

CRS Report for Congress

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

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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; the most recent WRDA was enacted in 2000. WRDA 2007 (H.R. 1495), which would authorize hundreds of projects and studies, was presented to the President on October 23, 2007. The conference report was agreed to in the House by a vote of 381-40, and in the Senate by a vote of 81-12.

A central issue in the current debate over the bill is its level of authorizations. A recent Congressional Budget Office analysis of H.R. 1495 estimated the 15-year impact of the bill at \$23 billion. The conference report would authorize the majority of projects in the earlier House and Senate versions of the bill; because many authorizations were in either the Senate or House bill but not in both, and because the Army Corps increased cost estimates in August 2007 for New Orleans hurricane protection authorized in the bill, the conference report authorization level exceeded the cost estimates of each chamber's bill.

An August 1, 2007, Administration letter stated that the President anticipated vetoing the bill, citing among other reasons the authorization level. The White House veto threat has prompted speculation about a congressional override. The Administration supports limiting authorizations to projects in the Corps' primary missions (navigation, flood and storm damage reduction, and ecosystem restoration) that demonstrate an economic and environmental justification for federal participation. Other issues shaping the WRDA 2007 debate include different opinions on Corps reform measures (such as independent review and project planning) and the need for prioritizing among authorized projects, 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 would authorize more than two billion dollars in construction activities to restore wetlands in coastal Louisiana, as well as actions to improve hurricane protection in New Orleans. Authorizations for navigation improvements (\$2.2 billion) and ecosystem restoration (\$1.7 billion) on the Upper Mississippi River-Illinois Waterway and Florida Everglades restoration (around \$2 billion), also are included. The conference bill would create a Committee on Levee Safety that would make recommendations for a national levee safety program. The conference bill's independent review provisions would require technical review of plans for Corps projects exceeding \$45 million and a safety review of construction activities for flood and storm damage projects at the discretion of the agency's Chief of Engineers.

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

Most Recent Developments

Congress generally authorizes new Army Corps of Engineers water resources studies and projects before appropriating funds for these activities. Authorization typically occurs in a Water Resources Development Act (WRDA). The 107th, 108th, and 109th Congresses considered but did not enact WRDA legislation; the most recent WRDA was enacted in 2000. WRDA 2007, which would authorize hundreds of projects and studies, was presented to the President on October 23, 2007. The conference report was agreed to in the House by a vote of 381-40, and in the Senate by a vote of 81-12.

A central issue in the current debate over the bill is its level of authorizations. A recent Congressional Budget Office analysis of H.R. 1495 estimated the 15-year impact of the bill at \$23 billion. The conference report's authorization level exceeded the estimates for the House and Senate versions of the bill, which were around \$14 billion and \$15 billion. Principal among the reasons for the higher authorization levels in the conference report are that

- it includes a majority of authorizations in the House and Senate bills, and many of the authorizations were only in one of those bills;
- the Army Corps in August 2007 increased federal cost estimates for New Orleans hurricane protection by approximately \$3.6 billion (previous estimates had been for approximately \$2.2 billion in federal funding beyond the supplemental appropriations already provided for this work);
- and, to a lesser extent, approximately 20 provisions in the conference report were in neither the House bill nor the Senate bill, including a more than \$250 million modification to the Santa Ana (CA) River Mainstem project.

An August 1, 2007, Administration letter stated that the President anticipates vetoing the bill, citing among other reasons the authorization level. The White House veto threat has prompted speculation about a congressional override. (For information on the override process, see CRS Report RS22654, *Veto Override Procedures in the House and Senate*, by Elizabeth Rybicki.)

The Administration supports limiting authorizations to projects in the Corps' primary missions (navigation, flood and storm damage reduction, and ecosystem

restoration) that demonstrate an economic and environmental justification for federal participation. Other issues that shaped WRDA 2007 include different opinions on Corps reform measures (such as independent review and project planning) and the need for prioritizing among authorized projects, increases in the federal cost for some water resources activities and nonfederal cost share credits, and expansion of Corps authorizations in municipal water and wastewater infrastructure (called *environmental infrastructure* projects).

Senate floor consideration was shaped by debate over whether restrictions on adding provisions during conference that were in neither the House nor the Senate bill applied to authorization bills like WRDA.

