

CRS Issue Brief for Congress

Received through the CRS Web

Army Corps of Engineers Civil Works Program: Issues for Congress

Updated May 21, 2003

Nicole T. Carter and Pervaze A. Sheikh
Resources, Science, and Industry Division

CONTENTS

SUMMARY

MOST RECENT DEVELOPMENTS

BACKGROUND AND ANALYSIS

 Appropriations and Budget Request

 Authorizations and WRDA

 Project Development Reform

 Operational Changes

 River Management

 Ecosystem Restoration

LEGISLATION

FOR ADDITIONAL READING

Army Corps of Engineers Civil Works Program: Issues for Congress

SUMMARY

The 108th Congress is likely to address ongoing issues related to the civil works program of the U.S. Army Corps of Engineers (Corps). Under civil works, the Corps primarily plans, constructs, and operates water resources facilities for the nation, such as flood control, navigation, and ecosystem restoration projects.

Appropriations and Budget Requests. Funding for the civil works program has often been contentious between the Administration and Congress, with appropriations typically providing more funding than was requested. The FY2004 budget request would cut civil works spending by 9% and reduce federal outlays by expanding the use of two trust funds.

Authorizations and WRDA. Congress typically authorizes Corps projects and makes policy changes as part of a biennial consideration of a Water Resources Development Act (WRDA). The most recent WRDA was enacted in 2000. A WRDA was reported in the House in 2002, but no vote was taken. It appears that the House Transportation and Infrastructure Subcommittee on Water Resources and Environment will pursue a WRDA in mid-2003. However, the Senate Environment and Public Works Subcommittee on Transportation and Infrastructure appears to have given priority to reauthorizing the Transportation Equity Act and has indicated it is unlikely to consider a WRDA before late 2003.

Project Development Reform. Conflict among Members of the 107th Congress and other interested parties over changing the way the Corps evaluates and undertakes projects reportedly influenced the decision not to vote

on a WRDA in 2002. No bills aimed at reforming Corps project development have been introduced during the 108th Congress, but a House Corps Reform Caucus has been reinstated.

Operational Changes. The Bush Administration has undertaken two initiatives that may change Corps operations. One is aimed primarily at increasing competition between public and private sources of services for federal agencies. The other is an Army-wide effort to find ways to focus on its core war-fighting competencies that encompasses a review of the agency's civil and military activities.

River Management. Widespread drought conditions in recent years have raised some fundamental questions about Corps management of the nation's rivers, particularly the Missouri River. Questions include whether some river uses should take precedence over others and if the current institutional arrangements for river management are appropriate. In this context, both the annual and long-term operations of the Missouri River are likely to be debated during the 108th Congress.

Ecosystem Restoration. During the last decade, Congress has expanded Corps involvement in ecosystem restoration. The Corps plays a significant coordination role in restoring the Florida Everglades. Implementation problems with Everglades restoration have raised concerns about the feasibility of such efforts and the proper federal role. More restoration projects with Corps participation are being planned and may be proposed during the 108th Congress.



MOST RECENT DEVELOPMENTS

On April 22, 2003, the Corps and the U.S. Fish and Wildlife Service (FWS) announced a negotiated agreement on an operating plan for the Missouri River mainstem dams for 2003. In response to the plan, the Attorney General of North Dakota sued the Corps in the U.S. District Court in Bismark. On April 29, the court ordered the Corps to reduce scheduled releases from Lake Sakakawea by 12% with the aim of protecting its sport fishing industry.

On April 9 following an April 1 nomination hearing, the Senate Committee on Environment and Public Works favorably reported on the nomination of John Paul Woodley for Assistant Secretary of the Army for Civil Works. Several Members of Congress have placed holds on floor consideration of the nomination.¹

A total of three hearings by committees of both chambers have been held on the agency's civil works budget for FY2004. Another recent Corps-related hearing was on the science of the Florida Everglades Restoration held by a House Appropriations Subcommittee on Interior and Related Agencies. A hearing that examined the use of independent peer review by various agencies including the Corps was held on March 5 by the House Transportation and Infrastructure Subcommittee on Water Resources and Environment.

Title I, Division D of P.L. 108-7, the Consolidated Appropriations Resolution for FY2003, has several controversial provisions involving the Corps. Issues raised included limiting attempts to study changing the Corps' civil works responsibilities and operations, Missouri River management for this drought year, and funding for Devils Lake (ND) and the Yazoo (MS) Basin Backwater Plant.

BACKGROUND AND ANALYSIS

The Corps is a unique federal agency located in the Department of Defense with military and civilian responsibilities; it is staffed predominantly by civilians. Through its military program, the Corps provides engineering, construction, and environmental management services to the Army, Air Force, government agencies, and foreign governments. The Corps military program is currently active in restoring the capability for oil production, oil refining, and gas processing, as well as other activities, in Iraq.² This report focuses not on the military mission but on the congressional issues related to the Corps civil works program.

