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Report to Congress on Future Water Resources Development: Overview

This 2019 Report to Congress on Future Water Resources Development (Annual Report) is in response to section 7001 of the Water Resources Reform and Development Act (WRRDA) of 2014 (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 completed feasibility reports recommending a water resources project for congressional authorization, proposed feasibility studies, and proposed modifications to authorized water resources development 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.

The section also directed that “the Secretary shall include in the annual report only those feasibility reports, proposed feasibility studies, and proposed modifications to authorized water resources development projects and feasibility studies that:

(i) are related to the missions and authorities of the Corps of Engineers;
(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 the Corps of Engineers.

On April 20, 2018, the United States Army Corps of Engineers (Corps) published the annual Federal Register notice for proposals from non-Federal interests. The deadline for submitting proposals was August 20, 2018 (120 days). The Federal Register notice for proposals was published on the Corps Headquarters website, with information distributed to all Corps Civil Works districts and divisions. The Corps hosted a public information session about the proposal process, held annually, on July 31.

This year, 34 proposals were received. All submitted proposals were evaluated against the five criteria in section 7001 and are presented in one of two tables in this Annual Report. The first table, included in the main report, contains proposals that meet the five criteria and other recommendations from the Secretary, including signed Chief’s Reports recommending authorization of a water resources development project, proposed Storage Use Plans submitted under the Water Supply Act of 1958, as amended (43 U.S.C. 390b), and non-Federal feasibility reports submitted for review to the Secretary of the Army under Section 203 of WRDA 1986, as amended (33 U.S.C. 2231). The second table, included as an appendix, contains proposals that did not meet the necessary criteria.

Evaluation Criteria and Methodology

In order to provide more transparency to non-Federal interests, the Federal Register notice and Corps Headquarters website details the process under which proposals would be evaluated against the criteria in developing the Annual Report. How proposals were evaluated under each criteria are described below.
Criteria 1. Related to the missions and authorities of the Corps

Proposals are considered related to the missions and authorities of the Corps when they involve a proposed or existing Corps water resources project or effort whose primary purpose is flood and storm damage reduction, commercial navigation, or aquatic ecosystem restoration. Proposals for related purposes, such as for recreation, hydropower, or water supply, may be eligible for inclusion if undertaken in conjunction with a project or effort involving one or more of those primary purposes.

Despite not being primarily a flood or storm damage reduction, commercial navigation, or aquatic ecosystem restoration proposal, certain environmental infrastructure proposals (i.e., proposed modifications for an environmental infrastructure program) may be included in the main report due to recent legislative changes to 33 U.S.C. § 2282d, Annual report to Congress.

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

Proposals are considered to require specific congressional authorization in the following cases:

- Proposals seeking construction authorization
  - Signed Chief’s Reports;
  - Non-Federal feasibility report submitted for review to the Secretary of the Army under Section 203 of WRDA 1986, as amended, under Administration review;
  - Ongoing feasibility studies that is expected to result in a Chief’s Report;
  - Proposed modifications to environmental infrastructure projects that were authorized prior to the date of enactment of the Water Resources Development Act of 2016 (December 16, 2016); and
  - Proposed modifications to authorized water resources development projects requested by non-Federal interests through the WRRDA 2014 Section 7001 process.

- Proposals seeking study authorization
  - New feasibility studies proposed by non-Federal interests through the WRRDA 2014 Section 7001 process will be evaluated by the Corps to determine whether or not there is existing study authority; and
  - Proposed modifications to studies requested by non-Federal interests through the Section 7001 of WRRDA 2014 process.

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 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 unrelated to any currently authorized water resource development project and is not the subject of a completed or ongoing feasibility study.
• Proposals that do not include a request for a potential future water resources development project through completed feasibility reports, proposed feasibility studies, and proposed modifications to authorized projects or studies.

Criteria 3. Have not been congressionally authorized

A proposal is considered to have not been congressionally authorized if all the specific elements contained in the proposal were not included in any previous authorization.

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

Proposals included in the report table in any previous Report to Congress on Future Water Resources Development are not eligible to be included in the table submitted with this report. They will be included in the appendix for transparency. Proposals previously included in an appendix may be resubmitted for consideration for inclusion in subsequent reports.

