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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 has considered issues related to the civil works program of the U.S. Army Corps of Engineers (Corps). The Corps plans, constructs, and operates water resources facilities primarily for flood control, navigation, and environmental purposes.

Appropriations. The President's request for FY2005 for the Corps' civil works program was \$4.12 billion. H.R. 4818, the omnibus appropriations bill, included \$4.75 billion. The bill increased funding for some of the Corps' more controversial projects.

Authorizations and WRDA. Congress typically authorizes Corps projects and policy changes in a Water Resources Development Act (WRDA). The House passed a WRDA 2003, H.R. 2557, on September 24, 2003. On August 25, 2004, the Senate Committee on Environment and Public Works reported WRDA 2004 — S. 2773 — which has been placed on the Senate calender. It authorizes a few controversial projects that had not been developed when the House voted on WRDA 2003. With WRDA action unlikely in December 2004, a WRDA bill is expected to be introduced early in the 109th Congress.

Project Development Reform. Although recent WRDA bills and other proposed legislation (e.g., S. 2188) have contained

provisions to change how the Corps formulates and reviews projects, no significant changes have been enacted. Measures to change the Corps are expected to continue as part of future WRDA debates.

Operational Changes. In 2003 and 2004, the Corps initiated a restructuring effort and released a civil works strategic plan for FY2004 through FY2009.

Missouri River Management. Drought, concerns over threatened and endangered species, and interest in non-structural flood control have raised questions about river management. Questions include whether some uses should take precedence over others and how uncertainty is addressed in decision-making. Management of the Missouri River has been both debated in 2004 as well as the subject of litigation.

Ecosystem Restoration. During the last decade, Congress has expanded Corps involvement in ecosystem restoration, such as leading efforts in the Florida Everglades, but concerns persist about its role. More restoration studies and projects with Corps participation, such as Coastal Louisiana restoration, have been under development in 2004.

MOST RECENT DEVELOPMENTS

H.R. 4818, the Omnibus Appropriations Act, provides \$4.75 billion for the U.S. Army Corps of Engineers (Corps) civil works program.¹ This is an increase from the President's \$4.12 billion and the \$4.58 billion appropriated for FY2004.

On August 25, 2004, the Senate Environment and Public Works Committee reported a WRDA 2004 — S. 2773 — which has been placed on the Senate calender. Holds have reportedly been placed on the bill. Provisions in S. 2773 authorize navigation and ecosystem restoration investments in the Upper Mississippi River-Illinois Waterway System (UMR-IWW), the Indian River Lagoon and another Everglades restoration project, and a limited set of activities for a Coastal Louisiana restoration effort. The House passed a WRDA 2003 (H.R. 2557) on September 26, 2003. H.R. 2557 does not authorize either the Everglades projects or the UMR-IWW investments.

During the summer of 2004, the House Transportation and Infrastructure Subcommittee on Water Resources and Environment held three hearings related to Corps projects: a hearing on the UMR-IWW on June 24, a hearing on Coastal Louisiana restoration on July 15, and a hearing on Everglades restoration efforts on July 22.

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, federal agencies, and foreign governments. This report, however, focuses on 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. The Corps' oldest civil responsibilities are creating navigable channels and controlling floods. During the last decade, Congress has increased the agency's responsibilities in the areas of ecosystem restoration, *environmental infrastructure*,² 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, and at times are quite controversial.

¹ This omnibus appropriation is expected to be subject to a 0.80% reduction, which would result in a total appropriation of \$4.67 billion.

² Environmental infrastructure refers to Corps projects focused on municipal water supply and wastewater treatment facilities or surface water resource protection and development. Before 1992, the Corps generally had not been involved with these types of projects; it historically has been involved in water supply only as part of a multipurpose project. Since 1992, Congress has authorized more than 220 environmental infrastructure projects. Appropriations, however, have not kept pace with authorizations; only some projects have received funding.