At the direction of Congress, the Corps plans, builds, operates, and maintains a wide range of water resources facilities under its civil works program. The Corps' oldest civil

¹ For background information on holds in the Senate, see CRS Report 98-712GOV, "*Holds*" in the Senate.

² More information on the Corps military program and its activities in Iraq are available, respectively, at [<http://www.usace.army.mil/military.html>] and [<http://www.hq.usace.army.mil/cepa/iraq/iraq.htm>].

responsibilities are creating navigable channels and controlling floods. During the last decade, Congress has increased Corps responsibilities in the areas of ecosystem restoration, environmental infrastructure, and other non-traditional activities, such as disaster relief and remediation of formerly used nuclear sites. The economic and environmental impacts of Corps projects can be significant locally and regionally, and at times are quite controversial.

Appropriations and Budget Request. The civil works budget of the Corps consists primarily of funding for the planning, construction, and maintenance of specific projects; appropriations are made as part of the Energy and Water Development Appropriations bills. Funding for Corps civil works has often been a contentious issue between the Administration and Congress, with appropriations typically providing more funding than the Administration has requested, regardless of which political party controls the White House and Congress. The FY2003 bill followed suit: at \$4.6 billion, it was \$457 million (11%) above the requested amount. For FY2004, the President requested \$4.19 billion, a decrease of \$436 million (9%) from FY2003.

At hearings on the Corps FY2004 budget, some Members of Congress expressed their displeasure with the Administration's proposed budget. On March 26, 2003, the House Appropriations Subcommittee on Energy and Water Development held a hearing on the Corps civil works budget for FY2004. The Senate Appropriations Subcommittee on Energy and Water Development on March 5, 2003, held a hearing on the same subject. The House Transportation and Infrastructure Subcommittee on Water Resources and Environment also held a hearing on the Corps FY2004 budget on February 27, 2003.

The President's FY2004 request is contentious because not only would it reduce the civil works budget but also it contains legislative proposals for decreasing federal outlays by expanding the use of the Inland Waterways Trust Fund (IWTF) and the Harbor Maintenance Trust Fund (HMTF). IWTF monies derive from a twenty cents per gallon fuel tax imposed on vessels engaged in commercial waterway transportation, plus investment interest. HMTF monies derive from receipts of a 0.125% ad valorem (i.e., percent of value) tax imposed upon commercial users of ports.³ The IWTF and HMTF have built up authorized, unappropriated balances since the early 1990s. These trust funds require annual appropriation by Congress. Spending of the trust funds is considered part of the Corps budget and, therefore, is subject to the congressional budget ceiling for energy and water development appropriations. The Administration proposes enacting the changes to the trust funds through the appropriations process for FY2004. To make the changes permanent, an authorization would typically be sought through the next Water Resources Development Act (WRDA).

The Administration proposes expanding the use of the IWTF to include *operation and maintenance* (O&M) of the inland waterway system, which historically has been paid with appropriations of general funds. The IWTF fund has been restricted to funding one-half of construction and major rehabilitation, with money from the trust fund matched by general funds appropriated by Congress. Under the Administration's proposal, the IWTF would finance 25% of the O&M cost of eight waterways that have averaged annually more than five billion ton-miles of traffic over the past five years, and 50% of the O&M cost for the

³ For more information on the HMTF and the tax supporting it, see CRS Report RL31264, *Harbor Maintenance Funding*.

remaining 20 waterways in the inland and intracoastal waterway system. The fund was originally authorized under the Inland Waterways Revenue Act of 1978 (P.L. 95-502). The Administration proposes increasing the amount spent from the trust fund from \$104 million in FY2002 and an estimated \$84 million in FY2003 to \$256 million in FY2004 — \$110 million for construction and \$146 million for O&M. According to the President's FY2004 budget documents, the increased withdrawal would reduce the IWTF balance from an estimated \$433 million at the end of FY2003 to \$287 million at the end of FY2004. The Inland Waterways Users Board — an 11-member industry advisory committee established by WRDA 1986 (P.L. 99-662) — argues that the IWTF's growing balance is not due to a lack of needed construction but results from what it believes are insufficient appropriations by the federal government for waterway construction projects.⁴ The Board calculates that the Administration's proposal would empty the fund in three years, if current collections are maintained, and it expresses concerns that this proposal would lead to a dramatic increase in the fuel tax.

