced causing a decline of \$1.9 Billion (at 2015 prices) in national gross domestic product from 2005 through 2010, the last year in which the impact was projected. Increased levels of risk reduction would add to the resiliency of the local community and that of the nation's energy, industrial, and shipping infrastructure.	\$1,500,000	\$1,500,000	\$3,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Modification to the LPV USACE Project Authority	LA	Coastal Protection & Restoration Authority (CPRA)	Modification to an existing USACE project authority	This modification's purpose would be to extend the existing construction authority through the 50 year period of analysis in the Draft Lake Pontchartrain and Vicinity, LA General Reevaluation Report whose notice of availability was published in the Federal Register 13 Dec 2019. Section 3017(e) of the Water Resources Reform and Development Act of 2014 (33 U.S.C. 3303a note) would be amended by striking "10 years" and inserting "60 years". The original authority did not include authorization for future levee lifts.	The annual benefits of the recommended plan in the draft report are \$203,000,000 against costs of \$82,000,000. Sustaining the 100 year level of risk reduction is important to the life safety of the community, ensuring continued economic investment of the area, and to the nation due to the magnitude of the traffic through the Port of New Orleans and the number of petrochemical facilities protected by the system. The catastrophic damage caused by the flooding of hurricane Katrina in 2005 to the Greater New Orleans area and the continued impact of powerful storms along coastal Louisiana including Hurricane Laura in 2020 demonstrate the ongoing need to sustain the Hurricane Storm Damage and Risk Reduction System that is comprised of the Lake Pontchartrain and Vicinity, LA Project and the West Bank and Vicinity, LA Project into the future to address consolidation, settlement, subsidence, sea level rise that would otherwise increase the risk to life and property over time.	\$1,690,000,000	\$910,000,000	\$2,600,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
To extend the WRRDA 2014 section 3017 construction Authority for West Bank and Vicinity projects.	LA	Coastal Protection and Restoration Authority (CPRA)	Modification to an existing USACE project authority	This proposal would be to extend the existing construction authority through the 50 year period of analysis in the Draft West Bank and Vicinity, LA General Reevaluation Report whose notice of availability was published in the Federal Register 13 Dec 2019. The original authority did not include authorization for future levee lifts. Section 3017(e) of the Water Resources Reform and Development Act of 2014 (33 U.S.C. 3303a note) is amended by striking "10 years" and inserting "60 years."	Sustaining the 100 year level of risk reduction is important to the life safety of the community, ensuring continued economic investment of the area, and to the nation due to the magnitude of the traffic through the Port of New Orleans and the number of petro-chemical facilities protected by the system. The catastrophic damage caused by the flooding of hurricane Katrina in 2005 to the Greater New Orleans area and the continued impact of powerful storms along coastal Louisiana including Hurricane Laura in 2020 demonstrate the ongoing need to sustain the Hurricane Storm Damage and Risk Reduction System that is comprised of the Lake Pontchartrain and Vicinity, LA Project and the West Bank and Vicinity, LA Project into the future to address consolidation, settlement, subsidence, sea level rise that would otherwise increase the risk to life and human property over time.	\$398,000,000	\$215,000,000	\$613,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		
Section 592, Mississippi Environmental Infrastructure Program	MS	Rankin County, Mississippi	Modification to an existing USACE Environmental Infrastructure Program authority	ground water. In addition to the need to increase the scope of the program authority, the El Program has	The socioeconomic and environmental problems that the EI program was authorized to address (e.g., insufficient water supply, storage, and distribution) continue to cause or contribute to public health and safety hazards, degraded environmental resources, and limited economic development within the region. Expanding populations and extreme weather events are placing even more pressure on water management systems, exacerbating associated socioeconomic and environmental consequence of insufficient and aging infrastructure. In addition to addressing increased flooding within Rankin County,	\$82,500,000	\$27,500,000	\$110,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.		

