

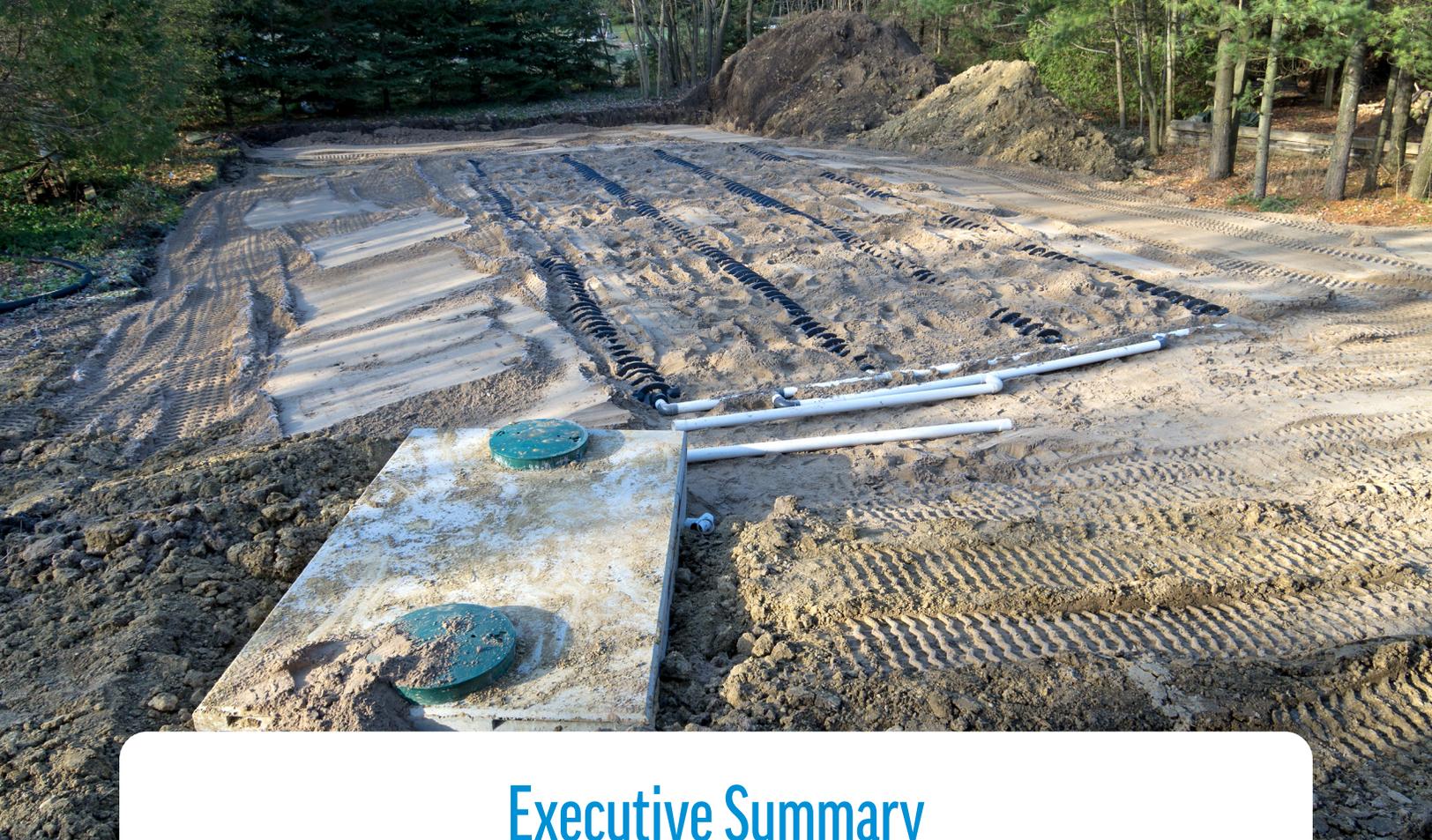
FINANCING DECENTRALIZED WASTEWATER TREATMENT SYSTEMS

Pathways to Success with the Clean Water State Revolving Fund Program



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Executive Summary

The Environmental Protection Agency (EPA) is providing this guide for community leaders, local and state onsite wastewater programs, and Clean Water State Revolving Fund (CWSRF) programs on how to utilize the CWSRF for decentralized wastewater treatment system projects (i.e., decentralized systems).

Approximately one in five American households rely on some type of decentralized wastewater system, such as a single-family home septic system or community cluster system. When properly designed and maintained, these systems protect public health and the environment. The impacts of failing systems can include illness, environmental degradation, and economic loss in communities that rely on healthy waters for industry, business, and tourism.

The CWSRF program is a robust source of financing for projects that improve water quality and wastewater infrastructure. The CWSRF offers attractive loan terms, including below-market interest rates, loan forgiveness, extended-term financing, and flexible repayment options. Most CWSRF loans are used to support the construction and repair of centralized wastewater treatment systems that serve households through connections to sewer lines. However, the CWSRF is also a viable financing source for decentralized projects.

What is a Decentralized Wastewater Treatment System?

Decentralized wastewater treatment systems treat domestic wastewater from homes and businesses that are not served by a centralized public sewer system. Types of decentralized systems include:

- Individual septic wastewater treatment systems (also referred to as “onsite” systems)
- Cluster systems
- Package plants

This guide explores how the CWSRF can be used as a source of financing for decentralized system projects by describing the basics of the program, the requirements, optional financing structures, and mechanisms to effectively reach prospective borrowers. It is designed to help local and state onsite/decentralized wastewater programs, and community leaders who are interested in learning the ways to access this source of financing. This guide may also be used by state staff in CWSRF programs that have never financed decentralized system projects and wish to either begin or expand their assistance to include them. For others learning about the CWSRF, this guide will provide the tools and knowledge necessary to successfully navigate the financing process, including information on eligibility, the application process, and understanding available financing mechanisms. It covers the basics of alternative CWSRF financing structures such as: linked deposit lending, pass-through loans, sub-state revolving loan funds, sponsorship programs, and working with Community Development Financing Institutions (CDFIs) or other private lenders, as well as the benefits of co-financing with other programs.

Across the country, CWSRF programs have developed successful decentralized system financing programs based on strong relationships with community leaders and stakeholders to target financial assistance to populations with the greatest need. Households that rely upon decentralized systems for domestic wastewater treatment are often in economically disadvantaged areas. This guide includes an 11-step process for community leaders, local and state onsite wastewater



programs, and state CWSRF programs to work together to: (1) identify the problem; (2) select the best financing solution; (3) identify critical partners; (4) effectively finance the project; and (5) implement decentralized system projects.