Agency “Reform” Issues. Throughout congressional consideration of the bill, independent review remained a debated policy issue. Conferees were faced with the challenge of reconciling the House and Senate language. The provisions had differed 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. The conference report adopted the technical review approach of the House bill, rather than the Senate’s broader policy review, and does not create a separate office of independent review, which had been part of the Senate language. The conference report included a safety assurance review for hurricane protection and flood damage projects — a concept raised in the Senate version — but unlike the Senate bill, the conference report gave the Corps’ Chief of Engineers discretion regarding when to call for a safety review. In its SAPs, the Administration stated its support for expanded use of external independent review while also proposing changes to §2037 (the independent review provision of the House bill) and §2007 (the independent review provision of the Senate bill).

Regional Project Authorizations. Other issues that shaped WRDA 2007 consideration included 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 Morgana-to-the Gulf project, and the authorization levels and specifics of wetlands restoration activities 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 entered the WRDA debate during consideration by the 110th Congress. For example, some environmental groups raised concerns that WRDA 2007 bill did not directly address the impact of climate change on flood risk across the nation. Language requiring the Corps to consider climate change impacts on its water resources projects, which is similar to language in a WRDA amendment that failed on the Senate floor, is included in H.R. 3221 — New

Direction for Energy Independence, National Security, and Consumer Protection Act — as passed by the House. 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.

Authorization of municipal water and wastewater infrastructure projects (called *environmental infrastructure* at the Corps) is an issue that shaped WRDA debates in the 109th Congresses and continued to receive attention, especially in the context of congressional earmark reform discussions. The conference report combined environmental infrastructure authorizations in the House and Senate versions of the bill; the conference report contains more than 200 Corps environmental infrastructure project authorizations. Some taxpayer groups have spoken out against these authorizations, arguing that other government agencies have existing, competitive programs¹ 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 authorizations are necessary to assist programs that are ineligible or have been unsuccessful at obtaining funds through these other programs.

The conference language would create a Committee on Levee Safety that would make recommendations for a national levee safety program. The Senate bill would have created a levee safety program; the House bill had not included levee safety provisions.

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.

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, including 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

¹ For a description of the existing programs, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, by Betsy A. Cody et al.

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 WRDA, or in a resolution by an authorizing committee — the House Transportation and Infrastructure Committee (T&I) or the Senate Environment and Public Works Committee. Authorization for construction 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 has an existing "backlog" of more than 800 authorized projects with more than 500 projects not consistently receiving construction appropriations. The current backlog is estimated at \$38 billion to \$60 billion depending on the suite of project authorizations considered.

WRDAs in Past Congresses

WRDA 1986 (P.L. 99-662) was a milestone for the Corps; it marked the end of a decade-long stalemate between Congress and the executive branch regarding authorizations, and changed the relationship and cost-sharing requirements between the agency and the nonfederal sponsors of its projects. It also established user fees and environmental requirements. Pressure to authorize new projects, increase authorized funding levels, and modify existing projects is often intense, thus promoting consideration of WRDA. Since 1986, 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). Since 2000, the 107th, 108th, and 109th Congresses have considered but not enacted WRDA legislation.

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

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. However, a number of factors (e.g., disagreement over the specifics of independent review provisions and other changes to Corps policies, Administration concerns about the overall level of authorizations, opposition to specific projects) complicated WRDA 2007 enactment. The authorizations in WRDA are part of a more general debate about the missions of the Corps, and how best to use the agency's resources and budget.

The Bush Administration did not send Congress a WRDA proposal; instead, it expressed its position through Administration letters and Statements of Administration Policy by the Office of Management and Budget (OMB). The Administration has threatened a veto, citing the conference language that would authorize billions in new authorizations, including billions for projects that the Administration considers to be outside the core mission of the agency. The Administration also opposed provisions that would increase the federal financing of Corps projects. Provisions in the conference bill that would allow in-kind construction work and work prior to the federal-nonfederal project cooperation agreement by nonfederal project sponsors to be credited against local cost-share responsibilities and for Corps projects could increase the federal share of project costs.³

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 proposed 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

³ A related issue that may arise during the course of congressional consideration concerns provisions that would allow in-kind construction work by nonfederal project sponsors to be credited against local cost-share responsibilities for Corps projects. This crediting 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.

