



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

September 22, 2017

H.R. 3387 **Drinking Water System Improvement Act of 2017**

*As ordered reported by the House Committee on Energy and Commerce
on July 27, 2017*

SUMMARY

H.R. 3387 would authorize the appropriation of about \$9 billion for the Environmental Protection Agency (EPA) to provide grants to public water systems, as well as to state, local, and tribal governments, to support drinking water infrastructure projects and to promote compliance with regulations that implement the Safe Drinking Water Act (SDWA).

CBO estimates that implementing this legislation would cost about \$6 billion over the next five years and an additional \$3 billion after 2022, assuming appropriation of the authorized amounts.

The staff of the Joint Committee on Taxation (JCT) estimates that enacting the bill would reduce revenues by \$572 million over the next 10 years. Because enacting the bill would reduce revenues, pay-as-you-go procedures apply. Enacting the bill would not affect direct spending.

CBO estimates that enacting H.R. 3387 would not increase net direct spending or on-budget deficits by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2028.

H.R. 3387 would impose intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) on public and private owners and operators of public water systems that are regulated by the SDWA, and on other state and local government entities. Based on information provided by the EPA, public water systems, and state and local agencies, CBO estimates that the total cost of complying with the mandates would fall below the annual thresholds for intergovernmental and private-sector mandates established in UMRA (\$78 million and \$156 million in 2017, respectively, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary effects of the bill are summarized in Table 1. The costs of this legislation fall within budget function 300 (natural resources and environment).

TABLE 1. ESTIMATED BUDGETARY EFFECTS OF H.R. 3387

	By Fiscal Year, in Millions of Dollars											2017- 2022	2017- 2027	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
INCREASES IN SPENDING SUBJECT TO APPROPRIATION														
Estimated Authorization Level	0	1,420	1,610	1,824	2,023	2,222	17	17	17	17	17	9,100	9,186	
Estimated Outlays	0	263	805	1,408	1,735	1,923	1,760	1,022	219	24	24	6,135	9,185	
DECREASES IN REVENUES														
Estimated Revenues	0	*	-3	-10	-25	-46	-72	-95	-106	-108	-107	-84	-572	

Sources: CBO and the staff of the Joint Committee on Taxation.

Note: * = between zero and -\$500,000. Details may not sum to totals because of rounding.

BASIS OF ESTIMATE

For this estimate, CBO assumes that the bill will be enacted near the beginning of fiscal year 2018, that the full amounts authorized or estimated to be necessary will be appropriated for each year, and that outlays will follow historical patterns of spending for existing and similar programs.

Spending Subject to Appropriation

H.R. 3387 would authorize appropriations totaling about \$9.1 billion over the 2018-2022 period for the EPA to administer different grant programs that support drinking water infrastructure and help public water systems comply with regulations under the Safe Drinking Water Act (see Table 2).

TABLE 2. AMOUNTS AUTHORIZED TO BE APPROPRIATED FOR EPA PROGRAMS UNDER H.R. 3387

	By Fiscal Year, in Millions of Dollars											2017-	2017-
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2022	2027
Drinking Water SRF Grants													
Authorization Level	0	1,200	1,400	1,600	1,800	2,000	0	0	0	0	0	8,000	8,000
Estimated Outlays	0	120	620	1,200	1,500	1,700	1,680	980	200	0	0	5,140	8,000
Public Water System Supervision Program													
Authorization Level	0	150	150	150	150	150	0	0	0	0	0	750	750
Estimated Outlays	0	135	150	150	150	150	15	0	0	0	0	735	750
Drinking Water Risk and Resilience Grant Program													
Authorization Level	0	35	35	35	35	35	0	0	0	0	0	175	175
Estimated Outlays	0	0	11	25	35	35	35	25	11	0	0	105	175
Source Water Petition Programs													
Authorization Level	0	5	5	5	5	5	0	0	0	0	0	25	25
Estimated Outlays	0	0	2	4	5	5	5	4	2	0	0	15	25
Drinking Water Fountain Replacement Grants													
Authorization Level	0	5	5	5	5	5	0	0	0	0	0	25	25
Estimated Outlays	0	0	2	4	5	5	5	4	2	0	0	15	25
Reauthorize Monitoring for Unregulated Contaminants													
Authorization Level	0	10	10	10	10	10	0	0	0	0	0	50	50
Estimated Outlays	0	2	15	15	13	5	0	0	0	0	0	50	50
Expand Monitoring for Unregulated Contaminants													
Authorization Level	0	0	0	15	15	15	15	15	15	15	15	45	120
Estimated Outlays	0	0	0	4	21	21	18	8	4	21	21	45	120
Technology Review													
Authorization Level	0	10	0	0	0	0	0	0	0	0	0	10	10
Estimated Outlays	0	1	1	4	4	0	0	0	0	0	0	10	10
Other Activities													
Estimated Authorization Level	0	5	5	4	3	2	2	2	2	2	2	20	31
Estimated Outlays	0	5	5	4	3	2	2	2	2	2	2	20	31
Total Changes													
Estimated Authorization Level	0	1,420	1,610	1,824	2,023	2,222	17	17	17	17	17	9,100	9,186
Estimated Outlays	0	263	805	1,408	1,735	1,923	1,760	1,022	219	24	24	6,135	9,185

Note: Details may not sum to totals because of rounding. SRF = State Revolving Fund.