Wherever possible, state-specific case studies and examples are included to illustrate the benefits and impacts of CWSRF-based financing of decentralized system projects. Tools and resources are also included to provide an understanding of the CWSRF program requirements and their applicability, options for loan repayment, and help on planning, risk assessment, management, and educational tools.



Introduction

Our nation's wastewater infrastructure is diverse in its complexity, it ranges from large-scale engineering technologies for highly populated urban centers to simple septic systems used throughout rural America. In fact, approximately one in five households in the United States rely upon decentralized wastewater treatment systems (or “decentralized systems” for short) to manage domestic wastewater.¹ With continuing advancement in design, decentralized systems play a valuable role in a comprehensive wastewater infrastructure strategy. These systems also offer attractive energy cost savings and resiliency in the face of severe weather events, such as hurricanes and floods. When properly designed, installed, and maintained, decentralized systems can be a highly cost-effective and efficient means of treating domestic wastewater.

Most government financing assistance for wastewater infrastructure is directed toward centralized collection systems and wastewater treatment plants. However, there are many communities where connecting to centralized wastewater treatment infrastructure is not the most cost-effective solution or geographically feasible. Unfortunately, projects to address decentralized systems can be prohibitively expensive for many homeowners, thus delaying important investments in the wastewater infrastructure needed to protect public health and water quality.

Measuring the Impacts of Failing Decentralized Wastewater Systems

There are serious consequences to surface and groundwater quality, drinking water resources, and public health from failing decentralized wastewater systems. Some communities have no constructed wastewater treatment and rely upon cesspools, privies, or straight pipes that discharge waste directly into their surrounding environment.

Lack of wastewater infrastructure and failing systems are a major contributor to water quality impairment from pathogens (e.g., *E. coli*) in the United States.² Pollution from failing decentralized systems can cause declines in local economies that are dependent on healthy waters for industries such as tourism, fishing, and shellfish harvesting (Figure 1). Economic impacts can also result in diminished real estate property values, job losses and unemployment. Overall, business revenue losses can be extensive from polluted waters caused by failing decentralized systems.

In addition, these consequences disproportionately affect rural, minority, and economically disadvantaged communities that struggle to address these impacts given their limited financial capacity.³ Finding affordable, sustainable financing solutions to resolve decentralized system infrastructure challenges is imperative at the local, state, and national level.

The Impacts of Failing Septic Systems



Figure 1. Failing septic systems affect the economy and environmental resources.



The Clean Water State Revolving Fund Program

The CWSRF was created in 1987 by the Amendments to the Clean Water Act under 33 U.S. Code §1383 as a financial assistance program to support a variety of water quality projects, including wastewater infrastructure. The program is a partnership between EPA and the states, where each state is responsible for the operation and management of its own CWSRF program.

Each CWSRF program functions like an environmental infrastructure bank, providing financing assistance, primarily in the form of below-market interest rate loans to eligible borrowers for water quality and wastewater infrastructure projects. There are [51 CWSRF programs](#); one in each state and Puerto Rico. Collectively, the CWSRF has provided over \$145 billion in financial assistance for water quality and wastewater infrastructure projects through June 30, 2020.⁴ This includes decentralized wastewater treatment projects such as:

- Installation of new individual septic systems,
- Repair and/or replacement of existing septic systems,
- Conversion of cesspools to septic systems,
- Conversion of septic systems to centralized wastewater treatment systems,
- Replacement or modification of existing cluster or small community package plants, and
- Payment of costs associated with establishing a [Responsible Management Entity \(RME\)](#) such as a special district to oversee decentralized systems in a particular neighborhood or region.

Each state program sets goals and priorities through its own project ranking system and publishes an Intended Use Plan (IUP) every year that includes a Project Priority List of projects it intends to finance.

The CWSRF programs are authorized through statutes and regulations at both the federal and state levels. While the federal authorities are broad and flexible, it is possible for states to have more stringent limitations on what their CWSRF program can finance.

Can the CWSRF Help Address Decentralized Wastewater Treatment Challenges?

The CWSRF can help communities, watershed groups, non-profit organizations, and homeowners facing decentralized wastewater treatment challenges by providing low-cost financial assistance to undertake decentralized system projects. Though the program is widely known for financing centralized wastewater treatment infrastructure projects worth millions of dollars, CWSRF programs have been working with local stakeholders to provide valuable assistance for decentralized wastewater projects in small, rural, and economically disadvantaged communities nationwide for more than 30 years.

With billions of dollars in financing available for loans (more than \$7.4 billion in FY 2020), the CWSRF is an excellent resource to consider when seeking solutions to support homeowner's, associations, and communities in need of affordable financing for decentralized system investments.⁵ Nationally, the CWSRF provided more than \$3.4 billion in combined assistance, since the program's inception, for various types of decentralized wastewater projects and septic-to-sewer conversions, representing over two percent of the total CWSRF assistance provided. The CWSRF has the tools to expand the universe of decentralized wastewater projects that receive assistance given the growing interest from stakeholders. Half of the CWSRF programs have made loans to these types of projects at one time or another, but as of 2020 there are only 11 state programs that continue to do so on a regular basis. There are many other states that would like to expand into this area.

In recent years, the passage of the Water Resource Reform and Development Act of 2014 (WRRDA) and the American Water Infrastructure Act of 2018 (AWIA) placed more emphasis on financing decentralized wastewater projects. The legislation supports decentralized funding due to the pervasiveness of these systems in the domestic wastewater landscape, and propensity to contribute to water quality impairments if left in disrepair or not maintained.

These legislative changes to the CWSRF program broadened the types of decentralized wastewater project activities eligible to receive financing. Eligible activities now include the installation of new decentralized systems as well as the repair and replacement of existing systems. CWSRFs may make loans to both public and private entities for decentralized system projects. Although most programs are not designed to make loans directly to individual homeowners, this can be accomplished and should not discourage local stakeholders from seeking CWSRF assistance for decentralized wastewater projects. The need for financing decentralized systems finds more CWSRF programs adopting alternative financing mechanisms. This allows state programs to engage community stakeholders and direct affordable financing to private borrowers and individual homeowners.

The CWSRF offers some of the most competitive lending rates available: they are guaranteed to be below the market rate, and states have the option of adding loan forgiveness to qualifying borrowers. Many states offer other attractive options like planning and design grants and can accept a wide variety of loan repayment options. The flexibility and creativity of CWSRF programs ensure they can be effective partners in financing decentralized systems.

Understanding the Fundamentals of the CWSRF Program

Successfully using CWSRF funds for decentralized system projects requires understanding how the program works, how to apply for a loan and the expectations of potential borrowers. To navigate the process and effectively engage with the CWSRF program in your state, it is important to understand eligibility and program requirements, loan terms, and repayment options.

