

Opportunities for Funding Water Quality Protection Projects through the Clean Water State Revolving Fund

SUMMARY: The Clean Water Act (CWA) allows Clean Water State Revolving Fund (CWSRF) funds to be used for projects that protect water quality, not just those that restore it. The projects must fit in one of the twelve eligibility categories identified in CWA §603(c), several of which provide opportunities for funding protection projects, in particular:

- Implementation of nonpoint source management programs under CWA §319;
- Development or implementation of National Estuary Program (NEP) comprehensive conservation and management plans (CCMP) under CWA §320;
- Management, reduction, treatment, or recapture of stormwater or subsurface drainage water; and
- Development or implementation of watershed pilot projects related to at least one of the six areas identified under CWA §122, including integrated water resource plans, which promote coordinated management and protection of surface water, groundwater, and stormwater resources (eligibility for this one is limited to municipalities and municipal entities).

Reports by the Environmental Protection Agency (EPA), especially its *2016 Overview of Clean Water State Revolving Fund Eligibilities*, confirm and further clarify the opportunity to use CWSRF funds to protect water quality, including, but not limited to, projects under the categories of:

- Surface water protection and restoration;
- Habitat protection and restoration;
- Planning/assessment;
- Stormwater; and
- Agricultural best management practices.

The details of each state's CWSRF program, including how the state prioritizes projects for funding, determine exactly which projects receive funding, but the CWA and the EPA leave the door wide open for water quality protection projects.¹

I. A Brief History of the CWSRF

The CWSRF was established by the 1987 amendments to the Clean Water Act as a replacement for the EPA's Construction Grants program.² Through the Construction Grants program, the federal government provided \$70 billion to states, municipalities, inter-municipalities, and interstate agencies to aid in the construction of publicly owned treatment works (POTWs).³ While the Construction Grants program was successful in improving the nation's water infrastructure, Congress worked to shift from a direct federal grant program to a state-managed low-interest loan program, providing funding for clean water infrastructure in perpetuity, establishing the new program in 1987. The CWSRF would serve the same purpose as the Construction Grants program with additional important eligibilities for funding nonpoint source projects.

II. Opportunities to Use CWSRF Funding for Protection Projects

Although the majority of CWSRF assistance has financed point source wastewater treatment solutions, the text of the Clean Water Act (CWA) and associated regulations makes application of the funds much broader. The stated purpose of the CWSRF is to operate “in a manner that preserves for States a high degree of flexibility for operating their revolving funds in accordance with each State’s unique needs and circumstances.”⁴ A state’s “unique needs and circumstances,” are limited only by the eligibilities outlined in CWA §603(c) and the program’s general intent “to ensure that each State’s program is designed and operated to continue providing assistance for water pollution control activities in perpetuity.”⁵ The selection of a state’s “unique needs” as a standard for determining the appropriateness of a particular project reflects a congressional intent to strike a balance between flexibility and necessity. It also lays the groundwork for states to support water quality projects other than wastewater collection and treatment infrastructure. This intent is further reflected in the extensive, diverse, and non-exclusive list of eligible projects identified in the EPA’s 2016 report on CWSRF eligibilities.⁶

a. Statutory Language

Section 603 of the CWA identifies requirements for the funding of CWSRF projects. Under CWA §603(c), financial assistance may only be provided to projects which fall into one of the twelve identified project categories.⁷ Of these categories, subsections (2), (3), (5), and (7) of CWA §603(c) provide the most support for funding water quality protection projects through the CWSRF.

Subsection 603(c)(2) of the CWA authorizes the use of CWSRF funding for the implementation of nonpoint source management programs under CWA §319.⁸ It is difficult to analyze the existing opportunities available under this subsection without evaluating each state’s nonpoint source management program plan. The EPA encourages states to develop creative funding mechanisms under the CWSRF for nonpoint source protection as well as restoration projects.⁹ The EPA also encourages the coordination of state nonpoint source programs, the CWSRF, and the Drinking Water State Revolving Fund (DWSRF) in funding source water protection projects.¹⁰

Subsection 603(c)(3) of the CWA makes eligible for CWSRF funding projects that develop or implement a National Estuary Program CCMP under CWA §320.¹¹ This includes implementation of water quality improvement projects in a NEP study area and in the larger surrounding watershed. Activities located outside the study area, but within the “estuarine zone” or watershed as defined in CWA §104(n)(4) and CWA §320(k), may have an impact on the water quality of the estuary and may implement the CCMP, therefore the CWSRF can fund NEP projects located within the watershed so long as the project implements a CCMP.¹² In addition, SRFs should work with the NEPs to ensure that any projects that they consider funding implement the CCMP.

A CCMP recommends actions and compliance schedules for restoring and maintaining, among other things, the water quality of the estuary.¹³ Similar to subsection (c)(2), the ability to use CWSRF funds for protection projects under this subsection depends on the content of the applicable plans. Yet, unlike subsection (c)(2), subsection (c)(3) also allows the use of funds to develop or amend these plans,¹⁴ which could yield more opportunities for protection activities.

