Process for U.S. Army Corps of Engineers (USACE) Projects

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SUMMARY

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Civil responsibilities of the U.S. Army Corps of Engineers (USACE) include undertaking federal water resource development projects and assisting nonfederal *environmental infrastructure* (EI, typically municipal water and wastewater) projects, among others. This report discusses the processes for USACE projects and assistance.

Authorization and Appropriations. Congress often considers new USACE authorization legislation biennially and discretionary USACE appropriations annually. The authorization bill is typically titled a Water Resources Development Act (WRDA). After a study, project, project modification, or EI assistance authorization is included in an enacted WRDA, in most cases, USACE action on the authorization requires federal funding. Congress typically funds a subset of the authorized USACE activities through annual Energy and Water Development appropriations bills.

Federal Water Resource Projects. USACE develops federal water resource projects principally to (1) improve navigable channels, (2) reduce flood risks along rivers and coasts, and (3) restore aquatic ecosystems. These federal projects also may have other project benefits; for example, some multipurpose projects that may serve hydropower, water supply storage, and recreation purposes, among others.

The standard process for a USACE project consists of four phases: study, design, construction, and operations, as shown in the figure. This process requires two separate congressional authorizations—one for studying feasibility and a subsequent one for undertaking the project (e.g., construction)—as well as appropriations for each phase. An exception to the required two-authorization process is smaller projects (i.e., typically projects with a federal cost less than $10 million) that can be performed under USACE's continuing authorities programs; these projects also largely follow the process described in this report.

Standard Process for USACE Federal Water Resource Projects

Source: Congressional Research Service.

For most activities, Congress requires a nonfederal sponsor to share some portion of study and construction costs and to provide the necessary real estate interests for the project (e.g., lands, rights-of-way). The standard study and construction cost-share requirements vary by project type.

Assistance for Nonfederal Environmental Infrastructure. Congress, typically in WRDAs, authorizes USACE to assist with the design and construction of certain publicly owned and operated water-related infrastructure (i.e., *EI assistance*). WRDAs contain EI assistance authorizations mostly related to water distribution works, stormwater management, surface water protection, and environmental restoration in specified municipalities, counties, and states. Following authorization, appropriations for EI assistance are required before USACE can proceed, generally at a 75% federal cost share. USACE provides assistance typically by contracting for design and/or construction work of the nonfederal project.

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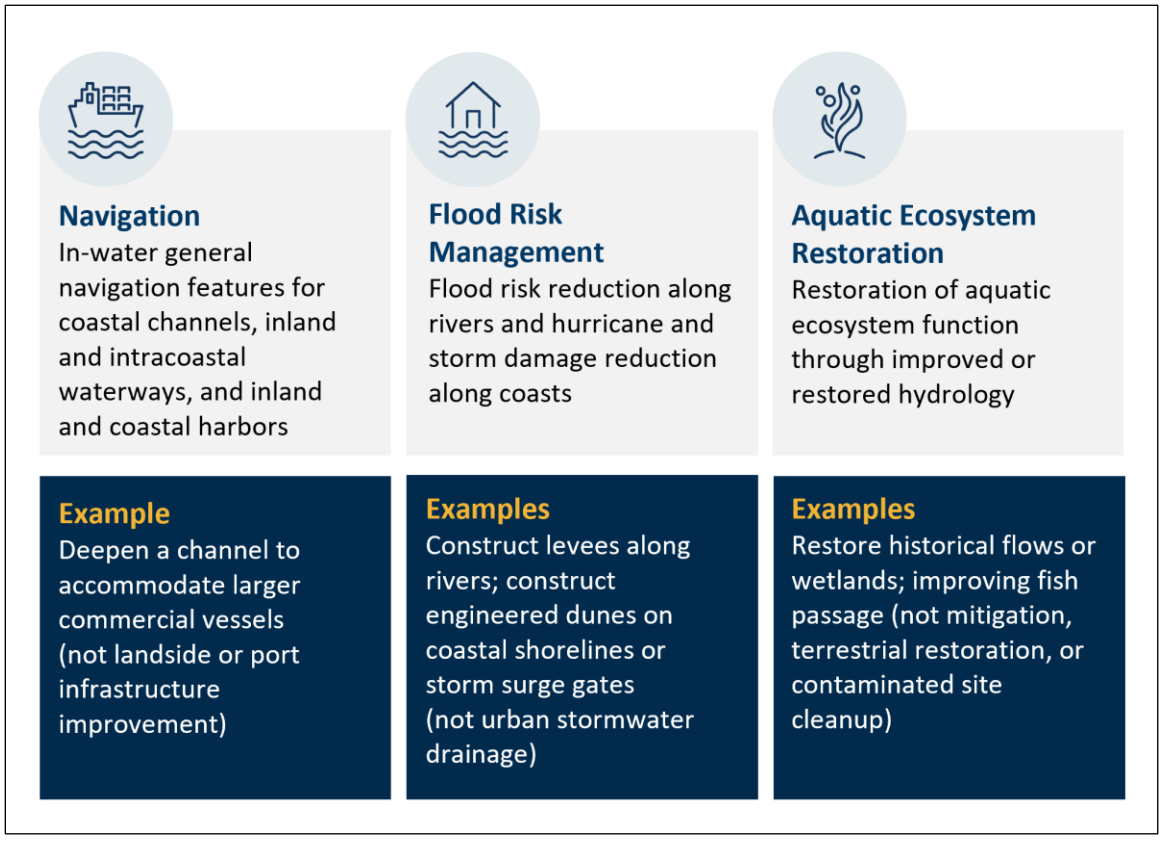
Introduction

The U.S. Army Corps of Engineers (USACE) is an agency within the Department of Defense with both military and civil works responsibilities. As part of USACE's civil works responsibilities, the agency undertakes *federal water resource projects* that are authorized and funded by Congress. **Figure 1** illustrates the primary purposes of most federal water resource projects performed by USACE—navigation, flood risk management, and aquatic ecosystem restoration. These projects also may have other project benefits; for example, some multipurpose projects that may serve hydropower, water supply storage, and recreation purposes, among others. Since 1992, Congress also has authorized USACE to provide assistance to nonfederal, public *environmental infrastructure* (EI) projects, consisting primarily of design and construction of municipal water and wastewater infrastructure; this assistance is not shown in **Figure 1**.

Figure 1. Primary Purpose of USACE Federal Water Resource Projects

(USACE projects can have multiple other project purposes in addition to the primary purposes)



Source: Congressional Research Service.

Notes: USACE = U.S. Army Corps of Engineers.

The Assistant Secretary of the Army for Civil Works (ASACW) provides civilian oversight of USACE. A military Chief of Engineers commands USACE's civil and military operations. The agency's responsibilities are organized into regional divisions, which are further divided into

local districts.[1] The districts and divisions perform both military and civil works activities and are led by Army officers.[2]

Congress typically legislates on authorization of most USACE federal water resource projects and USACE assistance for nonfederal EI through Water Resources Development Acts (WRDAs).[3] Congress often considers a WRDA biennially. Appropriations are typically provided through annual Energy and Water Development appropriations acts and are at times provided through supplemental appropriations acts.

This report summarizes the processes for both USACE federal water resource projects and USACE assistance for nonfederal EI.[4] After a primer on the range of USACE activities and their characteristics, this report discusses the process for USACE to

- undertake federal water resource projects that require project-specific congressional authorizations;
- undertake small federal water resource projects under *continuing authorities programs* (CAPs), typically with federal project costs less than $10 million; and
- assist with nonfederal EI.

Primer on USACE Activities

USACE's water resource activities have evolved with the changing needs of the nation. In the 19th century, Congress first authorized USACE to undertake federal projects to improve navigation channels, thereby facilitating the movement of goods between states and for import and export. In the mid-20th century, Congress began charging the agency to undertake congressionally authorized projects to reduce the damages from riverine floods and coastal storms. Since the 1990s, Congress has authorized USACE to undertake federal projects to restore aquatic ecosystems. Local stakeholders and Members of Congress often are particularly interested in USACE pursuing a federal water resource project, because these projects can have significant local and regional economic benefits and environmental effects. The agency typically works with nonfederal project sponsors in the development of these federal water resource projects. The nonfederal demand for USACE projects and congressional authorization of these projects often exceed available federal appropriations for USACE to complete construction on all authorized projects. In addition to studying and constructing projects, USACE operates more than 700 federally owned dams and improves and maintains more than 900 coastal, Great Lakes, and inland harbors, as well as 12,000 miles of inland waterways.[5]

Since 1992, Congress has authorized and funded USACE to assist with the design and construction of certain publicly owned and operated water-related infrastructure (i.e., EI

[1] A U.S. Army Corps of Engineers (USACE) division map and district links are available at USACE, "U.S. Army Corps of Engineers (USACE): Where We Are," https://www.usace.army.mil/Locations.aspx.