CWSRF Eligibility Requirements

Broadly, capital and construction costs are eligible for CWSRF financing, while [operation and maintenance](#) (O&M) expenses are not. Most CWSRF programs will finance planning and design costs but may have different criteria. For example, some states offer a planning and design allowance while others only reimburse for those costs once construction is ready to begin. The [CWSRF staff in your state](#) can help you understand what costs may or may not be eligible for assistance. Depending on the type of decentralized system installed, O&M activities may differ as shown in the examples below.^{6,7}

Figure 2 illustrates the broad flexibility that the federal statutes allow. Remember that some states have their own legal authorities that limit eligibilities within their CWSRF programs. Therefore, it is important to know what the CWSRF in your state can and cannot do. For example, the federal CWSRF program regulations allow for loans to be made directly to individual

What is O&M?

Decentralized systems require upkeep and maintenance. Maintaining these systems is a critical part of ownership, but these costs are not eligible for CWSRF financing.

Individual Septic System

- ✔ Ensure basement service traps have water in them as needed.
- ✔ Clean collection lines as needed.
- ✔ Check for leaks in toilets and dripping faucets annually.
- ✔ Make sure all caps and lids are intact and in place annually.
- ✔ Check for surfaced effluent annually.
- ✔ Pump out septic tanks every 3-5 years.

Cluster Decentralized Wastewater Systems

- ✔ Perform an annual review and audit of electricity, chemicals, labor, and equipment servicing costs.
- ✔ Remove and dispose of residuals annually.
- ✔ Establish a repair fund for equipment with a useful life (<10 years).
- ✔ Establish a replacement-depreciation fund to cover the cost of replacing major capital equipment.

homeowners for the installation, repair, replacement, or upgrade of decentralized systems. However, direct loans to homeowners are uncommon because under state statutes many CWSRF programs are only able to make loans to public entities, such as municipalities, counties, state agencies, districts, or other political subdivisions. This limitation is one of the reasons why alternative financing mechanisms exist. To date, the [Delaware CWSRF](#) is the only state program that makes loans directly to individual homeowners with decentralized systems (see page 14).

Many CWSRF programs reach individual homeowners for decentralized wastewater projects and upgrades either by lifting state legislative restrictions or developing innovative financing mechanisms to navigate alternatives. Where CWSRF programs perceive a demand for financing, they are often willing to develop innovative and effective solutions with the help of community stakeholders who are interested in exploring these options to address decentralized wastewater project needs.

CWSRF Financing Fundamentals



Is my project eligible for CWSRF funding?

- Planning and design
- Construction
- CWSRF CANNOT pay for operations and maintenance

Your state's CWSRF staff can help you understand what costs may/may not be included in a CWSRF loan.



What kinds of projects are eligible?⁸

- New septic system installation
- Repair/replacement projects
- Converting cesspools to septics
- Cluster systems or community package plants
- Certain fees associated with setting up a special district or a Responsible Management Entity



Am I eligible to apply?

The CWSRF may lend to:

- Communities, municipalities, townships, counties, political subdivisions
- Individual homeowners
- Citizen groups
- Non-profit organizations
- Public utility companies



What terms are available?

Within statutory limits, state CWSRF programs have a great deal of flexibility to offer borrowers, including leeway with:

- Interest rate and repayment terms
- Limited amounts of loan forgiveness
- Sculpted repayment structures to accommodate borrower cash flows

Check with staff in your state about how a CWSRF loan can be customized to fit your needs.

Figure 2. How do you finance decentralized projects under the federal CWSRF program?

There may be limitations on the types of borrowers or projects that your state CWSRF program can lend to under statute. Check with your [CWSRF program representative](#) to discuss options.

CWSRF Program Requirements

Projects that are deemed “treatment works,” per Section 212(2)(A) of the Clean Water Act, must comply with certain federal requirements. It is up to each state program to determine whether a project meets this definition and therefore must comply. It is important to note that projects co-financed between the CWSRF and another source must meet all CWSRF requirements. This applies for all projects that receive any amount of CWSRF funding.

Qualifying for a CWSRF Loan

CWSRF loan underwriting guidelines require borrowers to have enough funds available (after operations, maintenance, and other expenses) to repay the loan. Some states require an additional buffer or reserve to add further security. The credit review process will differ based on whether the project is implemented and repaid by a public entity (e.g., municipality, utility) or an individual homeowner. Each state might have different credit review requirements; Figure 3 shows what is typically requested from public and private entities versus individual homeowners.

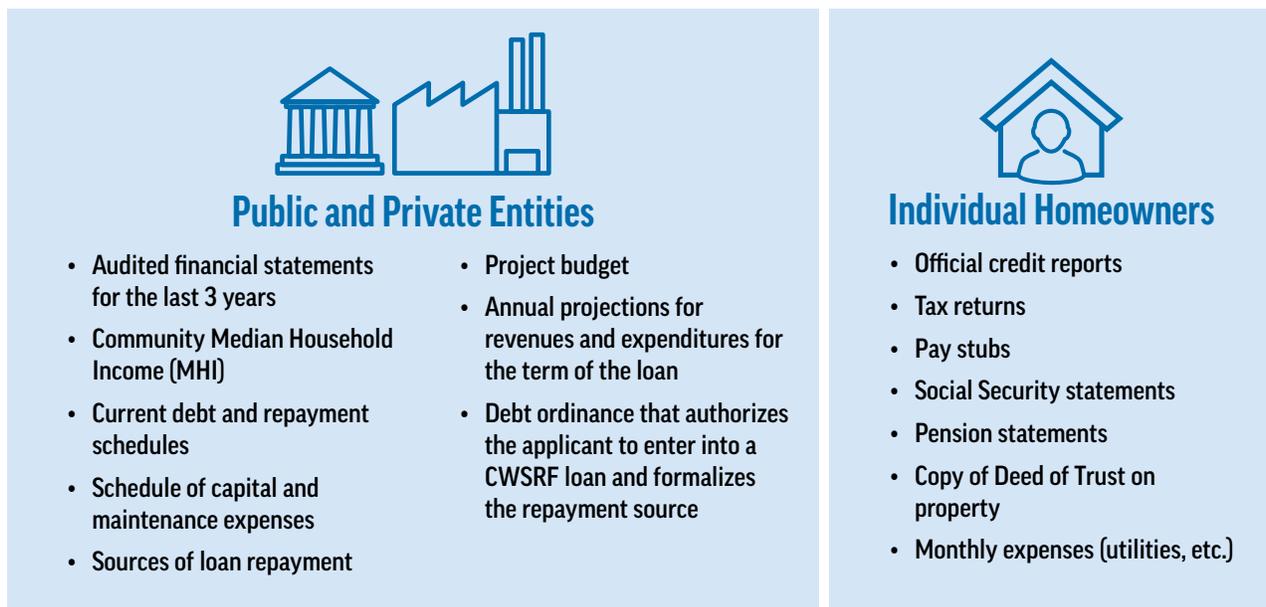


Figure 3. Typical credit review requirements for public and private entities versus homeowners.