Appropriations. The Corps civil works budget primarily funds planning, construction, and maintenance of site-specific projects; appropriations generally are made as part of the Energy and Water Development Appropriations Acts.³ Funding for Corps civil works often has been a contentious issue between the Administration and Congress, with appropriations typically greater than the Administration's request, regardless of which political party controls the White House and Congress.

Appropriations for FY2005 also are following suit, with the President's request for FY2005 at \$4.12 billion and the omnibus H.R. 4818 providing \$4.75 billion. For more information on the status of Corps FY2005 appropriations, see CRS Report RL32307, *Appropriations for FY2005: Energy and Water Development*, by Carl Behrens.

The President's FY2005 request raised concerns among some Members of Congress, primarily in two areas — operation and maintenance (O&M) funds for navigation, and policy changes for shoreline protection projects. The request focused the O&M funds for the inland waterways and harbors on projects supporting a high volume of commercial traffic as part of the agency's effort to move toward performance-based budgeting. H.R. 4818 increased funding levels above the President's request for navigation O&M; notably, the bill increased O&M funds for many segments of the Atlantic Intracoastal Waterway, with FY2005 appropriations for the waterway reaching a level of about 85% of previous years' appropriations.

The FY2005 budget request proposed that the Corps no longer budget for the periodic renourishment (i.e., sand replenishment) of beach storm damage reduction projects after initial construction. The omnibus bill states that the Corps shall not implement any changes to existing shoreline protection policies that have not been specifically authorized by Congress.

The omnibus report recommends funding levels above the Administration's FY2005 request for a few of the Corps' more controversial projects, including construction of the St. Johns Bayou/New Madrid Floodway levels, dredging of the Apalachicola River, construction of the Yazoo pumping projects, and deepening of the Columbia River Channel. According to the conference report, Congress also provided more funds for the popular Continuing Authorities Programs than requested by the Administration; the conference report also continued the recent trend of identifying specific priority projects for funding under these programs. The omnibus bill does not fund the new study or construction starts requested by the President. Unlike the President's request, H.R. 4818 funds some site-specific environmental infrastructure projects and funds some beach renourishment activities.

HR. 4818 contains some authorization language. Although the bill does not contain authorization of the Upper Mississippi River-Illinois Waterway navigation and ecosystem restoration project, the bill provides \$13.5 million in funding to proceed with the planning of the controversial navigation project. The bill provides \$17.5 million, which is less than

³ In addition to its activities using direct federal appropriations, the Corps performs reimbursable work for Department of Defense agencies, other federal agencies, local governments, tribes, U.S. territories, foreign governments, and international organizations. In FY2002, this work totaled \$953 million. More information on the Interagency and International Program is available at [http://www.hq.usace.army.mil/cecs-i/IISWWW/Web399/iishmpg.htm].

the \$28 million requested by the Administration, for the Upper Mississippi River System's Environmental Management Program, which complements the proposed ecosystem restoration project.

Authorizations and WRDA. Congress typically authorizes new Corps projects as part of its consideration of a Water Resources Development Act.⁴ For the most part, already authorized projects do not require reauthorization. The last WRDA was enacted in 2000. On September 24, 2003, the House passed H.R. 2557 — WRDA 2003. The Senate Environment and Public Works Committee ordered reported a WRDA 2004, S. 2554, on June 23, 2004. On August 25, 2004, the committee instead reported a new bill — S. 2773 — which has been placed on the Senate calender. Because no WRDA action is expected in December 2004, it is anticipated that a WRDA bill will be introduced early in the 109th Congress.

The debate over the Senate's consideration of WRDA in 2004 has been shaped by conflicting pressures — the Administration's interest in a bill that limits new authorizations, and demand for Corps projects. S. 2773 includes provisions authorizing controversial projects that are not included in H.R. 2557: Upper Mississippi River-Illinois Waterway navigation improvements (\$1.73 billion) and ecosystem restoration (\$1.46 billion) and two Everglades restoration projects (\$1.21 billion and \$363 million). For more information on the legislative action on WRDA, UMR-IWW investments, and the two Everglades projects, see CRS Issue Brief IB10133, *Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation*, coordinated by Nicole T. Carter.