The Administration also proposes expanding the use of the Harbor Maintenance Trust Fund to cover all federal costs associated with coastal port and channel *construction*. Use of the HMTF historically has been limited to financing 100% of harbor O&M and major rehabilitation costs. Under the Administration's proposal, the HMTF would finance *all* federal costs associated with the construction of coastal ports and channels. Federal responsibility for harbor construction projects varies from 50-90%, with local responsibility increasing with the harbor's depth.⁵ The fund was authorized in WRDA 1986. The Administration's proposal would increase the use of the trust fund from \$653 million in FY2002 and an estimated \$769 million in FY2003 to \$826 million in FY2004 — \$212 million for construction and \$600 million for O&M. Port and river trade groups responded quickly to the FY2004 budget request with criticisms that the Administration was raiding these funds for an unprecedented use of the money that had not been endorsed by the users paying the fees. They also expressed concern about the impact of this expansion on O&M spending. One of their primary arguments against the expanded use of the HMTF is that the federal government would be covering all of its fiscal responsibilities for harbors through a trust fund financed by users even though harbors provide national benefits. They argue that the HMTF's growing balance is not the result of a lack of needed maintenance but the result of insufficient appropriations from the HMTF for maintenance. The increased withdrawal would not cause the HMTF balance to drop, since revenues are expected to be \$880 million in FY2004.

Another change proposed by the Administration in its FY2004 budget request is direct funding of hydropower maintenance activities by three power marketing administrations (PMAs), which are federally-owned electric utilities. The proposal is listed in the Corps budget; however, the related legislative proposal is set out as part of the Department of Energy's budget because PMAs are part of the Department of Energy. Under the proposal, PMAs would pay the Corps at the beginning of the fiscal year (as opposed to the current

⁴ Inland Waterways Users Board, *17th Annual Report to the Secretary of the Army and the United States Congress with Appendices* (Alexandria, VA: February 2003), available at [<http://www.iwr.usace.army.mil/usersboard/UBAR2003final.pdf>].

⁵ For information on harbor cost-sharing and cost-sharing of other Corps activities, see CRS Report RS20866, *The Civil Works Program of the Army Corps of Engineers: A Primer*.

practice of paying at the end) for planned hydropower operation and maintenance expenses. This process is similar to the process currently used by the Bonneville Power Administration. A similar proposal was made by the Administration for FY2003 but was not enacted.

Authorizations and WRDA. Congress typically authorizes Corps projects as part of a biennial consideration of a Water Resources Development Act (WRDA). The trend in the last decade has been to authorize projects earlier in the development and review process than in the past. Congress might authorize a project following a review by the Assistant Secretary of the Army for Civil Works and the Executive Office of the President, Office of Management and Budget (OMB) and a favorable Chief of Engineers report; on the basis of a favorable Chief's report without senior administrative review; or contingent on a favorable Chief's report being completed within a year.⁶ Most projects authorized since WRDA 1996 have not undergone senior administrative or OMB review prior to receiving congressional authorization.

Contingent authorization, authorization prior to OMB review, and another practice — authorization in appropriations bills — have been criticized by some Members of Congress and Corps critics. The critics contend that contingent authorization rushes projects through critical stages of the development process and that congressional decisions are made without basic project information. They also argue that authorizations prior to senior review by the Administration result in insufficient review from a national perspective. Under Executive Order 12322, OMB is required to review the Chief's report for consistency with the policy and programs of the President, the principles guiding federal water projects, laws, and regulations. Some Members of Congress and Corps critics view authorizations in appropriation bills as circumventing the WRDA process.

There also has been criticism regarding the type of projects authorized in recent WRDAs. Local sponsors of navigation and flood control projects fear that the Corps' growing involvement in ecosystem restoration and other new responsibilities detracts from the agency's more traditional missions. Those supporting Corps involvement often assert that the Corps is redressing harm caused by its earlier projects and that the Corps has unique capabilities to perform this work. The President's FY2004 budget request classifies aquatic ecosystem restoration as a main mission of the Corps. During the 108th Congress, more ecosystem restoration projects will likely be proposed for authorization (see **Ecosystem Restoration**). "Environmental infrastructure" (i.e., projects for municipal water supply and wastewater treatment facilities and surface water resource protection and development not necessarily associated with other Corps projects) is another category of projects recently added to Corps activities. Beginning with authorizations in WRDA 1992 (P.L. 102-580), Congress has authorized more than 200 environmental infrastructure projects and has provided appropriations for some. The President's FY2004 budget request includes no funding for environmental infrastructure projects.

⁶ Authorizations contingent on a Chief's report have become a common practice as seen by the last three WRDAs. At the time of the passage of the most recent WRDAs, a final Chief's report was not available for 28 of the 30 projects authorized in §101, Project Authorizations, of WRDA 2000 (P.L.106-541), 15 of the 45 projects authorized in §101 of WRDA 1999 (P.L.106-53), and 13 of the 31 projects authorized in §101 of WRDA 1996 (P.L. 104-303).

If, and how, the next WRDA may address these issues is yet to be determined. The last WRDA enacted was in 2000. A WRDA was reported by the House Committee on Transportation and Infrastructure in 2002 (H.R. 5428, H.Rept. 107-717), but no floor action was taken. No related Senate bills were introduced. It appears that the House Transportation and Infrastructure Subcommittee on Water Resources and Environment will pursue a WRDA in mid-2003. However, the Senate Environment and Public Works Subcommittee on Transportation and Infrastructure appears to have established as its first priority for 2003 reauthorization of the Transportation Equity Act, indicating that consideration of WRDA is unlikely until late 2003 or early 2004.