Most CWSRF programs choose to partner with another entity to administer loans for decentralized systems using alternative financing mechanisms. This is discussed further in the next section. Depending on the financing mechanism selected, the partnering entity responsible for conducting the credit review may have different criteria.

An applicant's lack of financial capacity and/or a viable loan repayment source is the most cited reason CWSRF programs do not enter into loan agreements for decentralized system projects.

Although the CWSRF is primarily a loan program, and potential borrowers need to consider potential loan repayment sources, options exist in every program to provide assistance to help small and disadvantaged communities. In addition, in some cases the CWSRF assistance does not need to be repaid, and how this can support decentralized programs is discussed below.

CWSRF Loan Forgiveness & Disadvantaged Community Programs

Most CWSRF programs offer either a small or disadvantaged community program with special financing for qualified applicants. They are evaluated based on a set of affordability criteria to characterize their financial capability. Qualifying applicants may receive interest rates between zero percent and market rate with loan terms up to 30 years or the useful life of the project (whichever is shorter), and/or they may have a percentage of their loan forgiven.⁹

Under federal law, all state programs are allowed to provide loan forgiveness to their borrowers (this is also referred to as principal forgiveness). However, they are limited by federal legislation and appropriations as to how much forgiveness they can offer each year. Loan forgiveness is



Program: West Virginia CWSRF Recipient: New Haven – Winona Project: Septic Tank Gravity System

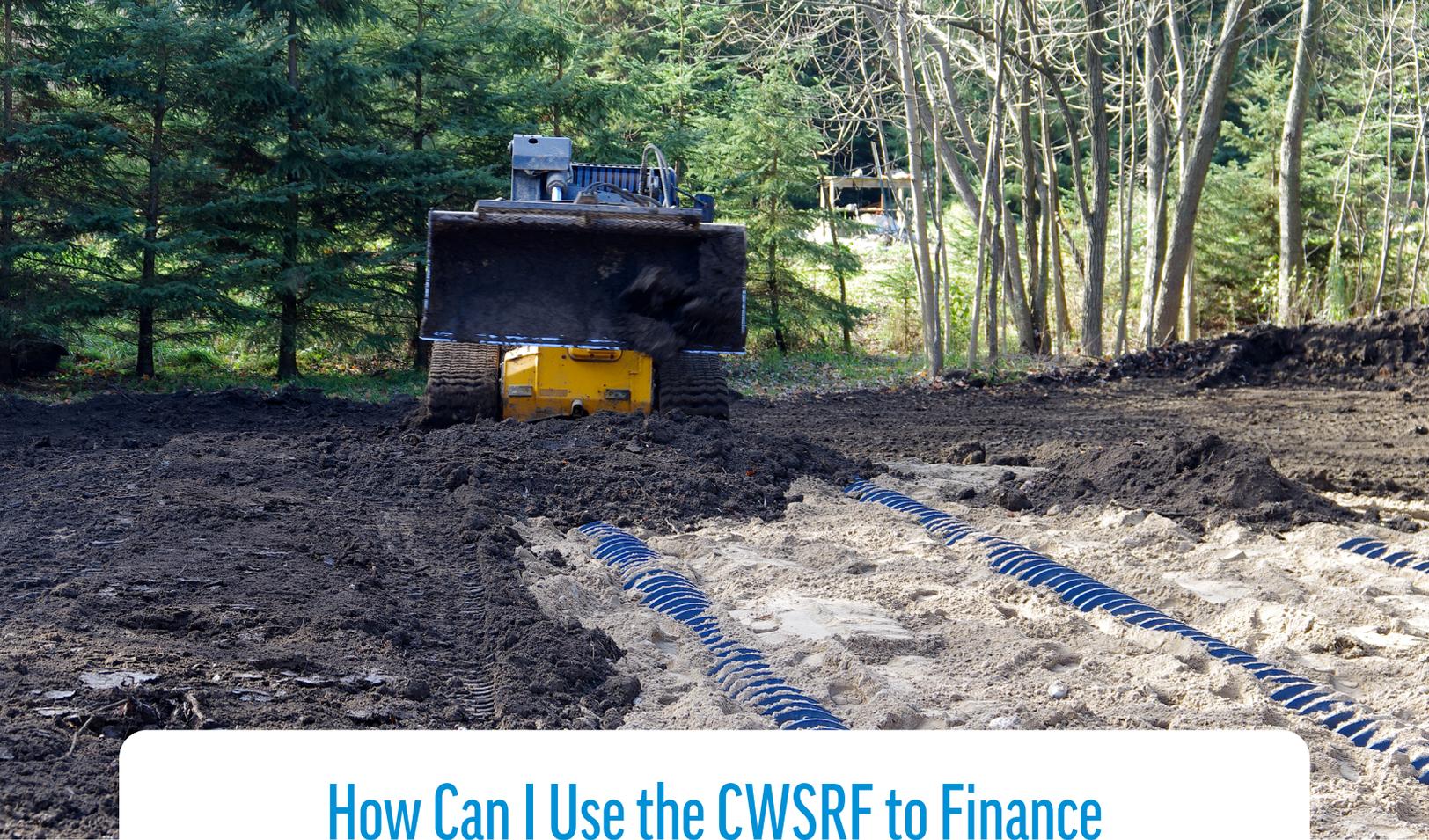
The community of Winona is a former coal camp of 99 homes and commercial buildings in Fayette County, West Virginia. Before 2017, wastewater disposal practices in Winona consisted of direct discharges and failing septic systems that released raw or partially treated wastewater into local ditches, ravines, and streams. Because of this, Keeney Creek, which flows through the center of the community, had the highest frequency of bacteria violations in the New River watershed. This project created a state-of-the-art decentralized sewer system through a series of distributed high-capacity septic systems. The project treats wastewater using technology that recirculates effluent through sheets of textile filters that last longer and require less maintenance than alternatives. The project combines principal forgiveness from the CWSRF with grant funding from two state agencies to keep the project affordable (under \$60 per month) for this low-income community. The flexibility of the CWSRF to provide funding for pre-bid engineering, legal, accounting, and administrative costs was key to making this project a reality. For more information, see the CWSRF's PISCES Recognition Program: [2017 Compendium](#).

functionally the same as a grant and occurs when a portion of the principal of the loan is written off—meaning it does not need to be repaid. The CWSRF statute allows states to offer loan forgiveness based on either affordability or sustainability criteria. The statute also determines whether CWSRFs may provide the subsidies to private entities, public entities, or both.¹⁰ Within this statutory authority, each state establishes terms and conditions to qualify for forgiveness based on its own lending priorities. For decentralized wastewater projects, loan forgiveness is typically based on affordability criteria. In recent years, the CWSRF programs have refined their affordability criteria to better assist families in economically distressed areas. Figure 4 outlines criteria that states have typically used to determine affordability. Each CWSRF program uses different benchmarks. CWSRF programs offer information on how much loan forgiveness is available and their plans for using that subsidy in their annual IUP, which is displayed on each program’s website.