Project Development Reform. Support for changing the Corps' decision-making process, sometimes called "Corps reform," gained momentum in 2000 in the wake of a series of critical articles in the *Washington Post*, whistleblower allegations over the economics of the UMR-IWW navigation improvements, and ensuing investigations. Although some Members of the 106th Congress supported Corps reform, other Members were satisfied with existing practices. The 106th Congress did not enact changes; instead, in §216 of WRDA 2000, it asked the National Academy of Sciences to review Corps planning. In April 2004, the Academy's National Research Council published its four reports from this review. Each report makes recommendations for changes to the Corps and the larger water resources management context.

In mid-March 2004, the National Wildlife Federation and Taxpayers for Common Sense published an investigative report, *Crossroads: Congress, the Corps of Engineers and the Future of America's Water Resources*, criticizing 29 specific projects costing \$12 billion and advocating for increased accountability for the Corps.⁶ The Corps and supporters of the agency countered the claims of this report and other calls for Corps reform. Moreover, the Corps argues that since 2000 it has undertaken efforts to transform itself primarily by strengthening its planning capabilities. For more information on Corps reform provisions in current WRDA legislation, see CRS Issue Brief IB10133, *Water Resources Development*

⁴ Appropriations bills have also been used as vehicles for authorizing projects.

⁵ For background information on Corps reform, see CRS Report RL30928, *Army Corps of Engineers: Civil Works Reform Issues in the 107th Congress*, by Nicole T. Carter.

⁶ The report is available at [http://www.taxpayer.net/corpswatch/crossroads/].

Act (WRDA) and Other Army Corps of Engineers Legislation, coordinated by Nicole T. Carter.

Operational Changes. In early October 2003, the Corps released a final restructuring plan, USACE 2012; this reorganization plan currently is being implemented. The plan is focused primarily on improving the agency's operational efficiency by integrating the regional and national perspective into the district teams responsible for project development. The plan also reorganizes the Corps along business lines, rather than geographically. The Corps anticipates that improved efficiency (e.g., shorter schedules for planning, report preparation, and approval) will allow the agency to maximize the effectiveness of appropriations for administrative expenses. This efficiency is expected to be achieved through decentralization, which has some stakeholders concerned that local and industry groups will have an increased influence over projects. Another anticipated consequence of the plan's implementation will be a reduction in the Corps workforce to be accomplished primarily through voluntary early retirement programs. The headquarters staff is being reduced by 17%. The final USACE 2012 does not contain proposals that require legislative changes. The plan also does not address the broader issues of what the agency's future role is in the Department of Defense and in relation to the changing national landscape of water resources (including water supply and municipal water and wastewater infrastructure) and environmental restoration.

In March 2004, the agency released its *Civil Works Strategic Plan*. The plan outlines the goals and direction that the agency is defining for itself. The plan describes how the agency will use performance based budgeting, business line management, and a watershed approach based on integrated water resources management concepts.

Missouri River Management. An array of interests are questioning current river management practices across the nation and how management can balance benefits (and harm) across multiple river uses, including in-stream uses. The Missouri River is a prime example of the complex management issues in which the Corps is embroiled. How the nation uses and values its rivers has changed over time. Rivers now are seen as providing not only economic benefits but also recreational opportunities and species habitat. These changes manifest themselves in law (e.g., Endangered Species Act and NEPA) and in interpretation of water resources statutes. This shift has resulted in a reexamination by the courts, agencies, and stakeholders of the distribution of economic and other benefits of management alternatives. The Missouri River debate raises some fundamental questions about water resources management, such as whether some river uses should take priority over others (e.g., threatened and endangered species protection over inland waterway transportation) and how precedence should be decided (e.g., balancing competing uses vs. maximizing economic benefits).

