Army Corps of Engineers: Civil Works Reform Issues in the 107th Congress

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Summary

The U.S. Army Corps of Engineers (Corps) is a federal agency within the Department of Defense that has both civil works and military programs. The Corps’ civil works activities are the subject of this report. Its civil works mission includes primarily water resources planning, construction, and operation. Congress generally directs Corps activities through biennial authorization and annual appropriation bills. The Corps attracts much congressional attention because its projects can provide significant economic stimulation in addition to their basic development purposes.

A budget deficit, a backlog of Corps construction and maintenance activities, and concerns about the project development process prompted some Members during the 107th Congress to question aspects of the civil works program. Specifically, should the agency’s administration of its civil works mission be altered to reflect changing fiscal and environmental priorities and to improve the project development process, and, if so, how? A bipartisan House Army Corps Reform Caucus was formed. Committees heard testimony supporting and opposing Corps reform. While Members in both Houses proposed bills to change Corps processes, other Members and interest groups satisfied with existing practices opposed these measures. No bills altering Corps procedures passed in the 107th Congress.

The intent of the Bush Administration’s proposal for the FY2003 Corps civil works budget was to improve the Corps’ fiscal performance by reducing the backlog of construction activities and supporting operation and maintenance of existing infrastructure. The Administration proposed reducing the backlog primarily by starting no new projects and concentrating resources on priority projects, i.e., those with evident national benefits for navigation, flood control, and environmental restoration. The Administration’s focus on priority projects addressed a concern about so called “mission creep.” Over the Corps’ 200-year history, its civil works mission has expanded from maintaining navigable channels and flood control projects to include environmental restoration and non-traditional projects, such as municipal water and wastewater projects. This expanding mission, the growing backlog, and limited federal funding for water resources projects has some Members and advocacy groups worried that the Corps’ efforts are spread too thin.

Proposed bills in the 107th Congress attempted to not only improve fiscal management but also modify the project development process and reduce environmental impacts. Many of the bills included provisions for greater public access to project information, increased public participation and independent review, stricter benefit-cost criteria, stronger environmental mitigation requirements, and deauthorization of projects. Environmental and taxpayer groups generally supported these bills while agriculture and navigation industries generally opposed them. This report summarizes the debate on Corps reform in the 107th Congress and is unlikely to be updated.
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The U.S. Army Corps of Engineers (Corps) is a federal agency within the Department of Defense that has both civil works and military programs. The Corps civil works program is the subject of this report. Its civil works mission includes primarily water resource facility planning, construction, and operation. Congress generally directs Corps activities through biennial authorization and annual appropriation bills.

The federal budget deficit, a backlog of Corps construction and maintenance and concerns about the project development process prompted some Members of the 107th Congress to question various aspects of the civil works program. Specifically, should the Corps’ administration of civil works be altered to better reflect current fiscal and environmental priorities and to restore public confidence in the agency’s project development process, and, if so, how? Interest groups that support reform propose many changes including in the following areas: project development process, economic justification and analysis of projects, independent review and local advisory groups, oversight by the Administration, environmental impact mitigation, and mission of the agency. Groups representing direct beneficiaries of Corps projects, such as agriculture and navigation industries, however, generally support retaining existing practices.

Hearings with testimony related to Corps reform and a House Army Corps Reform Caucus indicate the concern of some Members. Bills in both Houses — H.R. 1310, H.R. 2353, S. 646, S. 1987 and S. 2963 — would have changed how the Corps managed civil works. Although no legislation altering Corps procedures was enacted by the 107th Congress, reform issues received considerable media, interest group, and congressional attention. Reform supporters have indicated their continued interest in legislative action to change Corps processes.

A Primer on the Civil Works Program

Organization

The Corps is a unique federal agency being a military organization with a largely civilian workforce. Of the 25,000 civil works positions in 2002, only 250 were military personnel. The civil works program is headed by a civilian Assistant Secretary of the Army for Civil Works. A military Chief of Engineers oversees the

1 More information on the civil works program is available in CRS Report RS20866, The Civil Works Program of the Army Corps of Engineers: A Primer.
Corps’ civil and military operations and reports on civil works matters to the Assistant Secretary. Eight divisions coordinate 38 district offices in the United States and field offices worldwide. Water resource projects are largely planned at the district level and approved at the division and headquarters levels.

Mission and Responsibilities

Over the Corps’ 200-year history, its civil works program has evolved into a conglomeration of responsibilities with sometimes conflicting objectives. The agency’s oldest responsibilities are navigation and flood control. Many of the navigation and flood control projects are multi-purpose — i.e. they also supply water for municipal, industrial, and agricultural uses; recreation; and hydropower. In the last decade, ecosystem restoration has also become a significant part of the agency’s civil works activities. In addition to these primary responsibilities, the Corps is increasingly involved in a variety of other activities, such as disaster relief and recovery and remediation of formerly used nuclear sites (Formerly Utilized Sites Remedial Action Program, FUSRAP). The Corps played a significant role in the emergency response efforts following the September 11, 2001 terrorist attacks. It assisted the New York Fire Department with interim communications equipment, evaluated the safety of damaged buildings, provided emergency power to the financial district, and removed debris.

Navigation projects include river deepening, channel widening, jetty construction, lock expansion, dam operations, and dredged material disposal. Flood control projects encompass federal dam (and related hydropower) construction and operation, levee construction, river channelization, large-scale pumping systems, and coastal protection. More recent environmental restoration activities involve wetlands and marshlands restoration and environmental mitigation activities. The agency’s regulatory responsibility for navigable waters extends to issuing permits for private actions that might affect wetlands and other waters of the United States.2

The Corps attracts congressional attention because of the breadth and impact of its activities and Congress’ role in directing the agency. Construction and operation of Corps projects often provide economic stimulation for nearby localities as well as regional and national benefits. Corps flood control projects are built to protect millions of homes, farms, and businesses. Coastal ports, barge channels, and hydroelectric dams can significantly benefit local and regional economies. The range of the Corps’ activities often involves the agency in contentious environmental issues, such as dam removal on the Snake River, water management on the Missouri River, and restoration of the Florida Everglades. Because of the generally strong

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2Sections 10 and 13 of the Rivers and Harbors Act of 1899 (33 U.S.C. 407) require that a permit be obtained from the Corps for alteration or obstruction of and refuse discharge in navigable waters of the United States. The Corps also has regulatory responsibilities under other laws, notably §404 of the Clean Water Act (33 U.S.C. 1344). Since the mid-1970s, court decisions have significantly broadened the interpretation of navigable waters. Subsequent judicial and administrative actions have altered considerably the jurisdictional reach of the agency’s regulatory program from the Corps’ earlier interpretation.
congressional support of Corps’ projects, Congress typically appropriates more for civil works than was requested by the Administration.