Project Development Reform. Criticism of Corps project development has been raised for decades, particularly since the growth of the environmental opposition to large water resources development projects in the 1970s. Although Congress passed greater local cost-sharing requirements in 1986, it has enacted few changes to how the Corps develops and evaluates projects.

In response to two events in 2000, support for changing how the Corps undertakes and reviews projects has gained some momentum. First, *The Washington Post* published a series of articles raising questions about the integrity of the Corps planning process. Second, a Corps economist went public as a “whistleblower” contending that Corps officials manipulated a benefit-cost analysis to support expensive lock improvements on the Upper Mississippi River-Illinois Waterway. Although some Members support Corps reform, other Members along with agriculture and navigation industries are satisfied with existing practices at the agency.

The Bush Administration has generally approached reform as a fiscal issue linked primarily to the agency’s growing construction backlog. Over the longer term, many more projects have received authorization than appropriations, resulting in a backlog consisting of over 500 “active” authorized projects with a federal cost of approximately \$44 billion.⁷ To reduce the construction backlog, the President’s FY2004 budget request focuses the agency’s civil works activities on specific projects within the agency’s water resources missions of navigation, flood control, and environmental restoration. During the 1990s, Congress continued biennial authorizations of navigation and flood control projects and began authorizing more environmental activities and non-traditional projects.

In contrast, legislative proposals during the 107th and 106th Congresses consisted less of fiscal reforms and more of improved project development processes and review procedures. In 2003, Corps officials testified on how the agency is “transforming” itself in response to the criticism levied against its practices. Corps officials defended the integrity of the agency’s review process and detailed recent efforts to further strengthen it. For example, the Administration’s FY2004 budget request includes \$3 million for a peer review panel to examine selected projects and \$2 million for *ex post facto* studies of 15 to 25 completed projects to compare the estimated and actual project costs and benefits.

⁷ Active 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.

Notwithstanding the measures already taken and those planned by the Administration, many critics maintain that more fundamental changes are necessary. Bills proposed in previous Congresses demonstrate both the support of some Members of Congress for Corps reform and the controversial nature of such measures. Interest in Corps reform led to the introduction of six bills during the 107th Congress and three bills during the 106th Congress.⁸ However, no bills significantly reforming Corps procedures have been enacted. No Corps reform bills have been introduced during the 108th Congress, but a House Corps Reform Caucus has been reinstated. Supporters of reform view the next WRDA as a possible vehicle for reform. Corps reform could also be considered as part of the FY2004 Energy and Water Development Appropriations bill.

Operational Changes. There are currently two initiatives to change the operation of the Corps civil works program: the government-wide President's Management Agenda and an Army initiative referred to as the Third Wave. Neither initiative specifically targets the Corps, but both encompass Corps activities. The President's Management Agenda was undertaken by the Bush Administration as part of a movement toward more entrepreneurial government; one of the five components of the President's Management Agenda is a competitive sourcing initiative. The President's Management Agenda directed executive agencies to competitively source commercial activities in order to produce quality services at a reasonable cost through efficient and effective competition between public and private sources. The Administration mandated for FY2002 and FY2003 the competition of 5% and 10%, respectively, of the positions performing commercial activities at agencies, including the Corps.⁹

⁸ During the 107th Congress, bills in both chambers — H.R. 1310, H.R. 2353, S. 646, S. 1987, and S. 2963 — would have changed how the Corps managed its civil works program. A related bill — S. 3036 — proposed a commission to assess the agency's performance. Corps reform bills were also introduced during the 106th Congress — H.R. 4879, H.R. 5459, and S. 2309. Although none of these bills passed, the 106th Congress did enact some provisions related to Corps reform in Title II of WRDA 2000. These provisions were essentially scaled-down versions of reforms proposed in H.R. 4879. Section 222 of the WRDA 2000 required procedures to enhance public participation in 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 National Academy of Sciences 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." In response to this mandate, the Academy's National Research Council July 2002 report *Review Procedures for Water Resources Planning* 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, *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.

⁹ The Federal Activities Inventory Reform (FAIR) Act (P.L. 105-270) requires agencies to submit inventories of their commercial activities to OMB. The FAIR Act inventories are lists compiled by agencies of the commercial activities performed by their employees. A "commercial activity" is a not inherently governmental good or service that can be obtained from the private sector. Photography, data processing, and management support services are examples of categories of commercial activities. In contrast, an inherently governmental activity intimately relates to the
(continued...)

The Army's Third Wave initiative is broader than the President's Management Agenda. The Third Wave is a search for ways to improve the Army's operations by focusing its energies on its core war-fighting competencies. This includes a review of all positions and functions (i.e., entire areas of responsibilities and missions, such as wetlands regulation) that are not part of the Army's core military competencies. Actions that can be considered under the Third Wave for non-core functions and positions include competitive sourcing, privatization, transfer of responsibilities to other agencies, and divestiture. A significant portion of the Corps workforce was included in the first phase of the Third Wave because much of the water resources work performed by the Corps is not considered essential to the Army's war-fighting competencies.