Missouri River management was an issue during the markup of the Senate Committee on Appropriations of the FY2005 Interior appropriations bill. A provision to change a trigger that requires the Corps to implement drought conservation measures on the Missouri River remains in S. 2804 after a debate to have it removed during Committee markup, but was not included in H.R. 4818. The drought conservation measures would have suspended

⁷ The plan is available at [http://www.iwr.usace.army.mil/iwr/strategicplan/strategicplan.pdf].

navigational releases from Missouri River reservoirs if storage at the reservoirs fell below a defined level. For the last few years, upper basin reservoirs have experienced low water levels during an ongoing drought in the basin, and navigation has continued in the lower basin although at a minimum service level and with a shortened navigation season. The current trigger to implement drought conservation measures established by the Corps' 2004 Missouri River Master Water Control Manual is 31 million acre-feet (MAF) of storage at a March 15 storage check.⁸ The trigger in S. 2804 is for the suspension of navigation if the system storage level is at or below 40 MAF at any time during the year (not just on March 15). The current storage level is 35.7 MAF; storage on March 15, 2005, is estimated to be between 34.9 MAF and 36.5 MAF.

Missouri River Multiple Uses. Drought conditions in the Missouri River basin have contributed to an ongoing debate on the operation of the basin's dams. The controversy is drawn largely along state lines. Upper basin states, such as North Dakota and South Dakota, have strong lake recreational interests and would generally prefer stable reservoir levels. Lower basin states, such as Missouri, want to maintain management that supports navigation, power generation, and river recreation and continues current structural approaches to flood control. The difference between the operational regimes preferred by upper basin and lower basin states are exaggerated during drought. Threatened and endangered species protection further complicates river management.

Operations targeted for species protection could in many cases also support water conservation in the upper basin. Consequently, upper basin states are at times aligned with environmental interests in the debate over the Missouri River. Managing the river for species protection could imply a new operating regime for both drought and non-drought years. Although species protection can be harmed by or benefit from drought, the polarizing issue during drought is more often water conservation in the upper basin reservoirs vs. maintenance of flows for navigation.

These differing opinions on how to best manage the Missouri River have drawn attention to the Corps' annual operations of the Missouri River dams and its revision of the Missouri River Master Manual. The final Master Manual was released by the Corps on March 19, 2004, after 14 years of revision, during which the Corps struggled with how to balance 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. Some assert that the congressional authorizations of these dams do not clearly establish priority purposes or a hierarchy among purposes. Others point to 33 U.S.C. 701-1, which states that navigation is not to conflict with the present or future beneficial consumptive uses listed. This section was enacted in 1944 and did not list recreational and

⁸ The manual is available at: [http://www.nwd-mr.usace.army.mil/rcc/reports/mmanual/MasterManual.pdf].

⁹ "The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the ninety-eighth meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the ninety-eighth meridian, of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes" (33 U.S.C.

fish and wildlife protection uses. At an October 16, 2003 hearing by the Senate Committee on Indian Affairs, concerns regarding how Indian water rights were being addressed in the Master Manual revision process were raised, as well as the impacts of drought and current management practices on tribal cultural resources and economies.

If and how the economic value of different uses should be considered in management decisions is a contentious and complicated issue. The recreation industry in the Missouri River basin is often cited as having benefits significantly greater than the navigation industry. The Corps calculates the total average annual navigation benefit under current operations at \$7 million. It estimates recreation benefits in the basin at \$85 million annually — \$65 million in the upper basin and \$20 million in the lower basin. These annual averages are often cited by those arguing to alter river management to give recreation a greater priority than under current practice. Although interesting, there are numerous reasons why the comparison of navigation and recreation annual averages do not help much when trying to select among alternative operating regimes. Alternative regimes often differ most in their economic benefits not during an average year but during drought years. Also, upper basin recreation is reduced but it does not disappear when the reservoir levels are drawn down. Finally, the impact of lower flows on river recreation is also complicated because some types of recreation would likely increase while other recreational activities would decrease.

A consequence of the extended revision process for the Master Manual has been numerous legal challenges; legal challenges are not anticipated to end with the new Master Manual. Lawsuits on the management of the Missouri River are being used to legally challenge not only 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 in basins across the nation and as a testing ground for legal action to induce changes in river management policy.

