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Army Corps of Engineers Water Resources Projects: Authorization and Appropriations

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Summary

Congress authorizes and appropriates funds for the U.S. Army Corps of Engineers (Corps) to conduct water resources studies and projects for navigation, flood and storm protection, ecosystem restoration, and an array of other purposes. This report explains how the congressional authorization and appropriations process overlays the Corps' project development process. Special attention is given to initiating a water resources study, the Water Resources Development Act (WRDA) process, civil works appropriations, and emergency response activities.

Authorization of Water Resources Activities. Congress generally authorizes Corps studies generally as part of a WRDA or in a survey resolution passed by an authorizing committee. WRDAs, which often are considered biennially, also include authorizations to construct projects and changes to policies guiding the Corps civil works program, such as the split of project costs between the federal government and the nonfederal project sponsors.

Agency Appropriations. Federal funding is provided for the civil works activities of the Corps primarily through the annual Energy and Water Development Appropriations Act. These appropriations acts also may include authorizations of Corps activities; authorization provisions in appropriations provisions, however, may be subject to congressional parliamentary points of order. Due in part to competition for limited funding, many authorized activities do not receive appropriations, resulting in a backlog of authorized construction and maintenance activities. Few new studies and new construction activities have been included in the President's budget request in recent years.

Natural Disaster and Emergency Response Activities and Appropriations. In addition to its role in water resources development, the civil works responsibilities of the Corps include emergency and natural disaster response; some of this work is conducted through mission assignments directed by Federal Emergency management Agency (FEMA), and other work is conducted independently through the Corps' natural disaster response authority.

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Army Corps of Engineers and Its Civil Works Program

The U.S. Army Corps of Engineers (Corps) is a unique federal agency located in the Department of Defense with military and civilian responsibilities. At the direction of Congress under its civil works program, the Corps plans, builds, operates, and maintains a wide range of water resources facilities.[1] The Corps attracts much congressional attention because its projects can provide significant economic stimulation, locally and regionally, in addition to their basic resource development purposes. Congress plays a significant role in the direction of the agency's civil works program, particularly through the authorization and appropriations of studies and projects. In addition to its role in water resources development, the civil works responsibilities of the Corps include emergency and natural disaster response, such as flood fighting operations, structural repairs to levees, and water supply assistance. Some of the agency's emergency response work is conducted through mission assignments directed by Federal Emergency Management Agency (FEMA), and other work is conducted independently through the Corps' natural disaster response authority.

Within the Corps, projects are largely planned at the district level and approved at the division and headquarters levels.[2] The civil works program is headed by a civilian Assistant Secretary of the Army for Civil Works. A military Chief of Engineers oversees the Corps' civil and military operations and reports on civil works matters to the Assistant Secretary for Civil Works. The agency's traditional civil responsibilities are creating and maintaining navigable channels and controlling floods. During the last decade, Congress has increased Corps responsibilities in the areas of ecosystem restoration, environmental protection, environmental infrastructure (e.g., municipal water and wastewater treatment systems), disaster relief, and other nontraditional activities.

Initiating a Corps Project: Study Authorization

A Corps project often begins with a request for assistance from a community (e.g., citizens or businesses) or a local or state government entity with a water resource need (e.g., navigation, flood or storm protection, or ecosystem restoration) beyond its capability. Congressional sponsorship is generally necessary to

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[1] For more information on the Corps, its civil works program, and the types of projects that it undertakes, see CRS Report RS20866, *The Civil Works Program of the Army Corps of Engineers: A Primer*, by Nicole T. Carter and Betsy A. Cody.

[2] The Corps has 9 civil works divisions and 41 districts. A division and district map is available at [http://www.usace.army.mil/howdoi/civilmap.htm].

successfully initiate a study. The Corps generally requires two types of congressional authority to initiate a study — study authorization, then appropriations.[3]

A study authority allows the Corps to investigate a problem and determine if there is a federal interest in proceeding further. If the Corps has performed a study in the geographic area before, a new study can be authorized by a resolution (known commonly as a "survey resolution") of either the House Transportation and Infrastructure Committee or the Senate Environment and Public Works Committee.[4] If the Corps has not previously investigated the area, the study needs to be authorized in an act of Congress, typically a Water Resources Development Act (WRDA).[5] The most recent WRDA was enacted in November 2007 (P.L. 110-114).[6] The majority of Corps studies are currently authorized via survey resolutions. Once authorized, appropriations for Corps studies are sought through the annual Energy and Water Development Appropriations Acts. The objective of Corps studies is to guide the decision to authorize a Corps project for construction. Early in the study process, the Corps assesses the level of interest and support of nonfederal entities that may be potential sponsors. Nonfederal sponsors are state, tribal, county, or local agencies or governments that join the Corps in the effort. The authorizations of Corps studies generally are not time-limited; however, there is a process to begin deauthorization of studies that have not received appropriations for five years.