Section 109 of Title I, Division D of P.L. 108-7, the Consolidated Appropriations Resolution for FY2003, prohibits using funds to study or implement any "plans privatizing, divesting or transferring of any Civil Works missions, functions, or responsibilities" without specific direction by Congress. To comply, the Army is limiting its Third Wave review of the Corps during FY2003 to competitive sourcing, which it distinguishes from privatizing. No implementation actions under the Third Wave are anticipated to be undertaken before FY2004. Implementation is expected to begin in FY2004 and continue through FY2009. The Army will likely need congressional approval for many of the actions that it may propose as part of the Third Wave.

River Management. A fourth year of moderate-to-extreme drought in the Missouri River basin has contributed to an ongoing debate on the operations of the basin's dams. This debate raises some fundamental questions about water resources management in the nation, such as whether some river uses should take precedence over others and if the current institutional arrangements for river management are adequate and appropriate. The timing and the quantity of water releases affect uses of the river such as barge traffic, threatened and endangered species protection, water supply, and river recreation. Differing opinions on how to best manage the Missouri River during a drought have drawn attention to the operating plan for 2003 and the ongoing revision of the Master Manual, which guides the operation of the Missouri River's mainstem dams. The manual has been in revision for 14 years as the Corps has struggled with how to satisfy all of the authorized purposes of the Missouri River mainstem dams: flood control, hydropower, water supply, water quality, irrigation,

⁹ (...continued)

public interest, thus mandating performance by government employees. This includes activities that require the exercise of discretion in applying government authority or the making of value judgments, such as planning and decision making. (Executive Office of the President, Office of Management and Budget, "Policy Letter on Inherently Governmental Functions," *Federal Register*, vol. 57, no. 190, September 30, 1992, pp. 45100.) More information is available in CRS Report RL31024, *The Federal Activities Inventory Reform Act and Circular A-76*. The current definitions of activities for Corps civil works in the FY2000 inventory are available at [<http://www.asamra.army.pentagon.mil/fair/USACEFunctionsCodeDictionaryOMBVersion.htm>]. There are a total of 23,335 positions at the Corps that are commercial, according to the FAIR Act inventories from 2001, which are available at [<http://web.lmi.org/fairnet/home.html>]. Of these 23,335, there are 16,525 positions classified as requiring competitive sourcing under Circular A-76 and 6,810 positions that can be directly outsourced because price is not the primary concern. It appears that the Corps is looking to refine its FAIR Act inventories to include 20,659 (not 23,335) commercial positions (Corps presentation from August 2002, available at [<http://www.hq.usace.army.mil/cp18conf/8-27-02/Powerpoint/Ray's%20CP-18%20Aug%2002.ppt>]).

navigation, recreation, and fish and wildlife protection. The congressional authorizations of these dams generally do not stipulate priority purposes or a hierarchy among purposes. Members of Congress have tried to provide direction on Missouri River management to the Corps through the appropriations process in the past three years.

After *collaborative deliberation* between the Corps and the Fish and Wildlife Service ending in late April 2003, the agencies announced an agreement that establishes a release schedule for the Missouri River mainstem dams for 2003 that meets minimum service navigation targets while aiming to protect two threatened and endangered bird species during their May 1 through August 15 nesting season. This is a critical period for federally listed endangered bird species and for the river transportation industry. The deliberations and resulting release regime represent a negotiated response to the competing needs of species protection, navigation, and water conservation that will be applied exclusively during this drought year. The negotiated agreement does not affect the Corps' earlier announcements that it will provide only minimum navigation service (a 1-foot shallower channel than under full service) on the Missouri River and that it will reduce the navigation season by six days in November, subject to a July 1 storage check.

In response to the operating plan, the Attorney General of North Dakota sued the Corps in the U.S. District Court in Bismark for harming the fisheries of Lake Sakakawea behind Garrison Dam by drawing down the reservoir to satisfy lower basin water demands for navigation. On April 29, the court ordered the Corps to reduce the scheduled releases from Lake Sakakawea by 12%. North Dakota officials hope this will preserve the lake's sport fishing industry. The Governor of North Dakota has also asked the Army Inspector General to investigate if the Corps decisions on the 2003 operating plan violates the agency's own policies for managing the Missouri River.

Lawsuits on the management of the Missouri River are being used not only to legally challenge the specifics of operations of that river but also national river management practices. Many view the conflict in the Missouri River as a harbinger of increasing competition for water in basins across the nation and as a testing ground for legal action to induce changes in river management policy. Particularly notable is a lawsuit filed in February 2003 by a coalition of ten national and regional conservation organizations in the U.S. District Court for the District of Columbia against the Corps and the FWS. The lawsuit challenges actions of the agencies regarding operations of the mainstem dams and the adverse impacts of operations on threatened and endangered species, citing operations during the last 13 years while noting particular grievances with recent operations. The coalition seeks a court order for the Corps to operate according to a 2000 FWS Biological Opinion (under the Endangered Species Act) that stipulates a hydrologic regime that more closely mimics natural flows.