Status of Missouri River Operations. The final Master Manual was published on March 19, 2004; the operational changes set forth in the new manual are primarily drought conservation measures. The manual does not contain the flow modifications for species protection sought by environmental groups; instead it incorporates a process for developing a flow management plan by 2006 set out by the U.S. Fish and Wildlife Service (FWS) in its 2003 Amended Biological Opinion (BiOp). For the Annual Operating Plan for 2004, the Corps uses a provision of the 2003 Amended BiOp that lets the low summer flow modification be offset by the creation of 1,200 acres of shallow water habitat for the pallid sturgeon by July 1, 2004, one of three species in the Missouri River protected under the Endangered Species Act.

⁹ (...continued) 701-1(b)).

The Corps is restricted to considering national economic development benefits in evaluating alternatives for its projects. The Corps does not consider the regional *distribution* of benefits; instead, it is to select the alternative that maximizes the national benefit. The estimates presented in this paragraph were provided by the Corps in the Missouri River Revised Draft Environmental Impact Statement (RDEIS) of August 2001. Although the Corps evaluated the environmental impacts of alternative regimes, it did not monetize these environmental benefits and include them in the calculation of total national economic development.

The 2003 Amended BiOp was published by FWS on December 6, 2003, as an amendment to its 2000 Biological Opinion on the earlier draft of the Master Manual. The U.S. Fish and Wildlife Service recommended in 2000 a flow regime to avoid jeopardy of a threatened shorebird, an endangered shorebird, and the endangered fish pallid sturgeon. The recommendation was for a spring rise in the river level and lower summer flows; the intention was to have river flows mimic natural seasonal fluctuation. The 2003 Amended BiOp maintains that flow modifications are necessary, but the justification for the flow modifications and the nature of the modifications recommended under the 2003 Amended BiOp differ from the 2000 BiOp. According to the analysis in the 2003 Amended BiOp, the flow modifications are necessary in order to protect the endangered pallid sturgeon, but not the bird species. Also, the 2000 BiOp had required more dramatic flow reductions from current practices in the summer months than are included in the 2003 Amended BiOp.

The 2003 Amended BiOp requires the Corps to develop by 2006 a flow management plan that satisfies numerous characteristics identified by the FWS as important for the pallid sturgeon. The 2003 Amended BiOp also establishes how releases from the dams should be managed in the interim and a default flow management plan in case the Corps is unable to devise its own plan by 2006.

In the context of Energy and Water Development Appropriations, the level of funding for Missouri River mitigation measures was the main issue. H.R. 4818 provides \$19 million for Missouri River fish and wildlife recovery. The President's FY2005 budget request was for \$69 million; it would have covered expenses associated with environmental measures to comply with the U.S. Fish and Wildlife Service's Biological Opinion to protect three endangered species. The measures covered by the President's request would have included shallow water habitat for the pallid sturgeon and sandbar habitat for two shorebirds. The activities covered by the President's request, unlike previous mitigation, would not have been restricted to river segments used for navigation; the FY2005 request was for activities along the length of the Missouri River from the reservoir at Fort Peck to the confluence of the Missouri River and Mississippi River at St. Louis. The amount appropriated for mitigation in the Energy and Water Development Appropriations Act of FY2004 had been \$18 million. (The President's FY2004 request had been for \$22 million.) The Corps reprogrammed \$23 million in FY2004 funds to provide for the environmental measures needed to implement the Master Manual in the 2004 navigation season.

On June 21, 2004, Judge Magnuson of the U.S. District Court of Minnesota upheld the recently revised Missouri River Master Manual and the 2004 Annual Operating Plan for the river's six dams. The judge ruled that these documents are in compliance with federal law, and that the Corps and Fish and Wildlife Service have not acted arbitrarily and capriciously in the development of the these and supporting documents. The judge also concluded that prioritization of river interests (i.e., uses) is discretionary, and the Corps must consider and balance interests to achieve maximum benefits. Conservation groups warn that the ecological health of the river will continue to decline under the existing operating procedures, and are considering an appeal of the ruling.