**Corps Funding and Backlog**

The civil works budget consists primarily of funding for specific projects and studies in three stages: investigation and planning, construction, and operation and maintenance. Fiscal priorities and public attitudes in recent decades have produced a decline in federal funding for water resources development projects generally and prompted legislation in 1986 that requires greater local financial participation in projects. Over the past 30 years, the civil works budget declined in real dollar amounts. From the mid-1960s to the late 1990s, the annual funding for the general construction account alone fell from an average of $4 billion to $1.4 billion (in 1999 dollars). For FY2002 through FY2003, the construction budget and total agency appropriations averaged $1.7 billion and $4.6 billion, respectively.

In recent decades federal funding for water resources projects was becoming increasingly limited, the scope of the Corps’ responsibilities was growing. During the 1990s, Congress continued biennial authorizations of navigation and flood control projects through the Water Resources Development Acts (WRDA) and began authorizing more environmental activities and non-traditional projects. Over the longer term, more projects have received authorization than appropriations, resulting in a backlog of construction activities. The backlog consists of over 500 “active” authorized projects with an estimated federal cost of approximately $44 billion. The backlog resulted in the Corps having to spread appropriation across a larger number of projects. The consequence has been smaller appropriations for individual projects, which typically extend construction schedules, thus increasing costs and delaying benefits.

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4Previously, most studies and projects were funded entirely by the federal government. The Water Resources Development Act (WRDA) 1986 (P.L. 99-662) increased local cost-share requirements.

5Information provided by the Corps to Senator Voinovich at his request; available in Senator George V. Voinovich, “Statement,” *Corps of Engineers Mission and Backlog of Projects*, Hearing before Senate Environment and Public Works Subcommittee on Transportation and Infrastructure, May 16, 2000. The hearing is hereafter referred to as the Corps Mission and Backlog hearing.

6Active projects are those that have been recently funded, evaluated by the Corps as economically justified, and are supported by a local sponsor; an additional 800 authorized projects are considered inactive. Beginning with the FY2004 budget request, the Administration began referring to a $21 billion construction backlog (General Robert Flowers, Chief of Engineers, U.S. Army Corps of Engineers, “Statement,” *Oversight of the Corps of Engineers’ FY2001 Budget*, Hearing before House Transportation and Infrastructure subcommittee on Water Resources and Environment, February 27, 2003.) This represents the funding needed to complete the construction projects included in the FY2004 budget request. The larger $44 billion figure is the funding needed to complete the backlog of all active projects.
In addition to the construction backlog, the Corps in FY2002 had a $702 million backlog for deferred critical maintenance for existing structures at prevailing authorization and appropriation levels. The Corps and some Members expressed concern that without proper maintenance the ability of existing water resources infrastructure to serve the population and the economy will decline. During the 1990s, maintenance appropriations remained relatively constant even though the Corps had more built projects to maintain and the maintenance cost of the aging infrastructure was increasing.

As previously noted, funding for civil works has often been a contentious issue between the Administration and Congress. Final appropriations typically provide more funding than the Administration’s request regardless of which political party controls the White House and Congress. The Corps generally maintains strong congressional support because of the direct water resource benefits and indirect economic and political benefits of its projects. Given the construction and maintenance backlogs and limited federal budget resources, Congress and the Administration often make difficult choices among competing priorities as they prepare annual Corps appropriations.

The Corps civil works budget for FY2003 was once again contentious. The Administration’s budget request for the program in FY2003 (excluding full funding for federal retiree costs) was 7% less than the FY2002 appropriation, excluding emergency appropriations. The Administration’s request received considerable media attention in the wake of the resignation in March 2002 of the Assistant Secretary of the Army for Civil Works (who sets policy for the Corps’ civil activities). The resignation, or dismissal by some accounts, was reportedly over a rift with the White House on the FY2003 budget proposal. Both the Senate and House reports expressed the Appropriations Committees displeasure with the Administration’s low budget request (H.R. 5431, H.Rept. 107-681; S.2784, S.Rept. 107-220). The Bush Administration’s budget document not only proposed a reduction in the civil works budget but also identified “mission creep” as diverting the Corps from its main missions, slowing down completion of priority construction projects, and postponing the benefits of completing projects. The Administration specifically mentioned as a problem the increasing number of congressional authorizations and appropriations for Corps projects that could be carried out by other agencies or local governments, such as municipal “environmental infrastructure” water projects.

Interest and Action on Changing Processes and Procedures at the Corps

Much of the congressional interest in improving the Corps’ civil works program during the 107th Congress was founded not only on budgetary concerns but also on perceived deficiencies in the project development process. In 2000, allegations of improper manipulation of an economic study and news articles on an initiative to
Among the news media covering the Corps, articles in The Washington Post have received significant attention; these can be viewed at the following website: [http://washingtonpost.com/wp-dyn/nation/specials/aroundthenation/corpsofengineers].


The allegations were more thoroughly investigated at the request of the Department of Defense by both the Army Inspector General and the National Academy of Sciences (NAS).

In December 2000, the Department of Defense released the Army Inspector General’s report examining the allegations of wrongdoing. The Inspector General found an institutional bias toward large construction projects. A letter transmitting the findings to the President stated that the investigation revealed “serious misconduct and improprieties in connection with the feasibility study” and suggested “the existence of institutional biases that led to misconduct . . . and that may affect Corps decision making in other projects.” The institutional bias for large-scale projects was found to create “an atmosphere where objectivity in its analysis was placed in jeopardy.” The report identified an initiative to “grow” the civil works program as contributing to the bias; however, it found no blatant fraud or abuse.