Loan forgiveness is an invaluable tool for the CWSRF to get critical assistance to the communities who need it most. It is often used to tailor loan packages that are customized to the applicant’s ability to pay. Some of the alternative financing mechanisms discussed in the next section are limited in their ability to offer loan forgiveness. This is a factor that should be considered when selecting decentralized system financing tools.



Figure 4. Common affordability criteria used to determine CWSRF loan forgiveness.



How Can I Use the CWSRF to Finance My Decentralized System Project?

Federal statutes give states the ability to finance decentralized systems, but states determine whether and how to provide the financing. If a CWSRF program determines there is both a need and demand for decentralized system financing, it will assess the best way(s) to offer financing. In doing so, state program staff will need to consider several factors to design a decentralized financing program that reaches as many homeowners as possible (Figure 5).

What Options Are the Best Fit for Your Community?

Read Your State's CWSRF Legislation Rules, Regulations

Are there any state laws that limit or restrict decentralized system loans made to private home owners?

Review the Financing Mechanisms in this Document

Do any of the financing examples provide ideas on how to navigate state restrictions?

Identify and Approach Potential Partners

Many financing mechanisms use a partner, such as a nonprofit association. What type of partner is the best fit for your community?

Consider Possible Affordability Issues

Some of the potential mechanisms have more flexibility in interest rates and loan terms. What affordability issues matter most in your community?

Figure 5. Review of CWSRF options for communities.

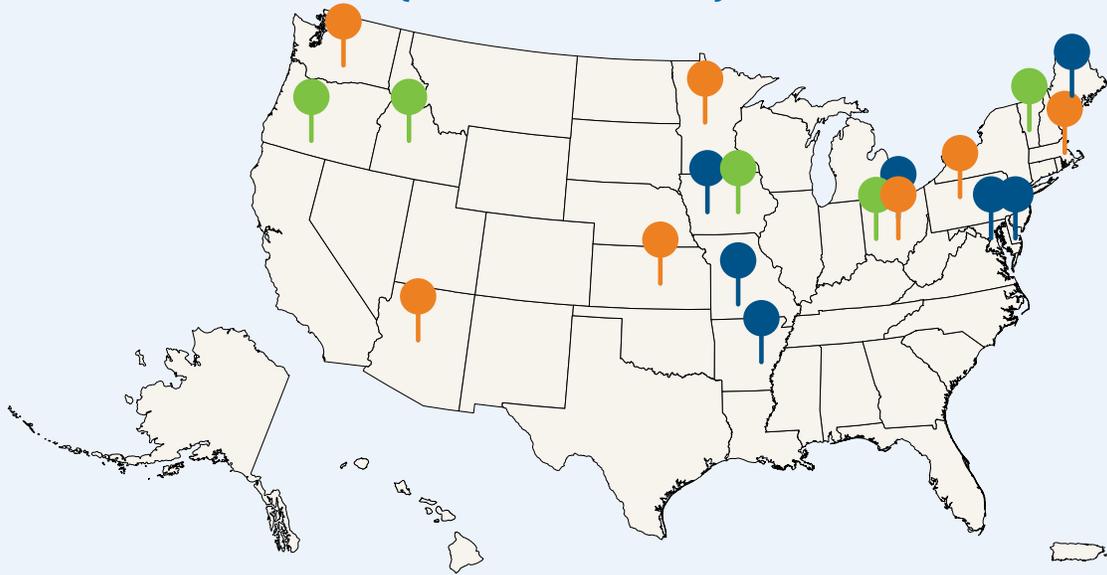
First, a CWSRF program must evaluate its statutory and regulatory language and identify any restrictions on lending to private property owners. Second, the CWSRF needs to determine how it can offer financing terms that are affordable to residents in need of this type of assistance. These terms may include interest rate flexibilities and loan forgiveness options. Third, CWSRF staff need to consider if they are the most effective messenger to reach the intended borrower, or if another entity may be more familiar. Homeowners may fear regulatory oversight when financing is provided by state and/or federal agencies. Strategic partnerships with county housing authorities, nonprofit organizations, councils of government, or local contractors can help dilute this fear that sometimes keep homeowners from participating in financial assistance programs.¹¹

Finally, the CWSRF program must assess if there is sufficient staff to implement and oversee the planned program. Fifteen of the sixteen states with active decentralized wastewater programs have chosen financing through an intermediary for this reason. This is also referred to as “conduit” lending where the CWSRF works with a partner, such as a local bank or county health department, with fewer restrictions to get financial assistance into the hands of homeowners. Delaware is the only state that offers direct assistance to homeowners for decentralized system projects. Figure 6 shows states that are actively using alternative financing mechanisms for various nonpoint source related projects. States with CWSRF decentralized system funding programs have used pass-through and linked deposit loans to provide more than \$1 million in assistance for septic system projects. Overall, states have provided more than \$510 million for decentralized system projects, which includes septic-to-sewer conversions.¹³ The remaining states may still be assessing which decentralized system financing programs would be the best to pursue.

Direct Loans

All CWSRF programs make direct loans for larger decentralized wastewater projects, such as septic-to-sewer conversions. These projects may often be viewed as part of a “centralized wastewater system,” where the recipient is a municipality or a publicly owned treatment works (POTWs). Only one state—Delaware—directly finances individual septic or cluster system projects (Figure 7). These borrowers, primarily homeowners and mobile home park owners, sign a loan directly with Delaware’s CWSRF program. The Delaware CWSRF offers two financial assistance programs to address decentralized wastewater needs: The Septic Extended Funding Option (SEFO) and the Septic Loan Rehabilitation Program (SLRP). SEFO provides interest-free loans for borrowers that do not qualify for the SLRP. These loans are repaid when the property is refinanced or sold. If these events do not occur, the SEFO loan is forgiven after twenty years. Due to this structure, the state uses CWSRF administrative funds for SEFO. SLRP loans are made from the CWSRF loan fund and do not receive loan forgiveness. Delaware works with septic system installers and the First State Community Action Agency for outreach and technical assistance but manages all other aspects of the loan program in-house.