[2] Across both its military and civil works programs, USACE consists of around 36,000 civilian employees (with roughly 11,000 employees supporting the military program and the remainder in the civil works program) and almost 800 uniformed military personnel (roughly 300 related to civil works). An officer typically is in a specific district or division leadership position for two to three years; a Chief of Engineers often serves for roughly four years.

[3] Water Resources Development Acts (WRDAs) are distinguished from each other by referencing the year of enactment; that is, WRDA 1986 refers to the act passed in 1986 (P.L. 99-662).

[4] The discussion of environmental infrastructure (EI) assistance herein is brief; more details are available in CRS Report R47162, *Overview of U.S. Army Corps of Engineers Environmental Infrastructure (EI) Assistance*, by Anna E. Normand.

[5] USACE, *Information Paper: Civil Works Statistics*, March 20, 2013.

assistance). EI assistance is mostly related to projects for water supply and distribution, stormwater management, surface water protection, and environmental restoration, among other purposes. These projects typically are authorized for specified municipalities, counties, or states. Local interests and Members of Congress often pursue cost-shared USACE EI assistance as an alternative to applying for assistance from other federal programs.

The USACE civil works mission also encompasses the agency's regulatory activities pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and the Rivers and Harbors Act of 1899 (33 U.S.C. §403),[6] as well as the agency's administration of the Formerly Utilized Sites Remedial Action Program (FUSRAP). Through FUSRAP, USACE remediates radiological contamination at nonfederal sites that were used during the early years of the U.S. nuclear weapons program.[7] Neither FUSRAP nor USACE regulatory activities are addressed in this report. USACE also has authorities to provide technical assistance; these authorities are largely beyond the scope of this report. This report focuses on the processes for USACE federal water resource projects and USACE assistance for nonfederal EI.

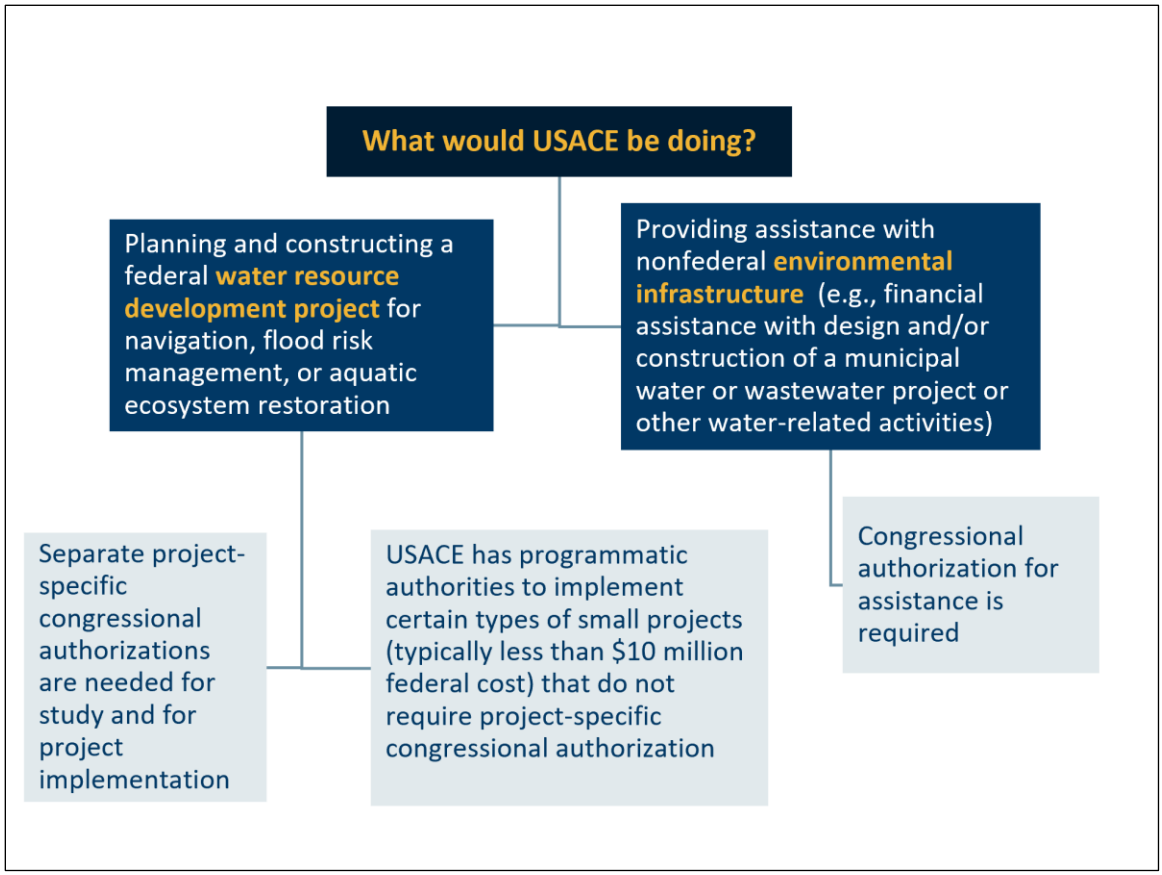
Characteristics of USACE Federal Water Resource Projects and USACE Assistance for Nonfederal Environmental Infrastructure

USACE implements federal water resource projects for navigation, flood risk management, aquatic ecosystem restoration and for other purposes associated with these projects (e.g., recreation, water supply storage, hydropower). These various federal projects, regardless of which purpose they serve, often follow fairly similar processes for their development and authorization. In contrast, USACE's EI assistance is for work on nonfederal projects; as a result, much of the process for EI assistance is distinct from the process for USACE federal water resource projects. **Figure 2** depicts some basic differences in the authorization processes for federal projects and assistance with nonfederal EI projects. USACE implements federal water resource projects pursuant to either project-specific congressional authorizations or without additional congressional authorization for smaller projects (i.e., often less than $10 million of federal costs) under preexisting CAP authorities. For assistance with nonfederal EI projects, Congress must authorize USACE to perform the assistance; that is, Congress authorizes not the nonfederal projects themselves but the assistance for certain nonfederal projects that qualify under the authority. EI assistance authorizations specify the types of projects that may receive assistance and the eligible geographic location of projects. **Table 1** provides information on various characteristics for federal water resource projects, small federal water resource projects under CAPs, and EI assistance.

[6] Section 404 permits are related to the discharge of dredged or fill material into waters of the United States, and Section 10 permits are related to the obstruction or alteration of navigable waters. USACE also administers Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. §1413) related to the issue of permits for the transportation of dredged material for dumping in ocean waters.

[7] The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) program in 1974, under the Atomic Energy Act of 1954, as amended. The program addresses radiological and chemical contamination at some of the smaller sites associated with the legacy production of nuclear weapons and nuclear energy research for civilian purposes; 10 U.S.C. §2701 note sets out USACE's authorities related to FUSRAP. For each FUSRAP site, USACE investigates the extent of environmental contamination, identifies a response, performs the cleanup work, and disposes of waste. After cleanup work is completed at each site, USACE transfers responsibility for long-term monitoring to DOE.

Figure 2. Congressional Authorization for USACE Federal Projects and USACE Assistance for Nonfederal Environmental Infrastructure



Source: Congressional Research Service.

Note: USACE = U.S. Army Corps of Engineers.

Table 1. Characteristics of USACE Federal Water Resource Projects and Assistance for Nonfederal Environmental Infrastructure

(typical characteristics are shown; exceptions may apply for some nonfederal sponsors)

Characteristic	Federal Water Resource Project	Small Projects Under CAPs	Assistance for Nonfederal EI
Minimum authorization action by Congress	Study authorization and project authorization for a federal project	None for projects within a CAP; most CAPs have limits for annual program appropriations and federal costs per project (see **Table 6**)	Authorization for design and/or construction assistance for a nonfederal EI project or EI program
Primary project purposes	Nav FRM AER	Specified in authorization; typically related to Nav, FRM, or AER	Municipal water, sewer, and resource protection and development; other purposes as specified in authorization

Characteristic	Federal Water Resource Project	Small Projects Under CAPs	Assistance for Nonfederal EI
Federal and nonfederal role in project	Federal project with NFS (no NFS for inland and intracoastal Nav)	Federal project with NFS	Nonfederal project receiving federal assistance (e.g., USACE contracts for work on nonfederal project)
Nonfederal study cost sharing	After first federal $100,000, feasibility study shared 50%	After first federal $100,000, feasibility study shared 50% under most CAPs, except for §204 and §111 CAPs	—
Nonfederal design cost sharing	PED same as construction cost sharing	PED same as construction cost sharing	25%
Nonfederal construction cost sharing	Varies by project type (see **Table 4** and **Table 5**)	Varies by CAP (see **Table 6**)	25%
Responsibility for operation, maintenance, repair, replacement, and rehabilitation	Nav: USACE FRM: Nonfederal AER: Nonfederal	Nonfederal under most CAPs, except for §107 CAP	Nonfederal
Nonfederal sponsor eligibility (42 U.S.C. §1962d-5b(b); 33 U.S.C. §2241)	Public body (including Indian tribe and tribal organization); nonprofit entity with local government consent and interstate agency created by compact for navigation projects	Typically legally constituted public body; some eligibility variation across CAPs regarding other entities	Typically public entity, although some eligibility varies based on authority
USACE Construction account appropriations in FY2023	Nav: $4.374 billion FRM: $1.726 billion AER: $893 million	CAPs: $72 million	EI Assistance: $149 million

Source: Congressional Research Service. Appropriations amounts are derived from the FY2023 work plans.

