

# **CRS Report for Congress**

## **Water Resources Development Act (WRDA): Corps of Engineers Authorization Issues**

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**Prepared for Members and  
Committees of Congress**

# Water Resources Development Act (WRDA): Corps of Engineers Authorization Issues

## Summary

Congress generally authorizes new Army Corps of Engineers water resources studies and projects in a Water Resources Development Act (WRDA) before appropriating funds to them. The 107<sup>th</sup>, 108<sup>th</sup>, and 109<sup>th</sup> Congresses considered but did not enact WRDA legislation; WRDA enactment previously had loosely followed a biennial schedule. The most recent WRDA was enacted in 2000. Pent-up demand for new authorizations is prompting interest in passing a WRDA in 2007. WRDA 2007 — H.R. 1495, which would authorize more than \$13 billion in Corps water resources activities — was reported out of the House Transportation and Infrastructure Committee on March 15, 2007. The Senate Environment and Public Works Subcommittee on Transportation and Infrastructure held a hearing on WRDA topics the same day. On March 29, 2007, the Senate Committee on Environment and Public Works met to mark up its version of WRDA 2007; the reported bill is not yet available.

Issues that shaped WRDA debates in recent Congresses continue to receive attention. Administration representatives have expressed that the concerns they raised over the WRDA bills of the 109<sup>th</sup> Congress continue to exist. The Administration does not support significant new authorizations in light of a backlog of authorized construction projects and maintenance activities. The Administration had expressed concerns about particular provisions of the bills in the 109<sup>th</sup> Congress; some, but not all, of these provisions are in H.R. 1495. A draft version of the Statement of Administration Policy (SAP) for H.R. 1495 reportedly includes not only concerns raised in SAPs for previous bills but also additional issues, including concerns with the specifics of the independent review provisions of the bill. Other issues that may shape WRDA 2007 include different opinions about the specifics of other Corps reform measures and the specifics of project authorizations, including authorization for coastal Louisiana, Florida Everglades, and Upper Mississippi River projects.

H.R. 1495 is based largely on the WRDA bill that passed the House in the 109<sup>th</sup> Congress; for example, provisions in H.R. 1495 to change Corps policies (e.g., the independent review provisions) are the same as in the earlier bill. H.R. 1495's sponsors generally did not include projects that were not in the 109<sup>th</sup> House-passed bill; the sponsors, however, allowed some changes to the contents of the project authorizations.

H.R. 1495 includes authorizations for a few multibillion-dollar projects. It would authorize approximately \$1.1 billion in activities to restore wetlands in coastal Louisiana, as well as for additional planning activities. The bill also would authorize actions to improve hurricane protection and navigation in coastal Louisiana. Authorization of spending for navigation improvements (\$2.0 billion) and ecosystem restoration (\$1.6 billion) on the Upper Mississippi River-Illinois Waterway is included in H.R. 1495; a House-floor amendment to limit the authorization of the navigation improvements failed in the 109<sup>th</sup> Congress. H.R. 1495 would also authorize \$2 billion in activities related to Florida Everglades restoration.

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# Water Resources Development Act (WRDA): Corps of Engineers Authorization Issues

## Most Recent Developments

The Water Resources Development Act of 2007 (H.R. 1495), which would authorize more than \$14 billion in Corps water resources activities, was reported out of the House Transportation and Infrastructure Committee on March 15, 2007. The Senate held a hearing on WRDA topics the same day. The Senate Committee on Environment and Public Works met on March 29 to mark up its version of WRDA 2007; the reported bill is not yet available.

H.R. 1495 is based largely on the House-passed WRDA bill (H.R. 2864) of the 109<sup>th</sup> Congress, which was not enacted. H.R. 1495's provisions to change Corps policies (e.g., the independent review provisions) are the same as those in the earlier bill. H.R. 1495's sponsors generally did not include projects that were not in the 109<sup>th</sup> House-passed bill; the sponsors, however, did allow some changes to the contents of the project authorizations. For example, the Everglades title appears in both bills, but H.R. 1495 would authorize two projects that were not in the earlier bill — the \$81 million Site 1 Impoundment, and the \$144 million Tamiami Trail bridge. Similarly, the coastal Louisiana restoration title in H.R. 1495 is different in many respects from the same title in the earlier bill, which was passed before Hurricane Katrina. Other examples of content changes range from a \$4 million authorization of the Upper Mississippi River dispersal barrier project for aquatic nuisance species, to a modification to the American River Watershed's Folsom Dam projects that would authorize \$683 million in construction activities to reduce the City of Sacramento's vulnerability to flooding.

