Army Corps of Engineers
Water Resources Activities:
Authorization and Appropriations

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Summary

**Project and Program Authorities.** 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. Congress authorizes Corps studies generally as part of the consideration of a Water Resources Development Act (WRDA) or in a survey resolution by an authorizing committee. Authorization to construct projects and changes to the policies guiding the Corps civil works program, such as cost-share requirements for projects, are also included in WRDAs. WRDAs are often considered biennially.

**Funding of Line Items and Accounts.** Federal funding is provided for the civil works activities of the Corps primarily through the annual Energy and Water Development Appropriations Act; although not encouraged in some instances, these acts also have authorized Corps studies and construction. 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.

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 WRDA process, and civil works appropriations. This report will be updated annually.
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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. 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.

Within the Corps, projects are largely planned at the district level and approved at the division and headquarters levels. 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 infrastructure (e.g., municipal water and wastewater treatment systems), disaster relief, and other non-traditional activities. For more information on current issues related to the Corps and its civil works activities, see CRS Issue Brief IB10120, *Army Corps of Engineers Civil Works Program: Issues for the 109th Congress*, by Nicole T. Carter and Pervaze A. Sheikh, and CRS Issue Brief IB10133, *Water Resources Development Act (WRDA): Army Corps of Engineers Authorization Issues in the 109th Congress*, coordinated by Nicole T. Carter.

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 8 divisions and 41 districts. A division and district map is available at [http://www.usace.army.mil/divdistmap.html].
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, which is often considered biennially.⁵ The majority of Corps studies are currently authorized by 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 non-federal entities that may be potential sponsors. Non-federal 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**

Non-federal 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), non-federal sponsors are responsible for a significant portion of the financing of studies, construction, and operation and maintenance (O&M) of most projects. Moreover, non-federal 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 without obtaining a study authorization or specific appropriations. They are performed at the Corps’ discretion based on the availability of funds. The Continuing Authorities Programs 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. House resolutions authorizing studies may occur numerous times annually; Senate resolutions have been less common. The number of studies authorized by resolution varies by Congress. The 105th Congress authorized 93 studies via survey resolutions; the 106th Congress authorized 92, and the 107th Congress authorized 66. 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.
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. 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

<table>
<thead>
<tr>
<th></th>
<th>Reconnaissance</th>
<th>Feasibility</th>
<th>Preconstruction &amp; Engineering Design</th>
<th>Construction</th>
<th>O&amp;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (years)</td>
<td>1</td>
<td>2-3</td>
<td>approx. 2</td>
<td>varies</td>
<td>authorized project duration</td>
</tr>
<tr>
<td>Federal Share of Costs*</td>
<td>100%</td>
<td>50%**</td>
<td>varies by project purpose</td>
<td>varies by project purpose</td>
<td>0% with some exceptions</td>
</tr>
</tbody>
</table>

* For more information on federal and non-federal 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.

** 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 non-federal 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 non-federal 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.

If a non-federal sponsor is found and the Corps recommends proceeding, a feasibility study begins. Its objective is to formulate and recommend solutions to 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). 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.

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 non-federal 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 non-federal 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. Non-federal 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

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8 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.

9 For more information on concerns that Corps projects are being authorized before a complete review by the Assistant Secretary and OMB and that project planning is being rushed by contingent authorizations, see CRS Report RL30928, Army Corps of Engineers: Civil Works Reform Issues in the 107th Congress, by Nicole T. Carter.
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 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 three general categories: studies, projects, and modifications to existing authorizations.

Beginning in 1986, a biennial WRDA cycle has loosely been followed, with WRDAs 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). Recent WRDAs have each authorized projects whose potential federal appropriations could reach between $3 billion and $4.3 billion; many of these WRDAs authorized or modified the authorization of more than a hundred projects. Pressure to authorize new projects, increase authorized funding levels, and modify existing projects is often intense, thus promoting a fairly regular (if not always biennial) consideration of WRDA. Controversial projects and policy changes have complicated the passage of some WRDAs, or even derailed them until the next Congress. For example, some Members of the 107th Congress were interested in including provisions in a proposed WRDA 2002 to change how the Corps evaluates and undertakes projects (i.e., “Corps reform”). A lack of Corps reform measures reportedly contributed to the bill not being voted on by the House. The debate over whether or not to include Corps reform provisions reportedly also played a role in the 108th Congress not enacting a WRDA. For more information on current WRDA development, see CRS Issue Brief IB10133, *Water Resources Development Act (WRDA): Army Corps of Engineers Authorization Issues in the 109th Congress*, coordinated by Nicole T. Carter. (For more information on the evolution of the Corps reform debate, see CRS Report RL30928, *Army Corps of Engineers: Civil Works Reform Issues in the 107th Congress*, 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,

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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 For example, WRDA 2000 authorized the construction of 155 projects, and 56 studies, and modified the authorizations for almost 50 projects.
Members of Congress may send a letter to the appropriate Committee Chair requesting the inclusion of a study authorization, project authorization, or project modification.\textsuperscript{12} 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.

Although Congress has historically authorized Corps projects as part of a WRDA, authorizations have also been included in appropriations bills, especially in years when passage of a WRDA has been delayed. Authorizations in appropriations bills, however, are generally not encouraged 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 of new projects; however, many of these new studies and new construction projects will 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.\textsuperscript{13} 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 non-traditional activities. The Corps now has a “backlog” of more than 500 authorized projects that have not received construction appropriations.\textsuperscript{14}

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 has also substantially reduced appropriation requests for new studies and eliminated the start of most new construction projects.

Funding for the civil works program has often been a contentious issue between the Administration and Congress, with final appropriations typically providing more funding than requested, regardless of which political party controls the White House.

\textsuperscript{12} Congress generally receives the Administration’s WRDA proposal during February of the second year of a Congress, at the same time as the President’s budget.

\textsuperscript{13} For example, the civil works budget has experienced a substantial decline in \textit{real dollar} amounts; the annual funding (in 1999 dollars) for the Corps’ construction account fell from an average of $4 billion in the 1960s and 1970s to $1.4 billion in the 1990s.

\textsuperscript{14} How many of these projects remain viable and desirable is unclear. Some may no longer have a non-federal sponsor ready to share project financing. A recommendation by the Administration for federal appropriations is generally based on evidence of financial support by the non-federal sponsor to provide its share of project costs.
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 chair 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.