

CRS Report for Congress

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

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**Prepared for Members and
Committees of Congress**

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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 107th, 108th, and 109th 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. Efforts have focused on moving WRDA legislation in 2007 based on authorizations for projects, studies, and policy changes that were included in WRDA bills passed by the two chambers during the 109th Congress, and considering additional authorizations in separated legislation later in the 110th Congress.

WRDA 2007 — H.R. 1495, which is estimated to cost more than \$14 billion in the next 15 years — was passed by the House on April 19, 2007. On April 30, 2007, the Senate Committee on Environment and Public Works reported its WRDA 2007, S. 1248. CBO's cost estimate was more than \$31 billion over the next 15 years; \$15 billion of the estimate was attributed to hurricane protections works for coastal Louisiana. A Manager's Amendment is anticipated during Senate floor consideration; it is reported that the coastal Louisiana authorizations may be trimmed to mirror language specific to New Orleans hurricane protection that was in the House bill (which CBO estimated at \$3 billion).

Issues that shaped WRDA debates in recent Congresses continue to receive attention, as well as new issues such as incorporating climate change into the planning of Corps projects. The Administration has expressed reservations about the total authorization level of recent WRDA bills and numerous specific provisions. On April 18, 2007, OMB released a Statement of Administration Policy (SAP) for H.R. 1495 that "strongly opposes H.R. 1495 in its current form" and characterizes the level of authorizations as "unacceptable." The Administration has not issued a SAP on S. 1248. Other issues shaping WRDA 2007 include different opinions on Corps reform measures (such as independent review and project planning), increases in the federal cost for some water resources activities and nonfederal cost share credits, and expansion of the Corps' authorizations in municipal water and wastewater infrastructure, called *environmental infrastructure* projects.

H.R. 1495 is based largely on the House-passed WRDA bill of the 109th Congress. H.R. 1495 includes authorizations for almost 700 projects and studies and a few regional efforts. It would authorize approximately \$1.1 billion in construction activities to restore wetlands in coastal Louisiana, and actions to improve hurricane protection in New Orleans. Authorization of spending for navigation improvements (\$2.0 billion) and ecosystem restoration (\$1.6 billion) on the Upper Mississippi River-Illinois Waterway, and Florida Everglades restoration (\$2 billion), are included. These regional authorization also are present in S. 1248. S. 1248 has most of the same provisions as the Senate-passed WRDA of the 109th Congress. S. 1248 would authorize less than half the number of studies, projects, and project modifications as H.R. 1495, and create a National Levee Safety Program.

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

Most Recent Developments

Efforts to authorize Army Corps of Engineers water resources actions and policy changes have used the WRDA bills of the 109th Congress as the basis for the bills in 2007. Reportedly, additional authorizations are anticipated for consideration in separate WRDA legislation later in the 110th Congress (i.e., a WRDA 2008).

H.R. 1495, Water Resources Development Act of 2007, is based largely on the House-passed WRDA bill (H.R. 2864) of the 109th Congress, which was not enacted.¹ Cost estimates for H.R. 1495, as passed by the House on April 19, 2007, are \$14 billion. S. 1248, the Senate's version of WRDA 2007, has most of the same provisions as the Senate-passed version of the WRDA (H.R. 2864) of the 109th Congress. On April 30, 2007, the Senate Committee on Environment and Public Works reported S. 1248. It would authorize less than half the number of studies, projects, and project modifications as H.R. 1495. Provisions in S. 1248 with unspecified authorization caps — such as one providing construction authorization for comprehensive hurricane protection for coastal Louisiana, subject to authorizing committee resolutions in the House and Senate — have raised questions regarding the total level of authorizations provided in S. 1248. CBO estimates the cost of the bill at \$5.5 billion for 2008-2012 and \$26 billion for the 10 years after 2012. In its estimate for 2013 to 2022, CBO included \$15 billion for the hurricane protection works for coastal Louisiana. A Manager's Amendment is anticipated during Senate floor consideration; it is reported that the coastal Louisiana authorizations may be trimmed to mirror language specific to New Orleans hurricane protection that was in the House bill (which CBO estimated at \$3 billion).