**Issues Shaping WRDA Consideration.** In mid-April 2007, it was reported that a draft version of the Statement of Administration Policy (SAP) for H.R. 1495 contained not only concerns raised in SAPs for previous bills but also additional issues, including concerns with the independent review provisions of the bill. In SAPs and other Administration documents related to WRDA bills considered in recent Congresses, the Administration has expressed that it does not support significant new authorizations in light of a backlog of authorized construction

projects and maintenance activities and changes to existing federal-nonfederal cost shares that would increase the cost to the federal government.<sup>1</sup>

Other issues shaping WRDA 2007 include different opinions about the specifics of other Corps reform measures and the specifics of project authorizations. Specific project authorizations shaping WRDA's consideration include authorization for:

- Coastal Louisiana wetlands restoration, flood and storm protection, and navigation projects (including authorization of the Morganza to the Gulf project, and the appropriations level and specifics of the wetlands restoration authorization for coastal Louisiana),
- Florida Everglades ecosystem restoration projects (including authorization of activities under the Modified Water Deliveries Project), and
- Upper Mississippi River navigation and ecosystem restoration projects (including concerns about linking the funding of navigation and restoration activities).

## **Background and Analysis**

The U.S. Army Corps of Engineers is a federal agency in the Department of Defense with military and civilian responsibilities. At the direction of Congress, the Corps plans, builds, operates, and maintains a wide range of water resources facilities in U.S. states and territories. The agency's traditional civil responsibilities have been creating and maintaining navigable channels and controlling floods; in the last two decades, Congress has increased the Corps' responsibilities in ecosystem restoration, municipal water and wastewater infrastructure, disaster relief, and other activities. The agency's regulatory responsibility for navigable water extends to issuing permits for private actions that might affect wetlands and other waters of the United States.

Congressional direction comes primarily through authorization and appropriations legislation and oversight activities. WRDA is the main legislative vehicle for Corps civil works authorizations. After background and discussion of WRDAs in recent Congresses, this report considers the current status of WRDA and major issues shaping WRDA consideration in the 110<sup>th</sup> Congress: changes to Corps project development practices and policies; coastal Louisiana wetlands restoration activities; UMR-IWW investments; and Everglades restoration projects.

### **WRDAs: Authorizing Corps Studies and Projects**

WRDA legislation provides the Corps with authority to study water resource problems, construct projects, and make major modifications to projects. The provisions and contents of a WRDA are cumulative and new acts do not supersede or replace previous acts unless explicit language modifies, replaces, or terminates

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<sup>1</sup> For example, §2002 of H.R. 1495 would increase the federal cost share from 40% to 65% for construction of deepwater navigation projects, and from 50% to 100% for operation and maintenance of these projects.

previous authorizations. A new WRDA adds to the original language and often amends provisions of previous acts.

Congress generally authorizes Corps water resources studies as part of a periodic consideration of a WRDA, or in a survey resolution by an authorizing committee — the House Transportation and Infrastructure Committee or the Senate Environment and Public Works Committee. Authorization to construct projects and changes to the policies guiding the Corps civil works program, such as project cost-share requirements, are typically in WRDAs.

Authorization of Corps projects generally does not expire; however, there is a process to deauthorize projects that have not received appropriations for seven years. Although Congress has historically authorized Corps projects as part of a WRDA, authorizations also have been included in appropriations bills, especially in years when a WRDA has been delayed or not enacted at all. Corps authorizing committees generally discourage authorizations in appropriations bills; authorization in appropriations bills may be subject to a point of order on the House floor.

Authorization establishes a project's essential character, which is seldom substantially modified during appropriations. The appropriations process, however, plays a significant role in realizing a project; appropriations determine which studies and projects receive federal funds.<sup>2</sup> Many authorized activities never receive appropriations. During the last 15 years, Congress has authorized not only navigation and traditional flood control projects, but also ecosystem restoration, environmental infrastructure assistance, and other activities, increasing competition for construction funds. The Corps now has a "backlog" of more than 800 authorized projects, with more than 500 not consistently receiving construction appropriations.