In late February 2001, the National Resource Council, an arm of the National Academy of Sciences, released its report on the planning of the Upper Mississippi River-Illinois Waterway project. The investigation found flaws in both the application of theoretical models and the data used for estimating navigation. The investigation noted, on the positive side, that the model represented an advance over previous models. The report stated:

This system model represents a major advance over previous economic models used by the Corps to forecast barge traffic....[However,] many of the assumptions

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7Among the news media covering the Corps, articles in The Washington Post have received significant attention; these can be viewed at the following website: [http://washingtonpost.com/wp-dyn/nation/specials/aroundthenation/corpsofengineers].


10Ibid.

Supporters and opponents of changes to the Corps interpret differently the meaning of the NAS report. Those advocating reform argue that the report illustrated problems in the project development process, while those opposing change claim that the report justified the Corps officers’ adjustments.

Concern over possible manipulation of study results to obtain a favorable recommendation to proceed grew as the media publicized a strategic vision for the agency that had been promoted by the former Chief of Engineers General Joe Ballard in 1999 called the “Program Growth Initiative.” The initiative emphasized the agency’s role in identifying water resources needs in the Nation. The initiative set expansion targets for the civil works program that would result in a 20% increase before inflation in the current civil works budget by 2005. The Washington Post in articles in February 2000 and a more extensive series in September 2000 brought the initiative to the public’s attention. The articles criticized the initiative for placing as the top priority expansion of the civil works program, regardless of need for the project. Former Chief of Engineers General Joe N. Ballard defended the Corps’ civil works program:

[W]e are seeking to identify unmet National water resource needs that fall within the Corps’ mission areas. These needs are based on published and documented information. Our role is to apply a structured, reasoned approach to identifying and quantifying the Nation’s water resource needs.

Environmental and taxpayer groups use the various studies and reports reviewing the Corps activities and procedures in their pursuit for reform of Corps management, operations, and policies. Environmentalists continue their decades-old argument that the environmental damages of some large-scale navigation and flood control projects outweigh their benefits and that environmental impacts are not properly measured, valued, and mitigated. Taxpayer groups argue that the benefits of federal investment in many projects are dubious and that project decisions are not based on sound economic analysis, but on politics.
Many groups and communities benefitting from Corps activities, such as the barge industry, port authorities, and some farmers, support existing practices. They laud the agency’s contributions to their communities and the national economy and argue for continued participation in inland waterways, shore protection, and flood protection.\textsuperscript{16} They contend that the Corps’ critics unfairly cite a few complex, high-profile atypical cases as evidence of fundamental problems.

**Related Legislative Activity in the 107\textsuperscript{th} Congress**

The 107\textsuperscript{th} Congress held several hearings related to the Corps. Three of these gave particular attention to Corps reform issues. The Senate Committee on Environment and Public Works has jurisdiction over the authorization of Corps projects. Its Subcommittee on Transportation and Infrastructure, which is responsible for WRDA, held a hearing in March 2001 on reforms of the Corps’ feasibility studies. The Subcommittee also addressed many Corps reform topics in a June 2002 hearing on the proposed WRDA 2002 bill (H.R. 5428). General Robert Flowers, the current Chief of Engineers, testified to the soundness of the existing process and responded to concerns about the Upper Mississippi River-Illinois Waterway economic study. In February 2001, General Flowers also testified at a hearing on the Inspector General’s report held by the Senate Appropriations Subcommittee on Energy and Water Development. Conflict among Members over the issue of Corps reform reportedly played a critical role in the decision not to vote on a WRDA in 2002.

Members of the 107\textsuperscript{th} Congress introduced five bills to alter the Corps processes and procedures — H.R. 1310, H.R. 2353, S. 646, S. 1987, and S. 2963—and one bill to create a commission to assess the agency’s performance. None of these bills were enacted.

Two related bills, H.R. 1310 introduced by Congressman Ron Kind and S. 646 introduced by Senator Russell Feingold, proposed establishing economic development and environmental protection and restoration as co-equal goals for the Corps. The bills included procedures for establishing stakeholder advisory committees and independent review of projects as well as requirements for public

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*Waters: Congress, the Corps of Engineers, and Wasteful Water Projects*, which can be found at [http://www.nwf.org/greeningcorps/report.html]. The report, which was co-authored by the Taxpayers for Common Sense and National Wildlife Federation and published in March 2000, made specific recommendations for Corps reform and identified the 25 “Most Wasteful Corps of Engineers Projects.” This report is hereafter referred to as Trouble Waters, 2000.

\textsuperscript{16}J. Ron Brinson (President New Orleans Port Authority), Tony B. MacDonald, (Executive Director of the Costal States Organization), and George Grugett (Executive Vice President of the Mississippi Valley Flood Control Association) provided testimony supporting the Corps’ continued participation in inland waterways, shore protection, and flood protection at the Corps Mission and Backlog hearing on May 16, 2000. At the same hearing, William Parrish (Vice Chairman Association of State Floodplain Managers) supported the Corps’ role in flood control and encouraged both greater participation in projects by local entities and floodplain management strategies using non-structural solutions.
access to project analyses. The bills would have refined the Corps economic evaluation procedures related to environmental impacts and established stricter mitigation and tracking requirements. There were twenty four cosponsors for H.R. 1310. The last action taken was the referral of the bill to the House Transportation and Infrastructure Subcommittee on Water Resources and Environment. There were no cosponsors for S.646. The last action taken on S.646 was a hearing by the Senate Committee on Environment and Public Works on June 18, 2002; the same hearing also addressed S.1987 (see below).

H.R. 2353, introduced by Congressman Thomas Tancredo, would have required the Corps to produce a community relations improvement plan, to establish mechanisms for public hearings and independent review of projects, to provide public access to project analyses, and to create a deauthorizing procedure. The bill included new economic evaluation criteria and project management techniques, increased local cost-sharing responsibility, and evaluations of the regional impacts of port and harbor projects. There were seven cosponsors. The last action on the bill was its referral to the House Transportation and Infrastructure Subcommittee on Water Resources and Environment.