Corps Project Development Process

Nonfederal sponsors are involved in not only identifying the water resources needs, but also contributing to each phase of the development process. Since WRDA 1986 (P.L. 99-662), nonfederal sponsors are responsible for a significant portion of the financing of studies, construction, and operation and maintenance (O&M) of most projects. Moreover, nonfederal support is useful in shepherding a project through the many stages from study initiation to final project construction.

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[3] Technical assistance and some small projects can be conducted under the Corps' Continuing Authorities Programs (CAPs) without obtaining a study authorization or specific appropriations. They are performed at the Corps' discretion based on the availability of funds. The CAPs include beach erosion, navigation, flood control, streambank and shoreline protection, snagging and clearing, modifications to existing projects for the benefit of the environment, and aquatic ecosystem restoration.

[4] To request a study's inclusion in a resolution, a Member of Congress may send a letter to the Chairman of the House Committee on Transportation and Infrastructure or the Senate Committee on Environment and Public Works. The number of studies authorized by resolution varies by Congress. The 108th Congress authorized 63 studies via survey resolutions; the 109th Congress authorized 29. A survey resolution is permitted under the Rivers and Harbors Act of 1913 (33 U.S.C. §542) for the examination and review of an earlier Corps report. To be eligible for authorization in a resolution, the new study must stay within the scope of the authorization of the original report.

[5] These acts are commonly distinguished from each other by including a reference to the year of enactment; for example, WRDA 1986 refers to the act passed in 1986.

[6] For more information on WRDA 2007, see CRS Report RL33504, *Water Resources Development Act (WRDA): Corps of Engineers Project Authorization Issues*, coordinated by Nicole T. Carter.

There are three phases that a project passes through before construction begins: reconnaissance study, feasibility study, and preconstruction engineering and design, as shown in **Table 1**.[7] All three are conducted under a single congressional study authorization. The length of each phase varies project by project, with the size and the complexity of a project typically resulting in a longer process.

Table 1. Project Phases, Duration, and Federal Cost

	Recon-naissance	Feasibility	Preconstruction & Engineering Design	Construction	O&M
Avg. Duration (years)	1	2-3	approx. 2	varies	authorized project duration
Federal Share of Costs[a]	100%	50%[b]	varies by project purpose	varies by project purpose	0% with some exceptions

a. For more information on federal and nonfederal cost-share responsibilities for various project purposes, see CRS Report RS20866, *The Civil Works Program of the Army Corps of Engineers: A Primer*, by Nicole T. Carter and Betsy A. Cody.

b. Inland waterways feasibility studies are a 100% federal responsibility (33 U.S.C. §2215). These projects are not considered to be "local" by their nature, and therefore, do not require a nonfederal sponsor for the feasibility study.

The reconnaissance study is used to better understand the nature of the water resources problem and to determine the likelihood of a plan that the Corps can eventually implement that is in the federal government's interest. The reconnaissance study also examines the interest of nonfederal sponsors who are involved in all phases of project development. Corps policy is to complete most reconnaissance studies within 12 months; the cost of reconnaissance studies and their related project study plans are generally limited to $100,000 and done entirely at federal expense. Around a third of the reconnaissance studies eventually lead to feasibility studies; only 16 of every 100 reconnaissance studies undertaken by the Corps lead to constructed projects.[8]

If a nonfederal sponsorship is secured and the Corps recommends proceeding, a feasibility study begins. Its objective is to formulate and recommend solutions to

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[7] More information on the planning process is available in the *Planning Guidance Notebook* (Engineer Regulation 1105-2-100), at [http://www.usace.army.mil/inet/usace-docs/eng-regs/er1105-2-100/toc.htm], and the *Project Partnership Kit* (IWR Report 96-R-10), at [http://www.usace.army.mil/cw/cecw-cp/library/ppkit.pdf]. Corps policies are available in its *Digest of Water Resources Policies and Authorities* (EP 1165-2-1), at [http://www.usace.army.mil/publications/eng-pamphlets/ep1165-2-1/toc.htm].

[8] General Robert B. Flowers, Army Corps Chief of Engineers, "Oral Statement," *Reforms to Address the Corps of Engineers Feasibility Studies*, hearing before Senate Environment and Public Works Subcommittee on Transportation and Infrastructure on March 15, 2001. The hearing is hereafter referred to as Reform of Feasibility Studies hearing, March 15, 2001. The testimony is available at [http://www.senate.gov/~epw/stm1_107.htm#03-15-01].

the water resources problem. During the first few months of a feasibility analysis, the local Corps district formulates alternative plans, investigates engineering feasibility, conducts benefit-cost analyses, and assesses environmental impacts under the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. §4321).[9] The evaluation of federal water resources projects, including Corps activities, is governed by *Principles and Guidelines for Water and Related Resources Implementation Studies*. An important outcome of the feasibility analysis is the determination of whether the project warrants further federal investment (i.e., if the project has sufficient National Economic Development benefits).