2021 Main Report Table

Name of Proposal	State(s)	Non-federal Interest All proposals included in the Main Report demonstrated, to the extent practicable, local support and the financial ability to provide the non-Federal cost share.	Proposal Type	Purpose (Summarized from Proposal) (Summarized from Proposal)	E	Estimated Federal Cost*	Estimated Non-Federal Cost*	Total Estimated Costs*	Requirements for Implementation (All must be authorized by Congress in law and receive appropriations in law)
Fox-Wolf Basin Watershed Study	WI	IFOX-WOIT Watershed Alliance	New feasibility study authority	Reduced water storage capacity on the landscape has resulted in uncontrollable rise in Lake Winnebago during storm events and following spring snow melt. Reduction in storage capacity has resulted in stream bank erosion, shoreline erosion and significant flooding along the streams and rivers throughout the Fox-Wolf basin. Reduced storage in the Upper East River Watershed combined with high water levels in Lake Michigan and the Bay of Green Bay has resulted in significant flooding in the Green Bay Metropolitan Area. An H&H study would provide valuable insight for water resource management. The study would provide the foundation for future design and construction of green infrastructure practices that build water storage capacity on the landscape which would reduce flooding and improve water quality.	ty owners. Larger een Bay result is	\$3,000,000	\$0	\$3,000,000	To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a current decision document, including obtaining the Administration's position on the project, and, if appropriate, transmit the decision document and/or the Administration's position to Congress.

2021 Appendix Table

Name of Proposal	State(s)	Non-federal Interest	Proposal Type	Purpose (Summarized from Proposal)	Benefits (Summarized from Proposal)	Total Estimated Costs (Directly from Proposal)	Unmet Section 7001 Criteria / Reason in Appendix
				NOTE: Information by non-Federal interests was not verified, r	revised or developed by USACE, Army, or OMB		
Juneau/Auke Bay Floating Wave Attenuator	AK	Port of Juneau	New feasibility study	The project would replace an aging 32-year-old breakwater with a floating wave attenuator to protect both private and public marina facilities from wind-driven and vessel wakes. The existing anchored breakwater is at the end of its useful life and safety is a concern. The project would increase the functionality by designing the wave attenuator sufficiently to allow moorage for Coast Guard/NOAA vessels, small cruise ships, large commercial fishing vessels and other user groups which are currently underserved. The construction of a new floating wave attenuator would serve to develop needed upland marine support facilities. Port of Juneau is requesting a feasibility study for a navigation project.	The maritime Industry in Juneau and throughout Southeast Alaska is growing and will require infrastructure investment to accommodate future economic opportunities. A study to evaluate potential improvements of the existing port facilities at Auke Bay could provide a way to plan for this growth. An example is the long waiting list for permanent moorage for commercial and recreational vessels – currently the wait list has eighty-seven patrons seeking moorage space – many have been on the list for several years. Statter Harbor primarily serves the fishing fleet, local recreational users, commercial charter fleet, research vessels, U.S. Coast Guard FRC, Fish and Game vessels, and private yachts. With the Juneau Harbor at capacity and the market for smaller pocket cruisers (100 ft. to 250 ft.) growing, the Auke Bay area may be a logical location to accommodate expansion of facilities.	\$53,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Coastal and Offshore Sediment Resources Inventory for a Resilient Gulf Coast	AL, FL, LA, MS, TX	Gulf of Mexico Alliance (GOMA)	New feasibility study authority	On behalf of the Gulf coast states (Texas, Louisiana, Mississippi, Alabama, and Florida), the Gulf of Mexico Alliance proposes a comprehensive sediment study to identify and delineate sediment resources within state waters and the Outer Continental Shelf. A robust investigation needs a phased approach, starting with a study to identify data gaps for focused surveys for efficiency and cost-effectiveness. Development of a comprehensive inventory of sediment will help states improve project planning and better understand competing uses that impact availability of sediment resources.	Coastal communities and stakeholders across the Gulf will benefit from development of an inventory that identifies compatible sediment sources to assist in the cost-effective protection and restoration of watershed and aquatic ecosystems as demonstrated by the letters of support from each of the five Gulf states. The proposed inventory would significantly reduce uncertainty and cost for determining strategic sources of sediment necessary for both state and federal projects. It will also provide advanced information about available sediment resources to expedite restoration and nourishment of storm-damaged beaches and shorelines that protect coastal communities and support tourism economies.	\$15,000,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program.
