



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

April 30, 2007

Water Resources Development Act of 2007

*As ordered reported by the Senate Committee on Environment and Public Works
on March 29, 2007*

SUMMARY

The Water Resources Development Act of 2007 would authorize the Army Corps of Engineers (Corps) to conduct water resource studies and undertake specified projects and programs for flood control, inland navigation, shoreline protection, and environmental restoration. The bill would authorize the agency to conduct studies on water resource needs, to complete feasibility studies for specified projects, and to convey ownership of certain federal properties. Finally, the bill would extend, terminate, or modify existing authorizations for various water projects and would authorize new programs to develop water resources and protect the environment.

Assuming appropriation of the necessary amounts, including adjustments for increases in anticipated inflation, CBO estimates that implementing the legislation would cost about \$5.5 billion over the 2008-2012 period and an additional \$26 billion over the 10 years after 2012. In particular, section 1003(o) would effectively authorize the Corps to construct projects in southern Louisiana to protect the region from a hurricane storm surge that results from a category 5 hurricane. Cost estimates to provide that level of protection in the New Orleans region are not available. However, based on the anticipated cost of flood protection projects envisioned for this region, CBO expects that additional flood protection efforts would cost at least \$15 billion during the decade following 2012 and perhaps much more. (Some construction costs and operations and maintenance would continue or commence after those first 15 years.)

The bill would convey parcels of land to various nonfederal entities and would forgive the obligation of some local government agencies to pay certain project costs. The bill also would allow the Corps to collect and spend fees charged for training courses offered by the Corps and for processing certain permits issued by the Corps. CBO estimates that enacting those provisions would increase net direct spending by \$6 million in 2008, by \$4 million over the 2008-2012 period, and by \$5 million over the 2008-2017 period. Enacting the bill would not affect revenues.

The legislation contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). Federal participation in the levee safety program and in water resource projects and programs authorized by this bill would benefit state, local, and tribal governments. Any costs incurred by those governments to comply with the conditions of this federal assistance would be incurred voluntarily.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of the legislation is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By Fiscal Year, in Millions of Dollars				
	2008	2009	2010	2011	2012
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated Authorization Level	1,224	1,350	1,265	1,209	1,197
Estimated Outlays	674	1,112	1,272	1,233	1,197
CHANGES IN DIRECT SPENDING ^a					
Estimated Budget Authority	6	-2	*	*	*
Estimated Outlays	6	-2	*	*	*

NOTE: * = less than \$500,000.

a. Annual changes in direct spending after 2012 would sum to less than \$500,000 a year.

BASIS OF ESTIMATE

For this estimate, CBO assumes that the bill will be enacted before the start of fiscal year 2008 and that the necessary amounts will be appropriated for each fiscal year.

Spending Subject to Appropriation

The bill would authorize new projects related to environmental restoration, shoreline protection, and navigation. It also would modify many existing Corps projects and programs by increasing the amounts authorized to be appropriated to construct or maintain them or by increasing the federal share of project costs. Assuming appropriation of the necessary funds, CBO estimates that implementing the bill would cost \$5.5 billion over the 2008-2012 period and an additional \$26 billion over the 10 years after 2012, including at least \$15 billion that would be authorized by section 1003(o).

For newly authorized water projects specified in the bill, the Corps provided CBO with estimates of the annual budget authority needed to meet project design and construction schedules. CBO adjusted those estimates to reflect the impact of anticipated inflation during the time between project authorization and the appropriation of construction costs. Estimated outlays are based on historical spending rates for Corps projects.

Significant New Authorizations. The legislation would authorize the Corps to conduct water resource studies and undertake specified projects and programs for flood control, inland navigation, shoreline protection, and environmental restoration. For example, the bill would authorize the construction of enhanced navigation improvements for the Upper Mississippi River at an estimated federal cost of \$1.8 billion and an ecosystem restoration project, also on the Upper Mississippi River, at an estimated federal cost of \$1.6 billion. Another large project that would be authorized by this bill is the Indian River Lagoon project in the Florida Everglades at an estimated federal cost of \$683 million. Construction of those projects would likely take more than 15 years.

Hurricane Damage. Several provisions in title I would authorize coastal restoration projects and water control infrastructure in Louisiana that are needed to correct hurricane damage. For example, the Morganza to the Gulf of Mexico Hurricane Protection Project would seek to reduce hurricane and flood damages across 1,700 square miles of coastal Louisiana at an estimated federal cost of \$576 million. Other projects would improve flood protection infrastructure within New Orleans and its vicinity. The cost of those provisions would approach \$2 billion. CBO expects that most of those projects would be built over the next five to 10 years. Improvements resulting from the completion of those projects could reduce the costs of damages from future storms and the amount of federal funds needed for recovery from such events.

Section 1003(o) of the bill would authorize the Secretary to construct projects in southern Louisiana that would provide protection for a storm surge equivalent to a category 5 hurricane (or a 500-year storm, which is a storm that has a 1-in-500 chance of hitting the city in any given year) if the Senate Committee on Environment and Public Works and the

House Committee on Transportation and Infrastructure each pass a resolution approving those projects.