Fiscal Issues. On April 18, 2007, a Statement of Administration Policy (SAP) for H.R. 1495 expressed that the Administration “strongly opposes H.R. 1495

¹ Some changes to the contents of project authorizations were included in H.R. 1495. 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's Folsom Dam projects that would authorize \$683 million in construction activities to reduce the City of Sacramento's vulnerability to flooding.

in its current form.” The SAP found the authorizations in the bill “unacceptable”; it stated: “The bill would increase Federal cost-share for many projects, authorize projects outside of the Army Corps of Engineers’ (Corps) mission, and not ensure that projects yield high economic and environmental returns.” A SAP for S. 1248 has not been issued.

Agency “Reform” Issues. The Administration stated its support for expanded use of external independent review, while also proposing changes to the independent review provision (§2037) of the H.R. 1495. S. 1248 contains the independent review language that was added on the Senate floor during WRDA consideration in the 109th Congress. The House and Senate provisions differ on which projects could be reviewed (i.e., the scope of the review), which projects could be exempted or included for review, who would be performing and directing the reviews, and how recommendations resulting from the reviews would be treated.

Another issue related to changing the practices and procedures of the agency was the subject of an amendment to H.R. 1495 agreed to on the House floor. The amendment substituted the language of §2036 on project planning. The original provision would have clarified the Secretary’s ability to recommend for construction a project alternative other than the one that maximized national economic development benefits. This was replaced by a requirement that the Secretary revise the agency’s guidance for project planning. S. 1248 would create a Water Resources Planning Coordinating Committee that would make recommendations for revising the planning guidance; the committee would consist primarily of federal department secretaries and agency directors.

Prioritization of Corps projects as a means of focusing federal water resources has been raised as a Corps reform issues in recent Senate WRDA debates, and is reportedly being considered as the subject of a Senate floor amendment. A prioritization amendment failed on the Senate floor during the 109th Congress because of concerns that the provision’s language would have reduced congressional ability to direct the agency.

Regional Project Authorizations. Other issues shaping WRDA 2007 include different opinions about the specifics of project authorizations, including the billion-dollar regional authorizations 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 Illinois Waterway (UMR-IWW) navigation and ecosystem restoration projects (including concerns about linking the funding of navigation and restoration activities).

Other Issues. Some new issues have entered the WRDA debate. Some environmental groups have raised concerns that H.R. 1495 and S. 1248 do not

directly address the impact of climate change on flood risk across the nation and are calling for incorporating climate change into the planning of Corps projects. Interest in directing the Corps to study the energy and fuel-related consequences of dam removal was raised via a failed motion to recommit H.R. 1495 on the House floor.

An issue that shaped WRDA debates in the 109th Congresses also is continuing to receive attention, especially in the context of congressional earmark reform discussions. Some taxpayer groups have spoken out against *environmental infrastructure* projects, arguing that other government agencies have existing, competitive programs to assist with these municipal infrastructure needs, and that these projects are outside the scope of the agency's core missions. Proponents of environmental infrastructure argue that these projects are necessary because of gaps in existing federal programs.

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 to the Corps comes primarily through authorization and appropriations legislation and oversight. 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 110th 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 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 (T&I) 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.² 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 107th, 108th, and 109th Congresses.

Current Issues

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 110th Congress to enact a WRDA bill in 2007. A number of factors that complicated WRDA passage in recent Congresses remain unresolved.³

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

³ Other issues that have not been actively debated in recent WRDA debates also may arise (continued...)

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 has expressed its position through Statements of Administration Policy by the Office of Management and Budget (OMB). In these SAPs, the Administration has raised concerns about adding new authorizations to the backlog of authorized Corps activities; some estimates of the existing backlog exceed \$60 billion. The Administration also opposed §2002 of H.R. 1495, which 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. Section 2001 of S. 1248 would allow in-kind construction work by nonfederal project sponsors to be credited against local cost-share responsibilities for Corps projects; in a SAP on the WRDA bill considered by the Senate during the 109th Congress, the Administration opposed this provision, citing diminished accountability, consistency, and Corps oversight.