Criteria 5. If authorized, could be carried out by the Corps

Unless some institutional impediment exists (e.g., state law), proposals meeting the other criteria are generally considered to be implementable by the Corps if authorized by Congress. As discussed below, additional steps are required before the Corps 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 the Corps can proceed to construction, whether the project is authorized following the Corps’ 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 the Corps can proceed to construct an authorized project; (1) the project must be authorized for construction by Congress; (2) the Secretary, or other appropriate official, 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 to Congress; and (3) funds for construction have been appropriated for 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 demonstrate a clear 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 Corps 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) is required to be completed 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 PACRs may not include feasibility analysis, because these PACRs support project modifications they may be considered for inclusion in the report if the recommendations require authorization.

Of the 34 proposals submitted for the 2019 Annual Report, 22 were proposals for new feasibility study authorization, 1 was a proposal for a modification to existing study authority, and 11 were for modifications to existing projects. Of these proposals, 15 met the criteria and are listed in the main report table. The remaining 19 proposals that did not meet the criteria are included in the appendix with an explanation of which specific criteria were not met. All 34 proposals provided by non-Federal interests for the 2019 Annual Report are available on the Corps Headquarters website at http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/Legislative-Links/wrrda2014/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 2019 Annual Report does not preclude the Army from carrying out either the study or construction.
All feasibility reports with signed Chief’s Reports that have not been authorized or previously included in an annual report are included in this report. Since submission of the 2018 Annual Report, four feasibility reports have been signed as Chief’s Reports and are under Army review.

In addition, the following recommendations from the Secretary are included in the main report:

- Proposed Storage Use Plans submitted under the Water Supply Act of 1958, as amended (43 U.S.C. 390b)
- Non-Federal feasibility reports submitted for review to the Secretary of the Army under Section 203 of WRDA 1986, as amended (33 U.S.C. 2231)

As mandated by WRRDA 2014, the required reporting for sections 3017 and 4011 of WRRDA 2014 have also been included at the end of this report.

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

Report Tables:

- Signed Chief’s Reports
- Proposed Storage Use Plans submitted under the Water Supply Act of 1958, as amended (43 U.S.C. 390b)
- Non-Federal feasibility reports submitted for review to the Secretary of the Army under Section 203 of WRDA 1986, as amended (33 U.S.C. 2231)
- Proposal Report

Appendix:

- Proposal Appendix

Additional Information:

- Required reporting for Section 3017 of WRRDA 2014
- Required reporting for Section 4011 of WRRDA 2014
<table>
<thead>
<tr>
<th>Name of Report</th>
<th>State(s)</th>
<th>Non-federal Interest</th>
<th>Status Notes</th>
<th>Purpose (Summarized from Chief's Report)</th>
<th>Benefits (Summarized from Chief's Report)</th>
<th>Estimated Federal Cost</th>
<th>Estimated Non-Federal Cost</th>
<th>Total Estimated Costs (October 2018 price levels)</th>
<th>Requirements for Implementation (All must be authorized by Congress in law and receive appropriations in law)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anacostia Watershed Restoration, Prince George's County</td>
<td>MD</td>
<td>Prince George's County</td>
<td>Signed Chief's Report in Review</td>
<td>To restore ecosystem function within the Anacostia River Watershed. In total, the recommended plan for aquatic ecosystem restoration will restore approximately 7 miles (32 acres) of aquatic habitat, restore approximately 4 miles of fish passage through the removal of blockages, and connect approximately 14 miles (64 acres) of restored habitat in the Northwest and Northeast Branches. App. 38 AA Streams bills will be produced.</td>
<td>Estimated Federal Cost $22,170,000 Estimated Non-Federal Cost $11,940,000 Total Estimated Costs $34,110,000 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 Congress.</td>
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<td>Pawcatuck River and Rhode Island Coastal Investigation</td>
<td>RI</td>
<td>Rhode Island Coastal Resources Management Council</td>
<td>Signed Chief's Report in Review</td>
<td>To provide Coastal Storm Risk Management for the Pawcatuck River study area. By elevating 247 structures and flood proofing 21 commercial structures, the project would provide equivalent average annual benefits of $8,860,000 with net average annual benefits of $6,750,000. The benefit to cost ratio is approximately 4.2 to 1.</td>
<td>Estimated Federal Cost $35,530,000 Estimated Non-Federal Cost $19,130,000 Total Estimated Costs $54,660,000 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 Congress.</td>
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<td>Little Colorado Winlows</td>
<td>AZ</td>
<td>Navajo County Flood Control District</td>
<td>Signed Chief's Report in Review</td>
<td>To reduce flood risk to the community in and near Winlows, Arizona. Construction/reconstruction of approximately 22,570 feet of levees within and near the city of Winlows, Arizona that will reduce average annual flood damages by approximately $8,590,000. The benefit to cost ratio is approximately 2.67 to 1.</td>
<td>Estimated Federal Cost $51,410,000 Estimated Non-Federal Cost $27,683,000 Total Estimated Costs $79,093,000 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 Congress.</td>
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<tr>
<td>San Joaquin Delta Islands and Levees</td>
<td>CA</td>
<td>California Department of Water Resources and the East Bay Regional Park District</td>
<td>Signed Chief's Report in Review</td>
<td>To restore ecosystem structure and function in the Sacramento-San Joaquin Delta. Restoration of approximately 240 acres of intertidal marsh habitat through beneficial use of maintenance dredged material from an ongoing federal navigation project. The restored marsh would provide habitat for multiple federally-listed species, notably salmonids and Delta smelt. The restored habitat would also benefit many species of migratory birds as they travel through the Delta on the Pacific Flyway.</td>
<td>Estimated Federal Cost $16,277,000 Estimated Non-Federal Cost $8,764,000 Total Estimated Costs $25,041,000 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 Congress.</td>
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<td>Name of Proposal</td>
<td>State(s)</td>
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<td>Missouri Department of Natural Resources Water Supply Storage at Mark Twain Lake</td>
<td>MO</td>
<td>Missouri Department of Natural Resources</td>
<td>Letter of recommendation to release future water storage rights signed by ASA(CW)</td>
<td>To release the Missouri Department of Natural Resources from 5,600 acre-feet of future water supply contracts and future financial obligations for the volume of storage.</td>
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<td>City of Plattsburg Water Supply Storage at Smithville Lake</td>
<td>MO</td>
<td>City of Plattsburg</td>
<td>Letter of recommendation to release future water storage rights signed by ASA(CW)</td>
<td>To release the City of Plattsburg from 8,850 acre-feet of future water supply contracts and future financial obligations for the volume of storage. Also to relieve the City of Plattsburg of the remaining principle payment and obligations for future water storage interest estimated at $9,060,668, as of fiscal year 2015.</td>
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<tr>
<td>City of Smithville Water Supply Storage at Smithville Lake</td>
<td>MO</td>
<td>City of Smithville</td>
<td>Letter of recommendation to release future water storage rights signed by ASA(CW)</td>
<td>To release the City of Smithville from 6,000 acre-feet of future water supply contracts and future financial obligations for the volume of storage. Also to relieve the City of Smithville of the payment obligations for future water storage estimated at $3,778,067, as of fiscal year 2015.</td>