A National Picture of Conduit Lending and Sponsorship in the CWSRF Program (as of October 2020)



SPONSORSHIP

A traditional publicly owned treatment works (POTW) project pairs with a local partner with a nonpoint source (NPS) project. A municipality receives the CWSRF loan with a reduced interest rate as compensation for sponsoring the NPS project. The municipality can implement the NPS project themselves, or provide the financing to a NPS partner like a nonprofit, to do so.

Sponsorship reinforces the idea that wastewater treatment plant improvements and water resource restoration projects are complimentary efforts.

PASS-THROUGH

CWSRF program makes a loan to another government agency or a municipality. The funds are then passed to private borrowers as loans for NPS pollution projects.

Pass-through lending is actively used for septic system repair/replacement, agricultural BMP projects, stormwater runoff controls, riparian restoration, and acid mine drainage overflow prevention in many states.

LINKED DEPOSIT

CWSRF program purchases a reduced-rate certificate of deposit from a private financial institution. The financial institution then loans out the deposited funds (at a slightly lower interest rate) to individuals for small-scale water quality projects that otherwise may have issues obtaining financing.

Linked deposit mechanisms are successful because the CWSRF program is invisible to the individuals seeking assistance. They are using a financial institution and loan process that is familiar, which is why many states have used linked deposits to fund decentralized wastewater projects.

Note: This list is not inclusive.

Not all states use these mechanisms every year. Delaware also funds decentralized systems through direct homeowner loans.

Figure 6. Mechanisms used by CWSRFs to finance decentralized system projects.

The Delaware Department of Natural Resources and Environmental Controls (DNREC) offers loans up to \$35,000 for homeowners and \$250,000 for mobile home parks for the construction, repair and replacement of decentralized systems, and connections to central sewer lines. Loans are offered through two programs, depending on the borrower's credit quality. Owners are required to pump out the system every three years. CWSRF staff perform a credit review of all applicants.



DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL



Septic Loan Rehabilitation Program (SLRP)

20-year loans at 3 or 6% interest, depending on income. Monthly payments paid to the CWSRF.

Septic Extended Funding Option (SEFO)

Interest-free loans for borrowers that do not qualify for SLRP. No monthly payments. Loans are due when the property is sold or transferred, or the mortgage is refinanced. Otherwise, the loan is forgiven at maturity. SEFO loans are financed from the CWSRF Administrative Fund.

At the end of FY 2020, Delaware had more than 530 SLRP and SEFO loans outstanding worth **\$9.3 million**.

The average loan is **\$18,000**.

The delinquency rate is **less than 2%**.

The loans pay for **planning, design, and construction costs**.

Source: Interview with Jessica Velasquez, Delaware Department of Natural Resources and Environmental Control, April 12, 2019.

Figure 7. CWSRFs direct loans for decentralized systems: Delaware.

The Conduit Approach to Decentralized System Loans

CWSRF programs often conduct their decentralized system lending via an intermediary, including state and local government agencies, banks, and nonprofits. The choice of an intermediary is contingent on many factors (Figure 8). These factors include, but are not limited to:

- **Borrower eligibility:** Eligibility restrictions impact the type of decentralized system conduit lender. For instance, some states are unable to make CWSRF loans to private entities and may require a governmental partner as a conduit lender.
- **Willing partner:** Decentralized system financing partners should have similar goals as the CWSRF, capacity to implement the financing program, and a positive working relationship with the CWSRF staff.
- **Accessibility:** Effective decentralized system financing partners should be engaged with the target borrower community. In many cases, the most effective CWSRF conduit lender is one that is already familiar and accessible to the borrower.
- **Internal considerations:** The CWSRF program needs the proper staffing and internal infrastructure in place to manage the selected financing mechanisms, whether it is oversight of partner banks or the ability to approve payment requests.

CWSRF programs often use conduit lenders to make smaller loans targeting property owners, homeowner’s associations, mobile home parks, and similar recipients. Using the mechanisms described on the following pages, they may finance individual septic systems, smaller package plants, or other smaller projects, with the CWSRF directly taking on larger, more complex projects such as septic-to-sewer conversions.

Selecting a Conduit Lender for Decentralized System Projects

Most CWSRFs use a partner (conduit lender) to finance decentralized system projects. The choice of partner is contingent on many factors, such as:

Partner Eligibility	Borrower Eligibility	Willing Partner	Accessibility	Availability
The conduit lender must be eligible under state and federal CWSRF regulations.	The financing recipient (e.g., homeowners) must be an eligible borrower for the conduit lender and the SRF.	The partner should have similar goals as the CWSRF program.	The partner should be engaged with the target borrower community.	The CWSRF and the partner must have the staffing and infrastructure to manage and oversee the program.

Figure 8. Factors to consider when choosing a conduit lender.

Linked Deposit Loans

Partner: Local Bank

Linked deposit loan programs partner the CWSRF program with local banks. The bank works directly with the property owner to implement the decentralized wastewater project, conduct the credit review, and approve the loan once the permits have been received.

The CWSRF program works behind the scenes: it makes an investment (typically in a certificate of deposit) at the bank, accepting a reduced rate of return on its investment. The bank then offers the same discount to the borrower. As a result, the property owner pays an interest rate that is below the bank's typical rate (Figure 9). While banks typically set the lending criteria, CWSRFs often have some influence. For example, Iowa's lenders agree not to charge more than three percent interest on the linked deposit loans. State banking rules and limitations may impact the structure of a linked deposit mechanism.

States have typically sought the linked deposit option if they are legally unable to make loans to private parties like homeowners. This option also allows property owners to work directly with their community lender with whom they may already have a relationship. Loan forgiveness has not typically been offered under this model because a bank is providing the loan; however, a lender may be willing to negotiate forgiveness options with a CWSRF.

Fluctuations in interest rates can impact the borrower's reliance on these types of loans. For example, the recent low interest rates have significantly diminished the demand for linked deposit programs nationally. However, due to the participation of hundreds of small community banks, Iowa's linked deposit program has remained a popular choice for septic system, agricultural, and other projects.

What are people saying about Iowa's Onsite Wastewater Assistance Program (OSWAP)?

"We started having a lot of septic problems and found out that we were going to have to replace our current system. Thanks to OSWAP's low-interest loan and City National Bank, we were able to get it fixed. I was surprised how affordable my payments were with the 3% interest over 10 years. It is a very convenient, affordable and easy program that I would recommend to anyone."