Corps “Reform” and Policy Changes

Some stakeholders seek changes to the agency and its procedures like those in S. 564, the Water Resources Planning and Modernization Act of 2007; others oppose some of the changes in H.R. 1495 and S. 564. 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 and heightened concerns about the quality of the agency's work.

Many advocates for change, primarily environmental groups, seek to modify Corps project planning (e.g., by changing the benefit-cost 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 106th,⁴ 107th, 108th, and 109th

³ (...continued)

during the course of congressional consideration in the 110th 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.

⁴ Although the 106th Congress did not enact Corps changes, it asked the National Academy (continued...)

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.⁵

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 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, different opinions persist over how to structure and limit independent review of Corps projects. Section 2037 would create a process for technical reviews of studies undertaken during the development of Corps projects. S. 1248 contains the independent review language that was added on the Senate floor during WRDA consideration in the 109th Congress. The House and Senate provisions differ on which projects could be reviewed (i.e., the scope of the review), which projects could be exempted or included for review, who would be performing and directing the reviews, and how recommendations resulting from the reviews would be treated. For example, the Senate version includes requirements for independent safety reviews of the construction of Corps flood and storm damage reduction projects, a requirement prompted by the floodwall failures in New Orleans. No similar safety review is included in H.R. 1495.

An amendment to H.R. 1495 agreed to on the House floor substituted the language of §2036 related to project planning. The original provision on project planning would have clarified the Secretary's ability to recommend for construction

⁴ (...continued)

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 (1) *Adaptive Management for Water Resources Planning*; (2) *Analytic Methods and Approaches for Water Resources Project Planning*; (3) *River Basins and Coastal Systems Planning Within the U.S. Army Corps of Engineers*; and (4) *U.S. Army Corps of Engineers Water Resources Planning: A New Opportunity for Service*.

⁵ 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. A third established a Civil Works Review Board that approves the final planning reports before submitting them to the Chief of Engineers.

a project alternative other than the one that maximized national economic development benefits. This provision was replaced by a requirement that the Secretary revise the agency's guidance for project planning. Environmental groups supported the amendment. They criticized the existing guidance, which had been adopted in 1982, as being outdated, insufficiently attentive to environmental costs and benefits of projects, and favoring structural solutions to water resources issues. Opponents of the amendment argued that the existing guidance provided sufficient flexibility to adapt to changing water resources knowledge and challenges.

The planning provision (§2005) in S. 1248 would provide deadlines for milestones for the planning process and related reports; it also provides direction on the consideration of risk in flood damage reduction projects, consideration of project alternatives, and assessments of the cost-effectiveness of elements of a project. Under the Senate version (§2006), every five years, a Coordinating Committee composed of secretaries from numerous federal departments would recommend changes to the planning principles guiding the agency's evaluation and development of projects. The Coordinating Committee also would be required to submit within two years of enactment a report on the vulnerability of the United States to flood and storm damages.

Other provisions in the bills also would alter the agency's policies, including §§2009 and 2019 of H.R. 1495, which would change policies related to the agreements that the agency has with its nonfederal partners. Other provisions of both bills would alter fish and wildlife mitigation at Corps projects. Many other sections of the bill would also change Corps policies.

Prioritization of Corps projects as a means of focusing federal water resources has been raised as a Corps reform issues in recent Senate WRDA debates, and is reportedly being considered as the subject of a Senate floor amendment. Prioritization language is included in S. 564, the Water Resources Planning and Modernization Act of 2007. A prioritization amendment failed on the Senate floor during the 109th Congress because of concerns that the provision's language would have reduced congressional ability to direct the agency.

Environmental Infrastructure

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. Before 1992, the Corps had not been involved in these types of projects. In recent years, appropriations for Corps environmental infrastructure have ranged from \$94 million in the FY2007 work plan for the agency to more than \$200 million in some years, representing between 2% and 4% of the agency's budget. Opponents dislike Corps involvement in these projects, arguing that other government agencies have existing, competitive programs to assist with these municipal infrastructure needs. Proponents of environmental infrastructure argue that these projects are necessary because of gaps in existing federal programs.

Environmental infrastructure authorizations in the House-passed bill in the 109th Congress reportedly were one of the issues that complicated conference negotiations.