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<td>Section 203 Navigation Study - Baptiste Collette, LA</td>
<td>LA</td>
<td>Plaquemines Parish</td>
<td>Non-Federal feasibility report submitted under Section 203 of WRDA 1986, as amended</td>
<td>To improve navigation efficiency on the Baptiste Collette Channel.</td>
<td>Benefits, in the form of transportation savings, are estimated at $15,140,000, yielding net benefits of $4,560,000 and a benefit-to-cost ratio of 1.42 @ 2.75%.</td>
<td>$24,080,000</td>
<td>$20,840,000</td>
<td>$44,920,000</td>
<td>The Secretary has transmitted the report and accompanying documents, including the administration's position on the project, to Congress and OMB.</td>
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<td>Name of Proposal</td>
<td>State</td>
<td>Non-federal Interest</td>
<td>Proposal Type (as defined in Proposal)</td>
<td>Purpose</td>
<td>Benefits (Summarized from Proposal)</td>
<td>Estimated Federal Cost</td>
<td>Estimated Non-Federal Cost</td>
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<td>South Perez Water Supply Desalination Demonstration</td>
<td>CA</td>
<td>Eastern Municipal Water District</td>
<td>Modification to Existing Project</td>
<td>The project requests an increase to the project authorization and federal appropriation level from the $25,000,000 2019 Main Report amount to $33,330,000 in 2020. This increase in federal funding is necessary to support the advanced, state-of-the-art desalination demonstration project. The federal funds would allow for the construction, installation, and operation of the advanced desalination demonstration project in the coastal Salton Sea region of Southern California. The project would help meet the increasing water supply needs of the Southern California region, particularly in arid and semi-arid areas.</td>
<td>$26,500,000</td>
<td>$8,330,000</td>
<td>$34,830,000</td>
<td>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.</td>
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<td>Lower Missouri River Study</td>
<td>KS, MO, ND</td>
<td>Authority of Kansas City District, Dredging, Omaha District, and Arkansas &amp; Missouri River Bemis Dam</td>
<td>New Feasibility Study</td>
<td>The project is expected to increase the total amount of water storage in the lower Missouri River from 1,100,000 acre-feet to 1,300,000 acre-feet by 2050. The additional water storage will improve the reliability of water supply for the Missouri River basin and enhance ecosystem management and water security.</td>
<td>$1,300,000</td>
<td>$1,300,000</td>
<td>$2,600,000</td>
<td>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.</td>
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<td>Northeastern Ohio Flood Risk Reduction</td>
<td>OH</td>
<td>Cuyahoga River Basin Authority</td>
<td>New Feasibility Study</td>
<td>The project is expected to reduce the risk of flooding and erosion in the greater Cleveland area, which is home to more than 1.9 million people and 200,000 businesses. The project would improve the effectiveness of existing flood protection structures and provide additional flood protection for areas that are currently not protected.</td>
<td>$125,000</td>
<td>$175,000</td>
<td>$300,000</td>
<td>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.</td>
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<td>So-called Central Flood Risk Reduction for the Merrimac, Massachusetts</td>
<td>MA</td>
<td>Plum Island Foundation</td>
<td>New Feasibility Study</td>
<td>The project is expected to examine coastal flooding on Plum Island and include a review of the effects of proposed federal flood reduction initiatives. The project would assess the feasibility of flood reduction measures and identify potential approaches to addressing coastal flooding on Plum Island.</td>
<td>$4,900,000</td>
<td>$1,500,000</td>
<td>$6,400,000</td>
<td>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.</td>
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<td>Lower Rio Grande Valley Feasibility Study</td>
<td>TX</td>
<td>Mexico Department of Natural Resources</td>
<td>Modification to Existing Project</td>
<td>The project is expected to reduce the risk of flooding and erosion in the Lower Rio Grande Valley region. The project would involve the construction of flood protection structures and the implementation of ecosystem restoration measures.</td>
<td>$1,900,000</td>
<td>$1,500,000</td>
<td>$3,400,000</td>
<td>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.</td>
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The primary benefit of this effort would be prevented flood damages. The population of Jones County is approximately 101,000 according to the 2000 census, with about 27,000 homes. The county has identified a flood corridor based on the flood plane that included over 18,000 homes and businesses. The flood of record is associated with approximately 160 feet and 20 businesses, causing about $1.5 million in damages (2018 dollars). A similar flood was experienced in 2009, which showed significant damage to the levee system at Overton. The estimated cost would be approximately $15 million. The project includes levee repair and maintenance work, which would potentially reduce the risk of structural flooding in the area.