Mark Feller - Borrower
Shenandoah

"The program is a benefit for our customers as well as a service to the communities we serve. We have issued 50 loans through the program since 2002 and have received excellent service. Our customers appreciate the 3% interest rate and the fact that the loan can be for the entire cost of the improvements they make to their system. Amortization can be established to make the payments affordable for everyone. A major benefit to Hills Bank is the fact that the entire loan amounts are fully funded by the Iowa Finance Authority."

Don Wilson - Lender
First Vice President, Commercial Banking

Source: http://www.iowasrf.com/program/other_water_quality_programs/on-site-waste-water-assistance-program/

Iowa Onsite Assistance Program (OSWAP)

OSWAP has over **400 participating bank lenders**. Many are community banks.

- Lenders apply at www.iowalinkeddeposit.com.

After the OSWAP project has been approved by the IA Department of Natural Resources, **Iowa SRF deposits an amount equal to the loan** with the lender. The lender reimburses the homeowner from this account.

- The lender establishes the loan terms.
- The CWSRF limits terms to up to 3% interest and 10 years
- Minimum loan is \$2,000
- 100% of project costs
- Principal repayments are credited back to the CWSRF

In FY2020, Iowa lenders signed over \$1 million in OSWAP linked deposit loans. Since OSWAP's inception in 2003, over \$18.6 million in loans have been signed.



Maryland Linked Deposit Program for Onsite Systems

Lenders must be approved by the **State Treasurer's Office** through an RFP process. They can participate in any state lending programs, not just the SRF. About 20 lenders participate.

https://mde.maryland.gov/programs/Water/WQFA/Pages/linked_deposit.aspx

After the lender approves the loan, the **Maryland SRF purchases a CD in the amount of the loan** at the lender. The CWSRF accepts a discounted rate of return. The lender passes the discount on to the borrower.

- The interest rate is the lender's market rate minus the SRF discount
- 100% of project costs

Since its inception in 1999, Maryland has funded 100 linked deposit loans. In recent years, low market interest rates have diminished demand.

Property owners must receive a permit from the county prior to going to the lender.

Figure 9. CWSRF linked deposit loan programs: highlights from Iowa and Maryland.

Pass-Through Loans

Partner:

- **State or local governmental entity**
- **Community Development Financial Institution (CDFI)**
- **Other community funding agencies**

In pass-through programs, a partner organization serves as a bridge connecting CWSRF financing to the loan recipient. The partner evaluates, approves, and services the loans. As the property owner incurs costs on the project, the partner lender requests disbursements from the CWSRF, and passes them to the property owner. Similarly, the property owner repays the loan via the partner organization. There is no direct contact between the property owner and the CWSRF.

Pass-through intermediaries can be private or governmental entities. The choice depends on the willingness of the partner, the ability to reach the end borrower, and the CWSRF's legal constraints (Figure 10). As a result, pass-through program partners differ from state to state. In a state where the CWSRF is unable to make decentralized system loans to private entities, the pass-through partner must be a municipal, intermunicipal, or state government entity. For instance, in New Jersey, septic management districts must be established as the partner, while Pennsylvania works through the state housing authority.

Idaho, Washington, and Oregon partner with community development financial institutions (CDFIs) or other private/nonprofit community financing organizations. For example, Craft3 is an innovative regional nonprofit CDFI that partners with the CWSRF in Washington for septic system and other loans.¹⁴ Massachusetts creates pass-through loans with individual communities while West Virginia has partnerships with both a state agency, the WV Housing Development Fund, and a community financing organization (Safe Housing and Economic Development, Inc.).

The choice of partners may affect how flexible the financing may be for different types of projects. While community financing agencies are mission-driven, they may have different lending criteria than local or state agencies. However, a pass-through partner may also be willing to distribute CWSRF loan forgiveness funds to the borrower.

What Is a Community Development Financial Institution?

CDFIs are mission-driven financial institutions that provide credit and financial services to underserved markets and populations. They can be banks, credit unions, (micro)loan funds, or venture capital providers. CDFIs are certified by the U.S. Department of the Treasury.

A list of certified CDFIs can be found at www.cdfifund.gov.

PASS-THROUGH VIA GOVERNMENT ENTITY

Massachusetts Community Septic Management Program (CSMP)

Communities request a CWSRF loan to **develop and implement a septic management program.** The community provides loans to homeowners for the repair or replacement of failed septic systems.

Interest on the loan is 0% for the first 2 years. During that time, the community is expected to disburse the funds to property owners.

Homeowner loans are **up to 5% interest and 20 years.** Homeowners repay their loans via property tax payments. The community maintains a lien on the property until the loan is paid off. The lien is transferable.

After two years, CWSRF loan repayments begin. The interest rate is 2% and the term is up to 20 years. **Property tax payments are used to repay the CWSRF loan.**

From 1996 to 2020, the CSMP made over \$142 million in loans and financed more than 480 septic projects.



PASS-THROUGH VIA PRIVATE OR NON-PROFIT ENTITY

Washington Regional Onsite Sewer System Program

Craft3 is a non-profit CDFI in Washington and Oregon. **Craft3 helps homeowners to finance the repair and replacement of failing septic systems.**

Craft3 received 5 CWSRF loans between FY 2016 and FY 2020. The 2020 loan was at **1.3% interest and 20 years, with \$1 million loan forgiveness.** Craft3 also received grants from Washington's Centennial Grant Program.

Craft3's loan rates are **based on household income** and were 2.49% to 5.49% in 2020.* They offer flexible repayment options, up to 15 years. Many borrowers would not qualify for a traditional bank loan.

Craft3 repays the SRF using **available cash flows**, including borrower repayments. Craft3 maintains capital liquidity and loan loss reserves to offset losses and ensure repayment of the CWSRF loans.

From July 15, 2016 to June 30, 2020, CWSRF loans to Craft3 have helped finance 1,033 decentralized projects totaling \$24 million. 31% of loans were to low-income households.

*Effective 8/1/2020. Subject to change. Full rates, terms, geographic eligibility at www.craft3.org/cleanwater

Figure 10. CWSRF pass-through loans: government and private models.

Sub-State Revolving Fund

Partner:

- **State or local governmental entity**
- **Community Development Financial Institution (CDFI)**
- **Other Community Funding Agencies**

In a sub-state revolving fund, the CWSRF provides one or more initial loans to an entity to capitalize another revolving loan fund (many sub-state revolving funds also seek other grant funds for capitalization). The sub-state revolving fund makes loans to and receives repayments from property owners for decentralized system projects. The repayments are used to pay off the CWSRF and finance new loans, with the intention of becoming self-supporting over time.