## WRDAs in Recent Congresses

WRDA 1986 (P.L. 99-662) marked the end of a decade-long stalemate between Congress and the executive branch regarding authorizations. In addition to authorizing numerous projects, WRDA 1986 resolved long-standing disputes related to cost-sharing, user fees, and environmental requirements. A cycle of biennial consideration of a WRDA has been loosely followed. Biennial *enactment* has been less consistent, with WRDAs enacted in 1988 (P.L. 100-676), 1990 (P.L. 101-640), 1992 (P.L. 102-580), 1996 (P.L. 104-303), 1999 (P.L. 106-53), and 2000 (P.L. 106-541). Many of these WRDAs authorized or modified the authorization of more than a hundred projects. Pressure to authorize new projects, increase authorized funding levels, and modify existing projects is often intense, thus promoting a fairly regular (if not always biennial) consideration of WRDA. WRDA legislation was considered, but not enacted, during the 107<sup>th</sup>, 108<sup>th</sup>, and 109<sup>th</sup> Congresses.

Because of the number of projects awaiting authorization and the length of time since Congress enacted the last WRDA in 2000, there is considerable support among some stakeholders for the 110<sup>th</sup> Congress to enact a WRDA bill in 2007.

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<sup>2</sup> For more information on the Corps' appropriations, see CRS Report RL33346, *Energy and Water Development: FY2007 Appropriations*, coordinated by Carl Behrens.

A number of factors that complicated WRDA passage in recent Congresses remain unresolved.<sup>3</sup> The authorizations in WRDA are part of a general debate about the missions of the Corps, and how best to use the agency's resources and budget. The Bush Administration has not sent Congress a WRDA proposal; instead, the Administration expressed concerns about the authorization levels in WRDA bills from the 109<sup>th</sup> Congress, which ranged from approximately \$11 billion to \$15 billion. The Administration is concerned about the addition of new authorizations to the existing backlog of authorized Corps activities; some estimates of the existing backlog exceed \$50 billion.

Additionally, the Administration and some stakeholders and policymakers oppose authorizations for projects outside the agency's core mission areas of navigation, flood control, and ecosystem restoration; in particular, they oppose "environmental infrastructure" projects, which focus on either municipal water supply and wastewater treatment facilities or surface water resource protection and development. Before 1992, the Corps had not been involved in these types of projects. Environmental infrastructure authorizations in the House-passed bill in the 109<sup>th</sup> Congress reportedly were one of the issues that complicated conference negotiations. H.R. 1495 does not authorize new environmental infrastructure projects; however, it increases the authorization levels for some already authorized environmental infrastructure projects.

Billion-dollar project authorizations in H.R. 1495 that may receive attention include:

- Coastal Louisiana: Approximately \$1.1 billion in actions to restore coastal wetlands over the next decade.
- Upper Mississippi River-Illinois Waterway (UMR-IWW): \$2.0 billion for navigation improvements and \$1.6 billion for ecosystem restoration.
- Everglades: \$2.0 billion for projects under the Comprehensive Everglades Restoration Plan (CERP) and other Everglades activities, including work on Tamiami Trail.

Furthermore, some stakeholders may seek changes to the agency and its procedures, while other may oppose some of the changes in H.R. 1495. For example, the performance of the Corps-constructed hurricane protection infrastructure in New Orleans heightened concerns about the quality of the agency's work and increased support for changing the agency's processes and for stronger oversight of its projects. In the 109<sup>th</sup> Congress, the Senate-passed language on independent review of Corps

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<sup>3</sup> Other issues that have not been actively debated in recent WRDA debates also may arise during the course of congressional consideration in the 110<sup>th</sup> Congress. For example, §2009 would allow in-kind construction work by nonfederal project sponsors to be credited against local cost-share responsibilities for Corps projects; this may raise the issue of the responsibility of these nonfederal sponsors to pay prevailing wages under the 1931 Davis-Bacon Act (40 U.S.C. §§276a-276a-5). The application of prevailing wages to activities of nonfederal sponsors was an issue that delayed a WRDA bill's consideration in 2000. For more information on the Davis-Bacon Act, see CRS Report 94-908, *Davis-Bacon: The Act and the Literature*, by William G. Whittaker.

projects differed from the language in H.R. 1495 and previously passed House bills. The 110<sup>th</sup> Congress is likely to confront different opinions on whether to limit review to technical issues or to include policy issues; which projects, documents, and planning tools to exempt from review; who should perform and direct the reviews; what responses to review recommendations would be required; and whether review would be conducted on projects under construction.