As reported by the House Committee on Transportation and Infrastructure, H.R. 1495 did not authorize new environmental infrastructure projects; however, it increased the authorization levels for some already authorized environmental infrastructure projects. The manager's amendment to H.R. 1495 agreed to on the House floor authorized more than \$800 million in federal appropriations for new environmental infrastructure activities. S. 1248 includes approximately \$100 million in federal appropriations authorization for activities that some stakeholders may classify as environmental infrastructure.

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 109th 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, 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. They 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 those authorized in H.R. 1495; 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 1998.⁶ 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 protection. 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 are most likely to occur 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 109th 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 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 coastal Louisiana title of S. 1248 is identical to the Senate-passed WRDA legislation of the 109th Congress. The near-term coastal Louisiana restoration actions that would be authorized by S. 1248 are largely the same as the authorizations in H.R. 1495. In general, the coastal Louisiana provisions in H.R. 1495 provide more detail, project information, and authorization of appropriations caps than those in S. 1248.

S. 1248 would create the Louisiana Water Resources Council, which would oversee and manage implementation of a system-wide plan for Corps projects that address issues raised by the hurricanes. Council members would be appointed by the

⁶ 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>].

President of the Mississippi River Commission, in consultation with the Louisiana governor. The Administration has previously objected to the creation of the Council, citing a circumvention of the executive branch processes, thus reducing accountability, and citing constitutional concerns with regard to the Appointments Clause. H.R. 1495 would require the establishment of the council and for it to provide the external review for the coastal Louisiana projects; no other details regarding the Council are provided in H.R. 1495.

According to the Administration's SAP for H.R. 1495, certain coastal Louisiana provisions in the bill raise some constitutional concerns related to the separation of powers and executive authority. It states: "provisions that purport to direct the substance of, and/or determine the chain of command for, internal Executive Branch deliberations should be deleted as inconsistent with the President's authority to supervise the unitary Executive." It also states that sections that purport to give congressional committees the power to control the execution of certain provisions of the bill after it has been enacted, as well as the power to appropriate funds by committee resolution, "should be modified so as not to violate the constitutional separation of powers and not contradict the Supreme Court's ruling in *INS v. Chadha*."

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 100-year flood, 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.

In contrast to H.R. 1495 provisions that specifically authorize New Orleans related hurricane protection, S. 1248 would conditionally authorize the projects being developed under a comprehensive hurricane protection study that is currently underway for the larger coastal Louisiana area; the authorization is contingent on the Senate EPW and House T&I committee resolutions approving the project. This would differ from the typical Corps process of projects requiring project-specific authorization by Congress in enacted legislation before appropriations are directed to the Corps for construction activities. The Administration during WRDA consideration in the 109th Congress opposed conditional pre-authorization of projects and noted that the hurricane protection projects are yet to be identified, and the costs are likely to measure in the tens of billions. A Manager's Amendment reportedly may trim the coastal Louisiana authorizations to mirror language specific to New Orleans hurricane protection that was in the House bill (which CBO estimated at \$3 billion).

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.

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. Authorization of investments in navigation and ecosystem restoration of the UMR-IWW is playing a role in current WRDA debates; topics being debated include the urgency, necessity, and national benefit of expanded UMR-IWW navigation capacity and ecosystem restoration and how, if at all, to link the funding for the two efforts.

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 (primarily agricultural 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.⁷ Following the Corps' Chief of Engineers approval of the completed feasibility report on UMR-IWW improvements in December 2004, 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 H.R. 1495 and S. 1248. General agreement exists that the ecosystem is declining, and general support exists for the

⁷ 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, September 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)]. 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).

first 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. The Administration's SAP on H.R. 1495 was critical of the 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 SAP 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 store freshwater that currently flows to the ocean, and redirect it 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 and S. 1248 would authorize more than \$1.7 billion in CERP activities, including 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.⁸ 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; 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. S. 1248 does not include provisions on Mod Waters.

⁸ This project was authorized by the Everglades National Park Protection and Expansion Act of 1989 (P.L. 101-229).

Concluding Remarks

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 110th Congress is 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, versus maintaining minimum levels of some values). 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

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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>].

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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.

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.