Malibu Creek Ecosystem Restoration Feasibility Study	CA	California Department of Parks and Recreation (CDPR)	existing feasibility study	To request construction authorization for the proposed project. The final Feasibility Report was submitted in July 2020. The 30 day State and Agency Review started on August 21, 2020, and the Chief's Report was signed on November 13, 2020.	The project benefits are the following: Restores aquatic habitat connectivity along Malibu Creek and tributaries; allows for migratory opportunities to about 15 miles of aquatic habitat that have been unreachable for many decades. Provides a more natural sediment transport regime from watershed to shoreline: allows for transport of Rindge Dam impounded sediment and future sediment generated during storms to nourish downstream shoreline and nearshore habitats that would have naturally benefited from this material without the dam in-place. Restores aquatic habitat of sufficient quality to sustain or enhance indigenous populations of aquatic species within the next several decades Addresses CDPR's life-safety concerns (Rindge Dam spillway removal).	\$276,482,287	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Santa Clarita Valley Water Agency Environmental Infrastructure Modification	CA	Santa Clarita Valley Water Agency (SCV)	existing USACE Environmental	Section 219(f)(93) of the Water Resources Development Act of 1992 as amended (121 Stat. 1259) authorized \$3 million for the Corps of Engineers to carry out projects for "wastewater and water related infrastructure" in the vicinity of Los Angeles County. Santa Clarita Valley Water is seeking a modification to this authority, including adding the Santa Clarita Valley as an eligible entity, and increasing the overall authority of the program to \$38 million.	The Authorization Modification will allow SCV Water to invest in treatment facilities to remove per- and polyfluoroalkyl substances (PFAS) from the nearly 50% of the Agency's groundwater wells which have been impacted. This work will restore a significant portion of our ground water supply, reducing reliance on water imported from the State Water Project (SWP). Groundwater is a local, sustainable part of the SCV Water portfolio. Direct Monetary Benefits: Groundwater tends to be the most cost-effective source of local water for SCV Water customers. Lost groundwater supply capacity must be made up elsewhere. Non-Monetary Benefits: With a commitment to public health protection, the construction of PFAS treatment infrastructure will increase the protection of human life by restoring drinking water to meet the California Department of Drinking Water standard.	\$47,500,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program because it involves environmental cleanup and remediation work whose performance may be otherwise compelled under State or Federal law. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).
Santa Clarita Valley Water Agency Perchlorate/VOC Remediation	CA	Santa Clarita Valley Water Agency (SCV)	Modification to an existing feasibility study	Perchlorate was discovered in the Santa Clarita Valley in the 1990s, spreading from a former munitions site into the groundwater supply. Perchlorate is a component of solid rocket fuel, munitions, fireworks, flares, and other explosive-type materials. The investigative work carried out by the Corps of Engineers accelerated and augmented the treatment technology we use today. Two VOCs—Trichloroethylene (TCE) and Tetrachloroethylene (PCE)—have been detected in several drinking water wells, all below the MCL of 5 ppb for TCE and PCE. Even though these levels comply with drinking water standards, DDW in an abundance of caution, has set a goal of non-detect for VOCs for water entering SCV Water's distribution system. SCV Water proposes to install treatment facilities to address contamination issues that impact water supply.	gland's ability to make essential hormones. This work will restore a portion of our ground water supply, reducing	\$13,500,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program because it involves environmental cleanup and remediation work whose performance may be otherwise compelled under State or Federal law. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).
