



Creating Watershed Financing Partnerships with the Clean Water State Revolving Fund

Healthy watersheds provide many services that benefit people, the economy, and the environment. Unfortunately, many of our nation's watersheds are currently impaired, primarily by nonpoint sources of pollution such as urban stormwater runoff, failing septic systems, and deforestation. There is an increasing understanding that improvements to water quality can be advanced by considering needs using a [watershed-scale approach](#) that can address both point and nonpoint sources of pollution in a holistic manner, while also finding ways to multiply benefits where opportunities exist.

Watershed-scale planning processes involve building partnerships, identifying goals and solutions, designing and implementing management plans, and measuring progress. The process of developing and implementing watershed management plans involves coordinated action among entities to identify needed projects and activities. In watershed financing partnerships, the stakeholders work together to access the various sources of financing that are appropriate for particular elements of the plan.

As the nation's largest program dedicated to addressing water quality problems, the [Clean Water State Revolving Fund](#) (CWSRF) can be a key partner in expanding investments in watershed protection undertaken by watershed financing partnerships.¹ The CWSRF provides low-cost financing to address a wide range of water quality needs, including for publicly owned treatment works, stormwater infrastructure, nonpoint source pollution control, and estuary protection. The program's ability to provide below market-rate interest rates and grant-like assistance, such as principal forgiveness, makes it an economical funding solution. As of June 2023, state CWSRF programs had collectively provided more than \$170 billion in below market-rate financing to municipalities, nonprofits, watershed groups, private entities, and homeowners for water quality and wastewater infrastructure projects.

How can you fund watershed-based solutions with the CWSRF?

Watershed-scale investments involve collaborating with multiple stakeholders to fund a mix of point source and nonpoint source activities. Watershed financing partnerships can pursue multiple sources of funding, including grants, loans, in-kind services, and more. As the partnerships grapple with project planning and sequencing, funding calendars, eligibilities, and internal coordination, the support of the CWSRF can impart multiple benefits:

- **Financial Savings:** Interest rates for CWSRF loans must be at or below market rate (including interest-free) and states may customize loan terms to meet the needs of their borrowers. Under certain conditions, CWSRF programs may provide up to a fixed percentage of their capitalization grants as additional subsidization such as principal forgiveness.
- **Stability:** The CWSRF can be a stable source of multi-year financing for watershed-based investments that is not dependent on grant cycles.
- **Flexibility:** CWSRF financing can be used for longer-term funding commitments, bridge funding,² and/or to leverage grant funding. This flexibility affords watershed financing partnerships the continuity to allow them to implement their watershed plans. In fact, even the development of the watershed management plans can be funded by the

¹ Watershed partnerships are eligible for CWSRF funding under Section 603(c)(7) of the Clean Water Act which states that each CWSRF may provide financial assistance "for the development and implementation of watershed projects meeting the criteria set forth in section 1274" (33 U.S.C. §1383(c)(7)) including "efforts of municipalities and property owners to demonstrate cooperative ways to address nonpoint sources of pollution to reduce adverse impacts on water quality." (33 U.S.C. §1274(a)(3))

² Bridge funding: Funding that is meant to fill the gap between when the costs are incurred and additional funding, such as a grant, is received.

CWSRF.

- Efficiency: Rather than offering assistance on a project-by-project basis, the CWSRF can finance eligible projects within a watershed management plan at one time or through annual commitments by grouping projects and activities together (i.e., [programmatic financing](#)).
- Opportunity: The flexible financing packages offered by CWSRF programs can enable the sharing of costs and repayment sources, allowing projects that may not have a dedicated source of repayment to be paired with projects that do have revenues. In addition, CWSRF programs have accepted a [wide range of repayment options](#) for projects, including timber revenues, recreational fees, and more.

How do you develop a CWSRF-supported Watershed Financing Partnership?