Very preliminary cost estimates from Corps officials indicate that the cost of protecting New Orleans from a hurricane storm surge that has a 1-in-100 chance of flooding the city in any given year could reach a total of \$15 billion. No preliminary cost estimates are available for the resources that would be needed to protect southern Louisiana from the storm surge that would result from a category 5 hurricane. CBO estimates that at least \$15 billion would be needed to provide storm-surge protection under section 1003(o) from much more severe storms.

Federal Share of Project Costs. Most projects undertaken by the Corps are required to have a specific portion of costs covered by local interests, and the remaining costs are considered the federal share of the total project cost. Section 2001 would allow local interests that have provided in-kind contributions for the construction of water resources projects to have the value of such contributions credited toward the local share of the total construction cost of such projects. Under the bill, the Corps would be authorized to credit in-kind contributions of local participants on projects. Based on information from the Corps, CBO expects that any credit toward in-kind contributions would not significantly affect the federal share of total project costs.

Deauthorizations. The bill would withdraw the authority for the Corps to build more than 50 projects authorized in previous legislation. Based on information from the Corps, however, CBO does not expect that the agency would begin any significant work under current law for most of those projects during the next five years (or longer). Some of those projects do not have a local sponsor to pay nonfederal costs, others do not pass certain tests for economic viability, and still others do not pass certain tests for environmental protection. Consequently, CBO estimates that cancelling the authority to build those projects would provide no significant savings over the next several years.

Direct Spending

CBO estimates that enacting the legislation would increase net direct spending by \$6 million in 2008, by \$4 million over the 2008-2012 period, and by \$5 million total over the 2008-2017 period. Components of this estimate are described below.

Various Land Conveyances. The bill would authorize the conveyance at fair market value of 650 acres of federal land at the Richard B. Russell Lake in South Carolina to the state. The bill also would authorize the conveyance at fair market value of 900 acres of federal land located in Grayson County, Texas, to the town of Denison, Texas. Based on information

from the Corps, CBO estimates that the federal government would receive about \$3 million in each of 2008 and 2009 from those sales.

The bill also would convey certain federal land in Arkansas, Missouri, Georgia, Kansas, and Oregon. CBO estimates that those conveyances would have no significant impact on the federal budget.

Arcadia Lake, Oklahoma. Section 3078 would eliminate the obligation of the city of Edmond, Oklahoma, to pay outstanding interest due on its water storage contract with the Corps. CBO estimates that this provision would result in a loss of receipts of about \$9 million in 2008. The city has no further obligations to pay the federal government under this storage contract after 2008.

Waurika Lake Project. Section 3082 would eliminate the obligation of the Waurika Project Master Conservancy District in Oklahoma to pay its outstanding debt related to the construction of a water conveyance project. Because of an accounting error, the Corps inadvertently undercharged the district for costs associated with a land purchase related to the water project in the early 1980s. Under terms of the construction contract, the district is required to pay all costs associated with building the project, including the full cost of the land purchases. The section would eliminate the requirement for the district to pay the difference between the full cost of the property and the initial (undercharged) amounts. CBO estimates that enacting this section would cost less than \$200,000 a year over the 2008-2017 period.

Fees for Training and Processing Permits. Title II would allow the Corps to accept and spend fees collected in conjunction with its training courses. Title II also would make permanent the Corps' current authority to accept and spend funds contributed by private firms to expedite the evaluation of permit applications submitted to the Corps. CBO estimates that the Corps would collect and spend less than \$500,000 during each year under those provisions and that the net budgetary impact would be negligible.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

The legislation contains no intergovernmental or private-sector mandates as defined in UMRA. Grant funds authorized in the bill would benefit state governments that participate in a national program to improve levee safety. State, local, and tribal governments also would benefit from water resource projects and other programs authorized in the bill. Governments that choose to participate in those programs and projects would incur costs to comply with the conditions of the federal assistance, including cost-sharing requirements, but such costs would be incurred voluntarily. In addition, some state and local governments

participating in ongoing water resources projects would benefit from provisions in the bill that would alter existing cost-sharing obligations. Many of those provisions would make it easier for nonfederal participants to meet their obligations by giving them credit for expenses they have already incurred or by expanding the types of expenditures counted towards the nonfederal share.

PREVIOUS CBO ESTIMATE

On March 29, 2007, CBO transmitted a cost estimate for H.R. 1495, the Water Resources Development Act of 2007, as ordered reported by the House Committee on Transportation and Infrastructure on March 15, 2007. Assuming appropriation of the necessary amounts, CBO estimated that implementing H.R. 1495 would cost about \$6.7 billion over the 2008-2012 period and an additional \$6.5 billion over the 10 years after 2012. In addition, CBO estimated that enacting H.R. 1495 would decrease net direct spending by \$6 million in 2008, \$9 million over the 2008-2012 period, and \$8 million over the 2008-2017 period. The differences in the cost estimates stem from different levels of authorized funding and from differences in direct spending provisions. In particular, the House bill does not contain the provision regarding Arcadia Lake, Oklahoma.

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