In March 2002, Senator Bob Smith introduced S. 1987 which proposed to modernize and improve the Corps. The bill included provisions for reviewing and reporting on the construction backlog and deauthorizing projects, independent peer review, and decreased federal financial participation for projects with primarily local benefits. The bill also proposed that projects meet a benefit-cost ratio of 1.5 or greater (compared to 1.0 currently) and that project analysis and justification information be publicly available. There were four cosponsors. The last action taken on the bill was a hearing held on June 18, 2002, by the Senate Committee on Environment and Public Works.

Senator Tim Johnson introduced S. 2963 which contained provisions for independent review of controversial projects, refinements to legislation guiding the Corps’ mitigation procedures, and establishment of environmental protection and restoration and economic development as co-equal goals. The bill also called for the Secretary of the Army in cooperation with the National Academy of Sciences to revise the Corps’ guidelines for water resources projects. The bill also proposed changes to the use of the Inland Waterways Trust Fund that would have allowed these funds to be used for operation and maintenance as well as construction of inland waterways. There were no cosponsors for this bill. The last action was the referral of the bill to the Senate Committee on Environment and Public Works.

Senator Tom Daschle introduced S. 3036 to establish a Corps of Engineers River Stewardship Independent Investigation and Review Commission. The Commission would have completed within two years a report on the Corps’ management of the Nation’s rivers. The report would have addressed a broad range of issues related to the Corps current practices including: compliance with environmental and cultural resource laws; quality of the agency’s analyses; the Corps’ coordination with federal and state agencies and Indian tribes; and the extent to which the Corps’ river management studies balanced competing river uses. The Commission would have also studied the several normative questions: whether Corps river management studies should be subject to independent review; whether river
planning laws should be amended; and whether the river management functions of the Corps should be transferred from the Department of the Army to a civilian federal agency. There was one cosponsor. The last action was its referral to the Senate Committee on Environment and Public Works.

Corps reform bills had also been introduced during the 106th Congress — H.R. 4879, H.R. 5459, and S. 2309. The 106th Congress did not act on these bills. The 106th Congress did enact some provisions related to Corps reform in Title II of the 2000 WRDA. These provisions were essentially scaled-down versions of reforms proposed in H.R. 4879. Section 222 of the 2000 WRDA required procedures to enhance public participation in the development of feasibility studies, and to include, if appropriate, a stakeholder advisory group. Section 223 required the Corps to monitor the economic and environmental results of up to five projects for at least 12 years. Section 216 directed the NAS to study “state of the art” project analysis methods and to compare them to the methods employed by the Corps and the practicality and efficacy of “independent peer review of feasibility reports.” The Academy’s National Research Council published its report Review Procedures for Water Resources Planning in July 2002. The report identified a need for increased independence from the Corps of the reviewers and the review process. Section 224 called for a study by the General Accounting Office (GAO) on the effectiveness of concurrent mitigation for fish and wildlife impacts. In the May 2002 GAO report titled US Army Corps of Engineers: Scientific Panel’s Assessment of Fish and Wildlife Mitigation Guidance (GAO-02-574), most of the expert panelists rated the overall quality of the Corps’ mitigation program as moderate or good while also making numerous suggestions for improvement.

In recent years both the House and Senate Appropriations Committees have expressed concerns and comments on the Corps’ project development process and criticisms raised against the Corps. In 2000, the House Appropriations Committee noted in H.Rept.106-693 concerns about the Corps’ project review process and indicated its desire for a more streamlined project development process. The Committee also commented on the accusations concerning Corps officials improperly trying to expand the civil works program; the Committee report stated that while pressure on planners and engineers to “inappropriately justify projects is unacceptable, the Committee believes that it is the proper role of the Chief of Engineers to advise the Administration, the Congress, and the Nation of the level of investment in water resources infrastructure that he believes is needed to support the

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18 A 1999 National Research Council report found only limited opportunities for streamlining the planning process. The Council recommended several changes to help shorten the process but found “[b]eyond these recommendations, however, further reductions may be neither reasonable nor desirable.” National Research Council (NRC), New Directions in Water Resources: Planning for the U.S. Army Corps of Engineers (Washington, DC: National Academy Press, 1999). Hereafter referred to as NRC New Directions in Water Resources, 1999.
economy and improve quality of life for our citizens.” In 2001, the Committee report addressed the criticism of the Corps manipulating studies on the Upper Mississippi River-Illinois Waterway (H.Rept.107-112). The Committee stated that the Corps officers charged with manipulating the data were justified in their actions. The Committee found that the National Academy of Sciences “has found that the Corps’ officers who questioned the preliminary results of the study were justified in doing so since those preliminary results were based on a seriously flawed model.” The Committee disregarded the criticism that the Corps was secretly trying to expand its program by citing the backlog of authorized projects.

In 2000, the Senate Appropriations Committee in Senate Report 106-395 noted its dissatisfaction with management reforms proposed by the Clinton Administration. Although the Committee did not include language prohibiting Corps reform, it put the Administration on notice that it would continue to “assess the need for such language as the process moves forward.” The Senate Committee also expressed concern about the Corps’ expansion into non-traditional areas and involvement in projects for which the private sector has demonstrated capability and capacity. In its 2001 report (S.Rept. 107-39), the Committee noted its satisfaction with the Corps’ response to the issues raised by the whistleblower allegations and made no mention of reforms. The Committee did express a general concern over the growing construction and maintenance backlogs.

**Corps Management and Operations Issues**

Congress in recent decades has not significantly changed the Corps’ organization, management, and project development process. It has made changes to specific procedures and requirements, such as changes in 1986 to the cost-share requirements for projects. Opinions varied widely among Members of the 107th Congress on the need, nature, and scope of changes in Corps processes and procedures.

There existed a similar diversity of opinions among interest groups. Advocacy groups and individuals supporting changes to the Corps approach the issue from many perspectives. They represent the spectrum of environmental groups, as well as groups interested in maximizing public benefits of federal investments and minimizing federal expenditures and responsibilities. Similarly, those generally satisfied with the Corps’ current policies and procedures are not a homogenous group. Some reform opponents represent industries that directly benefit from federal investment in Corps projects. Others are from communities interested in benefits from projects in new mission areas.