Ecosystem Restoration. The Corps has been widely criticized for the environmental harm its water resources projects may cause to ecosystems. To address this criticism, the Corps has adopted environmental operating principles and expanded its professional development programs to support greater environmental protection in its project

development processes. A dramatic change in Corps environmental protection efforts in the last two decades has developed out of its reworking of existing projects to provide not only mitigation but also ecosystem restoration. Ecosystem restoration is new for the Corps and remains a relatively young science; these factors contribute to risk and uncertainty on how to best undertake restoration and what outcomes to anticipate.

Everglades as a Test Case. The Corps' largest involvement in a restoration effort is in the Florida Everglades, where a three-decade \$7.8 billion restoration program has begun. With the goal of restoring the Everglades, Congress approved 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. An initial set of CERP projects was authorized in WRDA 2000. In 2004, two projects are being discussed for possible authorization in a WRDA bill — Indian River Lagoon-South wetlands and estuarine restoration and the Picayune Strand restoration. (For more information on these two projects, see CRS Issue Brief IB10133, Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation, coordinated by Nicole T. Carter.) The federal government is paying for half the cost of construction, operation, and maintenance performed under CERP; the other half is borne by the State of Florida, and to a lesser extent, local tribes and other non-federal sponsors. The Corps is involved with the coordination of the strategies, policies and plans for restoring the Everglades through task forces and other committees.

A set of goals guide restoration efforts under CERP while specific solutions 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 manipulation in Everglades restoration have been raised recently due to a Florida State law that may affect phosphorous mitigation deadlines and goals. Due to the passage of this state law, the Interior and Related Agencies Appropriation Act of FY2004 (P.L. 108-108) and the Energy and Water Development Appropriations Act of FY2004 (P.L. 108-357) contain provisions that condition funding for some Everglades restoration projects on the State of Florida meeting water quality standards. A similar provision is included in H.R. 4818 for the FY2005 Interior appropriations; no similar provision is in the Energy and Water Development title of H.R. 4818. (See CRS Report RL32306, Appropriations for FY2005: Interior and Related Agencies; and CRS Report RL31807, Appropriations for FY2004: Energy and Water Development.)

Everglades restoration is seen by many as a groundbreaking, large-scale restoration effort that may set the stage for other restoration projects. Consequently, its implementation and related congressional actions are 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.¹¹

Wetland loss in Louisiana threatens the productivity of its coastal ecosystem, viability of several (continued...)

Corps' Role in Ecosystem Restoration. 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, 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 restoration in the Bay-Delta through flood control and water management projects and technical assistance with levee design and construction. (For more information, see CRS Issue Brief IB10019, Western Water Issues, by Betsy A. Cody and Pervaze A. Sheikh.)

The growing role of the Corps in ecosystem restoration raises numerous questions, such as whether the Corps is 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 cost 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.¹² 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 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 Coastal Louisiana, the Missouri River, and the UMR-IWW. Many observers are watching 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.

^{11 (...}continued)

of its industries, and flood control in its cities. There are several factors contributing to wetland loss in coastal Louisiana and several proposed ideas for ecosystem restoration. The Corps is participating with other federal and state agencies in the development of a comprehensive coastal wetland restoration plan for Louisiana. (For more information on Coastal Louisiana restoration plans, see CRS Report RL32673, *Coastal Louisiana: Attempting to Restore an Ecosystem*, by Jeffrey Zinn, and CRS Issue Brief IB10133, *Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation*, coordinated by Nicole T. Carter.)

¹² Paula Tracy, "Wildlife Groups Push to Change Corps of Engineers," *The Union Leader*, (July 11, 2002), Sec. B, p. 3.

LEGISLATION

Appropriations

P.L. 108-357, H.R. 2754

Title I of The Energy and Water Development Appropriations Act for FY2004 provides \$4.57 billion for the civil works program of the Corps. The bill was passed by both chambers on November 17, 2003, and signed into law on December 1, 2003.