The following key principles can be used for successful development of a CWSRF-supported watershed financing partnership:

1. Develop an implementation plan. Present your watershed management plans and funding needs like a 5- or 10-year business plan with reasonable estimates of project costs, estimates, and outcomes. Sketch out potential funding sources, including the CWSRF, for projects and activities. Consider starting with a smaller, simpler project to finance before expanding to more complex arrangements. Use a project management approach to organize funding and implementation.
2. Learn about CWSRF eligibilities, lending structures and qualifying financial incentives (including additional subsidization) as well as the application process (including state project priorities and project scoring) in your state to find the best fit.
3. Gather your partners. Secure partnerships with eligible CWSRF applicants that are needed to pursue financing. If the project will be implemented by a non-eligible entity, it may be able to finance the project by partnering with an eligible borrower.
4. Reach out to the CWSRF early. Establish relationships with CWSRF staff early on and communicate with them often to ensure that the CWSRF and project sponsors are on the same page.

EPA has several resources that can help watershed partnerships learn about these issues and identify options, including the [CWSRF Best Practices Guide for Financing Nonpoint Source Solutions](#).



Seasonal Riparian Area Management (SRAM) project areas, before (left) and after (right). Photo credits: Barry Berg, Senior Watershed Manager, Big Sioux River Project.



Photo credits: Barry Berg, BSRP

Case Study: Big Sioux River Project

[The Big Sioux River Project \(BSRP\)](#) works throughout the Big Sioux River watershed to implement best management practices (BMPs) from Estelline, South Dakota to Sioux City, Iowa.³ BSRP coordinates project financing, implementation, and monitoring with a large coalition of partners including the City of Sioux Falls, the City of Dell Rapids, Northern Prairies Land Trust, Minnehaha Conservation District, and more.

Water quality objectives: The primary impairments in the watershed are E. coli bacteria and total suspended solids (TSS). The Big Sioux River is a popular recreation area during warmer months and a source of drinking water for surrounding communities.

Project types: BSRP works with landowners to implement best management practices such as riparian buffers, cover crops, conservation tillage, tree planting, shoreline stabilization, animal waste systems and more in rural areas throughout the watershed.

Financing strategy: BSRP has received more than \$10 million in CWSRF financing from the South Dakota Department of Agriculture and Natural Resources since 2011 through sponsorship loans with the cities of Sioux Falls and Dell Rapids. In a [sponsorship loan](#), a municipality will agree to add a nonpoint source or watershed project to its publicly owned treatment works CWSRF loan. To compensate the municipality for the additional project, the CWSRF reduces the interest rate on the combined loan thereby effectively eliminating the cost of the watershed project. In addition to the CWSRF, BSRP's funding is supplemented by grants from the EPA §319 Nonpoint Source Management Program and the U.S. Department of Agriculture, as well as local funding. The CWSRF represents more than 30 percent of BSRP's funding since 2004. BSRP is actively reaching out to other municipalities in the watershed to discuss CWSRF sponsorship opportunities.

Results: From August 2005 through September 2024, the BSRP has protected 102 miles of rivers and streams by preventing approximately 477,213 pounds of nitrogen, 126,184 pounds of phosphorus, and 73,501 tons of sediment from entering the river.⁴ As a direct result of BSRP and its partners' efforts, Skunk Creek, a major tributary of the Sioux River, was removed from the [impaired streams list for TSS in 2016](#).

Lessons learned: BSRP's watershed coordinator identifies many lessons learned from a successful CWSRF-funded watershed financing partnership:⁵

- CWSRF outreach plays a key role. South Dakota's CWSRF initiated outreach to BSRP and communities about the sponsorship opportunity – an option of which they were unaware.
- Leverage contacts. Establish close relationships with municipal partners.
- Create a structured plan. BSRP develops 5-year Project Implementation Proposals, which it uses to strategize with partners.
- Formalize roles. BSRP has signed agreements with its partners.
- Accentuate the benefits. Accentuate how their economies and permit compliance efforts will benefit from the partnership. For instance, the Sioux River is a source of drinking water for the City of Sioux Falls, and recreation on the river contributes to the local economy.

