

Funding Clean Water State Revolving Fund Projects Under Clean Water Act Section 320 Authority (National Estuary Program)



The EPA's Clean Water State Revolving Fund (CWSRF) is a source of funding for water quality improvement projects that implement Section 320 National Estuary Program (NEP) Comprehensive Conservation and Management Plans (CCMP). The CWSRF offers a broad range of eligibilities and flexible, affordable financing options. This document will better inform the 28 NEP programs of opportunities for CWSRF collaboration and financial assistance in the development and implementation of their CCMPs.

How the CWSRFs Work and Who May Qualify

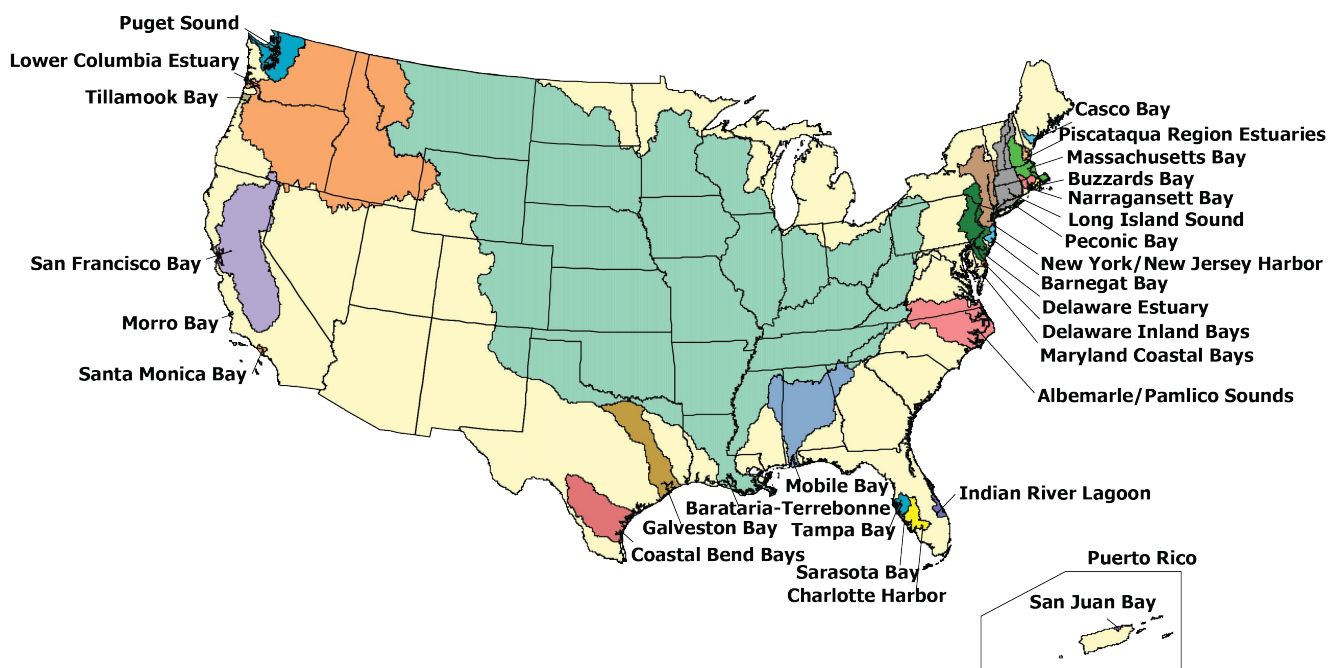
CWSRF programs in each state and Puerto Rico operate like banks. Federal and state contributions are used to capitalize the programs. These assets are used to make low interest loans for important water quality projects, including projects located in and affecting estuaries. Funds are then repaid to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

Included in a long list of eligible recipients are communities, individuals, citizens groups, non-profit organizations, and the 28 NEPs themselves. Since the program is managed by the states, the funding of eligible projects may vary according to the priorities of each state. Contact your state's CWSRF program for details.¹

Eligible NEP Projects

Section 603(c)(3) of the Clean Water Act (CWA) states that the CWSRF can provide assistance for the development and implementation of a CCMP under Section 320. This includes implementation of water quality improvement projects in an 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 Section 104(n)(4) and Section 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.