The bill would authorize the appropriation of \$8 billion over the next five years for the EPA to provide capitalization grants for the Drinking Water State Revolving Fund (DWSRF) programs. States use such grants, along with their own funds, to make low-interest loans to communities to build or improve drinking water facilities and infrastructure, and for other projects that improve the quality of drinking water. In addition to reauthorizing federal funding for states' DWSRF programs, the bill also would make several revisions to those programs, including allowing states to direct a greater percentage of funds to disadvantaged communities, extending the repayment terms for loans made by states, and requiring recipients of loans to certify that proposed projects meet certain cost-effectiveness criteria.

H.R. 3387 also would authorize the appropriation of about \$1 billion over the next five years for the EPA implement several other grant programs. Specifically, the bill would authorize the appropriation of:

- \$750 million for state and tribal agencies to implement programs that enforce compliance with drinking water regulations under the SDWA and provide technical assistance to public water systems;
- \$175 million for grants to public water systems to implement projects that mitigate risks to drinking water from natural hazards and security threats;
- \$25 million to states to implement partnership programs with public water systems that petition the states for assistance in complying with drinking water regulations;
- \$25 million for local educational agencies to pay the costs of replacing drinking water fountains in schools and monitoring for lead contamination;
- \$50 million for the EPA to continue funding the laboratory analysis costs of monitoring for unregulated contaminants in drinking water systems;
- \$120 million to expand the number of small systems that monitor for unregulated contaminants; and
- \$10 million in 2018 for the EPA to conduct a comprehensive review of technologies, equipment, and methods that effectively detect and prevent contamination of public drinking water systems.

CBO estimates that the cost to implement the remaining requirements in the bill, (for which the legislation does not specify an authorization level,) would total about \$20 million over the next five years, assuming appropriation of the necessary amounts. That funding would be used for various purposes, including providing technical

assistance to state agencies, developing guidance and updating tools for risk assessments, conducting a national inventory of any pipes or fittings that are used to connect buildings with the drinking water main supply pipes and are not lead free, and reporting on how water systems can more easily comply with cross-cutting federal, state, and local requirements.

Revenues

H.R. 3387 would authorize the appropriation of \$8 billion over the 2018-2022 period for the EPA to make grants to capitalize state revolving loan funds, from which states make loans to finance drinking water infrastructure projects. JCT expects that states would use a portion of those grants to leverage additional funds by issuing tax-exempt bonds. JCT estimates that issuing additional tax-exempt bonds would reduce federal revenues by \$572 million over the next 10 years.

PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in revenues that are subject to those pay-as-you-go procedures are shown in the following table.

CBO Estimate of Pay-As-You-Go Effects for H.R. 3387, as ordered reported by the House Committee on Energy and Commerce on July 27, 2017

	By Fiscal Year, in Millions of Dollars											2017- 2017-	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2022	2027
NET INCREASE IN THE DEFICIT													
Statutory Pay-As-You-Go Impact	0	0	3	10	25	46	72	95	106	108	107	84	572

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting the legislation would not increase net direct spending or on-budget deficits by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2028.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 3387 would impose intergovernmental and private-sector mandates as defined in UMRA on public and private owners and operators of public water systems that are regulated by the Safe Drinking Water Act. The bill also would impose intergovernmental mandates on state emergency response commissions (SERCs), local emergency planning committees, and state water agencies that are responsible for notifying the public in the event of a release of hazardous chemicals that affects drinking water. Based on information provided by the EPA, public water systems, and state and local agencies, CBO estimates that the total costs of complying with the mandates would range from \$14 million to \$36 million per year over the 2018-2022 period for water systems owned by public entities; for water systems owned by private entities, CBO estimates the total costs to comply with the mandates would range from \$3 million to \$6 million per year over that period. Therefore, CBO estimates that the costs of the mandates would fall below the annual thresholds for intergovernmental and private-sector mandates established in UMRA (\$78 million and \$156 million in 2017, respectively, adjusted annually for inflation).