**Estimated Federal Cost**: $61,500,000
**Estimated Non-Federal Cost**: $219,800,000

To obtain Administration support for implementation, the Secretary, or other appropriate official, must approve a secret decision document, including obtaining the Administration’s position to Congress.

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**2019 Main Report Table**

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Project Type</th>
<th>Purpose</th>
<th>Benefits</th>
<th>Estimated Federal Cost*</th>
<th>Estimated Non-Federal Cost*</th>
<th>Total Estimated Cost</th>
<th>Requirements for Implementation</th>
<th>Notes</th>
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<td>N/A</td>
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*As identified by non-federal interests in their proposals
<table>
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<tr>
<th>Name of Proposal or Report</th>
<th>State(s)</th>
<th>Non-federal Interest</th>
<th>Proposal Type (As Identified in Proposal)</th>
<th>Purpose</th>
<th>Benefits (Summarized from Proposal)</th>
<th>Total Estimated Costs (Directly from Proposal)</th>
<th>Unmet Section 7001 Criteria / Reason in Appendix</th>
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<td>Pure Water Project Las Vegas - Triunfo</td>
<td>CA</td>
<td>Las Vegas - Triunfo Joint Powers Authority</td>
<td>New Feasibility Study</td>
<td>This proposal requests to eliminate discharge of excess recycled water into the Malibu Creek to address TDMA requirements. Excess recycled water will be returned to the focus treatment plant that will further treat the water. The purified water will be conveyed to the Las Vegas Reclamation for indirect potable reuse utilizing surface water augmentation. The water would then be treated at the Westside Filtration Plant and used to meet potable water demands. The specific project proposed for study is the proposed 10-mile line.</td>
<td>The Pure Water Project is expected to replace up to 2,450 acre-feet of imported water in the near term (12% of demand) and up to 5,100 acre-feet of imported water in the long term (36% of demand). Every 4 acre-feet of water produced by the Pure Water Project reduces the need for imported water by the same amount, reducing impacts in both treated, saline and other special &amp; reduced energy consumption &amp; greenhouse gas emissions. The project greatly diversifies the local water district's water portfolio, increasing local resilience to the potential adverse effects of climate change on water supply. Distribution and treatment of recycled water reduces reliance in treated Malibu Creek, addressing TDMA requirements and improving quality of aquatic habitat.</td>
<td>$20,778,072</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
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<td>Rio Hondo/San Gabriel River Ecosystem Restoration Feasibility Study</td>
<td>CA</td>
<td>City of Arcadia, CA</td>
<td>New Feasibility Study</td>
<td>The request is for a feasibility study on ecosystem restoration opportunities adjacent to and along the Rio Hondo River, which is a USACE constructed facility. Specifically, the investigations proposed in potential project are the Acodia Wash, Saw Tooth Wash, and within the Santa Fe Basin. Multiple benefits are expected from projects, including wetland recreation, groundwater recharge, ecosystem restoration, and restoration of riparian and aquatic habitats, etc. The cost estimate also includes an estimate for construction of three potential projects.</td>
<td>Benefits expected from the proposed project include ecosystem restoration benefits of riparian and wetlands recreation, as well as contributions toward groundwater recharge reducing the need to import water. It would also allow for storm water capture. The request notes that it could produce up to 500 acre-feet of water.</td>
<td>$640,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
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<tr>
<td>South San Francisco Flood Control Feasibility Study</td>
<td>CA</td>
<td>City of South San Francisco</td>
<td>New Feasibility Study</td>
<td>The City of South San Francisco (SSF) faces an increasing threat from sea level rise which could severely flood up to 1,000 acres by the year 2050. SSF would like to conduct a feasibility study to look at infrastructures, land use planning and adaptation and irrigation strategies to define what opportunities exist to provide protection against tidal and flood flooding. The City Creek watershed, which flows through the southern part of SSF into San Francisco Bay, contains residential neighborhoods that have been severely flooded, habitat for threatened and endangered species and substantial public infrastructure. SSF has declared a natural disaster area due to flooding by FEMA four times in the past 21 years, and three times in 2017 alone.</td>
<td>The project is expected to provide benefits in the form of flood risk reduction, improved safety and potentially $53,000,000 in capital improvements.</td>
<td>$230,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
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<tr>
<td>City of St. Augustine Back Bay FEMA</td>
<td>FL</td>
<td>City of St. Augustine</td>
<td>New Feasibility Study</td>