Current attention to Missouri River management has raised interest in reconsidering institutional arrangements. With the growing recognition of the multiple uses of rivers and interest in ecosystem restoration, more consensus-based institutional arrangements are being tested, such as in the Florida Everglades. (See **Ecosystem Restoration** for more information on the Everglades.) *Missouri River Ecosystem: Exploring the Prospects for Recovery*, a January 2002 report by the National Research Council, describes how the states and federal government have been unable to devise an effective basin-wide water governance structure, resulting in the Missouri River being managed almost exclusively by the Corps of

Engineers. A conclusion of the report is that the lack of a well-structured, flexible, and updated mechanism for coordinating current interests in the basin is a barrier to avoiding conflict and improving dam operations and environmental conditions. Senator Tom Daschle has indicated that he may introduce legislation that proposes to remove Missouri River management responsibilities from the Corps.¹⁰

Ecosystem Restoration. The Corps has been widely criticized for the environmental harm its water resources projects may cause to sensitive ecosystems, such as the Florida Everglades and Coastal Louisiana. To address this criticism, the Corps has adopted environmental operating principles and expanded its professional development programs and hiring to support greater environmental protection in its project development processes. The most dramatic change in Corps environmental protection efforts in the last two decades has come with the reworking of its existing projects to provide more than mitigation — actual ecosystem restoration. The Corps' largest involvement in a restoration efforts is in the Florida Everglades, where a three-decade \$7.8 billion restoration program has begun. Ecosystem restoration is new for the Corps and remains a relatively young science;¹¹ these factors contribute to uncertainty on how to best undertake restoration and what outcomes to anticipate.

The authority for Corps involvement in ecosystem restoration has come from provisions within laws that authorize either Corps actions or specific restoration activities. WRDA 1986 (P.L. 99-662; 33 U.S.C. 2309a(c)), for example, provides the Corps with authority to modify existing project structures and operations to restore environmental quality within a Corps project area and the area affected by the project. WRDA 1990 (P.L. 101-640; 33 U.S.C. 2316) directs the Corps to adopt environmental protection as a primary mission of its water resources projects. Recently, the Corps has used or sought separate authorizations to conduct individual ecosystem restoration programs.

With the goal of restoring the unique wetlands of the Everglades, Congress authorized the Corps to implement the Comprehensive Everglades Restoration Plan (CERP) in WRDA 2000 (Title VI, P.L. 106-541). The principal objective of CERP is to redirect and store freshwater currently directed away from the Everglades to the ocean, and use it to restore the natural hydrologic functions of the south Florida ecosystem. Only an initial set of CERP projects was authorized in WRDA 2000. The next set is being prepared for approval by Congress, and it is anticipated that some will be ready for authorization during the 108th Congress. The federal government is paying for half the cost of construction, operation, and maintenance of CERP; the other half is borne by the State of Florida, and to a lesser extent, local tribes and other non-federal sponsors. Coordination of the strategies, policies, and plans for restoring the Everglades is the responsibility of the South Florida Ecosystem Restoration Task Force that includes representatives from federal agencies (including the Corps), the state, and local and tribal governments.

¹⁰ "Drought amplifies cries over Big Mo's low flow," *Argus Leader* (Sioux Falls, SD), April 27, 2003.

¹¹ Joy Zedler, "Progress in Wetland Restoration Ecology," *Trends in Ecology and Evolution*, vol. 15, no. 10 (2000):402-406.

Collaboration among stakeholders is an important feature of ecosystem restoration because of the need to collectively define restoration goals and coordinate restoration activities. Clear goals guide the direction of restoration efforts while the specific solutions to be applied are tested and adapted as restoration science and technology develop. This flexible learning-based approach to implementation, called adaptive management, is being used in restoration efforts across the country, including in the Everglades. While adaptive management provides the flexibility to incorporate new information, there are concerns that this flexibility could be used to manipulate restoration efforts.

Concerns about the manipulation of adaptive management in Everglades restoration have been raised recently due to a Florida State law that may affect phosphorous mitigation deadlines and goals.¹² In part to counter concerns about adaptive management, Congress maintains its involvement in Everglades restoration. It authorizes individual CERP projects in WRDAs and conducts oversight, as demonstrated by a March 26, 2003, hearing by the House Appropriations Subcommittee on Interior and Related Agencies on science and the Florida Everglades restoration.