## Current Issues

### Corps “Reform” and Policy Changes

Support for changing the Corps’ practices gained momentum in 2000 in the wake of a series of critical articles in the *Washington Post*, whistleblower allegations, and ensuing investigations. Many of the allegations raised were particularly critical of the Corps UMR-IWW navigation studies that were underway in the 1990s. The failure of Corps-constructed floodwalls in New Orleans and the findings of subsequent investigations have strengthened support for some Corps reform measures.

Many advocates for change, primarily environmental groups, seek to modify Corps project planning (e.g., by changing the cost-benefit analysis and consideration of environmental impacts and benefits), to require additional review of Corps projects (e.g., through external review of Corps feasibility reports), and to strengthen environmental protection (e.g., through modifications to fish and wildlife mitigation requirements); these kinds of changes often are referred to as “Corps reform.” Although Corps reforms were discussed in the 106<sup>th</sup>,<sup>4</sup> 107<sup>th</sup>, 108<sup>th</sup>, and 109<sup>th</sup> Congresses, no significant changes were enacted. The Corps argues that it has transformed itself by policies it has implemented since 2000; these include refinements in consideration of environmental benefits during planning, internal peer review, and guidance about optional external review.<sup>5</sup>

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<sup>4</sup> Although the 106<sup>th</sup> Congress did not enact Corps changes, it asked the National Academy of Sciences to review Corps planning in §216 of WRDA 2000. In April 2004, the Academy’s National Research Council (NRC) published four reports from this review. Each report recommended changes in Corps practices and the larger federal water resources management and organizational context. The four 2004 National Research Council reports (Washington, DC: National Academy Press) were *Adaptive Management for Water Resources Planning*; *Analytic Methods and Approaches for Water Resources Project Planning*; *River Basins and Coastal Systems Planning Within the U.S. Army Corps of Engineers*; and *U.S. Army Corps of Engineers Water Resources Planning: A New Opportunity for Service*.

<sup>5</sup> The Corps released five new policy documents in 2005 to be tested as guidance for the agency’s planning activities, which are available at [<http://www.usace.army.mil/publications/eng-circulars/ec-cw.html>]. One, on collaborative planning of Corps projects, is an update to the agency’s planning guidance. Another set out processes for the peer review of scientific, engineering, and economic information and assessments used to inform decision-making. Another established a Civil Works Review Board that approves the final planning reports before submitting them to the Chief of Engineers.



Other stakeholders argue that any changes should move the agency in a different direction than the measures pursued by environmental groups. Supporters of streamlining Corps practices, which include many of the nonfederal project sponsors for Corps projects, argue that the provisions supported by the environmental groups are unnecessary and add delay, cost, and uncertainty to an already lengthy project development and construction process. They want to increase the predictability of the Corps planning process by making changes such as standardizing planning procedures, models, and data; limiting the length of studies; and requiring tracking of the agency's construction backlog.

H.R. 1495 contains a range of provisions that would change Corps policies. For example, Section 2037 would create a process for review of studies undertaken during the development of Corps projects; different opinions persist over how to structure and limit independent review of Corps projects. Other provisions in H.R. 1495 that would alter the agency's policies include Sections 2009 and 2019, which alter agency policies related to the agreements that the agency has with its nonfederal partners. Sections 2013 and 2014 are related to the wetlands mitigation banking and fish and wildlife mitigation at Corps projects, respectively. Section 2036 would alter the consideration of environmental and economic benefits when evaluating project alternatives during the planning process. Many other sections of the bill would also change Corps policies.

## Coastal Louisiana

The Corps has a prominent role in New Orleans and southeast Louisiana hurricane recovery efforts, including repairing damaged floodwalls and levees and strengthening hurricane resiliency through infrastructure fortification and long-term wetlands restoration. The Corps continues to repair and strengthen much of the area's hurricane protection levees and floodwalls using authority and funding provided in supplemental appropriations legislation; funding for this work is an ongoing appropriations issue.