Notes: AER = aquatic ecosystem restoration; CAP = continuing authorities program; EI = environmental infrastructure; FRM = flood risk management; Nav = navigation; NFS = nonfederal sponsor; PED = preconstruction engineering and design; USACE = U.S. Army Corps of Engineers.

Process for Federal Water Resource Projects

For USACE federal water resource projects, congressional authorization and appropriations processes are critical actions in a multistep process to deliver a USACE project for navigation, flood risk management, and aquatic ecosystem restoration. This section describes the standard delivery process for USACE federal water resource projects.

Nonfederal project sponsors typically share in study, design, and construction costs of USACE federal projects. The division of these costs and other responsibilities is set out in agreements signed by USACE and the nonfederal sponsors—feasibility cost-share agreements, design agreements, and project partnership agreements (PPAs), respectively. Among the other nonfederal responsibilities for many USACE projects are (1) the provision of land and other real estate interests for most projects and (2) operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). Nonfederal project sponsors generally are state, tribal, or territorial organizations; political subparts of a state or group of states (e.g., local governments); or quasi-public

organizations chartered under state law (e.g., port authorities).[8] Congress has authorized that some USACE activities can have nonprofit organizations with local government consent as nonfederal sponsors and that an interstate agency created by compact can serve as a nonfederal sponsor for a navigation project.[9] The sponsor must have the legal and financial capability to fulfill the requirements of cost sharing and local cooperation.

The standard USACE project delivery consists of USACE leading the study, design, and construction of congressionally authorized federal water resource projects, as shown in **Figure 3**. The process shown in **Figure 3** is not automatic. Appropriations are required in order to initiate and complete studies, preconstruction engineering and design (PED), and construction; that is, both authorization and appropriations are needed for USACE to proceed. Appropriations are typically provided through annual Energy and Water Development Appropriations acts; at times, they are provided through supplemental appropriations acts. For USACE federal water resource projects, the report accompanying annual appropriations typically identifies with a line item the specific studies and projects to be funded for construction and operations. Congress also may provide additional funding that the Administration can apply to specific congressionally authorized studies and projects pursuant to the accompanying congressional direction. The Administration typically allocates this funding in *work plans* that are subsequently reported on to Congress.

During the operations phase, there may be interest in modifying the USACE project. Modification may take the form of restarting the process shown in **Figure 3** (although a new study authority may not be required), or it may entail a nonfederal entity pursuing a nonfederal project that alters the existing federal water resource project.

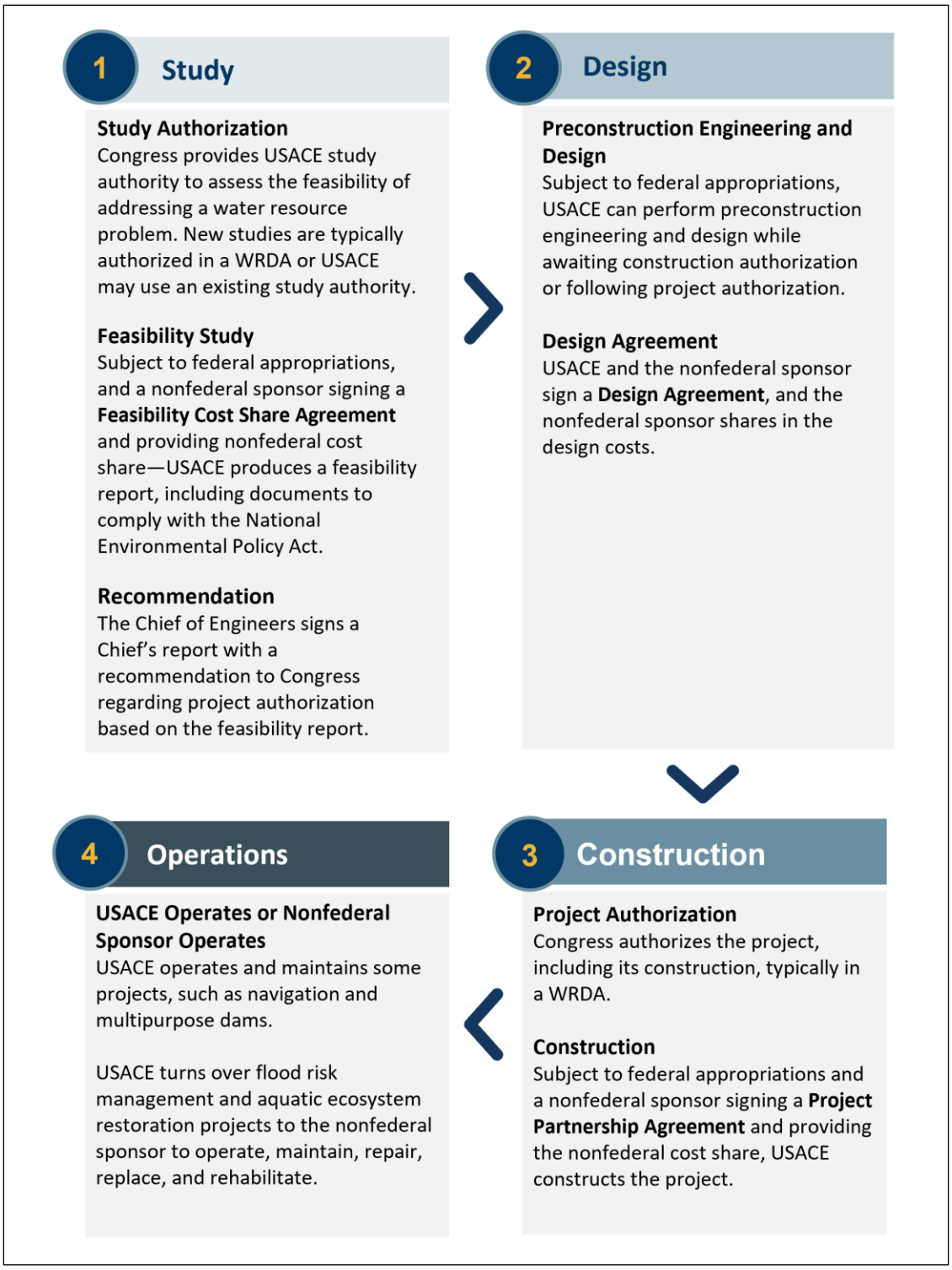
The remainder of this section describes in more detail the four phases shown in **Figure 3**. The section then describes how, after construction, USACE can study whether to modify an existing project, or an entity other than USACE can ask permission to modify a USACE project. The section also briefly addresses deauthorization of studies and projects.

[8] 42 U.S.C. §1962d-5b(b).

[9] Ibid.; 33 U.S.C. §2241.

Figure 3. Typical Process for USACE Federal Water Resource Projects

(process for projects that require project-specific congressional authorization)



Source: Congressional Research Service.

Notes: USACE = U.S. Army Corps of Engineers; WRDA = Water Resources Development Act.

Study Phase

The study phase consists of various planning activities to develop enough information to decide whether to recommend to Congress project implementation. This phase includes the development of alternative plans, initial design and cost estimating, economic analysis,[10] environmental analyses, and real estate evaluations, among other activities. **Table 2** provides an overview of the study phase.

To proceed with a study, USACE must have an authorization for the study. Congress generally authorizes USACE studies in WRDAs. (See the text box titled "How Studies Are Considered for Inclusion in a WRDA" for information on the process for identifying studies to be included in a WRDA.) The congressional authorizing committees—the House Transportation and Infrastructure Committee and the Senate Environment and Public Works Committee—also may use a committee resolution to direct USACE to reexamine or restudy a geographic area previously studied by USACE for a similar purpose (33 U.S.C. §542). USACE may initiate studies that review the operations of completed USACE projects without obtaining additional congressional authorization under its general reexamination authority (33 U.S.C. §549a).

How Studies Are Considered for Inclusion in a Water Resources Development Act (WRDA)

To develop WRDAs, including identifying studies to include in a WRDA, the authorizing committees for the U.S. Army Corps of Engineers (USACE) typically hold hearings to receive testimony from stakeholders, review reports transmitted by the Administration, and solicit input from Members of Congress. Also, in Section 7001 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014; P.L. 113-121), Congress established a process that may assist congressional authorizing committees in identifying USACE studies for congressional authorization. In Section 7001, as amended, Congress requires the Administration to transmit an annual report to the authorizing committees on publicly submitted USACE study proposals that require congressional authorization. Inclusion of a proposal in a Section 7001 report provides neither congressional authorization nor appropriation; rather, inclusion facilitates congressional consideration of the proposal's authorization. For more on the Section 7001 process, see CRS Insight IN11118, *Army Corps of Engineers: Section 7001 Report on Future Studies and Projects*, by Anna E. Normand. For information on how Congress develops a WRDA, see CRS Insight IN11810, *U.S. Army Corps of Engineers Civil Works: Primer and Resources*, by Anna E. Normand and Nicole T. Carter.