Everglades restoration is seen by many as a groundbreaking large-scale restoration effort that will provide many lessons for other restoration projects being considered nationally. Consequently, its implementation and related congressional actions are being watched closely. For example, the fate of the Everglades effort and the role of the Corps are being observed by those involved in an effort to restore Coastal Louisiana's wetlands that is in the early stages of planning and is likely to exceed the cost of the Everglades restoration.¹³

Corps responsibilities in ecosystem restoration efforts are diverse. In the case of CERP, the Corps' role is multi-faceted. The Corps is the designated federal sponsor for several aspects of CERP and is responsible for promulgating programmatic regulations for the

¹² Florida State law (Chapter 2003-12) has generated significant controversy among stakeholders in the Everglades restoration. It amended Florida's Everglades Forever Act of 1994 by authorizing a new plan to mitigate phosphorus pollution in the Everglades. Some critics argue that it extends previously established phosphorus mitigation deadlines for the Everglades, and may compromise efforts to restore the Everglades, as well as jeopardize federal appropriations for CERP. Proponents of the bill argue that the new plan represents a realistic strategy for curbing phosphorus. On April 29, 2003, six Members of the U.S. House, including Chairman of the Appropriations Committee C.W. Bill Young, released a joint statement on the bill that encourages the Governor to veto the bill. The letter is available at [http://www.house.gov/appropriations/news/108_1/04everglades.htm], accessed May 21, 2003. The law is available at [<http://www.flsenate.gov/data/session/2003/Senate/bills/billtext/pdf/s0626er.pdf>], accessed May 21, 2003.

¹³ Wetland loss in Louisiana threatens the productivity of its coastal ecosystem, viability of several of its industries, and flood control in its cities. There are several reasons for wetland loss in Coastal Louisiana and several proposed ideas for restoring the ecosystem. The Corps is participating with other federal and state agencies in the development of a comprehensive coastal wetland restoration program for Louisiana. The agencies are working toward securing congressional approval for an Everglades-like program for restoration in Coastal Louisiana. The Corps expects to submit the Coastal Louisiana study to Congress by mid-2004.

restoration effort,¹⁴ administering 50% of the cost of restoration (when it is the federal sponsor), constructing several of the restoration projects, and sharing in the responsibility of water management and distribution. In contrast to restoration in the Everglades, the Corps does not have a leadership role in the restoration of the San Francisco Bay - Sacramento/San Joaquin Rivers Delta (Bay-Delta or CALFED) in California. The Corps supports this restoration in the Bay-Delta through flood control and water management projects and technical assistance with levee design and construction.

The growing role of the Corps in ecosystem restoration raises numerous questions, such as is the Corps the best agency to manage large-scale restoration projects and, more generally, how much is the nation willing to invest in restoration, and at what costs to flood protection and other traditional water uses. Some navigation and flood control interests have raised specific concerns that Corps resources and funding are being spread too thin with the addition of large-scale restoration efforts to its workload. In contrast, some environmental organizations, such as the National Wildlife Federation, argue that the Corps is making a much needed move to incorporate ecosystem restoration into the modern era of water resources management.¹⁵ Further, they welcome Corps involvement in restoration efforts. While continuing to criticize project development procedures at the Corps, they recognize that the Corps has some unique expertise, such as in wetlands creation, and the authority to implement restoration efforts. These environmental organizations stress the importance of balancing the Corps role in restoration with the role of resource agencies, such as the Department of the Interior's FWS. Other environmental groups, such as the Everglades Coalition, argue that the Corps may lack scientific expertise in all essential aspects of ecosystem restoration and that other federal agencies such as the Department of the Interior should partner with the Corps in some environmental restoration activities.

Ecosystem restoration has the potential to be applied in many places across the country, including in river systems such as the Missouri River. Many observers are watching the current restoration efforts to see among other things: how federal financial involvement proceeds, how restoration science and supporting technologies develop, how well adaptive management works, and ultimately how effective and costly is restoration.

LEGISLATION

P.L. 108-7 (Young)

Title I of Division D of the Consolidated Appropriations Resolution for FY2003 encompassed many controversial issues for the Corps. Section 109 included language that prohibits the use of funds to study or implement any "plans privatizing, divesting or transferring of any Civil Works missions, functions, or responsibilities" without specific

¹⁴ Programmatic regulations are expected to provide guidelines for project implementation, monitoring, adaptive management, and water allocation for restoration activities provided by CERP. A proposed version of the programmatic regulations was published in the *Federal Register*, vol. 67, page 50540 (August 2, 2002); the final version is expected in 2003.

¹⁵ Paula Tracy, "Wildlife Groups Push to Change Corps of Engineers," *The Union Leader*, (July 11, 2002), Sec. B, p. 3.

direction by Congress. Provisions on notably controversial projects included: \$5 million for construction of an emergency outlet from Devils Lake (ND) and \$10 million for the Yazoo (MS) Basin's Backwater Plant. Introduced January 7, 2003; signed into law February 20, 2003.