Map of the Watersheds Eligible for CWSRF Funding Under Clean Water Act Section 320



¹ <https://go.usa.gov/xEeME>

The eligibility criteria for Section 603(c)(3) projects are:

- Projects must develop, amend, or implement a Section 320 CCMP.
- Projects can be publicly or privately owned and can serve public or private purposes.

Many activities in an NEP's CCMP are eligible for CWSRF assistance. These include agricultural best management practices, structural erosion controls, habitat restoration, riparian zone protection, stormwater management, and septic system repair/replacement. Some projects that may not otherwise be eligible for CWSRF assistance such as privately owned treatment works and concentrated animal feeding operations (CAFOs) may also be eligible.¹ Since the program is managed by the states, the funding of eligible projects varies according to each state's priorities. While there is no formal requirement for CWSRF programs to coordinate with NEP programs on Section 603(c) eligibility decisions, some states have developed memorandums of understanding between their CWSRF program and the appropriate NEP. In many cases, the CWSRF regularly sends potential projects to NEP staff to determine whether the project implements their CCMP. Other states determine consistency with the CCMP as part of the CWSRF application technical review. EPA encourages CWSRFs to work with the appropriate NEP² to ensure that projects funded under the Section 603(c)(3) eligibility are consistent with the CCMP.

Project Financing

CWSRFs offer a variety of financial assistance options. The programs primarily offer loans below the market rate, saving borrowers significant resources over the life of the loan.

Before a loan is approved, potential CWSRF borrowers must identify a dedicated repayment source not necessarily from the project itself. Though finding a source of repayment for estuary projects may prove challenging, many recipients demonstrate a high level of creativity.

Some potential repayment sources include:

- Recreational fees (fishing licenses, entrance fees),
- Dedicated portions of local, county, or state taxes or fees,
- Stormwater utility fees,
- Fees paid by developers,
- Donations or dues made to non-profit organizations,
- Individual or business revenues,
- Revenue from sustainable timber harvest or other forest products,
- Nutrient credits, and
- Downstream water users.

Because estuary projects may not have associated available income streams, states use a variety of financing mechanisms to fund these projects. One example is sponsorship lending.³ Sponsorship lending pairs a traditional publicly owned treatment plant (POTW) project

Financial Benefits of CWSRF Funding

CWSRF assistance options deliver significant benefits to prospective borrowers. Incentives may vary by state program. CWSRF loans can provide the following benefits:

- Coverage of up to 100 percent of project costs;
- Deeply discounted loans that are well below the market rate down to zero percent;
- Access to additional subsidies such as loan forgiveness;
- Deferred payments of principal and/or interest;
- Terms up to 30 years and extended term financing that reduces annual interest payments;
- Dedicated revenues for loan repayments that can come from any source;
- Low-cost project financing and reliable access to capital through the use of programmatic and portfolio financing options;
- Access to co-financing opportunities;
- Credit enhancements that lower the cost of borrowing for less than AAA green debt obligations; and
- Access to affordable assistance for technical assistance, project development, and planning.

1 For a comprehensive list of CWSRF eligibilities, please see: <https://go.usa.gov/xEetB>

2 <https://go.usa.gov/xEeM6>

3 <https://go.usa.gov/xEeMS>

with a nontraditional water quality improvement project, such as green infrastructure or estuary restoration. A municipality POTW receives a loan with a reduced interest rate as compensation for also undertaking (i.e., sponsoring) a nontraditional project thus allowing municipalities to address watershed priorities without placing a repayment responsibility on estuary or nontraditional projects.¹

Examples of CWSRF Funded Estuary Projects

There are several ways that the CWSRF can fund water quality improvement projects within the NEP estuary and greater watershed. Many water quality improvement projects within an estuary may be eligible to receive funding under several CWSRF statutory eligibilities.

