

CRS Issue Brief for Congress

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Army Corps of Engineers Civil Works Program: Issues for Congress

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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 plans, constructs, and operates water resources facilities such as flood control, navigation, and ecosystem restoration projects.

Appropriations and Budget Requests. Funding for civil works 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. A similar WRDA of 2003 — H.R. 2557 — was introduced in late June; a committee markup by the House Transportation and Infrastructure Committee is anticipated for mid-July. 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. A recently introduced bill — H.R. 2566 — aims at reforming Corps

project development, and a House Corps Reform Caucus has been reinstituted.

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

River Management. Drought conditions in recent years and threatened and endangered species concerns have raised some fundamental questions about Corps management of the nation's rivers. 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 and monitoring of the river's ecosystem and species (S. 531) are likely to be debated during the 108th Congress. Efforts to assist salmon restoration, especially the removal of the Lower Snake River dams (H.R. 1097), may also be discussed.

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

The Corps will continue releases to provide flows sufficient for minimum service navigation based on a July 1 reservoir level check for the Missouri River mainstem dams. The navigation season will be shortened by six days as previously planned. 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. Implementation of the plan was altered by court orders restricting the releases from an upper basin reservoir to protect its sport fishing industry. The most recent ruling in the nine lawsuits related to Missouri River management upholds that the Corps is required to manage the Missouri River mainstem dams pursuant to the existing Missouri River Master Manual.

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. The Senate Armed Services Committee had reported favorably on Woodley's nomination on March 27, 2003. Members of Congress have placed holds on floor consideration of the nomination.¹

A House Transportation and Infrastructure Committee markup of the recently introduced H.R. 2557 — Water Resources Development Act (WRDA) of 2003 — was postponed; it is anticipated for mid-July. H.R. 2566 — Army Corps of Engineers Reform Act of 2003 — was introduced in late June; it aims to change project development procedures at the Corps.

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 hearings 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.

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.

¹ For background information on Senate holds, 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>].

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 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. As discretionary spending, 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.

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

³ For more information on the HMTF and the tax supporting it, see CRS Report RL31264, *Harbor Maintenance Funding*. Identical bills — H.R. 2564 and S. 1310 — would alter the Internal Revenue Code to limit the exclusion of certain ports from the Harbor Maintenance Tax.

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 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,

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*.

PMAAs would pay the Corps at the beginning of the fiscal year (as opposed to the current 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; however, appropriations bills have also been used as vehicles for authorizing projects. The last WRDA was enacted 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. Rep. Don Young, Chairman of the House Transportation and Infrastructure Committee, introduced a WRDA 2003 — H.R. 2557 — on June 23. The bill is based largely on the WRDA legislation approved by the Committee in 2002. A committee markup is expected in mid-July. The Senate Environment and Public Works Subcommittee on Transportation and Infrastructure appears to have established reauthorization of the Transportation Equity Act as its first priority for 2003, indicating that consideration of WRDA is unlikely until late 2003 or early 2004.

H.R. 2557 contains approximately 250 provisions authorizing projects or changes to projects and 28 general provisions that alter various aspects of Corps operations and policies. The bill authorizes nine major projects that fall under the Corps navigation, flood control, environmental restoration, and storm damage reductions responsibilities. The bill also authorizes smaller projects — 13 flood damage reduction and protection projects, 5 navigation projects, 11 environmental quality and aquatic ecosystem restoration projects, and 1 shoreline protection project. The project-related provisions include modification of over 90 navigation, flood damage reduction, and environmental restoration projects. The 95 miscellaneous provisions include an increase in authorized appropriations or an expanded scope of activities for more than ten environmental restoration projects, the authorization of a 12-foot navigation channel for the Arkansas River (§5025), the development of a comprehensive river basin restoration plan for the Kaskaskia River (§5036) and the Coastal Louisiana Ecosystem (§5043).

Some interest groups have criticized the types 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 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. H.R. 2557 proposes authorization of many ecosystem restoration projects and related studies. (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 that have been 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 requests no funding for environmental infrastructure projects. Title V of H.R. 2557 includes numerous provisions for increasing the authorization and expanding the scope of at least 10 environmental infrastructure projects.

Beach nourishment is another category of controversial projects. Beach nourishment is the placement of sand on beaches either as a means of dredging spoil disposal or as an effort to artificially widen beaches. Periodic replenishment is needed to maintain most widened beaches. Taxpayer advocacy groups criticize periodic nourishment as providing only temporary benefits; they also argue that the benefits of nourishment accrue largely to local, often private, interests, although the federal share of such projects is now 50%. Some environmental groups are against many beach nourishment activities because of possible harm to marine and coastal habitats for benthic animals like worms and clams. Proponents of Corps involvement in beach nourishment argue that it is an economical solution to storm damage: the sand placed on the beach may reduce the force of ocean waves, providing additional protection to shorefront structures. H.R. 2557, the proposed WRDA 2003, would authorize beach nourishment activities. Another bill, H.R. 2558, would extend the period in which the Corps could provide beach nourishment for water resources development projects from 15 to 50 years from the date of initial construction. The President in his FY2004 budget request did not target beach nourishment activities for reduced federal funding, a change from past submissions by both Democratic and Republican Administrations.