<td>This proposal requests a Flood Risk Management/Coastal Storm Risk Management Study to assess the watershed, drainage infrastructure and flood solutions to reduce back bay flooding in St. Augustine, Florida. The city owes discharges from 4.6 feet and experiences bay back flooding from extreme high tides, as well as storms and hurricanes. The city also understands its vulnerability to sea level rise, and is actively looking for long term engineering solutions to protect the citizens and valuable historic resources in the area.</td>
<td>The current coastal flooding causes damages in over 200 acres of residential homes, commercial buildings, roads, Flagler College and other infrastructure. It impacts the economy post-flooding and inhibits a tourist industry with over $2 billion of revenue yearly, it threatens over 250 irreplaceable structures listed on the National Register of Historic Places. It also disrupts the natural ecosystem along the intracoastal and inland. A map provided by the non-Federal sponsor shows extensive back bay nuisance flooding at elevation 3.75 feet, with further extent of flooding with minimal forecasted sea level rise (3 feet). The current damages are expected to worsen over time as hurricane frequencies and intensities increase, and as sea level rise trends continue. The benefit of the proposed effort would be to reduce these negative impacts.</td>
<td>$2,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
<tr>
<td>Kansas River Basin Study</td>
<td>KS</td>
<td>Kansas Water Office</td>
<td>New Feasibility Study</td>
<td>This proposal seeks to develop a holistic plan and strategies to address critical future needs of the Kansas River basin and describe implementation strategies. The project will provide benefits to flood risk, habitat restoration and water supply by recommending measures at identified vulnerable areas, upstream and downstream of towns, and to the riparian and stream/wetland restoration. The project will also establish the scope of future work and prioritization for implementation.</td>
<td>The project will provide flood risk reduction, habitat restoration and water supply by recommending measures at identified vulnerable areas, upstream and downstream of towns, and to the riparian and stream/wetland restoration. The project will also establish the scope of future work and prioritization for implementation.</td>
<td>$1,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
<tr>
<td>Upper Turkey Creek PDD Funding Approval</td>
<td>KS</td>
<td>Merriam, Kansas Modification to USACE Project</td>
<td>New Feasibility Study</td>
<td>This project is seeking authorization and funding of the Upper Turkey Creek flood risk project. Approximately 1000 feet of line height new and flooded would be constructed to significantly reduce flood damage and risk to the area.</td>
<td>It is estimated that this project will provide $21,670,000 in average annual benefits from flood damage reduction, with an average annual cost of $3,100,000. Net benefits are estimated to $18,570,000 and the benefit cost ratio would be 2.2 to 1.</td>
<td>$40,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
<tr>
<td>Blue River Watershed Integrated Planning Study</td>
<td>KS, MO</td>
<td>City of Kansas City, Missouri</td>
<td>New Feasibility Study</td>
<td>The purpose of this study is to develop an integrated, recommended plan of habitat restoration and flood risk reduction, and other allied purposes in the Blue River Basin in Kansas City. The primary issue this study will investigate is degraded or lost habitat that can be restored while improving and sustaining flood risk management and other allied purposes. The scope of the study includes consideration of wetland, riparian and aquatic restoration opportunities, enhance flood risk management where opportunities exist on active projects or potential/new projects, and enhancing recreation and other related purposes.</td>
<td>The project will provide aquatic, riparian and wetland restoration habitat benefits in the highly impacted Blue River corridor in Kansas City and Johnson County, including areas impacted by a previous traditional channel modification project in the lower corridor. The project will also evaluate opportunities for enhancing future flood risk reduction with non-structural and structural measures.</td>
<td>$3,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
<tr>
<td>Line Creek Aquatic Ecosystem Restoration Study</td>
<td>MO</td>
<td>City of Riverside, Missouri</td>
<td>New Feasibility Study</td>
<td>This project is seeking support of aquatic and riparian restoration along Line Creek in the City of Riverside, Kansas. A scan of a reach stream impacted by the I-35 Federal levee project.</td>
<td>Project is expected to provide aquatic and riparian ecosystem restoration in an impacted reach of stream over approximately 5,000 to 6,000 linear feet of waterway, with connectivity to the Missouri River and Tributaries upstream in Platte County.</td>
<td>$4,400,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
<tr>
<td>Long Beach, MS Flood/Storm Water Reduction Study</td>
<td>MS</td>
<td>City of Long Beach, MS</td>
<td>New Feasibility Study</td>
<td>The purpose of this proposal is to assess flood and storm damage reduction in order to address life safety concerns and to protect property in the City of Long Beach, MS and surrounding areas in Harrison County, MS. This project would also analyze ecosystem restoration opportunities in the Bay of St. Louis and MS Sound.</td>
<td>The project is expected to provide benefits in the form of flood risk reduction, improved safety and potentially important habitat restoration.</td>
<td>$55,000,000</td>
<td>Does not require congressional authorization. Authority exists (Criteria 2 and 3).</td>
</tr>
</tbody>
</table>