The cost of the feasibility and environmental studies is split equally between the Corps and the nonfederal project sponsor. The feasibility phase ends when the Chief of Engineers signs a final recommendation on the project, known as the Chief's Report. In recent years, the Congress has used a favorable Chief's Report as the basis for authorizing projects.

The Corps sends an informational copy of the Chief's Report to Congress when it transmits the report to the Assistant Secretary and the Office of Management and Budget (OMB). Since the mid-1990s, Congress has authorized a significant number of projects based on these informational copies, prior to the projects receiving a full review by the Assistant Secretary and OMB. Some recent WRDAs have also included authorizations for projects that were still undergoing feasibility analyses; these projects generally were authorized contingent on a Chief's Report being available by December 31 of the year the WRDA was enacted.

The study phase — preconstruction engineering and design — that follows the feasibility analysis takes about two years, on average, and is conducted while pursuing congressional authorization for the project and construction funding. The preconstruction costs are distributed between the federal and nonfederal sponsor in the same proportion as the cost-share arrangement for the construction phase. Once the project receives congressional authorization, federal funds for construction are sought annually in the Energy and Water Development Appropriations Act. The federal cost-share for construction varies by project purpose. Nonfederal parties are responsible for all operation and maintenance expenses, absent a few exceptions mainly for harbors and inland waterways.

A project is likely to undergo some changes after authorization. If project features or the estimated project cost changes significantly, an additional congressional authorization may be necessary. Authorization of a significant modification is typically sought in a WRDA. For less significant modifications, however, additional authorization is often not necessary. Section 902 of WRDA 1986 allows for increases in total project costs of up to 20% due to modifications that do not *materially* change the project's scope or function without requiring additional

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[9] Generally, the district produces an environmental impact statement (EIS) for a project during the feasibility phase; however, projects, conducted under continuing authorities programs may undergo a more limited environmental assessment. An important part of the feasibility phase are public meetings that are normally held to determine the view of local interests on the extent and type of improvement desired.

authorization. The authorization of Corps construction projects generally are not time-limited; however, there is a process to begin deauthorization of projects that have not received appropriations for seven years.

Water Resources Development Act

WRDAs are legislative vehicles that typically are exclusively dedicated to authorizing Corps activities and establishing policies for Corps civil works activities, such as cost-share requirements. Authorizations in WRDA usually fall under four general categories: studies, projects, modifications to existing authorizations, and programmatic authorizations.

Beginning in 1986, a biennial WRDA cycle was loosely followed for a number of years. WRDAs were enacted in 1988 (P.L. 100-676), 1990 (P.L. 101-640), 1992 (P.L. 102-580), 1996 (P.L. 104-303), 1999 (P.L. 106-53), and 2000 (P.L. 106-541).[10] Pressure to authorize new projects, increase authorized funding levels, and modify existing projects is often intense, thus promoting a fairly regular biennial consideration of WRDA, although enactment has been less consistent. Controversial projects and policy changes contributed to WRDA bills in the 107th, 108th, and 109th Congresses not being enacted. The 110th Congress enacted WRDA 2007 in November 2007, by overriding a presidential veto. It authorized $23 billion in Corps activities. (For more information on WRDA 2007, see CRS Report RL33504, *Water Resources Development Act (WRDA): Corps of Engineers Project Authorization Issues*, coordinated by Nicole T. Carter.)

Once the House Committee on Transportation and Infrastructure or the Senate Committee on Environment and Public Works decides to consider a WRDA, Members of Congress may send a letter to the appropriate Committee Chair requesting the inclusion of a study authorization, project authorization, or project modification.[11] If the WRDA has been introduced in February or early March (according to a traditional WRDA cycle), Committee staff generally recommend that letters be sent by late spring; however, no formal deadline exists. The bill reported by the Committee generally passes that chamber with few changes. Although the appropriations process determines which studies and projects receive federal funds, the essential character of a project is established during the authorization process and is seldom modified substantially during appropriations.

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[10] WRDA 1986 marked the end of a decade or more of stalemate between the Congress and the Executive Branch regarding authorizations. In addition to authorizing numerous projects, WRDA 1986 resolved long-standing disputes related to cost-sharing, user fees, and environmental requirements. Prior to 1986, disputes over these and other matters had largely prevented enactment of major civil works legislation since 1970. Biennial authorizations were resumed after WRDA 1986 to avoid long delays between the planning and execution of projects and for Congress to review proposed projects on a regular basis.