³ The entire watershed spans parts of South Dakota, Minnesota, and Iowa. BSRP focuses its effort on the watershed area in South Dakota, which comprises 2,107,000 of the 3,921,000 watershed acres.

⁴ Figures provided by Barry Berg, BSRP Watershed Coordinator, December 16, 2024, using EPA's [Pollutant Load Estimation Tool](#) (PLET).

⁵ Based on discussions with Barry Berg, April 10, 2024.

Case Study: Wyoming Valley Sanitary Authority

The [Wyoming Valley Sanitary Authority \(WVSA\)](#) is a regional wastewater utility servicing municipalities in Luzerne County, Pennsylvania within the Chesapeake Bay watershed. Facing more stringent Municipal Separate Storm Systems (MS4) permit requirements in the region, WVSA engaged a consultant to conduct a feasibility study. The study found that managing stormwater on a regional basis would be significantly less costly than on a municipality-by-municipality basis. As a result, WVSA sought to become a regional stormwater manager, partnering with its member municipalities to coordinate stormwater investments. In 2021, WVSA signed a [\\$12.9 million CWSRF programmatic financing loan](#) to implement stormwater projects in 6 sub-watersheds throughout the member municipalities.

Water quality objectives: Under the new MS4 permit, WVSA is required to reduce sediment loads by 10 percent (1,150 tons), phosphorous by 5 percent and nitrogen by 3 percent to address pollution in the Chesapeake Bay.

Project types: WVSA is coordinating the implementation of stormwater management and green infrastructure improvements throughout the 32 member municipalities. It has partnered with local engineering firms, developers, and property owners to implement a suite of improvements strategically sited to help the region achieve its MS4 permit requirements.

Financing strategy: WVSA obtained a CWSRF programmatic financing loan that allows it to implement a series of projects across five phases. The phases are expected to be complete within five years, with principal repayment on the loan beginning in 2026. WVSA also received EPA Community Grant funding as well as multi-year grant financing through a partnership with the United States Army Corps of Engineers for technical assistance related to storm sewer mapping, infrastructure analysis, and condition assessment. The partnership includes a 50/50 cost share, enabling the WVSA to perform services at a reduced cost as compared to an independent municipal approach. Lastly, WVSA is collecting stormwater fees based on property owners' impervious surface. Property owners can choose to implement stormwater best management practices to reduce their stormwater bills and obtain credit for the savings. WVSA has been collecting the fee since 2019; this fee is used to repay the CWSRF loan.

Results: WVSA has restored over 16,000 feet of impaired stream using natural design concepts to stabilize banks to reconnect the stream with its natural floodplain, constructed two rain gardens, and restored three stormwater basins which service 696 acres. The expected load reduction is over 500 tons of sediment, 145,000 pounds of nitrogen, and 229,000 pounds of phosphorous annually.

Lessons learned: WVSA's lessons learned for its regional collaboration include:

- Obtain support early. WVSA reached out to the PA Department of Environmental Protection and local legislators very early on to obtain their support for the regional strategy. This helped bring municipalities on board.
- Work with the members. WVSA committed to working with the member municipalities' engineers and reimbursed engineers for their costs.
- Be willing to expend funds up-front. WVSA used internal funding to implement improvements for 6 months prior to rolling out the fee to show property owners what they can expect.
- Conduct significant outreach. WVSA implemented a rebranding campaign, released ads, participated in news shows, and more to reach community members to make them aware of the new stormwater fee. WVSA conducted over 50 community meetings.
- Demonstrate savings. WVSA's regional stormwater fee saves property owners 50-70% compared to what it would have cost the municipalities to do the work themselves. The typical homeowner fee is \$4.70 per month.



WVSA stream restoration project, before (top) and after (bottom). Credit: WVSA