



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

September 22, 2016

H.R. 5303 Water Resources Development Act of 2016

*As ordered reported by the House Committee on Transportation and Infrastructure
on May 25, 2016*

SUMMARY

H.R. 5303 would authorize the U.S. Army Corps of Engineers (Corps) to construct projects to mitigate storm and hurricane damage, to improve navigation and flood management, and to restore estuaries. CBO estimates, that implementing this legislation would cost about \$970 million over the next five years and \$3.1 billion over the 2017-2026 period, assuming appropriation of the authorized and necessary amounts.

Because enacting H.R. 5303 would not affect direct spending or revenues over the 2017-2026 period, pay-as-you-go procedures do not apply.

CBO estimates that enacting the bill would increase net direct spending and on-budget deficits by more than \$5 billion in at least one of the four consecutive 10-year periods beginning in 2027. The legislation would increase direct spending, beginning in fiscal year 2027, by authorizing the Corps to spend amounts in the Harbor Maintenance Trust Fund without further appropriation.

H.R. 5303 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary effects of H.R. 5303 are shown in the table below. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By Fiscal Year, in Millions of Dollars										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017-2021
INCREASES IN SPENDING SUBJECT TO APPROPRIATION											
Water Resources Infrastructure											
Estimated Authorization Level	62	92	190	230	284	329	419	481	489	534	857
Estimated Outlays	25	55	113	169	220	270	332	396	436	474	582
Policy Provisions and Studies											
Estimated Authorization Level	50	36	88	90	37	36	37	31	32	32	300
Estimated Outlays	27	37	54	72	60	49	41	32	30	31	250
Estuary Restoration											
Estimated Authorization Level	35	36	37	38	38	0	0	0	0	0	184
Estimated Outlays	14	25	31	35	36	21	10	4	0	0	140
Total Costs											
Estimated Authorization Level	146	163	314	357	359	365	456	512	521	566	1,341
Estimated Outlays	66	117	198	276	316	340	383	432	466	505	972
											3,761

Note: Amounts may not sum to totals because of rounding.

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 5303 will be enacted before the end of calendar year 2016 and that the authorized and necessary amounts will be appropriated for each fiscal year. Estimates of amounts necessary to implement the bill are based on information from the Corps; estimated outlays are based on historical spending patterns for similar projects and programs. Major components of the estimated costs are described below.

CBO estimates that H.R. 5303 would authorize appropriations totaling about \$3.8 billion over the 2017-2026 period for water infrastructure projects and studies administered by the Corps. We estimate that implementing those provisions would cost \$3.1 billion over the 2017-2026 period.

Water Resources Infrastructure

CBO estimates that implementing title IV would cost about \$2.5 billion over the 2017-2026 period, assuming appropriation of the amounts estimated to be necessary and accounting for anticipated inflation. This title would authorize the Corps to construct 27 new projects and would modify the existing authorization of four projects; those projects would aim to improve the nation's navigation system, strengthen flood-risk management, and restore the environment. Based on information from the Corps, CBO

estimates that the total cost to complete those projects would be \$10.5 billion. H.R. 5303 would authorize the appropriation of \$5.7 billion to cover the federal share of those costs and nonfederal entities would be responsible for the remaining costs, totaling an estimated \$4.8 billion.

To estimate how funds appropriated for those projects would be spent, CBO used information from the Corps for each project about when construction would begin, how long it would take to complete, and what funding would be necessary to complete it over the anticipated construction period. CBO also analyzed the historical spending patterns of similar projects. Because of the size and complexity of some large Corps projects, they can take several years to commence and more than ten years to complete. CBO estimates that the federal share of the projects and modifications authorized by this title would require the appropriation of about \$3.1 billion over the 2017-2026 period; the remainder of the federal share to complete the projects would be needed after 2026.

The estimated cost of the five largest projects authorized by H.R. 5303 totals \$6.9 billion; the federal share would total about \$3.5 billion. Those projects and their estimated federal cost are:

- The Central Everglades Planning Project to restore the Everglades in central and southern Florida (\$1 billion);
- The American River Watershed Common Features project to reduce the risk of flood along the American and Sacramento Rivers near Sacramento, California (\$880 million);
- The West Sacramento project to reduce the risk of flood in the City of West Sacramento, California (\$780 million);
- The West Shore Lake Pontchartrain project to reduce the risk of hurricane and storm damages in St. Charles, St. John the Baptist, and St. James Parishes in Louisiana (\$480 million); and
- The Los Angeles River Ecosystem Restoration project to restore ecosystems along the Los Angeles River in Los Angeles County, California (\$380 million).

Assuming appropriation of the necessary amounts, CBO estimates that spending on those five projects would total about \$1.1 billion and would be incurred over the 2017-2026 period. CBO estimates that construction spending for the other 22 projects and 4 modifications authorized by the bill would total about \$1.4 billion over the next 10 years.

Studies and Other Provisions

Based on a review of information provided by the Corps, CBO estimates that implementing the provisions described below would cost \$434 million over the 2017-2026 period, assuming appropriation of the necessary amounts. Those provisions (and their federal costs) would:

- Authorize the corps to conduct about 30 feasibility studies for projects to reduce risks stemming from floods and hurricanes, to restore ecosystems, and to improve navigation (\$50 million);
- Direct the Corps to maintain the width and depth of certain commercial harbors at the same dimensions as they were originally constructed by the Corps (\$100 million);
- Authorize projects to restore fisheries and ecosystems on the Great Lakes (\$100 million);
- Require the Corps to report to the Congress about the volume and types of foreign materials purchased each year for civil works projects (\$106 million); and
- Direct the Corps to develop beneficial uses for dredge material, remove sediment from certain reservoirs, waive certain cost-share requirements for projects and studies for Indian Tribes, and maintain a database on the condition of federal breakwaters and jetties (\$78 million).

Estuary Restoration

H.R. 5303 would authorize the annual appropriation for five years of \$35 million for the Estuary Habitat Restoration program and additional amounts necessary to account for cost increases caused by inflation. CBO estimates the appropriation of those amounts would cost \$175 million over the 2017-2026 period.

INCREASE IN LONG-TERM NET DIRECT SPENDING AND DEFICITS

CBO estimates that enacting the bill would increase net direct spending and on-budget deficits by more than \$5 billion in at least one of the four consecutive 10-year periods beginning in 2027.

Under the bill, balances in the Harbor Maintenance Trust Fund (HMTF) would become available to the Corps, without further appropriation, beginning in fiscal year 2027. CBO

estimates that the balance in the HMTF that would be available to spend in 2027 would be about \$20 billion. In recent years the annual appropriation from the HMTF has been about \$1 billion.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 5303 contains no intergovernmental or private-sector mandates as defined in UMRA. State, local, and tribal governments would benefit from greater flexibility provided in the bill to administer and finance infrastructure projects supported by the Corps. Any costs to those entities under agreements with the Corps, including matching contributions, would be incurred voluntarily.

PREVIOUS CBO ESTIMATE

On June 27, 2016, CBO transmitted a cost estimate for S. 2848 as ordered reported by the Senate Committee on Environment and Public Works on April 28, 2016. S. 2848 authorized the Corps to construct water resources infrastructure projects that are also authorized in H.R. 5305. For projects common to both pieces of legislation, CBO's estimated costs are the same.

ESTIMATE PREPARED BY:

Federal Spending: Aurora Swanson

Impact on State, Local, and Tribal Governments: Jon Sperl

Impact on the Private Sector: Amy Petz

ESTIMATE APPROVED BY:

Therese Gullo

Assistant Director for Budget Analysis