[11] If the Administration chooses to make a WRDA proposal, Congress generally receives the proposal during February of the second year of a Congress, at the same time as the President's budget.

Although Congress has historically authorized Corps projects in a WRDA, authorizations also have appeared in appropriations bills, especially in years when WRDA passage has been delayed. Authorizations in appropriations bills, however, generally are discouraged as standard procedure and may be subject to a point of order on the floor.

Appropriations Energy and Water Development

Each Congress, through a WRDA and survey resolutions, typically authorizes dozens or hundreds of new projects; however, many new studies and new construction projects do not receive appropriations. Fiscal priorities and public attitudes in recent decades have resulted in declining federal funding for water resources activities, thus increasing competition for funding among authorized activities. Moreover during the 1990s and in 2000, Congress authorized not only navigation and flood control projects, but also ecosystem restoration, environmental infrastructure assistance, and other nontraditional activities. With enactment of WRDA 2007, the Corps now has an estimated "backlog" of roughly 1,000 authorized activities.

To concentrate limited resources and to move projects through construction, the Bush Administration has focused its budget request on funding priority projects and those projects near completion that are for flood and storm damage reduction, navigation, and environmental restoration. It also has substantially reduced appropriation requests for studies and eliminated the start of most new studies and construction projects.

Civil works funding often has been a contentious issue between the Administration and Congress, with final appropriations typically providing more than requested, regardless of which political party controls the White House and Congress. Given the backlog of authorized Corps activities and the limited federal budget resources, Congress and the Administration are sometimes forced to make difficult choices among competing authorized activities as they prepare annual appropriations. One consequence of limited resources may be that the appropriated funds for an individual study or project are insufficient to permit the optimum programming of work by the Corps. Members of Congress may request that appropriations for a Corps activity be included (or altered) in an Energy and Water Development appropriations bill by sending a letter to the Subcommittee Chairman or the Ranking Member of the Appropriations Subcommittee on Energy and Water Development. In recent years, recommended deadlines for these requests have been in March or April for both the House and Senate. Once appropriations have been allocated for a Corps activity, funding requests for subsequent years are typically accorded priority until the study or construction is complete. However, fiscal constraints and Administrative priorities in recent years have resulted in deviations from this pattern.

Natural Disaster and Emergency Response Activities and Appropriations

National Response Plan Activities. The Stafford Act (42 U.S.C. §5170b) authorizes FEMA to direct Department of Defense to use its resources to provide

assistance in the event of a major disaster or emergency declaration by the President. Under the National Response Plan,[12] the Corps is designated as the coordinator for emergency support for *public works and engineering*. Public works and engineering support include technical assistance, engineering, and construction management as well as emergency contracting, power, and repair of wastewater and solid waste facilities. The Corps also is charged with providing assistance in monitoring and stabilizing damaged structures and demolishing structures designated as immediate hazards to public health and safety. The Corps' funding for these activities is provided through FEMA appropriations, often through supplemental appropriations legislation.

Under the National Response Plan, the Corps' responsibilities include managing, monitoring, and providing technical assistance in clearing, removing, and disposing of contaminated and uncontaminated debris from public property, and establishing ground and water routes into affected areas. The management of contaminated debris is coordinated with the U.S. Environmental Protection Agency (EPA) which is responsible for hazardous materials. Similarly, as part of the Corps' role in emergency response for public works and engineering, the agency manages the repair, replacement, and restoration of public water and wastewater systems in conjunction with other federal agencies, such as EPA, and state and local authorities, as appropriate.

Corps Natural Disaster and Emergency Response Authority. In addition to work performed as part of the National Response Plan, P.L. 84-99 (33 U.S.C. §701n) provides the Corps authority for emergency response and disaster assistance.[13] It authorizes disaster preparedness, advance measures, emergency operations (disaster response and post-flood response), rehabilitation of flood control works threatened or destroyed by floods, protection or repair of federally authorized shore protection works threatened or destroyed by coastal storms, emergency dredging, and flood-related rescue operations. These activities are limited to actions to save lives and protect improved property (public facilities/services and residential or commercial developments). Although the Corps' account paying for these activities may receive some appropriations in the annual Energy and Water Development Appropriations acts, this initial appropriation is often supplemented with emergency appropriations specific to the emergency being addressed.

[12] Section 502(6) of the Homeland Security Act of 2002 authorized the Secretary of Homeland Security to consolidate federal government emergency response plans into a single, coordinated National Response Plan, available at: [http://www.dhs.gov/xlibrary/assets/NRPbaseplan.pdf].

[13] The Corps also has other authorities that have emergency response (e.g., an Emergency Streambank and Shoreline Erosion Protection program) and recovery-related components (e.g., a Snagging and Clearing for Flood Control program).