



Funding Resilient Infrastructure with the Clean Water State Revolving Fund



The U.S. Environmental Protection Agency's (EPA) Clean Water State Revolving Fund (CWSRF) program is the largest public source of water quality financing in the country. The funding flexibility inherent to CWSRF programs allows states to address their unique water quality priorities.

The increased incidence of extreme weather due to climate change can threaten the integrity of critical wastewater infrastructure. EPA and its state partners recognize that today's infrastructure challenges include not only repair, upgrades, and replacement, but ensuring that infrastructure assets are resilient to climate change.

HOW THE CWSRF WORKS

CWSRF programs in each state and Puerto Rico operate like banks. Federal and state contributions are used to capitalize the programs. These assets are used to make low interest loans for important water quality projects. Funds are then repaid to the CWSRFs and are recycled to fund other water quality and public health projects.

TYPES OF CWSRF ASSISTANCE

CWSRFs can offer a variety of types of financial assistance. The programs primarily offer low-interest loans or purchase local debt over terms as long as 30 years or the useful life of the project, whichever is less. CWSRF programs can also refinance previously issued debt, provide credit enhancements in the form of guarantees or insurance, and guarantee sub-state revolving loan fund debt. A small amount of additional subsidization may be available each year in the form of principal forgiveness, negative interest rate loans, or grants. Additional subsidization can be provided to projects that address affordability concerns, stormwater, water and energy conservation, or sustainable project planning, design, and construction.

GETTING A PROJECT FUNDED

Those interested in learning more about CWSRF funding opportunities should seek out the CWSRF program in their state and participate in the annual process that determines which projects are funded. The list of CWSRF state programs can be found on our website at: www.epa.gov/cwsrf.

ASSISTANCE FOR RESILIENCY PROJECTS

The CWSRF can fund a wide range of activities that can help communities become more resilient to extreme weather and permanent climactic changes. These activities include energy and water efficiency upgrades, stormwater management, and projects that strengthen and protect wastewater infrastructure. Infrastructure resiliency projects:

- prevent interruption of collection system operation in the event of a flood or natural disaster;
- prevent floodwaters from entering a treatment works;
- maintain the operation of a treatment works and the integrity of the treatment train in the event of a flood or natural disaster; or
- preserve and protect treatment works equipment in the event of a flood or natural disaster.

States can also provide assistance to assess treatment works' vulnerability to extreme weather or analyze the best approach to integrate system and community resiliency priorities, as long as the work is reasonably expected to result in a capital project. Examples include water/energy audits, drought management plans, and asset management plans. These efforts help analyze infrastructure needs and can result in a pipeline of sustainable projects that are eligible for CWSRF funding.

ENCOURAGING RESILIENT INFRASTRUCTURE

Priority setting systems are an effective tool that states use to encourage resilient wastewater infrastructure. Each CWSRF program has a priority system that evaluates and ranks projects. Ranking criteria primarily focus on public health and water quality, but can also address other concerns including infrastructure resiliency. States may encourage projects promoting system resiliency through targeted rating criteria, such as offering priority points, and funding incentives, such as reduced interest rates and waiver of fees.

Additional subsidies in the form of principle forgiveness, negative interest rate loans, and grants, can also be used to encourage resiliency projects. In 2016, 17 CWSRF programs offered financial incentives.

CWSRF programs can also use their administrative resources to provide technical assistance and training in the development of resiliency projects. Additionally, many States use various marketing techniques to get the word out to prospective recipients.



New wastewater treatment plant in Columbus, Indiana

CLEAN WATER SUCCESS STORIES

Indiana

In 2008, severe flooding at a wastewater treatment plant in Columbus, Indiana, demonstrated how extreme weather and the prospect of climate change can threaten infrastructure assets that are critical to the protection of public health and water quality. Flooding was so serious that staff at the plant were forced to cease operations and evacuate due to rising waters. With the help of a \$51.8 million low-interest loan from the Indiana Finance Authority's State Revolving Fund, a new state-of-the-art wastewater treatment plant was built in a less flood-prone location. In addition to primary and secondary wastewater treatment technologies, the plant includes auxiliary power sources that can be used in the event of future emergencies. The plant was also designed to accommodate future expansion and incorporation of nutrient removal technologies.

New York

Thanks to assistance from the New York Environmental Facilities Corporation (NYEFC), the Bergen Point Wastewater Treatment Plant in Suffolk County is effectively managing the repair and replacement of infrastructure assets, as well as fortifying infrastructure against another severe weather event like Superstorm Sandy. The project included the planning, design, and construction associated with the replacement of effluent outfalls. This \$75.4 million project is funded by a \$16.8 million Storm Mitigation Loan Program grant and a \$58.6 million interest free loan executed in 2015. The project will be completed in 2017 and meets NYEFC requirements to provide storm resiliency measures, which include minimum elevation requirements relative to tidal change and sea-level rise.

For more information about the CWSRF please contact us at:

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