S. 531 (Dorgan)

The Missouri River Enhancement and Monitoring Act of 2003 establishes the Missouri River Basin Stakeholder Committee and the Missouri River Monitoring and Research Program. The stakeholder committee would consist of representatives of the states, tribes, and interested groups; the committee would be tasked with making recommendations to the federal agencies with jurisdiction over the river on means of restoring its ecosystem. The research program would be operated by the United States Geological Survey (USGS) and would be charged with conducting scientific analysis of the current conditions of the river's ecosystems, assisting with the monitoring and recovery of threatened and endangered species, and identifying means of restoring the ecosystem of the river. This research program aims to develop information on the affected species that would lead to a better understanding of how to manage the river for their protection. Introduced March 5, 2003; referred to Committee on Environment and Public Works.

S. 1097 (Feinstein)

CalFed Bay-Delta Authorization Act authorizes federal agencies to implement activities under the CALFED largely as framed in a Record of Decision (ROD) dated August 28, 2000. The bill authorizes Corps activities in the CALFED functional areas of ecosystem restoration, levee stability, science, and program management, oversight, and coordination. Introduced May 21, 2003. Referred to Committee on Environment and Natural Resources.

FOR ADDITIONAL READING

Background

CRS Report RS20866, *The Civil Works Program of the Army Corps of Engineers: A Primer*, by Nicole T. Carter and Betsy A. Cody.

CRS Report RS20569, *Water Resource Issues in the 108th Congress*, by Betsy A. Cody and H. Steven Hughes.

Budget and Appropriations

CRS Report RL31807, *Appropriations for FY2004: Energy and Water Development*, Coordinated by Carl Behrens and Marc Humphries.

Inland Waterways Users Board, *17th Annual Report to the Secretary of the Army and the United States Congress with Appendices* (Alexandria, VA: February 2003). Available at [<http://www.iwr.usace.army.mil/usersboard/UBAR2003final.pdf>].

Executive Office of the President, *Appendix: Budget of the United States Government, Fiscal Year 2004* (Washington, DC: GAO, 2003), pp. 847-857.

Reform

CRS Report RL30928, *Army Corps of Engineers: Civil Works Reform Issues in the 107th Congress*, by Nicole T. Carter.

National Research Council, *New Directions in Water Resources: Planning for the U.S. Army Corps of Engineers* (Washington, DC: National Academy Press, 1999).

National Research Council, *Inland Navigation System Planning: The Upper Mississippi River-Illinois Waterway* (Washington, DC: National Academy Press, 2001).

Executive Office of the President, *Budget of the United States Government, Fiscal Year 2004*, (Washington, DC: GAO, 2003) pp. 253-257 .

U.S. Dept. of the Army, *U.S. Army Inspector General Agency Report of Investigation (Case 00-019)*, (Washington, DC: December 2000) Available at [<http://www.osc.gov/reading.htm>].

The Washington Post series on the Corps, available at [<http://washingtonpost.com/wp-dyn/nation/specials/aroundthenation/corpssofengineers>].

Operational Changes

CRS Report RL31409, *The President's Management Agenda*, by Henry B. Hogue and Ronald C. Moe.

U.S. Department of the Army, Corps of Engineers Website on the Third Wave available at [http://www.hqda.army.mil/acsimweb/ca/third_wave.htm].

River Management

American Rivers, et al. v. United States Army Corps of Engineers and United States Fish and Wildlife Service (1:03CV00241,), United States District Court, District of Columbia. Available at [<http://www.amrivers.org/docs/moriverlawsuit.pdf>].

National Research Council, *The Missouri River Ecosystem: Exploring the Prospects for Recovery* (Washington, DC: National Academy Press, 2002).

U.S. Army Corps of Engineers, Northwest Division, *Missouri River Mainstem System 2002-2003 Annual Operating Plan* (Omaha, NE: Jan. 2003). Available at [<http://www.nwd.usace.army.mil/pa/endang-species.htm>] with other documents related to the 2003 operating regime and final agreement between the Corps and FWS.

U.S. Army Corps of Engineers, *Revised Draft Implementation Plan for the Final Biological Opinion on Operation of the Missouri River Main Stem Reservoir System, Operation & Maintenance of the Missouri River Bank Stabilization & Navigation Project, & Operation of the Kansas River Reservoir System* (Omaha, NE: Aug. 2001). Available at [<http://www.nwd-mr.usace.army.mil/mmanual/mast-man.htm>].

U.S. Department of the Interior, Fish and Wildlife Service and Department of the Army, Corps of Engineers, *Missouri River Final Biological Opinion*, (Nov. 2000). Available at [<http://www.r6.fws.gov/missouririver/mediapacket/Congressional.htm>].

Ecosystem Restoration

CRS Report RS20702, *South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan*, by Nicole T. Carter

CRS Report RS21331, *Everglades Restoration: Modified Water Deliveries Project*, by Pervaze A. Sheikh.

CRS Report RL31621, *Florida Everglades Restoration: Background on Implementation and Early Lessons*, by Pervaze Sheikh.