The 109<sup>th</sup> Congress, on the last day of the session (December 9, 2006), passed the Gulf of Mexico Energy Security Act of 2006 (P.L. 109-432); it shares 37.5% of certain offshore oil and gas revenues with four specified Gulf coast states, including Louisiana. These funds, which may be almost \$350 million over the next decade and more than \$25 billion over the next 45 years, according to a July 2006 OMB projection, are to be used for projects and activities to provide coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses, as well as fish and wildlife mitigation. The law increases funding available in Louisiana to commit to the nonfederal portion of restoration and hurricane protection efforts being considered in WRDA 2007.

**Wetlands Restoration and Protection.** Coastal wetlands in Louisiana have been disappearing at a high rate, as a result of both human activities and natural processes. Those losses are forecast to continue if no actions are taken to reverse current trends. Federal agencies, led by the Corps and in coordination with the state, developed several versions of plans to slow the rate of loss and restore some of these wetlands. The current Corps feasibility report was released in November 2004,

before Hurricanes Katrina and Rita. It received a favorable recommendation in January 2005 in a report by the Corps' Chief of Engineers. The report recommended measures totaling an estimated \$1.997 billion — \$1.123 billion for projects and programs for immediate authorization, \$0.145 billion for investigations of “large-scale concepts” that have already been authorized, and \$0.728 billion for future authorization of ten restoration features. The Corps' feasibility report proposed activities to divert water from the Mississippi River to convey sediments into nearby wetlands, and to help stabilize the coastline. (It is important to note that even if this plan is fully implemented, losses will continue, but at a much slower rate.) The federal government would pay about 64% of the total estimated cost. In the diversions, wetlands would gradually reestablish themselves on newly deposited sediments. The Corps is currently updating its overall plan, and, reportedly, may release it by the end of 2007.

Hurricanes Katrina and Rita altered the debate over wetlands restoration proposals and the cost-share for restoration investments. Many restoration proponents are calling for more extensive efforts than were in the versions of WRDA passed by the House and Senate during the 109<sup>th</sup> Congress; generally, their support has centered on a \$14 billion proposal developed by a team of state and federal agencies in the *Coast 2050 Plan* from 1998.<sup>6</sup> Decisions facing Congress include whether to authorize any coastal Louisiana restoration effort, the extent of the authorized effort, and how to prioritize and find synergies between wetlands restoration and hurricane protections. At the state level, the Louisiana Coastal Protection and Restoration Authority released a draft plan in February 2007 titled *Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast*. A final version of this plan is to be submitted to the state legislature later in 2007. While the state is considering this plan, federal decisions in 2007 seem most likely in the context of WRDA.

The Coastal Louisiana title of H.R. 1495 is similar in some ways to House-passed WRDA legislation of the 109<sup>th</sup> Congress, but it has some significant differences as well. The current legislation calls for the development and periodic update of a comprehensive plan for coastal Louisiana, and lists several planning priorities, including not only wetlands creation but also flood protection. It also would authorize the Corps to carry out a Louisiana Coastal Area (LCA) program for ecosystem restoration, and create a federal-state task force to participate in developing and implementing the plan. The task force would also function as the “exclusive peer review panel” for projects subject to the peer-review requirements established in other sections of H.R. 1495. While the title discusses cost-sharing, it does not specify the percentage to be paid by nonfederal partners. It would authorize \$10 million for modification of existing projects; \$100 million for related scientific and technical work; \$100 million for demonstration projects; \$828.3 million for five specific restoration projects that are close to ready to start (including \$105.3 million for the environmental restoration of the controversial Mississippi River Gulf Outlet); \$100 million to explore using dredged materials in restoration; and \$184.6 million

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<sup>6</sup> Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority, *Coast 2050: Toward a Sustainable Coastal Louisiana* (Baton Rouge, LA, 1998), available at [<http://www.lacoast.gov/Programs/2050>].

for four additional projects that are in the earlier stages of planning. H.R. 1495 also would require expedited reports on several specific projects and multiple reports to Congress on accomplishments and adjustments as the restoration effort moves forward.