The study process consists of the following steps:

- Scoping, in which USACE specifies the water resource problems and opportunities and formulates alternative plans to address the problems
- Evaluation and analysis of alternatives, in which USACE evaluates and compares the effects of various plans and chooses a tentatively selected plan
- Assessment of the feasibility of the tentatively selected plan
- Review and finalization of the feasibility report, which includes review by the USACE division, state and federal agencies, and USACE headquarters and ASACW

Once the final feasibility report is available and if it is favorable, the Chief of Engineers signs a recommendation on the project, known as the *Chief's report*. USACE submits the completed Chief's reports to the congressional authorizing committees (33 U.S.C. §2282a). The Chief of Engineers also transmits the reports to the ASACW and the Office of Management and Budget

[10] For flood risk reduction, Congress established federal policy for evaluating USACE projects in the Flood Control Act of 1936 (49 Stat. 1570) by stating that a project should be undertaken "if the benefits to whomsoever they may accrue are in excess of the estimated costs" and if a project is needed to improve the lives and security of the people.

(OMB) for Administration review.[11] Since the mid-1990s, Congress has authorized many projects based on Chief's reports prior to completion of project review by the ASACW and OMB.

As part of its consideration of alternatives, USACE evaluates whether a plan is technically feasible, economically justified, and environmentally acceptable. For flood risk reduction projects and navigation projects, USACE performs a benefit-cost analysis to compare the economic benefits of project alternatives to the investment costs of those alternatives. For ecosystem restoration projects, USACE performs a cost-effectiveness analysis to evaluate for each project alternative its associated costs and anticipated environmental benefits.

The USACE feasibility study process often occurs concurrently with the agency's efforts to comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§4321 et seq.). NEPA requires federal agencies to fully consider a federal action's significant impacts on the quality of the human environment—and to inform the public of those impacts—before making a final decision. Often USACE integrates into a single document a project's feasibility report and its NEPA documents.

There is no current, definitive, comprehensive, publicly available list of all authorized USACE water resource studies and projects. The status of existing authorizations for a given project or geographic area can be determined by reviewing enacted legislation, deauthorization actions (e.g., construction project deauthorization lists published in the *Federal Register*), and other relevant documents.

Although a USACE federal water resource project generally must have navigation, flood risk management, or aquatic ecosystem restoration as a primary project purpose, many USACE projects are multipurpose. Other purposes can include recreation, fish and wildlife enhancement, hydropower, agricultural water supply storage, and municipal and industrial water supply storage.

Table 2. Overview of USACE Feasibility Study Phase for Federal Water Resource Development Projects

Component	Description of Typical Applicability to USACE Federal Projects
Purpose	Inform federal decisions on whether there is a federal interest in authorizing a USACE construction project. The objective of the feasibility study is to formulate and recommend solutions to the identified water resource problem.
Authorities	Congress generally authorizes USACE studies in WRDAs. Authorizing committees also may use a committee resolution to restudy a geographic area previously studied by USACE for a similar purpose (33 U.S.C. §542). Some studies that review the operations of completed USACE projects may proceed under a reexamination authority (33 U.S.C. §549a).
Agreement	An entity willing to act as the nonfederal sponsor has to be identified and must sign a feasibility cost-share agreement with USACE in order to proceed with the feasibility study.

[11] The Office of Management and Budget's (OMB's) review stems from Executive Order 12322, "Water Resources Projects," 46 *Federal Register* 46561, September 21, 1981, as amended by Executive Order 12608, "Elimination of Unnecessary Executive Orders and Technical Amendments to Others," 52 *Federal Register* 34617, September 14, 1987. According to the amended order, before submission to Congress—or to any committee or member thereof—for approval, appropriations, or legislative action, any report, proposal, or plan relating to a federal or federally assisted water project or program, such report, proposal, or plan shall be submitted to the Director of OMB and reviewed. OMB shall advise the agency of the project's relationship to the policy and programs of the President, as well as of water resource project study guidance and other laws, regulations, and requirements related to planning.

Component	Description of Typical Applicability to USACE Federal Projects
Cost Share	After the first $100,000, which is federally funded, feasibility studies typically are cost shared 50% federal and 50% nonfederal, with some exceptions. Feasibility studies for inland and intracoastal waterway projects are performed at 100% federal cost. Congress requires that most feasibility studies be completed within three years of initiation and have a maximum federal cost of $3 million, unless an exception is provided.
Cost-Share Exceptions[a]	For territories, Indian tribes or tribal organizations, and certain Indigenous-related organizations, the first $648,000 in costs associated with USACE water resource activities are 100% federal (33 U.S.C. §2310). The waiver amount is annually adjusted to account for inflation; $648,000 reflects adjustment for FY2024.
Conduct of Study	USACE typically performs the study. Alternatively, under certain authorities, nonfederal entities may assume study responsibility and may seek application of credit for the study costs toward the construction cost share.
Recommendation to Congress	Once the final feasibility report is available and if it is favorable, the Chief of Engineers signs a recommendation on the selected plan for the project, known as the *Chief's report*. USACE submits completed Chief's reports to the congressional authorizing committees.

Source: Congressional Research Service.

Notes: USACE = U.S. Army Corps of Engineers; WRDA = Water Resources Development Act.

a. Section 118(b) of WRDA 2020 (Division AA of P.L. 116-260) directs the Secretary of the Army to establish a pilot program for feasibility studies for flood risk management and hurricane and storm damage risk reduction projects for economically disadvantaged communities at 100% federal cost. The Secretary is to annually publish in the *Federal Register* a notice for requests for nonfederal proposals for the pilot program, provide technical assistance with proposal formulation, and review and select 10 feasibility studies annually to be carried out by USACE. As of early 2024, USACE was continuing to develop the guidance documents required for implementing the program.

In addition, and separate from the above discussion of the study phase of a USACE federal water resource project, USACE has some technical assistance authorities. These authorities allow the agency to conduct other types of studies and provide technical assistance to nonfederal entities on water resource topics (see text box titled "USACE Technical Assistance, Including Studies and Information"). The information and studies produced pursuant to these authorities generally are not intended to justify a USACE federal water resource project; that is, they generally do not lead to a USACE federal water resource project. These studies and authorities are not discussed further in this report.

USACE Technical Assistance, Including Studies and Information

Separate from the traditional study phase for U.S. Army Corps of Engineers (USACE) federal water resource projects, USACE also may provide technical assistance to nonfederal entities. Some USACE technical assistance authorities are for the provision of information, and others are for the performance of studies. These studies do not typically lead to recommendations for USACE projects; that is, they are not feasibility studies. Below are a few examples of USACE authorities to perform federally funded or cost-shared technical assistance, including some studies such as watershed assessments.

- *Watershed studies* refers to the set of authorities for USACE to conduct comprehensive, strategic evaluations and analyses of watershed issues resulting in recommendations to inform future investment decisions by decisionmakers (e.g., local governments, state agencies). A USACE watershed study may produce a watershed management plan, watershed assessment, river basin assessment, comprehensive plan, or watershed study. USACE policy guidance most often cites 33 U.S.C. §2267a as the authority for these studies.
- Through the Floodplain Management Services Program (FPMS; 33 U.S.C. §709a), USACE provides information on flood hazards to local interests, state agencies, and other federal agencies to guide development decisions for U.S. floodplains. FPMS provides a range of information, technical services, and planning guidance and assistance to support floodplain management. USACE also cites 33 U.S.C. §709a as its authority to participate in state-led interagency teams (known as Silver Jackets teams), which assist

state agencies and local communities in accessing flood risk reduction information and resources, improving public communication of flood risk, and implementing state and local initiatives.

- Through the Planning Assistance to States authority (42 U.S.C. §1962d–16), USACE uses its technical expertise in management of water and related land resources to help states and tribes solve water resource problems. USACE cooperates with nonfederal public sponsors upon request in the preparation of plans for the development, use, and conservation of water and related land resources.
- Under the USACE emergency response authority (33 U.S.C. §701n), USACE may provide technical assistance of a temporary nature to save lives and protect improved properties (e.g., public facilities/services and residential/commercial developments) during or following floods and at times for other natural disasters; the technical assistance is for supplementing state and local efforts.

Design Phase

USACE preconstruction engineering and design consists of finalizing a project's design, preparing construction plans and specifications, and drafting construction contracts. PED may begin on a project before the project has obtained congressional authorization for construction.[12] PED begins once federal funds are provided to the PED activity and a design agreement is executed between USACE and the nonfederal sponsor. Once funded, the average duration of PED is two years, but the duration varies widely depending on the project's size and complexity. PED costs are shared between the federal and nonfederal sponsor in the same proportion as the cost-share arrangement for the construction phase (see "Construction Phase" discussion below for information on the construction cost-share requirements). During PED, USACE districts prepare a design documentation report, which records the post-feasibility phase final design. The report is the technical basis for the plans and specifications.