Charlotte County, Florida shore protection project	FL	Charlotte County, Florida	New feasibility study	In 2016, upon seeking to engage the Corps of Engineers in a long-term solution to shoreline erosion issues, the County learned that the Corps completed a Chief of Engineers report in response to a House Public Works Committee Resolution adopted 2 December 1971. Unfortunately, in the spring of 1981, the Charlotte County Board of County Commissioners withdrew support for the project, thereby effectively ending substantive work on the project. It is believed that in the 1990's the project was ultimately deauthorized, meaning that new authority must be provided to initiate a validation report of the old study by the Jacksonville District of the Corps. The Countrequests that the Corps initiate a validation study to address shoreline erosion, focusing primarily on those areas recommended for a project in 1981.	Southwest Florida was severely impacted by several major storms in recent years. Charlotte County has sustained significant shoreline erosion and other damage from these major storm events. Given the impact of recent storms, it is important to restart the Charlotte County beach study, focusing primarily on those areas recommended in the completed Chief of Engineers report, which was never constructed. A federal project would help protect infrastructure, including homes and an essential hurricane evacuation route. Charlotte County has declared several emergencies since 2014 due to the impact of the erosion on homes and infrastructure. The erosion, in some cases, has destabilized homes and condominium buildings to the point where they are no longer safe to enter.	\$53,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Gulf Intracoastal Waterway Damage Mitigation	FL	Baysavers	New feasibility study	Baysavers proposes construction of a water control structure or lock on the GIWW in the vicinity of White City, Florida to stop the damaging loss of freshwater from Apalachicola Bay and its subsequent discharge as toxic runoff into St. Joe Bay and St. Andrew Bay. This resulting natural increase in depth of lake Wimico will greatly decrease dredging and navigation maintenance of the GIWW through the Lake. We depend on the maintenance, preservation and restoration of our diverse natural ecosystems for our economic survival. This natural beauty, and diversity of flora and fauna, make the Panhandle unique, and attractive to the tourists, visitors and new residents that are the NEW ECONOMY of the Panhandle.	The economy of the Florida Panhandle depends on the maintenance, preservation and restoration of our natural resources. This project would drastically improve water quality and clarity on our many beaches in Gulf and Bay Counties, which will result in an increase in property values and a subsequent increase in taxes collected. This project will reduce the fiscal and environmental costs to the USACE of dredging and navigational maintenance of the GIWW through Lake Wimico by allowing the Lake to return to its original depth. This project will also help save the traditional oyster industry in Apalachicola Bay, as well as facilitate and improve the burgeoning oyster farming efforts being made there. This project will help alleviate the runoff problems that are well documented in the literature. This project will help protect these diverse ecosystems from Sea Level rise. This project will help protect the Drinking Water supply in Gulf County, which could be at risk during Tropical weather systems.	\$42,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).

2021 Appendix Table

Name of Proposal	State(s)	Non-federal Interest	Proposal Type	Purpose (Summarized from Proposal)	Benefits (Summarized from Proposal)	Total Estimated Costs (Directly from Proposal)	Unmet Section 7001 Criteria / Reason in Appendix
The Upper Mississippi River Comprehensive Plan	IA, IL, MO	Upper Mississippi, Illinois, & Missouri Rivers Association (UMIMRA)	Modification to an existing USACE project authority	UMIMRA proposes the following modification to Sec.459 of the 1999 Water Resources Development Act, "Upper Mississippi River Comprehensive Plan." In subsection (a) strike the word "develop" and replace with the word "implement." The purpose is to to implement a systemic approach that reduces cumulative flood risk costs and annual flood damages, while simultaneously providing long term improvements to other system values and uses (ecological, economic, recreation, transportation, etc.). An Upper Mississippi River Comprehensive Plan takes the guess work out of flooding, providing a plan of action so everyone knows where the water goes.	Implementation of a large, systemic flood risk reduction plan would result in significant regional economic benefits. The Tennessee Valley Authority estimated that every dollar spent on comprehensive flood risk reduction (i.e., 500-year level of risk reduction for urban areas and 100-year or greater level of risk reduction for agricultural areas) conservatively returns five dollars. According to the "Detour and Transportation Infrastructure Costs Due to a Major Flood Event on the Upper Mississippi and Illinois Rivers", Center of Transportation Research, University of Tennessee, July 5, 2012 report, the total costs of detour and repairs to highways and rail tracks are \$1.027 billion, and if no improvement, by year 30, the diversion costs of the 10 bridges of the Upper Mississippi becomes \$3.1 billion. Employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection.	\$4,003,000,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program.
