

Report Summary: The Economic, Job Creation, and Federal Tax Revenue Benefits of Increased Funding for the State Revolving Fund Programs

In 2016 the Water Environment Federation and WaterReuse Association completed an analysis to estimate the economic impact of potential increased federal Drinking Water (DW) and Clean Water (CW) State Revolving Fund (SRF) appropriation levels, including taxes that return to the federal government, and employment and economic output that the spending generates. The increased funding levels modeled in this analysis are intended to reflect proposals in the 114th Congress to increase the SRF appropriations levels for fiscal years (FYs) 2017 through 2021. The chart below reflects recent fiscal year appropriations and proposed increased amounts.

FY	CWSRF*	DWSRF*
2010	\$2,100	\$1,387
2011	\$1,522	\$963.1
2012	\$1,466	\$917.9
2013	\$1,376.1	\$861.3
2014	\$1,448.9	\$906.9
2015	\$1,448.9	\$906.9
2016	\$1,394	\$863
2017	\$3,200	\$1,500
2018	\$3,200	\$2,000
2019	\$3,600	\$2,000
2020	\$4,000	\$3,200
2021	\$6,000	\$6,000

*in millions

State Revolving Fund Programs

The CW and DW SRF programs are considered to be among the most successful infrastructure funding programs administered by the federal government. Since their creation, the programs have provided more than \$135 billion in low-interest loans for over 47,000 projects at a cost of approximately \$55 billion to the federal government. Nonetheless, the nation's drinking water, wastewater, and stormwater infrastructure needs to remain in compliance with regulatory standards exceed the funding levels being currently provided by the SRF programs and other infrastructure funding sources. The recent U.S. Environmental Protection Agency Clean Water Needs Surveys estimate that the nation will need \$271 billion over the next 20 years for wastewater and stormwater infrastructure, but the report states that the data underestimates stormwater infrastructure needs by roughly \$100 billion. EPA's recent Drinking Water Needs Surveys estimated that the nation will

need \$384 billion over the next 20 years. Combined, the two surveys call for \$655 billion over the next 20 years for communities to remain in compliance with the Clean Water Act and Safe Drinking Water Act. As a result, communities across the nation and the organizations that represent them in Washington, D.C., are calling on Congress to significantly increase the funding amounts for the SRF programs in order to help protect public health, the environment, and the nation's economic growth.

Results

SRF spending generates federal tax revenues:

- The total proposed federal allocations for 2017 through 2021 amount to \$34.7 billion (2016 USD), including \$14.7 billion for the DWSRF and \$20.0 billion for the CW SRF. This generates \$7.43 billion in direct federal tax revenues. **Thus, for every federal dollar of federal SRF spending, 21.4% is returned to the federal government in the form of taxes.**
- Federal SRF allocations account for 23% of total SRF spending, which also includes state matching funds and funds from state program loan repayments. **Thus, the proposed \$34.7**

billion federal allocation will leverage an additional \$116.2 billion in state spending (\$151 billion total).

- Together, the proposed federal allocations and state SRF program funds will result in \$32.3 billion in federal tax revenue. **Thus, when leveraged state program funds are taken into account, every dollar of SRF spending, of which \$.23 is the federal share, results in \$0.93 in federal tax revenue.¹**

SRF spending results in increased employment and labor income:

- On average, 16.5 jobs are generated for every million dollars in SRF spending. **The proposed \$34.7 billion federal allocation will result in 506,000 jobs.**
- SRF spending generates high-paying jobs – each job is estimated to bring about \$60,000 in labor income.

SRF spending generates output in the U.S. economy:

- Every million dollars of SRF spending results in \$2.95 million in output for the U.S. economy. **Thus, the proposed \$34.7 billion federal allocation will generate \$102.7 billion in total economic output.**

Methodology

The analysis used the IMPLAN economic model to estimate the impact of SRF spending on output, labor income, jobs, and federal tax revenues. The IMPLAN economic model was originally developed by the U.S. Forest Service in 1972. It is used by thousands of federal, state, and local government agencies to help make informed decisions and assess the potential impacts of policy and tax decisions on the economy. IMPLAN captures the effect of spending as it ripples through the economy. For example, utility spending of SRF funds results in direct spending on construction contractors (direct effect). The construction contractor then spends this money on goods and services that it needs to operate its business (indirect effect). Direct and indirect spending generate employment, creating additional income for households that generates even more spending (the induced effect). The total economic impact is the sum of direct, indirect, and induced effects. This generates federal, state, and local tax revenues.

To model federal SRF spending in IMPLAN, the analysis assumed that the proposed SRF allocations for 2017 through 2021 would be spent over a 10-year period, from 2017 to 2026. The analysis estimated the percentage of spending that will occur each year based on the relationship of allocation and spending developed by the Congressional Budget Office for the 2009 Water Infrastructure Financing Act.

The analysis allocated annual SRF spending across different project types based on the level of need estimated for each needs category in the 2011 DW and CW needs survey. The analysis then mapped the spending associated with the different needs categories into IMPLAN sectors. For example, for each needs category, a percentage of spending was allocated to IMPLAN sectors such as construction, heavy equipment, engineering and design services, and local government/water utilities. The full analysis and data soon will be available.

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¹This view compares the same amount of taxes generated from SRF spending but compares it only to the federal portion of the total spending.