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.

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.

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). In H.R. 2557, the eight projects proposed for authorization in §1001 (the section equivalent to §101 of the three WRDAs previously mentioned) all have Chief's reports available.

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.

In early 2003, Corps officials testified on how the agency is “transforming” itself in response to criticisms 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. Notwithstanding the measures already taken and those planned by the Administration, many critics maintain that more fundamental changes are necessary.

A House Corps Reform Caucus has been reinstituted for the 108th Congress, and Rep. Kind has introduced a Corps reform bill, H.R. 2566, based on his bill in the 107th Congress (H.R. 1310). Interest in Corps reform led to six bills during the 107th Congress and three bills during the 106th Congress.⁷ These legislative proposals for Corps reform of the 107th and 106th Congresses consisted primarily of improved project development processes and review procedures. However, no bills significantly changing Corps procedures have been enacted. Interest by some Members of Congress to include Corps reform measures in the proposed WRDA 2002 reportedly played a significant role in the bill not being voted on in the House.

H.R. 2557, the proposed WRDA 2003, does not contain the reform provisions sought by reform advocates, and some of the provisions of the bill may be viewed by the some groups as counter to reform. For example, §2028 is intended to streamline project environmental review by authorizing the Corps to coordinate the review activities of the

⁷ 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.

federal, state, and local agencies and Indian tribes with jurisdiction over the project. The Corps would establish a schedule for completing the NEPA (National Environmental Policy Act, P.L. 91-190; 42 U.S.C. 4321) process, with the intention of consolidating the various studies and requirements into a single environmental review process. Under §2025, a claim arising under federal law seeking judicial review of the environmental review documents and decision would be subject to time and venue restrictions. Environmental groups generally oppose this type of streamlining, arguing that it limits the roles of the other agencies and the judicial review of a project's environmental impacts. Another measure that may be viewed by environmental groups as counter to reform is §2027, providing for streamlining and consolidating of the Corps' and other agencies' permitting processes. Supporters of streamlining generally contend that current practices are inefficient and time-consuming and that measures such as those in §2027 and §2028 are necessary to expedite the sound development of the nation's water resource. Another notable general provision in H.R. 2557 is §2003; it would increase the federal cost-share responsibilities by 25% for deep draft navigation projects between 45 and 53 feet in depth. This increased federal responsibility is counter to reforms being pursued by taxpayer advocacy groups to limit federal funding for projects that have a significant portion of their benefits accruing to private and local interests and that are potentially environmentally damaging. Supporters of federal spending on harbors note the national benefits of the goods transported.

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.⁸ 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.

During the 108th Congress, Corps reform may be raised in a variety of forms — stand-alone Corps reform bills (e.g., H.R. 2566), provisions in a WRDA, or provisions in an appropriation 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

⁸ 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.

10%, respectively, of the positions performing commercial activities at agencies, including the Corps.⁹

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. An array of interests are questioning current river management practices in the nation and how management can balance benefits (and harm) across multiple river uses, including in-stream uses. Two debates raised by proposed legislation that are representative of this reevaluation of river management policies are the partial removal of the Lower Snake River dams and the management of the Missouri River. H.R. 1097, the Salmon Planning Act, would authorize the Corps to partially remove four dams on the Lower Snake River subject to favorable findings by the Secretaries of Commerce and the Interior and the Administrator of the U.S. Environmental Protection Agency.

The monitoring and possible restoration of the Missouri River is the subject of S. 531, Missouri River Enhancement and Monitoring Act of 2003. The bill would establish a basin stakeholder committee to make recommendations on means to restore the river ecosystem and support a research program dedicated to the monitoring and recovery of the river's

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 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 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 (Sept. 30, 1992) p. 45100.) More information is available in CRS Report RL31024, *The Federal Activities Inventory Reform Act and Circular A-76*.

threatened and endangered species. S. 531 addresses two elements of the debate over the Missouri River: the availability of scientific data, and the role of stakeholders in the decision making process guiding the river's management. Other aspects of the debate, principally the timing and quantity of the releases from the mainstem dams, have been raised numerous times during the appropriations process in recent years. These issues remain largely unresolved and may arise again during the 108th Congress, especially considering the climatological conditions in the basin.

Drought conditions persist in many areas of the Missouri River basin despite near normal snowpack and precipitation. The depressed levels of runoff due to the dry soil conditions from the preceding years of drought have further reduced the already low reservoir levels of the mainstem reservoirs. The operation of the mainstem dams and the impacts on the reservoirs is currently the subject of nine lawsuits.

The debate over the operation of the mainstem dams reflects 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.¹⁰ 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, navigation, recreation, and fish and wildlife protection. The congressional authorizations of these dams are generally understood not to 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.