Reevaluation of Authorized Chicago Shoreline Protection Project	IL	City of Chicago Department of Transportation	Modification to an existing USACE project authority	The construction of the Chicago Shoreline Storm Damage Reduction Project is nearing completion. Since the original feasibility study that justified the Chicago Shoreline project was completed over two decades ago, conditions along the shoreline have further deteriorated, negatively affecting public safety and critical infrastructure and rendering the existing shoreline susceptible to significant coastal storm damage. We have identified several locations along the shoreline that are experiencing significant coastal storm damage including, but not limited to, Juneway Terrace Beach and Park to Osterman Beach, Montrose Beach and "Hook" Pier, North Avenue to Oak Street Beach, 67th Street at South Shore Drive which includes the La Rabida Children's Hospital, 71st to 75th Streets, and Rainbow Beach which includes the South Water Purification Plant.	The shoreline along Lake Michigan is largely a man-made system of revetments (concrete, stone and steel sheet pile), armor stone breakwaters, beaches, and promontories. The lakefront is largely publicly owned and is used for recreation and for commuting. For a significant portion of the lakefront, Lake Shore Drive (US 41) runs parallel to the shoreline and carries up to an average daily traffic load of over 150,000 vehicles per day. In addition, the lakefront trail also serves as a commuter artery for the thousands of daily cyclist commuters. The Chicago Park District owns and maintains the lakefront parks and beaches for use by the public. Some areas along the lakefront are privately owned and, in some cases, have minimal protection structures. Damage from the January 2020 storm is estimated to be in excess of \$20M in public property alone. Erosion caused by the storms has a negative environmental impact on Lake Michigan water quality and also poses a life-safety threat.	\$503,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Fox Waterway Operation Sustainability	IL, WI	Fox Waterway Agency	New feasibility study authority	Within the Fox Waterway Watershed there has been a lack of a comprehensive watershed planning effort within Illinois, as well as Wisconsin. Study may focus on an evaluation of existing flood control and identifying new and additional flood control facilities along with data base of at-risk critical facilities. We would like the study to focus on sedimentation throughout the system which has become much more prevalent with every additional flood event. In-lake sedimentation is a direct result from this flooding in relation to sediment redistribution due to high current and additional erosion that is caused by flooding. In-lake sediment traps and the creation of additional storage volume may not be primary drivers for a flood control focus but we'd appreciate the evaluation of a sediment control basin or structure near the Illinois Wisconsin border that also includes debris diversion or management, since flooding brings floating debris which causes navigational problems.	The Fox Waterway Agency (FWA) mission is adversely affected due to influx of sediments and recurring flooding, from the Upper Fox River in Wisconsin and surrounding area. The estimated \$150M + that this system generates each year for local economies is greatly impacted by the more regular and recurring 100-year flooding not to mention the millions of dollars in property damage that results for thousands of our waterway residents on a more frequent basis. These challenges along with the damage caused to water quality with many folks relying on outdated septic systems and area sewage plants around the system that are regularly compromised during these more increased periods of flooding. These problems in addition to the ecological threat of shoreline destruction and limited/compromised navigation during times of flooding has been a massive problem that has caused very damaging results to our lands, communities and businesses.	\$11,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Lakeside Wetland and Riparian Bank Project	IN	Fort Wayne City Utilities, City of Fort Wayne, Indiana	Modification to an existing USACE Environmental Infrastructure Program authority	The Lakeside Wetland and Riparian Bank project will include the creation of approximately 100-acres of wetlands and riparian areas in conjunction with trails and education experiences and opportunities. It will also serve to reconnect the Pierson Drain to the Maumee River with the replacement and lowering of a culvert. The project will reconnect the Maumee River to its floodplain and provide more robust and diverse ecology in the area, improving water quality in the Western Lake Erie Basin, while benefiting projects within the city and county. The project also includes the replacement of old and undersized culverts under Lake Ave with an appropriately sized culvert, two-stage ditch, a stormwater overflow sewer along Reed Rd, relocation of a sanitary interceptor sewer, removal of a sanitary siphon structure, relocation of a force main, and neighborhood stormwater improvements will be included.	Lunder the road, future expansion of the road can occur. This replacement allows for a Letter of Man Revision to the	\$12,725,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).