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 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.

The conference report for H.R. 1495 contains a range of provisions that would change Corps policies. Of these provisions, the independent review language continues to receive congressional attention and be the subject of debate. The House and Senate provisions differed 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. The Senate version included 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 was included in the House bill.

The conference report includes a safety assurance review for hurricane protection and flood damage projects, but gives the Corps’ Chief of Engineers

⁴ Although the 106th 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 NRC reports 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* (Washington, DC: National Academy Press).

⁵ The Corps released five new policy documents in 2005 to be tested for two years 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.

discretion regarding when to call for a safety review. Overall, the conference report adopts the technical review approach of the House bill, rather than the Senate's broader policy review, and does not create a separate office of independent review, which had been part of the Senate language. The conference language adopts the sunset provision for the independent review requirements from the House bill but extends the deadline from four years to seven years. The conference language allows the Chief of Engineers to exempt from review projects that are considered routine, some projects involving rehabilitation and replacement, and projects that pose minimal loss of life risks.

Environmental Infrastructure

The Administration, some Members of Congress, and some stakeholders 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 (i.e., municipal water and wastewater 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 of Corps involvement in environmental infrastructure argue that other government agencies have existing, competitive programs to assist with these municipal infrastructure needs. Proponents of environmental infrastructure argue that these Corps projects are necessary because existing federal programs are unable to address all the existing needs, either because of program eligibility criteria or constrained resources. The conference language would authorize more than 200 new Corps environmental infrastructure projects.

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 total 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 65% 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 the WRDA 2007 bills; 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 the WRDA 2007 conference report combines provisions in the House and Senate-passed bills, generally adding more specificity and detail, but also making a few more significant changes from both these bills. The House-passed bill 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 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>].

House bill. 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. The House bill 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 the Senate bill would authorize many of the same actions as the House bill. Where the bills differ, the Senate bill generally provides less detail and project information. More specifically, the Senate bill 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 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. The House 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 the House bill.

The conference committee did not eliminate any coastal Louisiana ecosystem restoration projects that had been in the House- and Senate-passed bills. It did make a number of adjustments to language about what is to be considered in the restoration, often combining language from both bills. It would authorize more projects than either of the passed bills, either directly if the Secretary determines they are feasible, or with the approval by resolution of the House Transportation and Infrastructure Committee or the Senate Environment and Public Works Committee. A new subsection (Section 7006(c)(4)) would limit cost increases for each of the 5 initial projects to 150% of the current estimated cost. The conference committee bill, in Section 7006(3)(A), would authorize six additional projects with a total cost of \$542 million that were not identified in either the House-passed or Senate-passed bills if the Chief issues a favorable report before December 31, 2010.

According to the Administration's SAPs for the House and Senate bills, certain coastal Louisiana provisions in the bill raise some constitutional concerns related to the separation of powers and executive authority. The SAP for the House bill 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*.⁷ This concern did not appear to be addressed by the conference committee.

Hurricane Protection and Navigation. In addition to provisions authorizing coastal wetlands restoration efforts, the WRDA 2007 bills also contain numerous provisions related to Corps hurricane protection and navigation projects in Louisiana. The bills 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). Many of these activities were already appropriated funds through the \$7 billion in supplemental appropriations legislation in FY2005 and FY2006 for coastal Louisiana hurricane storm protection. Since the supplemental funds were appropriated, revised estimates for the work indicate that nearly \$6 billion in additional federal appropriations would be needed to complete the activities.⁸

The conference report stipulates that the projects can exceed their authorized level by 25%; 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 their authorized level by 20% to obtain a legislative increase in their authorization level.

The conference report also provides for expedited consideration of measures analyzed as part of a comprehensive hurricane protection study that is currently underway for the larger coastal Louisiana area. The provision states that legislative proposals submitted by the President based on the results of the study shall be eligible for expedited consideration by the Senate. Expedited consideration would consist of a 45-legislative-day window for Senate Committee action.

Among their other provisions, the WRDA 2007 bills also would authorize other hurricane protection and navigation projects, such as the \$0.9 billion Morganza-to-the Gulf of Mexico 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 used

⁷ For a discussion of the separation of powers issue, see CRS Report RL33151, *Committee Controls of Agency Decisions*, by Louis Fisher.