Construction Phase

After Congress authorizes a project (typically in a WRDA), federal funds for construction are needed for USACE to proceed with these activities. USACE and the nonfederal sponsor enter into a project partnership agreement for construction of a water resource project. The PPA describes the project and the responsibilities of the government and the nonfederal sponsor in the cost sharing and execution of project construction. Once federal construction funds are available, USACE typically functions as the project manager; that is, USACE staff usually are responsible for leading on construction. **Table 3** provides an overview of the USACE construction phase.

[12] In general, subject to appropriation, preconstruction engineering and design begins after the Chief's report has been transmitted to the Assistant Secretary of the Army for Civil Works (ASACW; 33 U.S.C. §2287). Some USACE guidance indicates design may be initiated after the Division Engineer's transmittal of the feasibility report to USACE headquarters.

Table 3. Overview of USACE Construction Phase for Federal Water Resource Development Projects

Component	Description of Typical Applicability to USACE Federal Projects
Purpose	Construction of congressionally authorized federal water resource projects
Authorities	Congressional project authorization typically included in a Water Resources Development Act (WRDA)
Agreement	Nonfederal sponsor signs a project partnership agreement with USACE in order to proceed with construction. The agreement sets out the parties' responsibilities during the construction phase, such as nonfederal cost sharing and nonfederal responsibility for providing land, easements, rights-of-way, relocations, and disposal (LERRDs).
Cost Share	Typically specified in the documents identified as part of the project's WRDA authorization. Generally, cost sharing follows requirements set out in statute as shown in **Table 4** and **Table 5**. Deviations can be recommended as part of the decision document transmission to Congress; Congress must authorize cost-share deviations. A nonfederal sponsor typically pays USACE its cost share as funds are needed (i.e., as construction proceeds). When payments are deferred, interest is charged.[a] Some of the nonfederal cost share typically can be met with credit for LERRDs or in-kind work.
Conduct of Construction	Typically managed by USACE using contracts with the private sector to complete the physical work. Alternatively, under certain authorities, nonfederal entities may assume construction responsibility and may seek reimbursement or credit from USACE for the federal share.

Source: Congressional Research Service.

Notes: LERRD = land, easements, rights-of-way, relocations, and disposals; PPA = project partnership agreement; USACE = U.S. Army Corps of Engineers; WRDA = Water Resources and Development Act.

a. USACE annually publishes a memorandum on deferred payment interest rates and payment calculations. For example, the rates for deferrals in FY2024 are described in USACE, *Federal Interest Rates for Corps of Engineers Projects for Fiscal Year 2024*, Economic Guidance Memorandum, 24-01, October 26, 2023. The FY2024 memorandum describes how in practice budget constraints may limit USACE participation in projects with deferred payments.

Although project management is generally performed by USACE personnel, physical construction is contracted out to private engineering and construction contractors. There are authorities for nonfederal entities to lead on construction of authorized projects (e.g., 33 U.S.C. §2232); however, nonfederal leadership of a project's construction is much less common than USACE leadership.

Table 4 provides the standard construction and operations phase cost-share requirements for the primary project purposes of navigation, flood risk management, and aquatic ecosystem restoration. The table also identifies whether USACE or the nonfederal sponsor is the responsible entity for the operations phase. **Table 5** provides the standard construction and operations phase cost-share requirements for other purposes at USACE multipurpose projects; that is, the purposes shown in **Table 5** generally are added to a project that has at least one of the three primary purposes of navigation, flood risk management, and aquatic ecosystem restoration. Deviation from the standard cost-sharing arrangements for individual projects often requires specific authorization by Congress.[13]

In addition to USACE accepting the nonfederal cost share as required by statute and a project's authorization, USACE has authorities to accept funds from nonfederal sponsors to expedite the

[13] Congress established that cost shares shall be subject to a nonfederal sponsor's ability to pay (33 U.S.C. §2213(m)(2)); however, this authority is rarely employed. The regulation related to this provision (33 C.F.R. Part 241) does not reflect various statutory amendments. USACE has indicated plans for a rulemaking to amend the regulations.

delivery of federal water resource projects. These may be advanced funds, accelerated funds, or contributed funds.[14]

- **Advanced funds** are nonfederal funds provided as an advance of the federal share for construction of an authorized water resource project, with eligibility for potential repayment subject to the availability of federal appropriations.[15]
- **Accelerated funds** are nonfederal funds provided in excess of the nonfederal proportional share of costs based on federal funds provided for that year but are within the ultimate required nonfederal cash contribution for the project's phase, thereby allowing work to continue pending the provision of additional federal funds. Credit for accelerated funds is provided if additional federal funding is provided for that project phase.
- **Contributed funds** are nonfederal funds that are provided and that are above the statutorily required nonfederal cost share, with no credit or repayment authorized for such funds.[16]

Table 4. Standard Cost Share and Responsible Entity by Project Purpose for USACE Project Construction and Operations Phases

Project Purpose	Nonfederal Share of Construction Phase[a]	Responsible Entity for Operations Phase	Nonfederal Share of Operations Phase
Navigation			
Coastal Navigation Channels and Coastal and Inland Harbors			
Improvements less than 20 ft. deep	10%, plus 10% over a period not to exceed 30 years	USACE	0% nonfederal; 100% from HMTF[b]
Improvements between 20 ft. and 50 ft. deep	25%, plus 10% over a period not to exceed 30 years	USACE	0% nonfederal; 100% from HMTF[b]
Improvements greater than 50 ft. deep	50%, plus 10% over a period not to exceed 30 years	USACE	50% nonfederal; 50% from HMTF[b]
Inland and Intracoastal Waterways	No nonfederal sponsor; 35% from Inland	USACE	0%

[14] Advanced, accelerated, and contributed funds must be voluntarily offered and provided.

[15] Advanced funds are in addition to funds provided to meet any required nonfederal cost share. USACE guidance indicates that an offer to provide advanced funds must include a nonfederal commitment to provide all funds to complete either project construction or a separable element of the project (USACE, *Acceptance of Contributed Funds, Advanced Funds, and Accelerated*, Director's Policy Memorandum FY2020, CECW-P [2020-01], December 2019, https://planning.erdc.dren.mil/toolbox/library/MemosandLetters/DPM_AcceptanceofFunds_19Dec2019.pdf). Advanced funds may be provided by Indian tribes or a state or political subdivision thereof, inclusive of several states, the District of Columbia, the commonwealths, territories, and possessions of the United States.

[16] Contributed funds can be applied to study, design, or construction or to operation and maintenance of federal water resource projects. Contributed funds may be accepted from a nonfederal interest, as defined in Section 221(b) of the Flood Control Act of 1970, as amended (42 U.S.C. §1962d-5b(b)). USACE acceptance of contributed funds is to be expended in connection with funds appropriated by the United States. To meet this requirement, in general, there are two main points at which appropriated funds must have been provided: study initiation and project construction initiation.

Project Purpose	Nonfederal Share of Construction Phase[a]	Responsible Entity for Operations Phase	Nonfederal Share of Operations Phase
	Waterways Trust Fund[c]		
Flood Risk Management			
Riverine Structural Flood Control	35%-50%[d]	Nonfederal	100%
Nonstructural and Natural or Nature-Based Features	35%		
Coastal Hurricane and Storm Damage Reduction (Except Periodic Beach Renourishment)[e]	35%	Nonfederal	100%
Aquatic Ecosystem Restoration	35%	Nonfederal	100%

Source: Congressional Research Service, using 33 U.S.C. §§2211-2213, unless otherwise specified below.

Notes: HMTF = Harbor Maintenance Trust Fund; USACE = U.S. Army Corps of Engineers.

a. Nonfederal share may be met through provision of land, easements, rights-of-way, relocations, and disposals, unless otherwise noted.
b. The majority of federal support for harbor maintenance is derived from the HMTF, which receives collections from a harbor maintenance tax principally applied to commercial cargo imports at federally maintained ports. For maintaining improvements up to 50 feet in depth, the maximum federal share is 100%; for maintaining improvements over 50 feet deep, the costs are split 50% federal and 50% nonfederal.
c. Monies from the trust fund, which is funded by a fuel tax on vessels engaged in commercial transport on designated waterways, are used for 35% of all new or ongoing construction projects after October 1, 2022.
d. 33 U.S.C. §2213 identifies 65% federal as the maximum share and 50% as the maximum nonfederal share; 5% of the nonfederal share must be paid during construction.
e. Congressionally authorized beach nourishment components of coastal storm damage reduction projects consist of periodic placement of sand on beaches and dunes. Most nourishment activities remain in the construction phase for 50 years, with the possibility for extension (42 U.S.C. §1962d-5f). The nonfederal share for new periodic beach nourishment projects generally is 50% nonfederal for shores open to the public, 100% for private shores with access limited to private interests, and 0% for federally owned shores (33 U.S.C. §2213).