The principal reform issues raised during the 107th Congress include: project development process; economic justification and analysis of projects; independent review and local advisory groups; oversight by the Administration; environmental impacts of projects; and mission focus and expansion. Although no reform

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legislation was enacted during the 107th Congress, reform supporters may seek future legislative action.

While reform supporters present many specific recommendations for reform that are discussed herein, those content with existing Corps processes raise general opposition to Corps reform. Consequently, it is important to emphasize that those opposed to reform in most cases do not argue against specific recommendations but the fundamental need for reform. They argue that the current processes are sufficient and that changes will only increase expense and lengthen project development. They apply these arguments to all of the recommendations proposed by those seeking change. This report presents the recommended reforms and the arguments made for and against these specific reforms.

Project Development Process

The Corps currently follows a two-phase planning process intended to provide decision makers with sufficient information to determine if a project warrants federal investment. Project development is directed by Principles and Guidelines for Water and Related Resources Implementation Studies (P&G), prepared by the Water Resources Council (WRC) in 1983 to guide development of federal water resources. The P&G do not differentiate between benefits to individual or local interests and to society at large. The Corps also has internal planning guidance — the “Planning Guidance Notebook” updated (and given its current name) in April 2000. In the National Research Council’s 1999 New Directions in Water Resources report and NAS’s 2001 Upper Mississippi River-Illinois Waterway report, it was recommended that the P&G be reviewed and modified to incorporate contemporary analytical techniques and changes in public values and federal agency programs. Proponents and opponents of reform differ on their view of whether the process and its related guidance need to be changed.

Corps’ projects generally originate with a request for assistance from a local community (e.g., citizens, businesses, or congressional delegation) or from a local government entity with a water resource need that is beyond its capability to alleviate. Contingent upon a finding of sufficiency, or satisfaction that the project ought to move forward, the Corps’ district office typically requests congressional study authorization and funding to undertake a reconnaissance study. A reconnaissance study typically takes 12 to 18 months, and its cost is limited to $100,000. This study is used to better understand the nature of the water resource problem; determine the likelihood of developing project that the Corps can eventually

20More information on the planning process is available in Planning Guidance Notebook (Engineer Regulation 1105-2-100) available at: [http://www.usace.army.mil/publications/].

21WRC was established pursuant to the 1965 Water Resources Planning Act (P.L. 89-80; 42 U.S.C. 1962-b2). WRC is currently dormant due to a lack of funding. Given the WRC’s status, the procedures for modifying P&G are not clear. Three other federal agencies—the Bureau of Reclamation, the Natural Resources Conservation Service, and the Tennessee Valley Authority—also use the P&G.

implement; and make a preliminary evaluation of federal interest, economic benefits and costs, and environmental impacts and potential mitigation. Based on the findings of a reconnaissance study, Corps headquarters decides whether to proceed to a feasibility study. According to testimony by Corps officials, of every 100 reconnaissance studies, only 16 result in actual construction. Technical assistance and some small projects can be conducted without specific congressional authorization under the Continuing Authorities Program.

During the first months of a the next phase in project development — feasibility planning, the Corps’ local district office formulates alternative plans, investigates engineering feasibility, assesses environmental impacts pursuant to the National Environmental Policy Act (NEPA, P.L. 91-190; 42 U.S.C. 4321) and other regulations, and conducts benefit-cost analyses according to the P&G and Corps guidelines. Generally the district produces an environmental impact statement (EIS) for a project during this feasibility phase; however, projects conducted under continuing authorities may undergo a more limited environmental assessment. The district office distributes a project’s draft feasibility report and environmental documents for review by its division, Corps headquarters, the Assistant Secretary, affected federal agencies, Governors of affected states, the Office of Management and Budget (OMB), and the general public. The feasibility phase ends when the Chief of Engineers signs a final recommendation. The Corps then begins preconstruction engineering and design, a one to two year process conducted while pursuing congressional authorization and appropriations for construction.

Congress typically authorizes Corps projects as part of a biennial consideration of a WRDA. Congress might authorize construction of a project on the basis of a Chief of Engineers report, or it might wait for review by the Assistant Secretary for Civil Works and OMB. In the last decade congressional authorization of projects before a complete Chief’s report is available but contingent on its favorable completion within a year has become more common. Most projects authorized during the late 1990s and early 2000s had not undergone OMB review prior to receiving congressional authorization.

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23 This description of the reconnaissance study is from Chapter VII of the Corps’ 1996 Project Partnership Kit available at: [http://www.iwr.usace.army.mil/iwr/pdf/ppkit.pdf].


25 According to the NAS “All feasibility reports and significant decision documents are now reviewed by a Central Review Center” (NAS, Review Procedures for Water Resources Planning (Washington DC: National Academy Press)). The report describes a streamlined version of the technical and policy reviews that are supposed to occur, as well as a brief history of changes in the review process.

26 The final Chief’s report was not completed for 28 of the 30 projects authorized in WRDA 2000 (P.L.106-541), 15 of the 45 projects authorized in WRDA 1999 (P.L.106-53), and 13 of the 31 projects authorized in WRDA 1996 (P.L. 104-303).
Following authorization for construction, the federal cost-share may be provided in the annual Energy and Water Development Appropriations Act. Construction is managed by the Corps’ district but typically is performed by private contractors. Most projects are operated and maintained by local sponsors.

Advocates of reform argue that the Corps’ project development process needs to better reflect the national interest and current values, such as giving a higher priority to environmental objectives and projects with national benefits. The construction and maintenance backlogs motivate interest in refining criteria to prioritize activities based on the greatest national benefit. Others contend that reform is not needed; they argue that the Corps’ current project development practices are among the most advanced used by the federal government and produce sound projects with national benefits. Some also argue that federal funding is adequately directed to priority projects through the congressional appropriations process.