⁸ On August 22, 2007, the Corps announced over \$6 billion in increases in cost estimates for New Orleans hurricane protection since the supplemental appropriations in 2006 (see the press release for more information at [http://www.usace.army.mil/cw/hot_topics/ht_2007/orleans_risk_maps.pdf]). The August 2007 estimate for federal funding for the work was approximately \$3.6 billion more than the previous estimate; the previous estimate had been for \$2.2 billion in federal funding beyond the supplemental appropriations already provided for this work.

to justify federal water resources investments. Authorization of investments in navigation and ecosystem restoration of the UMR-IWW is part of the current WRDA debate; namely, the urgency, necessity, and national benefit of these investments and how, if at all, to link the funding for the navigation and ecosystem restoration 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' Chief of Engineers approved the completed feasibility report on UMR-IWW improvements in December 2004. The Chief's approval and the Corps' feasibility report failed to significantly reduce the debate over the urgency, necessity, and national benefit of expanded navigation capacity.⁹ 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. Critics of the project argue that the economic justification for the navigation lock investments are decreasing as the result of anticipated use of corn in the region for ethanol production rather than for shipment to international markets. Supporters of the investments argue that competitiveness of U.S. products is harmed by the additional cost and travel time incurred during transit through and waiting for availability of the existing shorter locks.

The Corps' ecosystem restoration plan has been less controversial than the \$2.2 billion in navigation investments proposed in the WRDA 2007 bills. General agreement exists that the ecosystem is declining, and general support exists for the 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 the House bill was critical of the cost-share language for this restoration

⁹ 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).

effort. As the result of numerous exceptions to the 65% federal-35% nonfederal cost share, the cost of the \$1.7 billion in restoration activities has been estimated as being split at 91% federal-9% nonfederal. The SAP for the House bill recommended a cost share of 50% federal-50% nonfederal. The SAP on the Senate bill did not address the cost share for the project, but it does suggest deleting the provision linking restoration and navigation funding.

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 (CERP) 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. The WRDA 2007 bills 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.¹⁰ 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. The House bill would have addressed 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.

The House bill would have authorized the \$144 million project design that the Corps found to be the most cost-effective. Some stakeholders support a more ecologically desirable design, consisting of a 10.7-mile bridge (commonly called the skyway). The Senate bill did not include provisions on Mod Waters. H.Rept. 110-280 states that "the managers are concerned that continuing re-analysis of options for modifying water deliveries will only delay benefits to the Everglades." The

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

conference report deletes the House authorization but provides multiple directions to the Corps in report language. For example, report language would direct the Chief of Engineers to take immediate steps to increase flows to the Park, without significantly increasing the risk of roadbed failure. H.Rept. 110-280 also would direct the Chief of Engineers to reexamine prior reports and environmental documentation associated with modifying water deliveries to the Everglades National Park and to submit to Congress no later than July 1, 2008, recommendations on practicable alternatives for increasing the flow of water under Tamiami Trail and into the Park.

WRDA in the Federal Water Resources Context

In addition to directing future federal investments in water resources through WRDA authorizations, Congress also is confronted with addressing water resources issues that are not resolved through authorizing new projects. 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.

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 debates surrounding WRDA 2007 illustrated the continuing differences of opinions over the role of authorizations in guiding and prioritizing the agency's activities. 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.

For Additional Reading

Background

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Authorizations and WRDA

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——. Letter to Honorable Barbara Boxer, May 8, 2007, on amendment in nature of a substitute to S. 1248, the Water Resources Development Act of 2007, available at [<http://www.cbo.gov/ftpdocs/80xx/doc8093/s1248am.pdf>].

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——. *Statement of Administration Policy on H.R. 1495 (Senate)* (made on May 11, 2007), available at [<http://www.whitehouse.gov/omb/legislative/sap/110-1/hr1495sap-s.pdf>].

Rob Portman (Executive Office of the President, Office of Management and Budget) and John Paul Woodley, Jr. (Assistant Secretary of the Army (Civil Works)), letter to Chairman James Oberstar, August 1, 2007.

Coastal Louisiana

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

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

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