H.R. 4614 (Hobson)

Title I of The Energy and Water Development Appropriations for FY2005 provides \$4.82 billion for the Corps' civil works mission. Passed the House on June 25, 2004; referred to the Senate Committee on Appropriations.

H.R. 4818 (Kolbe)

Division C, Title I, of the bill provides \$4.75 billion for the Corps' civil works mission. The House and Senate both approved a conference report on H.R. 4818 on November 20, containing FY2005 appropriations for previously unpassed bills including Energy and Water Development. H.R. 4818 is being held at desk in the Senate, pending action by the House on H.Con.Res. 528, as amended in Senate to remove a provision in H.R. 4818.

WRDA

H.R. 2557 (Young)

Water Resources Development Act of 2003. Contains approximately 300 provisions authorizing projects or changes to projects and 34 general provisions that alter various aspects of Corps operations and policies. Passed House September 24, 2003.

S. 2554 (Inhofe)

Water Resources Development Act of 2004. Ordered reported by the Senate Committee on Environment and Public Works on June 23, 2004. Instead on August 25, 2004, the committee reported a new bill — S. 2773 — which has been placed on the Senate calender.

S. 2773 (Inhofe)

Water Resources Development Act of 2004. Original measure reported to Senate, and placed on Senate calendar on August 25, 2004. It is now available for floor action.

Project Development Reform

H.R. 2566 (Kind)

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, independent project review, and public access to project analyses. It refines the economic evaluation of environmental impacts and establishes stricter mitigation and tracking requirements. Introduced June 23, 2003, and referred to Committee on Transportation and Infrastructure.

S. 2188 (Feingold)

Corps of Engineers Modernization and Improvement Act of 2004. Establishes economic development and environmental protection and restoration as co-equal goals. The bill establishes independent project review, requirements for public access to information,

and stricter mitigation and tracking requirements. It includes a process for review of the Corps' planning guidance. It increases non-federal financial responsibility for some project types, applies a benefit-cost ration of 1.5 to 1 (instead of 1 to 1), and establishes a more stringent deauthorization process. The bill would also focus activities on navigation, flood control, and environmental protection. Introduced March 10, 2004, and referred to Committee on Environment and Public Works.

Missouri River Management

H.R. 3373 (Bereuter)

Missouri River Enhancement and Monitoring Act of 2004. Directs the Secretary of the Interior with the Director of the U.S. Geological Survey (USGS) to establish a program to monitor the following characteristics of the Missouri River: chemistry, hydrology, geomorphology, water quality, and biology, including the threatened and endangered species. Introduced on October 24, 2003; referred to Committee on Resources.

H.R. 4315 (Rehberg)

Fort Peck Lake Protection Act. Prohibits the Corps from releasing water from the reservoir at Fort Peck Dam under certain reservoir conditions. Introduced May 6, 2004; referred to Committee on Transportation and Infrastructure.

S. 531 (Dorgan)

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 be make recommendations to the federal agencies with jurisdiction over the river on means of restoring its ecosystem. The research program, which would be operated by the USGS, would conduct 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. Introduced March 5, 2003; referred to Committee on Environment and Public Works.

S. 1378 (Dorgan)

Transfers authority to revise the Missouri River Master Manual and to operate the Missouri River mainstem dams from the Secretary of the Army to the Secretary of the Interior. Introduced July 8, 2003; referred to Committee on Environment and Public Works.

Ecosystem Restoration: Everglades Case Study H.R. 4344 (Foley)/S. 2209 (Bob Graham)

The Restoring the Everglades, an American Legacy Act of 2004. Authorizes the Corps to construct the Indian River Lagoon-South project and the Southern Golden Gates Estates project (also known as the Picayune Strand project). Project authorization is conditional on a favorable Chief of Engineers report. The bill contains no mention of CERP. H.R. 4344 was introduced May 12, 2004, and referred to House Committee on Transportation and Infrastructure. S. 2209 was introduced March 12, 2004, and referred to Senate Committee on Environment and Public Works.