The CWSRF can provide funding to:

- Develop or revise an NEP CCMP;
- Implement projects located within an NEP study area that implement a CCMP;
- Implement projects located within the greater watershed of an NEP that implement a CCMP;
- Match grants that support eligible projects for the protection or restoration of estuaries, including Section 319 Nonpoint Source Management Program and Section 320 National Estuary Program grants (note: federal and state match CWSRF funds are ineligible for match for either Section 319 or Section 320 grants); and
- Fund any estuary project that meets the criteria of one of the eleven CWSRF eligibilities in Section 603(c) of the Clean Water Act.

California

Providing Funding for the Development of a Revision of a National Estuary Program CCMP

In the last 150 years, habitat destruction has eliminated more than 90 percent of shoreline wetlands and 40 percent of the San Francisco Bay aquatic ecosystem, leading to the need for special protection of more than 90 species of plants and animals. Throughout the Bay, state Water Quality Standards are exceeded for pesticides, invasive species, mercury and other metals and toxic substances. Many miles of beaches are impaired because of unacceptable levels of bacteria due to sewage spills and crumbling sewage infrastructure. The San Francisco Estuary is a Section 320 estuary of national significance.



In 2015, the California State Water Resources Control Board, California's CWSRF program, provided a loan for over \$693,000 with 100% principal forgiveness to the Association of Bay Area Governments for the Unified Bay and Delta Protection Planning and Reporting project. In three phases the project developed reports based on established monitoring programs designed to provide key information for decisions affecting the health of the Estuary. The first two phases of the project produced the State of the Bay Delta Science (SBDS) report, and the first-ever State of the Estuary Report. These reports identified areas of new understanding that can be used to refine condition and stewardship indicators.

Based on the information from these two reports, Phase 3 included the complete overhaul and update of the San Francisco Estuary Partnership's CCMP resulting in their 2016 San Francisco Estuary Blueprint.² The new CCMP incorporated findings from both the SBDS Report and the State of the Estuary Report, reflecting recent adjustments in public environmental policies and priorities for protecting the Estuary. With estuarine habitats shrinking and water quality problems remaining, the project, and resulting updated CCMP, will help meet the challenge of restoring and sustaining a healthy Bay-Delta Estuary.

1 For more information on CWSRF assistance and more, please see: <https://go.usa.gov/xEetX>

2 <http://www.sfestuary.org/ccmp/>

Delaware

Lending to Privately Owned Wastewater Treatment Systems that Implement a National Estuary Program CCMP

The Delaware CWSRF program, known as the Delaware Water Pollution Control Revolving Fund, provides assistance to privately-owned water quality improvement projects that implement a Section 320 CCMP. It makes funds available to private individuals, companies (profit and non-profit) and other entities to fund privately-owned water quality improvement projects that are within Delaware's "estuary zones," and that are consistent with the CCMPs established for those estuaries. In Delaware, consistency with the CCMP is determined by Environmental Finance staff as part of the application technical review.



In 2016, for the first time in its history, the Delaware Water Pollution Control Revolving Loan Fund provided a direct loan to a privately-owned wastewater treatment system. Over \$8 million in CWSRF loan funds were awarded to Allen Harim Foods, LLC for the Harbeson Poultry Processing Plant in southern Delaware. The facility currently discharges into Beaver Dam Creek, which is in a Section 320 estuary of national significance (the Delaware Estuary) thus opening eligibility for CWSRF assistance to this private enterprise for activities to implement the Partnership for the Delaware Estuary's CCMP.

The loan was offered at 2% interest for 20 years.