Table 5. Standard Cost Shares for Other Project Purposes of USACE Multipurpose Projects for USACE Project Construction and Operations Phases

Project Purpose	Nonfederal Share of Construction Phase	Nonfederal Share of Operations Phase
Hydroelectric Power	100%[a]	100%
Municipal and Industrial Water Supply Storage	100%	100%
Agricultural Water Supply Storage (typically irrigation water storage)[b]	35%	100%
Recreation at USACE Facilities	50%	100%
Aquatic Plant Control	Not Applicable	50%

Source: Congressional Research Service, using 33 U.S.C. §2213, unless otherwise specified below.

Note: USACE = U.S. Army Corps of Engineers.

a. Construction costs initially are federally funded; they are 100% repaid by fees collected from power customers.
b. Unlike other USACE project components, 100% of nonfederal agricultural water supply construction costs are initially federally funded if the USACE project is in the 17 western states where reclamation law applies.

Repayment of these costs by nonfederal water users over extended terms is subject to conditions under the federal reclamation laws.

Changes During Construction

Figure 3 shows a project moving from construction to operations without additional reports required. For many projects, issues may arise during the construction phase that result in USACE developing a *post-authorization change report* (PACR). That is, a project may undergo some changes after authorization, such as cost increases or the addition of a project purpose (e.g., recreation). These changes may have to be evaluated and documented in a PACR. There are various types of PACRs that end in different types of decisions, and approval authority varies based on what has changed, what needs to be analyzed, and whether new congressional authorization is required. If additional congressional authorization is necessary for the changes captured in a PACR, Congress typically authorizes these modifications in a WRDA. For less significant modifications, additional authorization often is not necessary. Section 902 of WRDA 1986, as amended (33 U.S.C. §2280), generally allows for increases in total project costs of up to 20% (after accounting for inflation of construction costs) without additional congressional authorization. Increases in project authorization of appropriations exceeding the amount allowed under Section 902 require congressional authorization; for these projects, USACE does not pursue additional contracts for the project until Congress has adjusted the authorization of appropriations.

USACE and the nonfederal sponsor enter into a feasibility cost-share agreement to produce these reports. USACE may undertake three types of PACRs during the construction phase: general reevaluation reports (GRRs), limited reevaluation reports (LRRs), and engineering documentation reports (EDRs).

- **General Reevaluation Report.** A GRR is a reanalysis of a previously completed study, using current planning criteria and policies, which is required due to changed conditions and/or assumptions. The results may affirm the previous plan, reformulate and modify the previous plan, or find that no plan is currently justified. If reauthorization is necessary, the document will be processed in the same manner as a feasibility report and will conclude with a Chief's report as the design document.
- **Limited Reevaluation Report.** An LRR evaluates a specific portion of a project plan under current policies, criteria, and guidelines and may be limited to economics, environmental effects, or—in rare cases—project formulation. An LRR often ends with a Director's memorandum or Director's report. LRRs documenting the justification for an increase in the project's authorization of appropriations (due to the project costs exceeding the amount allowed under Section 902 of WRDA 1986, as amended) require congressional authorization.
- **Engineering Documentation Report.** An EDR documents other information when project reformulation is not required and the changes are technical in nature or the reformulation changes are minor.

Operations Phase

Post-construction operations and upkeep responsibilities depend on the type of project. When construction is complete, USACE may own and operate the constructed project (e.g., navigation projects) or operations responsibilities may transfer to the nonfederal sponsor (e.g., most flood damage reduction projects and aquatic ecosystem restoration projects). The responsible entity and

the cost-share responsibilities during the operations phase vary by project purpose, as shown in **Table 4** and **Table 5**.

USACE generally uses the term *operation and maintenance* for the operations phase of federally operated projects and the term *operation, maintenance, repair, replacement, and rehabilitation* (OMRR&R) for the operations phase of nonfederally operated projects. OMRR&R consists of the suite of activities necessary to maintain the project in sound operating condition. For nonfederally operated projects, USACE prepares an OMRR&R manual for the nonfederal sponsor. During the operations phase, the nonfederal sponsor completes operations reports on a regular basis (e.g., semiannual reports), and USACE periodically inspects the project to assess and evaluate the project's performance and safety during its operating life. For nonfederal flood risk management projects, USACE operates a rehabilitation program to support with federal funding the repair of certain damaged flood control and storm damage reduction facilities, as discussed in the next section.

USACE Rehabilitation Program for Flood Control and Storm Damage Protection Projects

USACE operates a repair program—the P.L. 84-99 Rehabilitation Program—for nonfederal flood control works, including federal water resource projects for which the nonfederal sponsor has assumed OMRR&R. Through the program, USACE can fund the repair of damage by "other than ordinary" water, wind, or wave action to (1) certain nonfederal flood control works (e.g., levees, dams) and (2) federally constructed hurricane and shore protection projects. To be eligible for this assistance, the damaged project must be eligible for and active in the rehabilitation program and the project must have been in an acceptable condition, as inspected and assessed by USACE, at the time of damage. USACE regularly inspects the 1,600 nonfederal levee systems (consisting of 13,000 miles of levees) that participate in the program. The damage rehabilitation program does not fund repairs associated with regular OMRR&R.

Modification to Completed Projects

During a USACE project's operations phase, nonfederal sponsors and other stakeholders may be interested in modifications to the existing project. Often, there is interest in having USACE modify an existing project (e.g., by deepening a federal navigation channel). In some circumstances, a nonfederal entity is interested in undertaking its own modification.

USACE Modification to Completed Projects

USACE can review the operations of completed USACE projects under a reexamination authority (33 U.S.C. §549a), established by Section 216 of the Flood Control Act of 1970 (P.L. 91-611). These reviews are often referred to as *Section 216 studies*. The reexamination authority allows for review of the operation of USACE-constructed projects for navigation, flood control, water supply, and related purposes when advisable due to significantly changed physical or economic conditions. These USACE studies result in a report to Congress with recommendations on the advisability of modifying the structures or their operation and for improving the quality of the environment in the overall public interest. Congress would need to authorize the changes for USACE to proceed.

Non-USACE Modification to Completed Projects

If a nonfederal entity is interested in altering a USACE civil works project after construction, the entity generally must obtain permission from USACE. USACE's authority to allow alterations to its projects derives from Section 14 of the Rivers and Harbors Act of 1899, also known as Section 408 (based on its codification at 33 U.S.C. §408). This provision states that the Secretary of the Army may "grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work."[17] Pursuant to the regulations, USACE conducts a technical review of the proposed alteration's effects on the USACE project. Section 408 permissions may be required not only for projects operated and maintained by USACE but also for federally authorized projects that are operated by nonfederal project sponsors (e.g., many USACE-constructed, locally maintained levees).[18] At the end of the Section 408 process, USACE chooses to approve or deny permission for the alteration. USACE may attach conditions to its Section 408 permission.

Deauthorization and Divestiture

At times, Congress deauthorizes specific USACE projects or project elements. USACE may conduct a Section 216 study to determine whether to recommend deauthorizing a completed USACE project that no longer serves its congressionally authorized project purposes. If Congress deauthorizes the project, USACE will proceed with a divestiture process.[19] For example, a few inland waterway locks and dams that no longer support commercial navigation have been deauthorized and divested to nonfederal interests.

Congress also has used WRDAs to deauthorize unconstructed projects and project elements and to deauthorize studies. In previous WRDAs, Congress established various processes to deauthorize existing study and project authorities meeting certain criteria. Some of these deauthorization processes have since been repealed. For example, previously enacted study deauthorizations were repealed by WRDA 2020 (Division AA of P.L. 116-260). Current statutes for deauthorization processes consist of the following:

- Pursuant to statute (33 U.S.C. §579d-2 paragraphs (b)-(e)), the ASACW is to submit a preliminary list of authorized but unconstructed projects or separable elements of projects for deauthorization that meet congressionally specified criteria (e.g., authorization prior to November 8, 2007 [i.e., before WRDA 2007, P.L. 110-114]), solicit public comment on the list, prepare a final deauthorization list, submit the list to the House Transportation and Infrastructure Committee and the Senate Environment and Public Works Committee, and publish the list in the *Federal Register*. WRDA 2022 (Division H, Title LXXXI, of P.L. 117-263) repealed a separate part of this authority that had provided for an automatic

[17] On September 30, 2018, Engineer Circular (EC) 1165-2-220, *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*, replaced the 2015 EC 1165-2-216.

[18] EC 1165-2-220 provides that the regulation applies principally to alterations proposed within the real property identified and acquired for the USACE project, with potential exceptions.