Subsection 603(c)(7) of the CWA provides the most explicit opportunity to support water quality protection projects. This subsection authorizes providing CWSRF funding to municipalities or municipal entities to develop or implement watershed pilot projects related to at least one of the six areas identified under CWA §122.¹⁵ One of those areas expressly references protection: integrated water resource plans. These plans, as described in CWA §122, promote coordinated management and protection of surface water, groundwater, and stormwater resources on a watershed or subwatershed basis to meet the goals, objectives, and policies of the CWA.¹⁶ There may be opportunities in the other areas listed in CWA §122, watershed partnerships and various stormwater-relevant efforts, as well.

Unlike the prior three subsections, CWA §603(c)(5) is not confined by the characteristics of another CWA program. It simply allows CWSRF funds to be used for “measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water.”¹⁷ The EPA defines “subsurface drainage” for this purpose as “an underground collection system (e.g., sewer, tile drain, etc.) used to manage overland flow of water (e.g., stormwater, irrigation water, etc.).”¹⁸ CWSRF funds expended in furtherance of this subsection can support, among other types of projects, stormwater management, agricultural best management practices, water conservation, and planning and assessment.¹⁹

b. EPA Clarifications

The EPA has detailed flexibility in the CWSRF, including its application to a diverse range of water quality projects, in numerous reports over the last five years.²⁰ In its 2016 *Overview of Clean Water State Revolving Fund Eligibilities*, the EPA identified 15 categories of CWSRF-eligible projects, a list that is not exclusive.²¹ Several of these categories are particularly accommodating of water quality protection projects:

- *Surface water protection and restoration*
Projects specified as eligible include, among others, land and water rights acquisitions for the protection of water quality.²² Land acquisition includes conservation easements, leasing of land, and fee simple purchases of land.
- *Habitat protection and restoration*
Projects specified as eligible include, among others, wetland development, water control structures for flow regime and salinity, dam removal, invasive species control, re-establishing riparian vegetation, creating living shorelines, and installing filter strips.²³
- *Planning/assessment*
Projects specified as eligible include, among others, watershed management plans, TMDL implementation plans, stormwater management plans, and certain project effectiveness assessment activities and equipment.²⁴
- *Stormwater*
Projects specified as eligible include various types of gray and green infrastructure, notably the protection, as well as restoration and creation, of wetland, riparian, or shoreline areas.²⁵

- *Agricultural best management practices*

Projects specified as eligible include, among others, fencing and alternative water supplies for animals (to keep them out of water bodies); streambank stabilization; chemical use reduction; the purchase of conservation tillage equipment; and the installation of buffers, filter strips, windbreaks, sediment control basins, and manure containment structures.²⁶

The table below connects the categories of projects (columns) with the CWA §603(c) eligibility requirements detailed above (rows). An “X” indicates that CWSRF funds may be provided under the specific category of project for the noted CWA §603(c) objective.²⁷

	Surface water protection and restoration projects	Habitat protection and restoration projects	Planning/assessment projects	Stormwater projects	Agricultural best management practices projects
Plan/assess for, among other possibilities, implementing a NPS management program - CWA § 603(c)(2)			X		
Implement a NPS management program - CWA § 603(c)(2)	X	X		X	X
Develop/amend a CCMP - CWA § 603(c)(3)			X		
Implement a CCMP - CWA § 603(c)(3)	X	X	X	X	X
Manage/reduce/treat/recapture stormwater or subsurface drainage water - CWA § 603(c)(5)			X	X	X
Develop/implement watershed partnerships to address NPS, by a municipal entity - CWA § 603(c)(7)	X	X		X	X
Develop/implement an integrated water resource or stormwater management plan, by a municipal entity - CWA § 603(c)(7)			X	X	

c. State Examples

Stormwater Management and Community Revitalization in Florida: In early 2019, the City of Tavares completed a \$9.5 million stormwater treatment improvement and beautification project intended to protect the water quality of Lake Dora and its water-related recreational activities as well as support economic development of the downtown area. The Florida Clean Water State Revolving Fund program awarded the project over \$8 million to convert an existing wetland area into a stormwater pond and to install a new drainage system for one of the main streets of the city. While reconstructing the stormwater system on Ruby Street, the asphalt was replaced with ruby red pervious brick. This same pervious brick was used to pave a previously unpaved road that parallels the lake and to pave the parking lot for the stormwater park. Now, the 8-acre Tavares Ecological Park serves as passive green space while filtering stormwater before it enters Lake Dora, which has visibly improved turbidity in the lake.²⁸ For more information: <https://www.orlandosentinel.com/news/lake/os-ne-tavares-ecological-park-20190110-story.html>.