Mandates That Apply to Both Public and Private Entities

The bill would impose several mandates on owners and operators of public water systems that are regulated by the Safe Drinking Water Act. Public water systems may be publicly or privately owned. Systems owned by local governments serve the majority of the U.S. population, while many smaller systems are owned by private entities. The bill would require public water systems that serve populations larger than 10,000 to send consumer confidence reports to their customers twice per year; under current law, those systems must send reports once per year. In addition, the bill would require all public water systems to include information in consumer confidence reports about actions taken to control corrosion in pipes. While an increasing number of systems send such reports electronically at low cost, the requirement would increase costs for systems that still send reports by mail. Based on information from public water systems and state water agencies about the costs of complying with current requirements, CBO estimates that public water systems would spend about \$14 million per year to comply with these requirements.

The bill would require public water systems that serve populations larger than 3,300 to conduct assessments of the risks posed to their systems by security threats and natural hazards and to prepare response plans. The bill would require those systems to certify to the EPA that they have conducted such assessments once every five years. Alternatively, systems could satisfy those requirements by certifying to the EPA that they are following consensus technical standards developed by the water industry and recognized by the EPA. Risk assessments are increasingly common in the water industry, and CBO expects that many systems, especially those that serve major populations, would already be in compliance because they follow industry standards; additional costs to them resulting

from the mandate would be small. However, CBO expects that other systems, particularly those that are smaller in size, would need to conduct risk assessments and prepare response plans at varying costs, depending on their size and complexity. Based on information from the EPA and the American Water Works Association, CBO estimates that systems would spend an additional \$25 million to comply with those requirements. That estimate is based on the expectation that many smaller systems would comply by conducting assessments at low cost using free assessment tools, while larger systems would undertake much more expensive and comprehensive analyses ranging into the hundreds of thousands of dollars.

The bill would impose a mandate by requiring the EPA to expand the number of small public water systems (those serving fewer than 10,000 people) that must monitor drinking water for unregulated contaminants. The EPA would select a representative sample of those systems to conduct monitoring. The bill would authorize the appropriation of \$15 million per year to cover the costs of laboratory analysis of samples. However, systems would incur costs to collect samples and to train staff. Based on information from public water systems and state water agencies about the costs of sample collection under current requirements, CBO estimates that systems selected for monitoring would spend, in the aggregate, \$2 million to \$3 million each year to comply with those requirements.

Mandates on Public Entities

The bill would require SERCs and local emergency planning committees to notify state water agencies whenever there is a release of hazardous chemicals into water bodies used for drinking water and also would require water agencies to in turn notify public water systems in the affected area. Additionally, the bill would require SERCs and local emergency planning committees to provide information about chemicals stored at specific facilities whenever local public water systems request that information. Because it is already common practice for SERCs and local emergency committees to conduct such activities, CBO estimates that the costs of compliance would be small.

Other Effects on Public Entities

Under the bill, state and tribal agencies that have chosen to implement the Safe Drinking Water Act would likely incur additional costs to provide financial and technical assistance to public water systems that are subject to federal regulations under that act. Specifically, state and tribal water agencies would work with public water systems to meet requirements under the bill relating to consumer confidence reports, risk assessments, and monitoring for unregulated contaminants. Costs incurred by those agencies, however, would result from participation in a voluntary federal program.

The bill also includes a provision that would provide state and tribal governments with the authority to compel public water systems that are out-of-compliance with federal drinking water standards to undergo consolidation with another system, or to transfer ownership. In cases where the targeted systems are unable to meet federal drinking water standards, and are either financially unable or unwilling to take actions that would result in compliance, states and tribes with primary enforcement responsibility for the SDWA could require the owner or operator of such a system to assess options for consolidation or transfer and then carry out those actions if doing so is economically feasible and likely to result in greater compliance with federal standards. CBO expects that state and tribal agencies would generally use the authority selectively to focus on systems that have serious violations of drinking water standards; however, use of this authority could result in significant costs for some water systems, depending on how the authority is exercised, and the size and complexity of the systems affected. Because state and tribal water agencies would exercise the authority at their discretion, any costs incurred by affected water systems would not stem from a federal intergovernmental mandate under UMRA. Based on evidence from consolidation efforts in California and other states, CBO expects that many state and tribal agencies would provide financial assistance to cover necessary interconnection, improvement, and administrative costs for systems required to undergo consolidation or transfer. The bill also would authorize states and tribes to use federal funds provided through the DWSRF programs to cover the costs of consolidations and transfers.

Finally, the bill would benefit public water systems, as well as state, local, and tribal agencies that implement federal drinking water regulations, by authorizing federal financial and technical assistance for several drinking water grant programs. Public water systems would benefit from loans provided by state agencies for drinking water infrastructure projects. The bill would authorize the appropriation of \$8 billion over the 2018-2022 period for the EPA to provide capitalization grants to DWSRFs to finance those loans. Any costs public entities might incur relating to grant and loan programs, including matching contributions, would result from conditions of federal assistance.

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