Boston North Shore Coastal Flood Damage Reduction and Environmental Enhancement Study- Revere, Saugus, Lynn, Malden, and Everett, Massachusetts	MA	The City of Revere Is the primary local sponsor		Revere and surrounding coastal communities favor a partnership with USACE to study current conditions, analyze probabilistic and hydrodynamic situations and recommend engineering solutions to reduce risk from a natural disaster. They advocate collectively for a regional study that will lead to coastal flood protection for these municipalities against a severe threat of coastal flooding accelerated by sea-level rise. USACE previously authorize a coastal flood protection study and design project that secured state, regional, and local support. Despite overwhelming community support, in 1993, the Secretary of Environmental Affairs declined to support the final construction phase, it was de-authorized. The "bomb cyclone" event in 2018, set a new tidal record. This storm event halted access north and south of Boston for thousands of commuters, and 2,000 Revere residents were isolated. The Blizzard of '78, flood inundated 3,100 buildings to depths of 7", evacuated over 4K people, and brought \$300M in damages.	Project benefits include significant quality of life improvements by reducing the stress of flooding, loss of life, and preserving the ecological system. 5,100 Revere, 2,300 Saugus, 2,832 Malden, and 4,026 Lynn properties are	\$53,500,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Modification of Water Supply Contract at the Clarence Cannor Dam and Mark Twain Lake Project, Salt River, Missouri	МО	Missouri Department of Natural Resources		This request is to receive Congressional authority to modify the Water Supply Contract No. DACW43-88-C-0036, dated March 10, 1988, between the United States and the State of Missouri. The State is requesting a modification to their contract to stop payment for operation and maintenance (O&M) for future use storage. The amendment would relieve the State of Missouri of the obligation to pay that percentage of the annual O&M expense of the joint use facilities of the Clarence Cannon Dam and Mark Twain Project, Salt River, Missouri that is attributable to water supply storage space not being used by the State (future use water supply). This proposed modification is in agreement with the St. Louis District's evaluation conducted in their Letter Report process (July 8 2019), and would bring the contract in line with current Corps policy and with other water supply contracts nationally.	to pay O&M for future use water supply. The State of Missouri has already suffered economic loss of over \$3.77 million through prior payment and would incur an additional expense of \$92,175 (based on the past 5-year average) annually as long as this issue remains. For the remainder of the project's life of 100 years this would result in approximately \$6.45 million for water that is being stored but not used as part of the total Mark Twain	\$18,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).
Port of Gulfport Mississippi Deepening and Widening Federal Navigation Channel	MS	Mississippi Development Authority	New feasibility study authority	Determine the feasibility of deepening and widening the Federal Navigation Channel into and including the Port of Gulfport. Maritime freight transportation has trended towards larger deeper-draft vessels to increase efficiency in cargo operations. Reducing the cost of transporting goods to and from international markets strengthens the development of a stable, diversified, and healthy regional economy while improving the quality of life in the region. The purpose of these improvements is to provide greater navigation safety and increasing economies of scale for cargo vessels using the Federal Navigation Channel and Port, to more effectively handle the existing and future commercial vessel fleet through the 30-year period of analysis.	increase. Max vessel size for Gulfport is 2,602 TEU at current authorized depth. Average vessel sizes have	\$410,000,000	Does not require congressional authorization. Authority exists (Criteria 2 and 3).

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Critical Restoration Projects of the Lake Champlain Watershed - Vermont and New York	NY, VT	Vermont Department of Environmental Conservation	Modification to an existing USACE Environmental Infrastructure Program authority	Section 542 (WRDA 2000 amended 2007) supports critical environmental restoration projects in the Lake Champlain basin of Vermont and New York. The Program is a partnership between the States of Vermont and New York, the Lake Champlain Basin Program, and USACE. The program requires a 35 percent non-Federal cost share from non-Federal sponsors. There have been nine projects executed under the Section 542 authority to date. The total appropriation to date is \$6.331M. The total expended as of 8/21/2020 is \$5.85M. The modification to Section 542 proposed is: 1) an increase in Authorization of Appropriations in §542(g) from \$32M (§3160, WRDA 2007) to \$100M; 2) An amendment to §542(b)(2) to facilitate clean water infrastructure planning, design, and construction, and to clarify that construction on a dam for which refurbishment is necessary to achieve environmental restoration goals is an eligible project type.	There are several anticipated benefits. With respect to the water infrastructure project in Waterbury, the project protects 10,000 Vermont residents from flood injury, 800 people from fatality, and 1,200 from flood damage or destruction. This project will restore degraded shoreland habitat in a major reservoir, and degraded habitat and fisheries in the Little River below the Dam, which also serve to improve recreational opportunities. With respect to water infrastructure projects in small rural municipalities, there are several monetary and non-monetary benefits associated with these projects. A major study the societal costs and benefits of clean water in the Lake Champlain Basin indicated that \$300M/year in economic activity is associated with Lake Champlain. Water quality impairments in certain sectors of the lake result in an annual reduction of \$17M in tourism revenue, and loss of 195 jobs.	\$153,755,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program because it proposes measures for construction of flood risk management dams that are beyond the scope of environmental infrastructure. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).