Land Conservation in Virginia: From 2004 through 2018, Virginia's Clean Water Financing and Assistance Program put \$34.4 million toward land conservation, including support for ten projects that purchased land with the intent of protecting and restoring adjacent and downstream waterbodies. Among these examples was a 2011 loan to The Nature Conservancy (TNC), in the amount of \$2,544,700 from the Virginia Clean Water Revolving Loan Fund, for the preservation of 1,167 acres in the Dragon Run and Mattaponi River watersheds. TNC used the loan to purchase the property and then resell it to a private buyer subject to a conservation easement that protects water quality through the maintenance of 100-foot vegetated buffers, sustainable forest management practices, and restrictions on residential development. This project was part of TNC's larger land conservation strategy in the Dragon Run watershed, where it has protected over 28,000 acres. A similar effort in 2019 resulted in the largest open space easement ever recorded in the Commonwealth; for more information: <https://www.governor.virginia.gov/newsroom/all-releases/2019/august/headline-844184-en.html>.

Updating the San Francisco Estuary Partnership's CCMP: In 2015, the California State Water Resources Control Board, California's CWSRF program, provided a loan for over \$693,000 with 100% loan forgiveness to the Association of Bay Area Governments. This loan funded two reports that resulted in a complete overhaul of the San Francisco Estuary Partnership's CWA §320 Comprehensive Conservation and Management Plan, which serves as the master reference for recommended local and regional estuary health actions.²⁹ The water quality improvement projects included in the CCMP are now eligible for CWSRF financing under CWA §603(c)(3). This may include projects that may not otherwise be eligible for CWSRF assistance such as privately-owned treatment works and concentrated animal feeding operations (CAFOs). Since the program is managed by the states, the funding of eligible projects varies according to each state's priorities.³⁰ For more information: <https://www.sfestuary.org/ccmp/>.

Endnotes

- ¹ <https://www.epa.gov/cwsrf/forms/contact-us-about-clean-water-state-revolving-fund-cwsrf#state>.
- ² U.S. Env'tl. Prot. Agency, Learn About the Clean Water State Revolving Fund (CWSRF), <https://www.epa.gov/cwsrf/learn-about-clean-water-state-revolving-fund-cwsrf>.
- ³ MICHAEL CURLEY, PAYING FOR TOMORROW: MAINTAINING OUR QUALITY OF LIFE 61 (2018).
- ⁴ 40 C.F.R. §35.3100.
- ⁵ *Id.*; 33 U.S.C. §1383(c).
- ⁶ *See* U.S. ENVTL. PROT. AGENCY, OVERVIEW OF CLEAN WATER STATE REVOLVING FUND ELIGIBILITIES 3 (2016).
- ⁷ 33 U.S.C. §1383(c).
- ⁸ *Id.* at §1383(c)(2).
- ⁹ U.S. ENVTL. PROT. AGENCY, NONPOINT SOURCE PROGRAM AND GRANTS GUIDELINES FOR STATES AND TERRITORIES 12 (2013).
<https://www.epa.gov/cwsrf/financing-options-nontraditional-eligibilities-cwsrf>.
- ¹⁰ *Id.* at 26.
- ¹¹ 33 U.S.C. §1383(c)(3).
- ¹² <https://www.epa.gov/cwsrf/funding-cwsrf-projects-under-cwa-section-320-authority-national-estuary-program>.
- ¹³ *Id.* at §1330(b)(4).
- ¹⁴ *See id.* at §1383(c)(3).
- ¹⁵ *Id.* at §1383(c)(7).
- ¹⁶ *See id.* at §1274(a)(4); U.S. ENVTL. PROT. AGENCY, OVERVIEW OF CLEAN WATER STATE REVOLVING FUND ELIGIBILITIES 6 (2016).
- ¹⁷ 33 U.S.C. §1383(c)(5).
- ¹⁸ U.S. ENVTL. PROT. AGENCY, OVERVIEW OF CLEAN WATER STATE REVOLVING FUND ELIGIBILITIES 3 (2016).
- ¹⁹ *Id.* at 13-25.
- ²⁰ *See, e.g.*, U.S. ENVTL. PROT. AGENCY, OVERVIEW OF CLEAN WATER STATE REVOLVING FUND ELIGIBILITIES (2016); U.S. ENVTL. PROT. AGENCY, NONPOINT SOURCE PROGRAM AND GRANTS GUIDELINES FOR STATES AND TERRITORIES (2014); U.S. ENVTL. PROT. AGENCY, FINANCING OPTIONS FOR NONTRADITIONAL ELIGIBILITIES IN THE CLEAN WATER STATE REVOLVING FUND PROGRAMS (2017). U.S. ENVTL. PROT. AGENCY, FEDERAL FUNDING OPPORTUNITIES FOR SOURCE WATER PROTECTION (2013).
- ²¹ U.S. ENVTL. PROT. AGENCY, OVERVIEW OF CLEAN WATER STATE REVOLVING FUND ELIGIBILITIES 7 (2016).
- ²² *Id.* at 23.
- ²³ *Id.* at 19.
- ²⁴ *Id.* at 24.
- ²⁵ *Id.* at 13.
- ²⁶ *Id.* at 14.
- ²⁷ *See id.* at 13-25.
- ²⁸ <https://floridadep.gov/wra/srf/content/recent-awards-state-revolving-fund>.
- ²⁹ <http://www.sfestuary.org/ccmp/>.
- ³⁰ <https://www.epa.gov/cwsrf/funding-cwsrf-projects-under-cwa-section-320-authority-national-estuary-program>.