NOTE: Information by non-Federal interests was not verified, revised or developed by USACE, Army, or OMB.
PTCWS/ Water Systems Improvement Project

Name: County of Westchester, NY
Type: Power Toxton County Water and Sewer District
Project: Modification to USAE Project

This proposal requests a Water System Improvement Project for construction of new water supply wells, new water storage, upgrade water treatment and connection to and improving the existing distribution system. The existing system serves the unincorporated town of Power with a population of approximately 175, but includes a school with enrollment of 516 students serving the surrounding area. Based on its proximity to the City of Great Falls, MT, approximately 210 miles to the east, the Town of Power is expected to grow significantly in the next 20 years.

The effect is expected to provide benefits in the form of reliable water supply for the town, the school, and future fire suppression. The existing surface water intake on Madalynn Creek is not reliable based on high levels of turbidity and poor water quality causing increased treatment costs and taxing the existing system. The surface intake and fire reservoir have been subjected to periodic damage due to ice jams which have forced cut-offs and further illustrate the need. The existing storage and distribution system lacks redundancy and sufficient volume to meet fire suppression requirements.

Total Estimated Cost: $2,627,000

Reason in Appendix

PA: PA

This proposal is seeking to repair a reinforced concrete low-head dam that provides the pool for intake to the Indian Creek Water Treatment Plant, which provides water to thousands of customers in Somersett County, PA.

This proposal expects benefits in the form of transportation costs avoided, as well as safe operation and financial viability of this facility if drainage were to be performed.

Total Estimated Cost: $0

Reason in Appendix

PA: PA

This proposal is seeking to extend the $200M ceiling of authority for the existing Section 313 Environmental Infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $2,984,000

Reason in Appendix

PA: PA

This proposal is seeking to extend the $200M ceiling of authority for the existing Section 313 Environmental Infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $0

Reason in Appendix

TX: TX

The purpose of this proposal is to extend the northernmost portion of the Eastchester Creek Federal navigation channel from mile 4.7 to mile 15, and to achieve and federally maintain critical channel depth in the “Y” portion of Eastchester Creek.

The objective of this request is to extend the 200MCY ceiling of authority for the existing Section 333 Environmental infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $1,000,000

Reason in Appendix

TX: TX

The purpose of this proposal is to modify the existing Galveston Bay reach by widening the channel from 330 ft to 1800 ft. Widening of the full bay reach would enable safe meeting and two way traffic for non-Panama container class vessels, barge traffic, and marina use. Widening would minimize the recurring need to enter space traffic movements, which would cause massive operational disruption of the busiest deep draft ship channel in the U.S. Because of the low bedrock, the flood depth is approximately 10 ft. Increased flood depth is needed in order to accommodate a 100 year flood level.

The proposed project will significantly alter the property attractiveness to large industry. The property has substantial benefits for handling any industry that can utilize a multi-model system of large, rail, and road infrastructure to move their product. This project is expected to greatly enhance the economy by employment potential, land use, and enhancement of communities located within the historically disadvantaged areas of Victoria County in South Texas. The levee improvement project is also expected to aid property values for local landowners by removing or reducing the effects of flooding on certain areas of their property.

Total Estimated Cost: $1,000,000

Reason in Appendix

TX: TX

This proposal requests to use underground dredge material storage could be conducted for 60% to 80% less than conventional placement areas, considering land acquisition, and recurring dike raises and mobilization costs. A single placement cavern could potentially store 25 MCF of material in its first decade of use with cost avoidance of over $100,000. Use of underground placement could eliminate environmental impacts caused by creation and operation of new placement area on the bay, and preserve bay acreage for recreation and commercial fishing.

Total Estimated Cost: $15,593,000

Reason in Appendix

TX: TX

The proposed project is seeking to extend the $200M ceiling of authority for the existing Section 313 Environmental Infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $3,116,000

Reason in Appendix

TX: TX

The purpose of this proposal is to modify a water quality management study that has been in place for approximately 20 years, as required by the USAE. This project provides a health and safety benefit. The system has the capacity to remove over 80% of HSC tonnage is hazardous cargo, safer vessel movements will improve life safety and minimize environmental consequences.