Portland Metropolitan Levee Study (PMLS)	OR	Multnomah County Drainage District #1	Modification to an existing feasibility stud authority	Authorization is needed to advance the Portland Metropolitan Levee Study (PLMS) from feasibility to PED and construction. Implementation of the preferred plan will reduce flood risk in the PMLS and improve life safety, resiliency, and operability of the system. The purpose of the feasibility study is to assess alternatives for Federal interest with a focus on improving levee performance, incorporating resilience, and reducing flood risk to the 27-mile levee system located along the Columbia River and Columbia Slough in the Portland metro area, which has seen significant land-use changes since it was originally authorized. The impact of a levee failure in the study area would have extreme consequences due to the significance of the people, property, and infrastructure at risk. The system has failed once before in May of 1948. The failure destroyed the city of Vanport, resulting in at least 15 deaths and the displacement of over 18,500 residents.	According to the initial draft of the PMLS Integrated Feasibility Report & Environmental Assessment, the analysis of National Economic Development (NED) flood risk damages estimates \$22.3 million in Expected Equivalent Annual Damage (EEAD) systemwide. The LifeSim modeling estimates a population at risk of nearly 30,000 during the daytime and 12,000 overnight. If implemented, the preferred plan will provide this critical region with additional resilience, life safety, and \$7.6 million in annual net benefits. The PMLS reduces the risk of flooding for a 13,000-acre area that includes vital local, regional, and national infrastructure. With \$16 billion in annual economic activity, the Columbia Corridor represents a critical West Coast trade corridor, and the flood safety facilities and operations are of national significance. Additionally, these 27-miles of levees are essential to the protection of the daily life of 8,900 residents and over \$7.2 billion in assessed property value.	N/A	Does not require congressional authorization. Authority exists (Criteria 2 and 3).
Milwaukee Metropolitan Sewerage District's (MMSD) Improving Infrastructure Functionality & Reducing Combined Sewer Overflows Through Construction Of Strategically Located Environmental Infrastructure	WI	Milwaukee Metropolitan Sewerage District (MMSD)	existing USACE Environmental	Through a Planning Assistance To States award, MMSD and the USACE partnered to develop an approach to reduce combined sewer overflows, improve water resources and address climate change. The result is the 'Maximizing Stormwater Capture Using Green Infrastructure' plan. This plan develops an agreed-upon framework for how to strategically build green infrastructure in the combined sewer service area. The plan identifies 8 priority projects and provides conceptual designs, community engagement strategies, and cost estimates. This proposal requests funds to move 7 of the 8 identified projects into final design and construction and will capture over 525,000 gallons of stormwater in a single storm event.	Approximately 6% of MMSD's service area, located entirely within the City of Milwaukee and the Village of Shorewood, is serviced by the combined sewer system. This combined sewer service area is the focus of this Green Infrastructure Implementation Plan, as reducing stormwater inflow into the combined system will reduce the risk of a combined sewer overflow. The Milwaukee region is home to over 1.1 million people and the region's population is expected to grow by approximately 16% by 2035. Problems such as flooding, polluted stormwater, and extreme heat tend to negatively impact vulnerable communities more severely, and these impacts are expected to be greater in the region due to climate change. This project would capture 525,000 gallons of stormwater in a single storm event and provide a platform to continue to build community and political support for investments in infrastructure.	\$4,500,000	The proposal does not meet the requirements of 7001(a), it is not a feasibility report, a proposed feasibility study, a modification to an authorized project, or a programmatic modification to an environmental infrastructure assistance program. Additionally, the proposal does not relate to a primary USACE authority/mission area (Criteria 1).