[19] There currently is no formal process for a nonfederal entity to submit a proposal for congressional deauthorization of a project. Some nonfederal project sponsors have proposed deauthorizations through the annual report process established by Section 7001 of WRRDA 2014 (P.L. 113-121). The Administration has stated in its Section 7001 annual reports to Congress that the submitted deauthorization proposals do not qualify pursuant to the congressional direction in Section 7001(c)(1)(A) of WRRDA 2014 (33 U.S.C. §2282d(c)(1)(A)).

deauthorization of projects after a two-year period for congressional review of the final list. No other step following the transmittal of the list and publication in the *Federal Register* is specified in the current amended authority.[20]

- Pursuant to statute enacted in 2020 (33 U.S.C. §579d-2(f)), projects or separable elements of "antiquated" projects were automatically deauthorized if they met the following criteria: they were authorized for construction prior to November 17, 1986, and either construction had not begun by December 27, 2020, or funds had not been obligated for construction in the 10 years prior to December 27, 2020. As of early 2024, a list of the projects deauthorized by the provision had not been made publicly available.

Process for Continuing Authorities Program Projects and Other Small Projects

Continuing Authorities Programs

USACE can plan, design, and implement certain types of water resource projects without project-specific congressional authorization under CAPs established by Congress. Under CAPs, USACE has authority to plan and implement projects of limited size, cost, scope, and complexity. For most CAP authorities, Congress has limited the project's federal cost and scope, as shown in **Table 6**.[21] Once funded, CAP projects generally take two to three years for the study phase, and the construction phase often takes two to five years. CAPs typically are referred to by the section number in the bill in which the CAP was first authorized.

CAP projects move through phases: study (feasibility), design and construction, and operations. During the study phase, USACE identifies alternative project plans and develops initial cost estimations, environmental impact analyses, and a real estate evaluation, among other actions to formulate a project. The study phase typically consists of developing a feasibility report as the decision document, in which USACE identifies the preferred project alternative. For CAP projects, USACE can proceed directly to design and construction after the study phase without obtaining specific congressional project authorization. The design and construction phase includes the final project design and specifications, nonfederal real estate acquisition, project contracting, and physical construction.

The study phase is initially federally funded up to $100,000, and then the study cost sharing for most CAPs is 50% nonfederal after executing a feasibility cost-share agreement (see **Table 6**), with two exceptions. Studies under the Section 204 CAP (i.e., regional sediment management to reduce storm damage) are 0% nonfederal. For studies under Section 111 (prevention/mitigation of shore damage by federal navigation projects), after the first $100,000 in costs, which are federally funded, costs are shared the same as construction of the navigation project causing the damage.

[20] In WRDA 2020, Congress repealed the ASACW's existing deauthorization process authorities and enacted new deauthorization provisions, including a one-time deauthorization authority (33 U.S.C. §579d–2). In WRDA 2022 (Division H, Title LXXXI, of P.L. 117-263), Congress amended WRDA 2020 in various ways. Whereas the WRDA 2020 process would have concluded with automatic deauthorization of projects after a two-year period for congressional review of a deauthorization project list transmitted by the ASACW to Congress, the WRDA 2022 amendments conclude the deauthorization authority with the ASACW's submission of the deauthorization list to Congress for review of the list (i.e., no automatic deauthorization).

[21] USACE, *Continuing Authorities Program*, Engineer Pamphlet 1105-2-58, March 1, 2019, https://www.publications.usace.army.mil/Portals/76/EP_1105-2-58.pdf?ver=2019-04-30-105428-920.

The design and construction phase consists of actions to implement the project, such as design, preparation of contract plans and specifications, permitting, real estate acquisition, contracting, and construction. Near the beginning of the design and construction phase, USACE and the nonfederal sponsor sign a project partnership agreement. Costs for the construction phase are shared as specified in the authorizing legislation for the CAP, as shown in **Table 6**. Under CAPs, the operations phase is a nonfederal responsibility, except for general navigation feature improvements under the Section 107 CAP.

Although USACE does not need any additional authorization to perform projects under CAPs, Congress in some WRDA bills has included references to specific CAP projects, such as noting that the Secretary shall expedite completion of certain CAP projects.

CAPs are often funded as a program (which leaves USACE with the discretion of which CAP projects to fund); at times, Congress has directed funding to specific CAP projects. As part of the annual Energy and Water Development appropriations process, CAP authorities typically are funded through inclusion of a line item for each CAP in the USACE Construction account in the report accompanying the legislation. At times, some CAPs have been funded through supplemental appropriations (e.g., flood-related CAPs funded in flood-related or disaster-related supplemental appropriations acts).

Table 6. Selected USACE Continuing Authorities Programs for Small Projects

Common Name of CAP Authority	Eligible Activities and *U.S. Code* Citation	Nonfederal Construction Cost Share	Per Project Federal Limit (in millions)	Annual Federal Program Limit[a] (in millions)
§14	Streambank and shoreline erosion of public works and nonprofit services 33 U.S.C. §701r	35%-50%[b]	$5.0	$25.5
§103	Beach erosion/hurricane storm damage reduction 33 U.S.C. §426g	35%	$10.0	$38.0
§107	Navigation improvements 33 U.S.C. §577	Varies (see **Table 4**); 50% for recreational navigation	$10.0	$63.0
§111	Prevention/mitigation of shore damage by federal navigation projects 33 U.S.C. §426i	Same as the project causing the damage	$12.5	Not Applicable
§204	Regional sediment management as part of construction to reduce storm damage, protect aquatic ecosystems, and improve environmental conditions (§204) and beneficial use of dredged material from federal water resource project (§204(d)) 33 U.S.C. §2326	35% for costs beyond the base disposal plan costs (which is 100% federal cost of the least costly typical disposal)	$10.0 (per construction) $10.0 (per beneficial use/placement under §204(d) multiple placements allowed)	$63.0

Common Name of CAP Authority	Eligible Activities and *U.S. Code* Citation	Nonfederal Construction Cost Share	Per Project Federal Limit (in millions)	Annual Federal Program Limit[a] (in millions)
§205	Flood damage reduction (including ice jam prevention) 33 U.S.C. §701s	35%-50% for structural,[b] 35% for nonstructural	$10.0	$69.3
§206	Aquatic ecosystem restoration 33 U.S.C. §2330	35%	$10.0	$63.0
§208	Snagging and clearing for flood damage reduction 33 U.S.C. §701g	35%	$0.50 for any tributary in a fiscal year	$8.0
§1135	Project modifications for improvement of the environment 33 U.S.C. §2309a	25%	$10.0	$50.5

Source: Congressional Research Service, using statutes and USACE, *Continuing Authorities Program*, Engineer Pamphlet 1105-2-58, March 1, 2019, https://www.publications.usace.army.mil/Portals/76/EP_1105-2-58.pdf?ver=2019-04-30-105428-920.

Notes: CAP = continuing authorities program; USACE = U.S. Army Corps of Engineers. CAPs that have not been funded in the most recent five fiscal years are not shown.

a. Division AA of P.L. 116-260 increased annual CAP funding authorization limits for FY2021 through FY2024 by $500,000 for each CAP compared with FY2020 levels; FY2024 levels are shown here.

b. 33 U.S.C. §2213 identifies 65% as the maximum federal share and 50% as the maximum nonfederal share; 5% of the nonfederal share must be paid during construction.

Other Small Project Authorities

Apart from the regularly funded CAPs previously discussed, Congress has established other authorities that share many CAP characteristics or are authorized in conjunction with CAPs. Below are a few authorities allowing USACE to perform work without project-specific study or project authorization if federal project costs are below a specified amount; the list of programs below is not comprehensive. Although some of these authorities have received funding (e.g., Tribal Partnership Program), others have not been funded. A number of these authorities reference *economically disadvantaged communities*; USACE has developed implementation guidance that defines this term and related criteria,[22] and this guidance applies unless more specific direction is provided in law.