The Administration has not announced a position on this legislation. While it generally supporting coastal Louisiana wetlands restoration language in the 109<sup>th</sup> Congress, the Administration's position differed from the legislative language in many respects. For example, an OMB Statement of Administration Policy on the a version of the Senate bill recommended a single generic (programmatic) authorization covering all studies, construction, and science activities, rather than the separate authorizations provided in the pending legislation. The Administration argued that this would provide more flexibility and expediency. The Administration's SAP for the 109<sup>th</sup> Congress WRDA bills recommended a cost-share of 50% federal-50% nonfederal.

**Hurricane Protection and Navigation.** In addition to provisions authorizing coastal wetlands restoration efforts, H.R. 1495 also contains numerous provisions related to Corps hurricane protection and navigation projects in Louisiana. The bill would authorize multiple activities to improve New Orleans-area flood and hurricane storm damage reduction projects, including work to provide a level of protection that would protect the area from a 1% event, and thus qualify the area for the National Flood Insurance Program (NFIP). Generally these activities were already appropriated funds through supplemental appropriations legislation in FY2006. H.R. 1495 provides language that stipulates that the projects can exceed 25% of their authorized amounts; any expenditures above that would require an increase in the authorization level approved by both the House Committee on Transportation and Infrastructure and the Senate Environment and Public Works Committee. Standard Corps policy requires projects that exceed 20% of their authorizations to get an increased authorization enacted in legislation.

Among its other provisions, H.R. 1495 also would authorize other hurricane protection and navigation projects, such as the \$0.9 billion Morganza to the Gulf of Mexico project, and modifications to the New Orleans to Venice hurricane protection project.

H.R. 1495 would deauthorize the controversial deep-draft Mississippi River Gulf Outlet (MRGO, Mr. Go) and require a plan for closure and restoration of the channel within 180 after enactment. It would not authorize financial assistance for moving deep-draft navigation facilities that may be affected by the possible permanent closure, which had been included in the Senate-passed version in the 109<sup>th</sup> Congress.

## **Upper Mississippi River-Illinois Waterway**

The Upper Mississippi River and Illinois Waterway (UMR-IWW) is at the center of a debate over the future of inland navigation, the restoration of rivers used for multiple purposes, and the reliability and completeness of the Corps analyses justifying investments. Consequently, authorization of investments in navigation and ecosystem restoration of the UMR-IWW is likely to have a role in WRDA debates

in the 110<sup>th</sup> Congress; topics being debated include the urgency, necessity, and national benefit of expanded UMR-IWW navigation capacity and ecosystem restoration.

The UMR-IWW is a 1,200-mile, 9-foot-deep navigation channel created by 37 lock-and-dam sites and thousands of channel structures. The UMR-IWW makes commercial navigation possible between Minneapolis and St. Louis on the Mississippi River, and along the Illinois Waterway from Chicago to the Mississippi River. It permits upper midwestern states to benefit from low-cost barge transport. Since the 1980s, the system has experienced increasing traffic delays, purportedly reducing competitiveness of U.S. products in some global markets. The river is also losing the habitat diversity that allowed it to support an unusually large number of species for a temperate river system. This loss is partially attributable to changes in the distribution and movement of river water caused by navigation structures and operation of the 9-foot navigation channel.

The Corps' feasibility report failed to significantly reduce the debate over the urgency, necessity, and national benefit of expanded navigation capacity.<sup>7</sup> Following the Corps' Chief of Engineers approval of the completed feasibility report on UMR-IWW improvements in December 2004,<sup>8</sup> the Assistant Secretary of the Army (Civil Works) requested that an economic reevaluation of the navigation investments be made available by the end of September 2007.

The Corps' ecosystem restoration plan has been less controversial than the \$2.0 billion in navigation investments proposed in recent WRDA bills and in H.R. 1495. General agreement exists that the ecosystem is declining, and general support exists for the 15-year increment of the Corps' 50-year ecosystem restoration plan. Debate over the restoration proposal focuses primarily on implementation strategies, including linkages between the ecosystem restoration and navigation investments, and the federal-nonfederal cost-share for restoration activities.<sup>9</sup> OMB's Statements of Administration Policy on WRDA bills in the 109<sup>th</sup> Congress were critical of the

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<sup>7</sup> For a 2004 CRS analysis of key factors affecting the attractiveness of these navigation investments, see CRS Report RL32470, *Upper Mississippi River-Illinois Waterway Navigation Expansion: An Agricultural Transportation and Environmental Context*, coordinated by Randy Schnepf. The National Research Council (Washington, DC: National Academy Press) has reviewed and reported on the UMR-IWW proposals in *Inland Navigation System Planning: The Upper Mississippi River-Illinois Waterway* (2001); *Review of the U.S. Army Corps of Engineers Upper Mississippi-Illinois Waterway Restructured Study: Interim Report* (2003); and *Review of the U.S. Army Corps of Engineers Restructured Upper Mississippi River-Illinois Waterway Feasibility Study: Second Report* (2004).