The request expects that use of underground dredge material storage could be conducted for 60% to 80% less than conventional placement areas, considering land acquisition, and recurring dike raises and mobilization costs. A single placement cavern could potentially store 25 MCF of material in its first decade of use with cost avoidance of over $100,000. Use of underground placement could eliminate environmental impacts caused by creation and operation of new placement area on the bay, and preserve bay acreage for recreation and commercial fishing.

Total Estimated Cost: $345,000

Reason in Appendix

TX: TX

This proposal is seeking to establish a new water treatment plant to serve the unincorporated town of Power with a population of approximately 171, but includes a school with enrollment of 516 students serving the surrounding area. Based on its proximity to the City of Great Falls, MT, approximately 210 miles to the east, the Town of Power is expected to grow significantly in the next 20 years.

The objective of this request is to extend the 200MCY ceiling of authority for the existing Section 333 Environmental infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $0

Reason in Appendix

TX: TX

This proposal is seeking to extend the $200M ceiling of authority for the existing Section 333 Environmental infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $15,593,000

Reason in Appendix

TX: TX

The purpose of this proposal is to extend the northernmost portion of the Eastchester Creek Federal navigation channel from mile 4.7 to mile 15, and to achieve and federally maintain critical channel depth in the “Y” portion of Eastchester Creek. The objective of this request is to extend the 200MCY ceiling of authority for the existing Section 313 Environmental infrastructure program. The Section 313 program is within 5% of its authorized limit, which limits non-federal sponsor’s ability to partner with USAE in order to address water and wastewater infrastructure issues.

Total Estimated Cost: $1,000,000

Reason in Appendix

TX: TX

This proposal requests to use underground dredge material storage could be conducted for 60% to 80% less than conventional placement areas, considering land acquisition, and recurring dike raises and mobilization costs. A single placement cavern could potentially store 25 MCF of material in its first decade of use with cost avoidance of over $100,000. Use of underground placement could eliminate environmental impacts caused by creation and operation of new placement area on the bay, and preserve bay acreage for recreation and commercial fishing.

Total Estimated Cost: $345,000

Reason in Appendix

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Total Estimated Cost: $15,593,000

Reason in Appendix
Section 3017 of WRRDA 2014
Reporting Requirement to be Included in Annual Report
to Congress on Future Water Resources Development

Section 3017 of WRRDA 2014 authorizes the Secretary of the Army to carry out measures on certain federally authorized hurricane and storm damage reduction projects to address consolidation, settlement, subsidence, sea level rise, and new datum. Subsection (d) of Section 3017 provides for the inclusion of the following information in the annual report on future water resources development that the Corps prepares under Section 7001 of WRRDA 2014:

(1) any recommendations relating to the continued need for the authority provided under Section 3017;
(2) a description of the measures carried out under Section 3017;
(3) any lessons learned relating to the measures implemented under Section 3017; and
(4) best practices for carrying out measures to restore hurricane and storm damage reduction projects.

Under the authority of Section 3017, the Corps is carrying out two studies. These studies will evaluate the costs and benefits of options to address consolidation, settlement, subsidence, sea level rise, and new datum impacts at the Lake Pontchartrain and Vicinity, Louisiana; and the West Bank and Vicinity, Louisiana projects.
Section 4011 of WRRDA 2014

Reporting Requirement to be Included in Annual Report
to Congress on Future Water Resources Development

Section 4011 of WRRDA 2014 (“Louisiana Coastal Area”) requires the Secretary to review the plan entitled “Louisiana’s Comprehensive Master Plan for a Sustainable Coast” prepared by the State of Louisiana and accepted by the Louisiana Coastal Protection and Restoration Authority Board (CPRAB), including any subsequent amendments or revisions. Further, this section also requires the Secretary, in consultation with the State of Louisiana, to identify and conduct feasibility studies for up to 10 projects included in the plan. Subsection (b)(3) of Section 4011 requires that the Secretary to include the following in the subsequent annual report developed under Section 7001 of WRRDA 2014:

1. any proposed feasibility study initiated under this authority, and
2. any feasibility report for a project identified under this authority.

There are no proposed feasibility studies under this authority.