- **Tribal Partnership Program.** Under this authority, USACE can perform feasibility studies and construct water resource development projects (with a federal cost up to $26 million before congressional authorization is required) that

[22] USACE, *Implementation Guidance for Section 160 of the Water Resources Development Act of 2020, Definition of Economically Disadvantaged Community*, March 14. 2023, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll5/id/36002. According to the guidance, an *economically disadvantaged community* is defined as meeting one or more of the following criteria: low per capita income (i.e., the area has a per capita income of 80% or less of the national average); unemployment rate above national average (i.e., the area has an unemployment rate that is, for the most recent 24-month period for which data are available, at least 1% greater than the national average unemployment rate); *Indian country*, as defined in 18 U.S.C. §1151, or in the proximity of an Alaska Native village; U.S. territories; or communities identified as disadvantaged by the Council on Environmental Quality's Climate and Economic Justice Screening Tool.

benefit Indian tribes primarily within Indian country or in proximity to Alaska Native villages (33 U.S.C. §2269). USACE also can perform other types of studies, such as watershed studies and non-feasibility studies, for various purposes. Although the tribal cost sharing varies by activity (e.g., 50% for studies, 25% for water and river basin assessment, 0% for technical assistance, and consistent with **Table 4** and **Table 5** for construction and operations), all program activities are subject to tribal ability-to-pay considerations that may reduce or eliminate the tribal cost sharing.[23]

- **Pilot Program for Small Projects for Economically Disadvantaged Communities.** Section 165(a) of WRDA 2020 (33 U.S.C. §2201 note) authorized a 10-year pilot program for USACE to carry out projects at 100% federal cost under various CAPs for up to 20 economically disadvantaged communities. The included CAPs are Sections 14, 103, 204, 205, 206, 208, and 1135. A June 2023 notice requested pilot project proposals; submissions were due by October 2023.[24]
- **Small Projects for Shoreline and Riverine Protection and Restoration.** Section 8103 of WRDA 2022 amended 33 U.S.C. §2332 to authorize USACE to perform shoreline and riverine protection and restoration projects without project-specific congressional authorization for projects with federal costs of $15 million or less. Nonfederal cost sharing is 50% after the first $200,000. Nonfederal design and construction cost sharing is consistent with **Table 4**, except nonfederal costs for design and construction are 10% for projects benefitting economically disadvantaged communities for ecosystem restoration, nonstructural measures, natural or nature-based features, or structural flood and storm damage reduction projects.
- **Permanent Measures to Reduce Emergency Flood Fighting Needs for Communities Subject to Repetitive Flooding.** Section 119 of WRDA 2020 authorized USACE to study and perform flood and coastal storm risk management projects for communities that have been subject to two or more flooding events in any 10-year period and that have received USACE emergency flood-fighting assistance. The authority requires that the project have a benefit-to-cost ratio greater than 1.0 (and allows for affected communities to pay, or provide contributions equal to, an amount sufficient to reduce the remaining project costs enough to meet the benefit-to-cost requirement). USACE can study, design, and perform the projects without project-specific congressional authorization for projects with federal costs of $17.5 million or less. Nonfederal cost sharing is 50% after the first $100,000. Nonfederal design and construction cost sharing is consistent with **Table 4**. When planning the project, to the maximum extent practicable, USACE is to incorporate natural features or nature-based features, or a combination of such features and nonstructural features, that

[23] For more on determining the cost sharing for this program, see USACE, *Economic Guidance Memorandum 24-04, Tribal Partnership Program Reduced Cost Share Eligibility Criteria (Ability to Pay)*, Economic Guidance Memorandum 24-04, January 29, 2024, https://planning.erdc.dren.mil/toolbox/library/EGMs/EGM_24-04-2.pdf. The program is authorized through FY2033.

[24] USACE, "Request for Project Proposals Pursuant to Section 165 of the Water Resources Development Act of 2020, Pilot Program for Continuing Authority Projects in Small or Disadvantaged Communities," 88 *Federal Register* 40229, June 21, 2023, https://www.federalregister.gov/documents/2023/06/21/2023-13144/request-for-project-proposals-pursuant-to-section-165-of-the-water-resources-development-act-of-2020.

avoid or reduce at least 50% of flood or storm damage in one or more of the alternatives included in the final alternatives evaluated.

- **Program for Small Water Storage Projects.** Under Section 155 of WRDA 2020 (33 U.S.C. §2347c), USACE may study and construct new—or enlarge existing—small water storage projects for the purpose of flood risk management, ecological benefit, water management, water conservation, or water supply (including agricultural or municipal and industrial water supply). Implementation guidance for the Section 155 program indicates that the policy of USACE not conducting single-purpose water supply studies is superseded for purposes of this program.[25] The water storage capacity of a project under the program is to be not less than 2,000 acre-feet and not more than 30,000 acre-feet.[26] The program is authorized to be appropriated $130 million annually through FY2030. The per project federal cost limit is $65 million. The nonfederal cost share for studies is 50% after the first $100,000, and the cost sharing for design and construction is consistent with **Table 5**.

Process for Assistance for Nonfederal Environmental Infrastructure

Congress has authorized and appropriated funding for USACE EI assistance for the design and construction of certain nonfederal infrastructure in specified municipalities, counties, and states. These authorizations typically appear in a WRDA.

The authorized assistance supports different nonfederal projects at publicly owned and operated facilities. These nonfederal projects often may include construction of water distribution works, stormwater management, surface water protection, and environmental restoration, among other activities. CRS estimates there are over 400 EI assistance authorities with cumulative authorizations of appropriations totaling over $12 billion.[27]

USACE evaluates a proposed EI activity's eligibility for assistance by identifying whether an EI assistance authorization exists for the nonfederal project's geographic area and whether the proposed work is an eligible type of assistance provided for in the specific EI authorization. The EI authorization's specifics determine the nature of USACE's involvement and the nonfederal cost share. USACE is typically authorized to perform design or design and construction work with USACE funds. For certain programmatic authorities, USACE may use appropriated funds to reimburse nonfederal sponsors for work they perform.

Most USACE EI assistance requires cost sharing at 75% federal and 25% nonfederal, and the nonfederal sponsor—the owner of the constructed facility—is responsible for operation and maintenance. Unlike traditional USACE water resource projects, EI assistance is not subject to the USACE planning process (e.g., it does not require a feasibility study); however, other federal laws, including NEPA, apply to EI assistance. USACE and the nonfederal sponsors sign either a design cost-share agreement or a design and construction cost-share agreement before EI assistance may be initiated.

[25] USACE, *Implementation Guidance for Section 155 of the Water Resources Development Act of 2020, Small Water Storage Projects*, April 22, 2022, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll5/id/35987.

[26] An acre-foot is a unit of volume equivalent to approximately 43,560 cubic feet.

[27] CRS analysis of enacted legislation likely to include EI assistance authorities.

For more information on USACE EI assistance, including a list of authorities and appropriations information, see CRS Report R47162, *Overview of U.S. Army Corps of Engineers Environmental Infrastructure (EI) Assistance*, by Anna E. Normand.

Concluding Considerations

Congress regularly considers during its WRDA deliberations various topics related to the processes for USACE federal water resource projects and USACE assistance with nonfederal EI. Some examples of process-related topics include nonfederal responsibilities, USACE's role in water supply and conservation, and the future of USACE EI assistance.

Nonfederal Responsibilities. Nonfederal sponsors are often interested in altering their responsibilities associated with USACE federal water resource projects. Among the changes that some stakeholders support are reducing the nonfederal cost share for specific projects or certain types of projects (e.g., projects that benefit economically disadvantaged communities). Some stakeholders view the current nonfederal cost-share requirements as prohibitive or burdensome. Other stakeholders support nonfederal beneficiaries continuing to contribute to the costs of USACE projects, as set out in current statute. Given limited federal appropriations, a lowering of nonfederal cost sharing may reduce the number of studies and projects that USACE can perform with available federal appropriations.

Flood Risk Management. As described in this report, Congress primarily directs USACE's flood risk management through geographically specific study and project authorizations. The current process for USACE flood risk management projects at times raises questions regarding how effectively, efficiently, and equitably the agency's planned and funded projects are reducing the nation's flood risk. For example, in a 2024 report on community relocation away from environmentally high-risk areas, the National Academies of Sciences, Engineering, and Medicine stated, "the requirement that USACE seek congressional authorization to address flood risk in a specific locality, with no organic statute governing overall authority of USACE to determine its own agenda, has resulted in piecemeal and inequitable distribution of flood risk management projects."[28] Others also have questioned whether the USACE project process favors certain types of approaches to reducing flood risk, such as structural approaches rather than nonstructural or nature-based approaches.

Water Supply and Conservation. Congress in Section 221 of WRDA 2020 directed the ASACW to report on the benefits and consequence of including water supply and water conservation as a primary USACE mission. This interest may continue as the demands on existing water supplies increase and as changes in the availability and reliability of water supplies shift. The addition of water supply and water conservation as a mission would alter USACE processes by adding a fourth primary purpose for which USACE could study, construct, and operate a project.

[28] National Academies of Sciences, Engineering, and Medicine, *Community-Driven Relocation: Recommendations for the U.S. Gulf Coast Region and Beyond* (Washington, DC: The National Academies Press, 2024), p. 222.

EI Assistance. Congress since 1992 has continued to expand the suite of locations where USACE can provide EI assistance; for example, WRDA 2022 included over 400 EI assistance authorizations. The increased authorizations have resulted in expanded eligibility for many more nonfederal projects. Nonetheless, EI assistance is not available nationwide and is limited to authorized geographic areas. In addition, the authorization amounts of EI assistance vary widely, from a few thousand dollars to hundreds of millions of dollars. Although some of the larger EI authorities rival the size of individual USACE federal water resource project authorizations, the process for EI assistance remains distinct from the process for federal water resource projects; this distinction is due in part to the nonfederal nature of this infrastructure.

Congress may consider whether to add, amend, or deauthorize EI assistance authorities. It also may consider altering the scope of EI authorities (e.g., geographic area, authorization of appropriations, activities). Further, Congress may consider whether to define prioritization for EI assistance (e.g., for economically disadvantaged communities) or whether to establish a more formal program (e.g., a competitive program or a program with national eligibility).

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