Critics of the Corps’ current practices argue that the heart of the problem with the agency’s project development process is a fundamental conflict of interest: the Corps evaluates proposed projects and builds the ones it deems worthwhile. These critics assert that the Corps lacks objectivity because if an analysis concludes that economic costs of a project outweigh benefits, or that the ecological damage is too extreme, the agency loses a potential construction job. Critics believe that the Corps’ dual responsibility for project evaluation and project construction produces incentives for the agency to bias studies toward recommendations to proceed. The December 2000 Inspector General’s report partially attributed the institutional bias toward large construction projects to district staff funding. The report explained: “The Districts were dependent upon project funds to maintain their staffs. The continued vitality of the Districts was thus dependent on producing study results that favored construction projects.” Critics claim that these incentives were heightened by pressures to expand the civil works program. Retired Chief of Engineers Ballard fiercely defended the integrity of the agency’s staff and studies, saying that the Corps’ system filters out questionable projects and leads to unbiased recommendations in the public interest. This sentiment was reiterated by General Flowers at hearings during the 107th Congress.

Reform supporters set forth a variety of proposals for changing the project development process to focus the Corps’ efforts and funding. Some groups concerned about federal spending propose requiring Corps feasibility studies to demonstrate that projects are primarily in the national interest, prioritizing projects on the basis of their benefit-cost ratio and other criteria, and designing projects to maximize net national benefits per dollar invested. They are also concerned that the benefits of some current projects are concentrated among a limited number of agribusinesses, farmers, ports, barge firms, shipping firms, and developers. Critics of the Corps argue that local interests dominate the project development process.

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because cost-sharing requirements financially tie the districts to local interests. Reform supporters contend that this tie results in the districts not demonstrating sufficient concern for the national interest; they see this as particularly problematic under the current process that incorporates only limited review from the division, headquarters, and senior Administration officials.

Some local project sponsors argue that local interests must be involved in project development since they are contributing local financial resources to Corps projects. Supporters of current practices argue that the projects are in the national interest if they comply with the P&G.³⁰ In testimony in 2001, General Flowers stated:

An unintended effect of cost-sharing has been the focus of studies, as cost sharing partners are reluctant to finance studies that are broader than their immediate concern. As a result, our planners are often caught between the forces seeking comprehensive planning at one end of the spectrum and those who voice concerns for addressing needs on an expedited basis and early screening of alternatives that have little chance of being implemented.³¹

**Economic Justification and Analysis of Projects**

A benefit-cost analysis is conducted as part of the feasibility phase. It is intended to provide a measure by which to compare a project’s benefits to the investment required and costs borne by society. The Corps began using benefit-cost analyses in the 1930s and has continued to refine its procedures in applying this decision-making tool. Nonetheless, the Corps’ application of benefit-cost analysis continues to draw criticism. Although criticisms that the Corps undervalues environmental benefits and damages are still raised, recent critics of the agency’s economic studies have focused on the economic models applied and the data supporting the analysis.³² Some Corps observers have voiced concern about the validity of assumptions and projections and the improper participation by powerful project beneficiaries.³³ Another of their concerns is that analysis techniques in the P&G neither address a perceived institutional bias at the Corps toward large projects nor account for federal fiscal constraints.

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³⁰The P&G states that “The Federal objective of water and related land resources project planning is to contribute to national economic development consistent with projecting the Nation’s environment.” (1983, p. iv) available at: [http://www.iwr.usace.army.mil/iwr/pdf/p&g.pdf].


³²The NAS Upper Mississippi River-Illinois Waterway report provides an analysis and critique of an economic analysis for one project.

³³The 2000 Army Inspector General report found that “the barge industry was viewed as a partner during the study [of the lock expansion]. This view led Corps leadership to involve the industry to a far greater extent than other interest groups...[A Corps official] permitted the barge industry to become improperly involved in the economic analysis” (pp. 7 and 13).
Taxpayer groups argue that the Corps needs to be redirected toward more fiscally-responsible management of the nation’s water resources; they propose eliminating spending on projects and maintenance activities that do not provide sufficient national benefits.\footnote{Examples of this perspective can be seen in the Trouble Waters, 2000 and the recent report titled Green Scissors 2001: Cutting Wasteful and Environmentally Harmful Spending by Green Scissors (a coalition of taxpayer, consumer, and environmental organizations) available at: \url{http://www.greenscissors.org/publications/gs2001report.htm}.} Reform opponents argue that current benefit-cost analysis techniques adequately gauge if federal investment is warranted and that accounting for federal fiscal constraints is a budgetary issue unrelated to an individual project analysis.

Some fiscal conservatives have called for a national review of inland navigation waterways, decommissioning of waterways with insufficient traffic to support their operation and maintenance, and reduced federal responsibility for operation and maintenance of waterways. They also support shifting to local communities more maintenance costs for beach replenishment projects because of their localized benefits. Some taxpayer groups propose terminating congressional waivers and other practices that reduce local financial contributions; they contend that reduced cost-sharing increases demand for projects and encourages over-built projects. Reformers also argue for increasing local cost-sharing for some activities, most notably flood control projects and port deepening.

Project beneficiaries contend that further cost-sharing increases would be unfair because only wealthier communities could afford projects. They argue that the Corps’ continued participation in construction and maintenance of waterways, flood control, and shore protection projects is in the national interest because of their transportation and flood protection benefits.\footnote{Corps Mission and Backlog hearing on May 16, 2000.} According to Corps officials in 2001, since 1959, the agency’s projects had prevented nearly $500 billion dollars in flood damages, returning $6 for every $1 invested.\footnote{General Robert B. Flowers testimony at Reform of Feasibility Studies hearing, March 15, 2001.} Others argue that the country’s waterway and navigation system require modernization and improvement for ports and shippers to remain competitive internationally.\footnote{For more on this perspective, see testimony provided at a hearing of the House Mississippi River Caucus on the Upper Mississippi Navigation Study held March 15, 2001. The testimony is available at: \url{http://www.usace.army.mil/inet/functions/cw/hot_topics/uppermissreport.htm}.} Some supporters of current Corps’ practices respond to the whistleblower allegations of improper study manipulation by arguing that Corps officials were fixing a flawed economic study, not manipulating results.