<sup>8</sup> U.S. Army Corps of Engineers, *Final 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, Sept. 24, 2004), pp. 230 and 490. Available at [[http://www2.mvr.usace.army.mil/umr-iwwsns/documents/FINAL\\_FES\\_EIS\\_Report\\_Cover\(2004\).pdf](http://www2.mvr.usace.army.mil/umr-iwwsns/documents/FINAL_FES_EIS_Report_Cover(2004).pdf)].

<sup>9</sup> For more information, see CRS Report RL32630, *Upper Mississippi River System: Proposals to Restore an Inland Waterway's Ecosystem*, by Kyna Powers and Nicole T. Carter.

cost-share language for this restoration effort; as the result of numerous exceptions to the 65% federal-35% nonfederal cost share, the cost of the \$1.6 billion in restoration activities has been estimated as being split at 91% federal-9% nonfederal. The Administration's SAP for the 109<sup>th</sup> Congress WRDA bills recommended a cost-share of 50% federal-50% nonfederal.

## Everglades Restoration

### **Projects Under the Comprehensive Everglades Restoration Plan.**

The largest Corps ecosystem restoration effort to date is in the Florida Everglades, with a three-decade, \$10.9 billion restoration program. Congress approved the Corps' implementation of the Comprehensive Everglades Restoration Plan as a framework for Everglades restoration in WRDA 2000. The principal objective of CERP is to redirect and store freshwater that currently flows to the ocean back to the Everglades, where it originally was kept. The retained water is expected to help restore the natural hydrologic functions of the Everglades ecosystem. WRDA 2000 authorized an initial set of CERP restoration projects and \$700 million in federal funds to implement them. It also established a process for additional projects outlined in CERP to be developed and authorized. H.R. 1495 would authorize more than \$1.7 billion in CERP activities, including three projects developed under the CERP process, in addition to the \$1.7 billion authorized in WRDA 2000. Some view the fate of these first projects as a test case of the CERP framework.

**Modified Water Deliveries Project.** Prior to CERP, the federal government and the State of Florida had undertaken other Everglades restoration activities. The Modified Water Deliveries Project (Mod Waters) is a controversial ecological restoration project in south Florida designed to improve water delivery to Everglades National Park.<sup>10</sup> The implementation schedule of Mod Waters is of interest to Congress partly because its completion is required before the implementation of portions of the Comprehensive Everglades Restoration Plan. H.R. 1495 addresses Mod Waters by authorizing the construction of a project known as Tamiami Trail Modifications (§6008) at a total cost of \$144 million and specifying that the Secretary of the Army and the Secretary of the Interior shall equally share the construction costs. The Tamiami Trail Modifications project aims to increase water flows to Everglades National Park by raising Tamiami Trail (a state highway) with a 2-mile and 1-mile bridge. Some contend that this project is part of Mod Waters and therefore authorized, whereas others contend that is a separate project that requires authorization. H.R. 1495 would authorize the project and \$144 million to fund the project. The Corps identified this project design as the most cost-effective. Some stakeholders support a more ecologically desirable design, consisting of a 10.7-mile bridge (commonly called the skyway), at an estimated cost of \$280 million.