As one of the largest producers of chicken products in the world, Allen Harim's operations are sophisticated and complex, generating significant wastewater flows as well as nutrient loads from nitrogen and phosphorus. The upgrade and expansion project funded by the CWSRF included an upgrade to the biological nutrient removal process to achieve nutrient removal from effluent, and a sideline wastewater treatment facility that will help to facilitate plans for future water reuse at the facility.



Photos Courtesy of Delaware Department of Natural Resources and Environmental Control

Florida

Using CWSRF to Provide Grant Match

The City of Cocoa Beach, Florida implemented the Minuteman Causeway project, an urban stormwater project that is intended to reduce nutrients discharged into the Banana River Lagoon—a waterbody that is part of the Indian River Lagoon system, a designated estuary of national significance under Section 320.



The Minuteman Causeway project treats an 8.34-acre watershed using three major Low-Impact Design best management practices in its treatment trains. These include native landscape bioswales/tree filters, underground exfiltration, and pervious pavers. Sorption media will be used to further reduce the nitrogen and phosphorus pollution mass before entering the groundwater. This large green infrastructure project reduced nutrient loading for the Indian River Lagoon and has added aesthetic value along the City's streets, making it more attractive to new businesses.



Photos Courtesy of Florida Department of Environmental Protection

The project is an excellent example of diverse partners coming together to fund a project. It includes a \$1.8 million CWSRF loan at 0.315% interest used to provide match for a Section 319 Nonpoint Source grant. Additional partners include Brevard County, the Florida Department of Transportation, St Johns River Water Management District, the Department of Environmental Protection 319 program and TMDL program, as well as a State of Florida Legislative appropriation. The total cost of construction for this project was \$5.2 million.

Washington

Lending to Estuary Restoration Projects

Squalicum Creek in Washington State is a tributary that flows from the Cascade foothills through the City of Bellingham and drains into Bellingham Bay in the northern Puget Sound. Puget Sound is a Section 320 designated estuary of national significance. The Creek historically provided approximately 32 miles of habitat for multiple salmonid species, including Chinook and Steelhead, which are both listed under the Endangered Species Act. In the 1960s, excavation during construction of Interstate-5 created two large pits in the path of Squalicum Creek that filled and became known as Bug Lake and Sunset Pond.



In 2015, a multi-phase project began to re-route Squalicum Creek around both Sunset Pond and Bug Lake to restore natural conditions. The process reactivated remnant channels and reconnected the stream with

its floodplain while restoring riparian buffers. The next phases will continue the re-routing for an additional 0.5 miles around culverts and a major traffic intersection. After completion, water quality and shade monitoring will provide quantitative data to measure the project's success. Throughout the Squalicum Creek project, the City of Bellingham widely engaged the community with mailings, signage, project web page, videos, an open house, and planting events. The community is viewed as an important project partner. The public helped inspire the project concept and will be instrumental as long-term stewards.

Therefore, providing public outreach and events allows the community to participate in and celebrate the projects that make a difference in their day-to-day lives. The City of Bellingham leveraged resources from state and federal grants and CWSRF loans that included over \$620,000 in principal forgiveness to fund this project. Total CWSRF funding for all phases totals over \$2.5 million, or over 30% of \$8.2 million total project cost. Interest rates on the CWSRF loans averaged less than 3%.

This project is an example of sustainable restoration with benefits to water quality, habitat, and recreation. In addition to decreased water temperatures, improved dissolved oxygen levels, and reduced fecal coliform concentrations, the re-routed channel and floodplain reconnection will enhance biotic integrity with native vegetation and sustain natural stream dynamics. The new channel is narrower to prevent stagnation, has large woody debris for complexity, and can accommodate 1.5-year storm events with wetlands and forest to absorb higher flows. In 2016, the Phase 1 and 2 projects were named the American Public Works Association's national habitat project of the year.



Photos Courtesy of Washington State Department of Ecology

For more information on the CWSRF, contact:

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EPA Publication 832F19003
April 2019
<https://www.epa.gov/cwsrf>