**Administration Review**

Before the 1990s, the Assistant Secretary and OMB typically reviewed projects for technical and policy compliance prior to seeking congressional construction
authorization. Although the P&G do not differentiate between individual or local interests and national benefits during the evaluation and development of a project, OMB is required under Executive Order 12322 to consider whether a project serves a federal interest as defined by the President’s priorities. Like the internal division and headquarters reviews, these senior-level Administration reviews appear to have evolved from a technical and policy review to a more general “policy compliance review” in an attempt to cut administrative costs and streamline project development. Moreover, since the mid-1990s, Congress has authorized numerous projects prior to a full review by the Assistant Secretary of Civil Works and OMB.

Environmental and some taxpayer groups want increased oversight by the Assistant Secretary and OMB to protect the national interest and balance what they see as a strong influence by Members of Congress who seek projects in their districts. Opponents of reform contend that current review protects the national interest, so additional civilian control is unnecessary.

According to some observers, attempts by the Clinton Administration to expand existing civilian oversight of the Corps in March 2000, after the whistleblower’s allegations became public, contributed to a breakdown in an already poor relationship between then-Chief of Engineers Ballard and then-Assistant Secretary Westphal. Staff of three Senate committees — Environment and Public Works, Armed Services, and Appropriations — jointly conducted an investigation that found no need for significant management reform, but revealed a systemic communication and management breakdown between the Chief of Engineers Office and the Office of the Assistant Secretary. The relationship between the Assistant Secretary and the Chief of Engineers was clarified through a joint memorandum in November 2000 signed by newly-appointed General Flowers and Assistant Secretary Westphal. Many critics of the Corps are not satisfied. They argue that the memorandum does not address the two causes of the limited input and oversight by senior Administration officials: (1) the Corps civil works program’s placement in the Department of the Army and (2) the congressional desire to fund specific projects.

Taxpayer groups and environmentalists posit that the limited review contributes to both unreliable feasibility studies and projects that are not economically justified and/or in the national interest. They call for a full review of projects by the Office of the Assistant Secretary and OMB before authorization. The Clinton Administration stated that projects authorized on the basis of only a Chief of Engineers report (or contingent on a Chief’s report), rather than following a review by the Administration, received insufficient review from a national perspective.

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39“Memorandum for the Secretary of the Army: Civil Works Management and Communications Clarifications” signed by Assistant Secretary Joseph Westphal and Chief of Engineers Robert Flowers on November 28, 2000.

Recent WRDAs have authorized projects in the feasibility phase by making their authorizations contingent on a Chief of Engineers report being available by December 31 of the year the WRDA is enacted. Reform advocates are particularly critical of this authorization procedure. They contend that contingent authorization rushes projects through critical stages of the development process (e.g., environmental impact assessment) and that congressional decisions are made without basic project information.

Opponents of greater civilian oversight argue that the existing project development procedures and the authorization and appropriation process provide sufficient protection of the national interest. They note that the Administration’s reviews are used to inform appropriating decisions, even if they are not available for authorization decisions. Others argue that the Administration’s input is not necessary because it is the prerogative of Congress to authorize projects for a variety of purposes and at variable costs and that Administration reviews can be manipulated to delay projects that conflict with the President’s priorities.

Independent Review and Local Advisory Groups

In the 1990s, the Corps reduced its internal review of projects. Headquarter and division-level technical review were devolved to the districts to cut administrative costs and to streamline planning. Policy review by the division, headquarters, and Assistant Secretary were consolidated into a single policy compliance review in Washington, DC. The 106th Congress in the Water Resources Development Act of 2000 (WRDA, P.L. 106-541, §216) directed the Corps to contract with the National Academy of Sciences to study the feasibility of establishing an independent review panel for Corps studies. Its July 2002 report recommended that large-scale Corps projects be independently reviewed by experts outside the agency. In response to the criticism, the Corps initiated during FY2002 an additional internal staff review of project justifications by the Office of the Assistant Secretary for Civil Works.

Environmentalists and some fiscal conservatives contend that an external review of projects is necessary. They claim that it would not only counter deficiencies in the existing internal review and biases in the project development process, but also improve national-level oversight. They are also calling for the establishment of local advisory groups for projects as mechanisms for reaching consensus on project objectives and design, and opening up the decision-making process to the public. In their view, an institutional-cultural bias for large construction projects affects the objectivity of Corps reports and discourages internal criticism. They argue that external expert review and local advocacy groups are needed to provide additional input, including input by stakeholders opposed to a project.

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42 Destruction by Design: The U.S. Army Corps of Engineers’ Continuing Assault on America’s Environment, a December 1999 report by the Gulf Restoration Network, includes numerous recommendations for improving public participation at the Corps and is available at: [http://www.gulfrestorationnetwork.org/wetlands/Destruction%20by%20Design.htm].
Those opposed to increasing external input and review argue that the existing project development process incorporates sufficient review and opportunities for public input; they believe that more review will only delay projects and increase costs. In particular, they argue that the various internal reviews eliminate the need for what they see as a redundant external review. They also argue that the analyses undertaken during project development inevitably require professional judgment calls and that Corps staff perform their duties as responsible professionals.

### Environmental Impacts of Projects

The Corps evaluates the environmental impact of projects under NEPA and other environmental laws. During this evaluation process, if the Corps determines that actions are needed to mitigate project impacts, mitigation plans are developed as part of the feasibility analysis. The Chief’s Environmental Advisory Board, which was created in 1970 to provide advice on developing policy and procedural recommendations for engineering and economic development in an environmentally sustainable manner, had not been active in the last decade. While testifying in March 2001, General Flowers announced the reactivation of the Board in April 2001, which now meets twice annually.\(^{43}\)

A fundamental criticism of the Corps is that the environmental damages of some navigation and flood control projects supported by the agency outweigh their national benefits. Some Corps critics allege that the Corps is not complying with environmental regulations and that the districts are too autonomous, resulting in varied implementation of national policy. Environmentalists argue that the Corps has not been held to the same mitigation standards as other developers, particularly in regards to wetlands. Proposed reforms include full wetlands mitigation for environmental impacts of projects by replacing habitat destroyed acre-for-acre and simultaneous appropriations for mitigation and construction. Other proposals have the Environmental Advisory Board of the Corps evaluating projects during the reconnaissance phase to determine if environmental impacts can be successfully mitigated. Opponents of such changes argue that the existing planning process and regulations provide sufficient environmental protection and further requirements would only cause delay and increase costs.