## Concluding Remarks

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<sup>10</sup> This project was authorized by the Everglades National Park Protection and Expansion Act of 1989 (P.L. 101-229)

Recent debates about authorizations and policies for the Corps' water resources activities have taken place in the context of omnibus WRDA bills. Like WRDA debates in recent Congresses, the debate in the 110<sup>th</sup> Congress likely will be dominated by different opinions over the desirability and need for changing the agency's policies, practices, and accountability, and for authorizing billions of dollars in investments in ecosystem restoration, navigation, and flood and storm damage reduction measures. The growing backlog of Corps construction and maintenance activities, constraints on federal water resources funds, the nation's aging water resources infrastructure, failure of the Corps-constructed floodwalls in New Orleans during Hurricane Katrina, and increased attention to the flood risks of urban areas have raised concerns about continuing the practice of adding billions of dollars in authorizations to the Corps' portfolio of activities through omnibus WRDA legislation. However, many factors maintain the popularity of this vehicle among legislators, and nonfederal project sponsors create demand for its passage, prompting its likely continued use.

Water resources management and policy issues facing the Corps and the nation may arise outside of consideration of a WRDA bill. These issues may receive legislative action in other vehicles, be the subject of amendments proposed to WRDA bills or appropriations legislation, or be the subject of congressional oversight. An example of an ongoing water resource issue affecting the Corps and the nation that may receive congressional attention outside of WRDA is multi-use 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. 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. This shift has resulted in a reexamination by the courts, agencies, and stakeholders of the distribution of economic and other benefits of management alternatives. For example, Missouri River management 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, or vice versa) and how precedence should be decided (e.g., balancing competing uses versus maximizing economic benefits). The river's management is a prime example of the complex issues in which the Corps is embroiled that often result in congressional consideration through oversight or legislative language in WRDA or other bills.

A broad water resource issue that is unlikely to be directly addressed by WRDA, but is significant to the agency and the nation, is the federal role in water resources. Hurricane Katrina raised questions about this role; in particular, the disaster brought attention to the trade-offs in benefits, costs, and risks of the current division of responsibilities among local, state, and federal entities for flood mitigation, preparedness, response, and recovery. The question of the federal role also is raised by increasing competition over water supplies, not only in the West but also for urban centers in the East (e.g., Atlanta), which have resulted in a growing number of communities seeking financial and other federal assistance, actions, and permits related to water supply development (e.g., desalination and water reuse projects, reservoir expansions and reoperations). Congress rarely chooses to pursue broad legislation on federal water resources policies for many reasons, including the

challenge of enacting changes that affect such a wide breadth of constituencies. Instead, Congress traditionally has pursued incremental changes through WRDA bills and other legislation, and this pattern seems likely to continue.

## 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 RL32064, *Army Corps of Engineers Water Resources Activities: Authorization and Appropriations*, by Nicole T. Carter and H. Steven Hughes.

### 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*.

Executive Office of the President, Office of Management and Budget, *Statement of Administration Policy on H.R. 2864* (made on July 14, 2005), available at [<http://www.whitehouse.gov/omb/legislative/sap/109-1/hr2864sap-h.pdf>].

———. *Statement of Administration Policy on S. 728* (made on July 18, 2006), available at [<http://www.whitehouse.gov/omb/legislative/sap/109-2/s728sap-s.pdf>].

### Coastal Louisiana

CRS Report RS22110, *Coastal Louisiana Ecosystem Restoration: The Recommended Corps Plan*, by Jeffrey Zinn.

CRS Report RS22467, *Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA): Effects of Hurricanes Katrina and Rita*, by Jeffrey A. Zinn.

CRS Report RS22276, *Coastal Louisiana Ecosystem Restoration After Hurricanes Katrina and Rita*, by Jeffrey A. Zinn.

CRS Report RL33597, *Mississippi River Gulf Outlet (MRGO): Issues for Congress*, by Nicole T. Carter and Charles V. Stern.

CRS Report RL33188, *Protecting New Orleans: From Hurricane Barriers to Floodwalls*, by Nicole T. Carter.

### Upper Mississippi River-Illinois Waterway

CRS Report RL32470, *Upper Mississippi River-Illinois Waterway Navigation Expansion: An Agricultural Transportation and Environmental Context*, Coordinated by Randy Schnepf.

CRS Report RL32630, *Upper Mississippi River System: Proposals to Restore an Inland Waterway's Ecosystem*, by Kyna Powers and Nicole T. Carter.

CRS Report RL32915, *Upper Mississippi River-Illinois Waterway Investments: Legislation in the 109th Congress*, by Nicole T. Carter.

## **Everglades Restoration**

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

CRS Report RS22048, *Everglades Restoration: The Federal Role in Funding*, by Pervaze A. Sheikh and Nicole T. Carter.

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