H.R. 5232 (Foley)/S. 2857 (Bob Graham)

The Restoring the Everglades, an American Legacy Act of 2004. Authorizes the Corps to construct the Indian River Lagoon-South and Picayune Strand ecosystem restoration projects. Project authorization is conditional on a favorable Chief of Engineers report for the

Picayune Strand project. (The Indian River Lagoon Chief's report was signed in August 2004.) The bill references the section of WRDA 2000 in which CERP was approved as a framework. H.R. 5232 was introduced October 6, 2004, and referred to House Committee on Transportation and Infrastructure. S. 2857 was introduced September 29, 2004, and referred to Senate Committee on Environment and Public Works.

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 RL32064, Army Corps of Engineers Water Resources Activities: Authorization and Appropriations, by Nicole T. Carter.
- CRS Report RL32307, Appropriations for FY2005: Energy and Water Development, Coordinated by Carl Behrens.
- Executive Office of the President, *Appendix: Budget of the United States Government, Fiscal Year 2005* (Washington, DC: GPO, 2004).

Authorizations and WRDA

- Congressional Budget Office, Cost Estimate, H.R. 2557, Water Resources Development Act of 2003, as ordered reported by the House Committee on Transportation and Infrastructure on July 23, 2003.
- CRS Issue Brief IB10133, Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation, coordinated by Nicole T. Carter.
- Executive Office of the President, Office of Management and Budget, *Statement of Administrative Policy on H.R. 2557* (made on September 24, 2003), available at [http://www.whitehouse.gov/omb/legislative/sap/index-date.html].

Upper Mississippi River-Illinois River Investments

- CRS Report RL32401, Agriculture as a Source of Barge Demand on the Upper Mississippi and Illinois Rivers: Background and Issues, by Randy Schnepf.
- CRS Report RL32470, *Upper Mississippi River-Illinois Waterway Navigation Expansion:* An Agricultural, Transportation, and Environmental Context, coordinated by Randy Schnepf.
- U.S. Army Corps of Engineers, Draft Integrated Feasibility Report and Programmatic Environmental Impact Statement for the UMR-IWW System Navigation Feasibility

Study (Rock Island District, St. Louis District, St. Paul District, April 29, 2004) available at [https://www2.mvr.usace.army.mil/umr-iwwsns/documents/FES_EIS_Report_Cover(2004).pdf].

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).
- ——Adaptive Management for Water Resources Planning (2004).
- ——Analytic Methods and Approaches for Water Resources Project Planning (2004).
- ——River Basins and Coastal Systems Planning Within the U.S. Army Corps of Engineers (2004).
- ——U.S. Army Corps of Engineers Water Resources Planning: A New Opportunity for Service (2004).
- Washington Post series on the Corps, available at [http://washingtonpost.com/wp-dyn/nation/specials/aroundthenation/corpsofengineers].

Missouri River Management

- National Research Council, *The Missouri River Ecosystem: Exploring the Prospects for Recovery* (Washington, DC: National Academy Press, 2002).
- U.S. Army Corps of Engineers, *Missouri River Mainstem Reservoir System Master Water Control Manual* (Omaha, NE: Northwestern Division, 2004), available at [https://www.nwd.usace.army.mil/pa/missouri2003aop.asp].
- U.S. Dept. of the Interior, Fish and Wildlife Service and Dept. of the Army, Corps of Engineers, *Missouri River Final Biological Opinion* (Nov. 2000).
- U.S. Dept. of the Interior, Fish and Wildlife Service, 2003 Amendment to the 2000 Biological Opinion (Dec. 2003). Available at [http://www.fws.gov/pdfs/FinalBO.pdf].

Ecosystem Restoration

- CRS Issue Brief IB10019, Western Water Resources Issues, by Betsy A. Cody and Pervaze A. Sheikh.
- CRS Report RS20702, South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan, by Nicole T. Carter and Pervaze A. Sheikh.
- CRS Report RL32131, *Phosphorus Mitigation in the Everglades*, by Pervaze Sheikh and Barbara Johnson.