### Mission Focus and Expansion

In recent years, Congress has through authorizations and appropriations assigned to the Corps new responsibilities outside of its traditional mission. This has raised concerns that the agency is spread too thin and losing focus on its core competencies. Most notable has been the dramatic growth in the number and size of ecosystem restoration projects, such as the Corps’ activities in the Florida Everglades. Other non-traditional responsibilities that Congress has given to the Corps include: beach nourishment, brownfield revitalization, nuclear waste cleanup, and a limited number of wastewater treatment and water supply projects.

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The 107th Congress and the Bush Administration differed on how to define the core mission of the Corps. In H.Rept. 107-112, the House Committee on Appropriations stated: “The Committee fully supports the environmental restoration efforts being undertaken by the Corps, but urges it to maintain a balance in its work and not lose sight of its traditional missions of navigation and flood control.” The Administration’s FY2003 budget request for the Corps stated the agency’s main missions as projects that: “1) aid commercial navigation; 2) protect citizens and their property from flood and storm damages; and 3) protect, restore and manage environmental resources.” The Administration also expressed its perspective that Congress’ directing the Corps to work on non-traditional projects (excluding environmental restoration) results in inefficiencies and slows the completion of priority projects.

Fiscal conservatives and taxpayer groups argue that the Corps’ mission should be limited so that federal appropriations are focused on priorities with national benefits and on needs that are not addressed effectively by the private sector and other agencies (e.g., U.S. Environmental Protection Agency on brownfield revitalization and wastewater treatment). Taxpayer groups, groups working to contain urban sprawl, and some Members are uncomfortable about authorizations and limited appropriations for the Corps to disburse grants for community wastewater treatment and water supply. Prior to 1992, the Corps’ involvement in municipal water infrastructure was limited to water supply from its reservoirs, paid for by local project sponsors. Financing community water and sewer systems has traditionally been the responsibility of local government, with the federal government providing some directed grants and low-interest loans.

On the topic of mission expansion, some Corps observers who generally oppose reform share an interest with reform supporters in limiting the agency’s mission. Both groups argue that new responsibilities dilute efforts and funding. The two groups differ on how to limit the Corps’ mission. Environmentalists generally support ecosystem restoration work, but discourage further expansion of the agency’s mission. Local sponsors of navigation and flood control projects, who generally oppose reform, fear that the Corps’ growing involvement in environmental restoration and other new responsibilities detracts from the traditional missions. This concern became particularly acute following the authorization of $0.7 billion in federal funding for the first phase of the $7.8 billion Comprehensive Everglades

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44Both the Clinton Administration’s legislative program and S.2335 (State and Local Brownfield Revitalization Act) in the 106th Congress proposed a $100 million authorization for Corps remediation at publicly-owned brownfield sites affecting waterways. The Senate Environment and Public Works Subcommittee on Transportation and Infrastructure hearing on May 23, 2000 included much testimony supporting Corps involvement in brownfield revitalization. Among the reasons cited were consistency with the Corps’ existing mission, activities, and competencies. The testimony is available at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=106_senate_hearings&doci d=f:68423.wais].

45For more on the federal financing of water projects and programs, see CRS Report RL30478, Federally Supported Water Supply and Wastewater Treatment Programs.
The numerous other large restoration projects under development, including projects for the Columbia River, Missouri River, coastal Louisiana and Great Lakes also contribute to this concern. Beneficiaries of projects in new mission areas argue against any restrictions on the Corps’ mission. They contend that the Corps is uniquely able to work in a number of areas that may be outside its traditional mission but in national interest.

**Conclusion**

Since the 1970s, reform of the Corps and its civil works program has been attempted many times, with few changes enacted. Interest during the 107ᵗʰ Congress in improving the agency’s policies and procedures surfaced in response to budgetary concerns, allegations that Corps officials manipulated studies, and a backlog of construction and maintenance activities. The basic reform issues raised were: what to include in the civil works mission; how to maximize the effectiveness of federal appropriations; and whether project approval, review, and environmental mitigation policies needed changing.

Beginning in the late 1990s, some fiscal conservatives joined environmental groups and other reform advocates in arguing that many Corps projects generate significant environmental damage with little national economic benefit. To improve the situation, they support increasing the input from the Administration, independent experts, and project stakeholders. They argue that this input would offset a perceived bias at the Corps toward large construction budgets. Environmental groups support the Corps recent involvement in ecosystem restoration projects and argue for greater attention to and mitigation of environmental impacts of Corps projects. Groups benefitting from navigation and flood control projects favor limiting the agency’s activities to the two traditional mission (navigation and flood control). They are generally content with existing project development processes. In contrast, groups benefitting from projects in new mission areas support the Corps’ expansion and vary on their stances on other reform issues. All these interest groups pressed the 107ᵗʰ Congress to decide on the nature of the civil works program and how best to direct the Corps’ activities given fiscal constraints.

The Bush Administration pushed the issue of improving the Corps’ performance through its proposals for focusing fiscal resources on priority projects with national benefits. The FY2003 budget request reduced funds for studying new Corps projects and targeted funds for completing ongoing priority projects. The request emphasized projects and programs in commercial navigation, flood damage reduction, and environmental restoration and enhancement.

Members of the 107ᵗʰ Congress responded to interest in civil works reform by introducing five bills that proposed changes related to fiscal efficiency, environmental impacts, and project development procedures. Many of the bills included provisions for improved public access to project information and analyses.

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⁴⁶For more information on Everglades restoration, see CRS Report RS20702, *South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan.*
increased public participation and independent review, stricter benefit-cost criteria, stronger environmental mitigation requirements, and more deauthorizations of projects. As is often the case, the 107th Congress was confronted with making difficult choices among competing priorities while making annual appropriations and considering WRDA authorizations and Corps reform bills. Similar to the conclusion of many past efforts to change the Corps, the 107th Congress enacted no Corps reform legislation; nor did it enact a WRDA in 2002. This lack of legislation underplays the supporting and opposing attention that Corps reform received during the 107th Congress.