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. A court order altered the operating plan of 2003 by restricting the releases from the reservoir to protect its sport fishing industry. The most recent ruling in the nine suits related to Missouri River management upholds that the Corps is required to manage the Missouri River mainstem dams pursuant to the existing Missouri River Master Manual. The

¹⁰ 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 protected bird species during their May 1 through August 15 nesting season. This is a critical period for federally listed endangered birds 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 (i.e., 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.

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.¹¹

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;¹² these factors contribute to uncertainty on how to best undertake restoration and what outcomes to anticipate.

¹¹ "Drought amplifies cries over Big Mo's low flow," *Argus Leader* (Sioux Falls, SD), April 27, 2003.

¹² Joy Zedler, "Progress in Wetland Restoration Ecology," *Trends in Ecology and Evolution*, vol. 15, no. 10 (2000):402-406.

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.

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.¹³ Due to the passage of this state law, the House Committee on Appropriations, in its draft Interior and Related Appropriations bill, has directed the Secretary of the Army and other department heads to file a biannual report indicating whether the State of Florida is meeting its obligations to improve water quality in certain portions of the Everglades (including Everglades National Park) and whether it is consistent with state water quality standards. If the report is favorable, the Committee will release funds to continue certain restoration projects in the Everglades. The Corps is also authorized to

¹³ 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. The law is available at [<http://www.flsenate.gov/data/session/2003/Senate/bills/billtext/pdf/s0626er.pdf>], accessed May 21, 2003.

receive funds from the Department of the Interior to provide additional water quality improvement technologies in the Everglades; these technologies are expected to assist the State of Florida with meeting water quality standards.

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.¹⁴ 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.¹⁵

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 restoration effort,¹⁶ 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

¹⁴ The U.S. Supreme Court has announced that during its next session, beginning October 2003, it will consider a case related to water allocation in the Everglades. (*South Florida Water Management District v. Miccosukee Tribe of Indians, et. al* (No. 02-626).) The Court is expected to decide how much authority the federal government has in controlling water pumping across the Everglades.

¹⁵ 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 plan 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 2004.

¹⁶ 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.

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.¹⁷ 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

Appropriations and Budget Request

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 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.

Authorizations and WRDA

H.R. 2557 (Young)

The Water Resources Development Act of 2003 contains approximately 250 provisions authorizing projects or changes to projects and 28 general provisions that alter various aspects of Corps operations and policies. Introduced June 23, 2003; referred to the House Committee on Transportation and Infrastructure.

H.R. 2558 (McIntyre)

This bill extends from 15 to 50 years the period during which the Corps could provide beach nourishment for a water resources development project. Introduced June 23, 2002; referred to the Committee on Transportation and Infrastructure.

¹⁷ Paula Tracy, "Wildlife Groups Push to Change Corps of Engineers," *The Union Leader*, (July 11, 2002), Sec. B, p. 3.

Project Development Reform
H.R. 2566 (Kind)

The Army Corps of Engineers Reform Act of 2003 establishes economic development and environmental protection and restoration as co-equal goals for the Corps. The bill establishes stakeholder advisory committees and independent review of projects as well as requirements for public access to project analyses. The bill refines the Corps economic evaluation of environmental impacts and establishes stricter mitigation and tracking requirements. Introduced June 23, 2003; referred to Committee on Transportation and Infrastructure.

River Management
H.R. 1097 (McDermott)

The Salmon Planning Act authorizes the Corps to partially remove four Lower Snake river dams if their removal is found favorable by the Secretaries of Commerce and the Interior and the Administrator of the Environmental Protection Agency. It also requires the agency to perform the preliminary engineering, design, and construction for partial removal. The bill also requires a National Academy of Sciences analysis of the federal salmon recovery efforts and a General Accounting Office study of the effects of partial removal on the four Lower Snake dams. Introduced March 5, 2003; referred to the Resources Subcommittee on Fisheries Conservation, Wildlife, and Oceans (which has requested executive comment from the Department of the Interior) and the Transportation and Infrastructure Subcommittee on Water Resources and the Environment.

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.

Ecosystem Restoration
H.R. 2641 (Miller, G.)

CalFed Bay-Delta Authorization Act is similar to S. 1097 in that it would authorize federal agencies to implement activities under the CALFED largely as framed in a Record of Decision (ROD) dated August 28, 2000. Further, the bill would authorize Corps activities in the CALFED functional areas of ecosystem restoration, levee stability, science, and program management, oversight, and coordination. Introduced June 26, 2003; referred to Committee on Transportation and Infrastructure and Committee on Resources.

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).

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>].

CRS Report 98-666 ENR, *Pacific Salmon and Anadromous trout: Management under the Endangered Species Act*, by John R. Dandelski and Eugene H. Buck.

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.

CRS Report RL31975, *CALFED Bay-Delta Program: Overview of Institutional and Water use Issues*, by Pervaze A. Sheikh and Betsy A. Cody.