Any eligible CWSRF borrower can receive a loan to start a sub-state revolving fund. Missouri's CWSRF helped capitalize a sub-state revolving fund through two loans to a local nonprofit, Ozarks Water Watch. Other CWSRF programs, including those in Washington, Rhode Island, and Virginia, have helped capitalize sub-state revolving funds through loans with governmental entities – the Spokane Conservation District, local communities, and a large political subdivision, respectively (Figures 10, 11). In some cases, these loans both included forgiveness of a portion of the CWSRF principal.

In most cases, the sub-state revolving fund administrator establishes the lending criteria, ensuring that it has the means to repay the CWSRF loan while also establishing a revolving structure to finance new loans. Many sub-state revolving funds offer both grants and loans. It is important for an entity considering a sub-state revolving fund to consider the potential borrower pool and develop a business plan with financial projections to understand its financing ability.



Virginia Middle Peninsula Planning District Commission (MPPDC) Septic Repair Program

MPPDC consists of 3 towns and 6 counties, with significant rural and coastal areas. The Septic Repair Program was first capitalized with a **\$250,000 CWSRF loan** in 1997. It has received 3 more CWSRF loans and funding from other programs.

CWSRF loans are at **0% interest for 15 years**.

Homeowner loan terms range from 0% to prime +2%, and repayment within 15 years. Low-income homeowners may receive grants.

Referrals are typically by the county Health Department, septic inspectors, and contractors.

MPPDC has provided \$1.4 million in assistance, 55% as loans. 174 projects have been completed. There are 50-60 active loans at any time. Interest earnings are used for administration.

Rhode Island Community Septic System Loan Program (CSSLP)

Since 1999, **local governments may apply for CWSRF loans** to capitalize a CSSLP for septic system repair and replacement. There is a similar program for sewer tie-ins.

Local governments apply with an Onsite Wastewater Management Plan and provide additional security in the event of homeowner defaults (e.g., general revenue pledge). **The CWSRF loan is at 0%.**

Homeowner credit reviews are conducted by a state agency, RI Housing.

There is a 1% annual fee and a \$300 loan origination fee.

60 CSSLP have been made to 17 communities totaling \$21.1 million.



Figure 11. Sub-state revolving loan funds: highlights from Virginia and Rhode Island.

Sponsorship

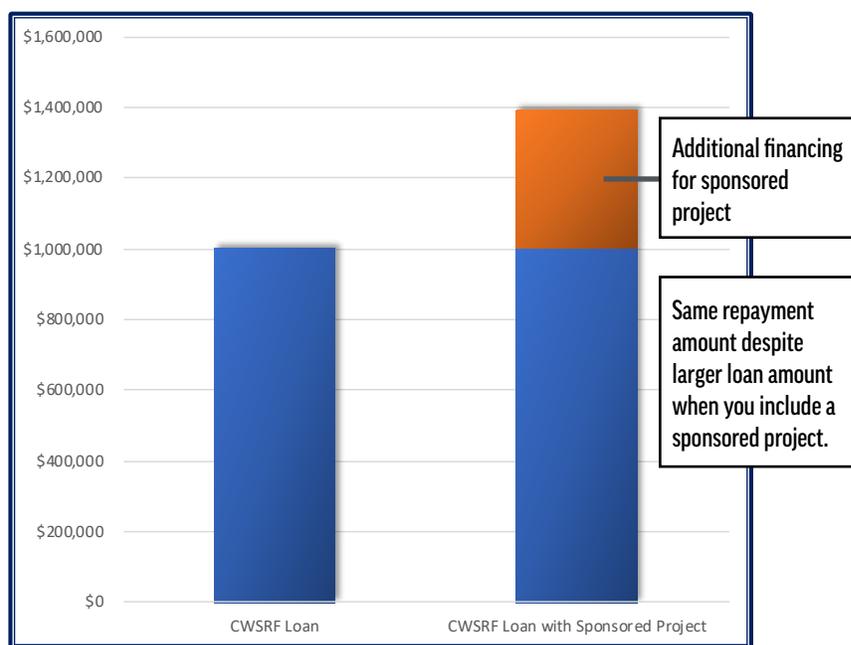
Partner:

- Publicly-Owned Utility
- Local Government Entity

Sponsorship loans are being used in several states to finance nonpoint source projects and may also be used for financing decentralized system projects. In a sponsorship loan, a public CWSRF borrower (community, wastewater utility, etc.) receives a loan for a POTW project. An amount is added to the loan to finance a nonpoint source project, which is being “sponsored” by the public borrower. In return, the CWSRF lowers the interest rate on the loan so the annual payments are equal to what they would have been to finance the POTW project alone without the addition of the nonpoint source sponsored project. The public CWSRF borrower is funding two projects for the price of one. The nonpoint source sponsored project is essentially grant-funded. Some CWSRFs provide an additional discount as an added incentive. Figure 12 provides additional information and insight on how financing works under a sponsorship loan.

Sponsorship is ideally suited to nonpoint source projects that lack sources of repayment revenues. This financing option is currently in use in Ohio, Iowa, Oregon, Delaware, and Vermont for land conservation, wetland restoration, and other water protection projects

	Loan Amount	Interest Rate	Total Repayment over 20 Years
CWSRF Loan	\$1,000,000	3.8%	\$1,436,707
CWSRF Loan with Sponsored Project	\$1,393,442	0.3%	\$1,436,707



A hypothetical \$1 million traditional CWSRF loan with a 3.8% interest rate and 20-year loan term will have to repay \$1,463,707.

A nonpoint source project is sponsored, bringing the total loan to \$1,393,442. The CWSRF lowers the interest rate to 0.3%, so the total repayment stays \$1,463,707. The nonpoint source project pays nothing.

Figure 12. Sponsorship loans: how does the math work?

While not yet being used for decentralized systems, sponsorship is a suitable option for financing septic repair, replacement, and remediation projects. For instance, an entity could sponsor a grant program for decentralized wastewater projects. The sponsor could be the community's wastewater treatment utility or local community, which may find it more financially advantageous to provide homeowners with grants to upgrade septic systems than to expand the collection system.

Co-Financing

Partner:

- **Any Other Financing Program**

CWSRF programs have the flexibility to be partnered with almost any other state or federal water quality financing program. This includes the United States Department of Agriculture's Rural Development (USDA-RD) program, the United States Department of Housing and Urban Development's Community Development Block Grant (CDBG) program, EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program, and more.¹⁵ Every CWSRF program has engaged in co-financing and many states such as Montana and Arizona have "one-stop shops" to help facilitate co-financing through regular funders meetings. Co-financing allows the CWSRF loan to be paired with a grant or other low-cost funds from other programs, bringing down the costs for borrowers and expanding the reach of limited grant funds.

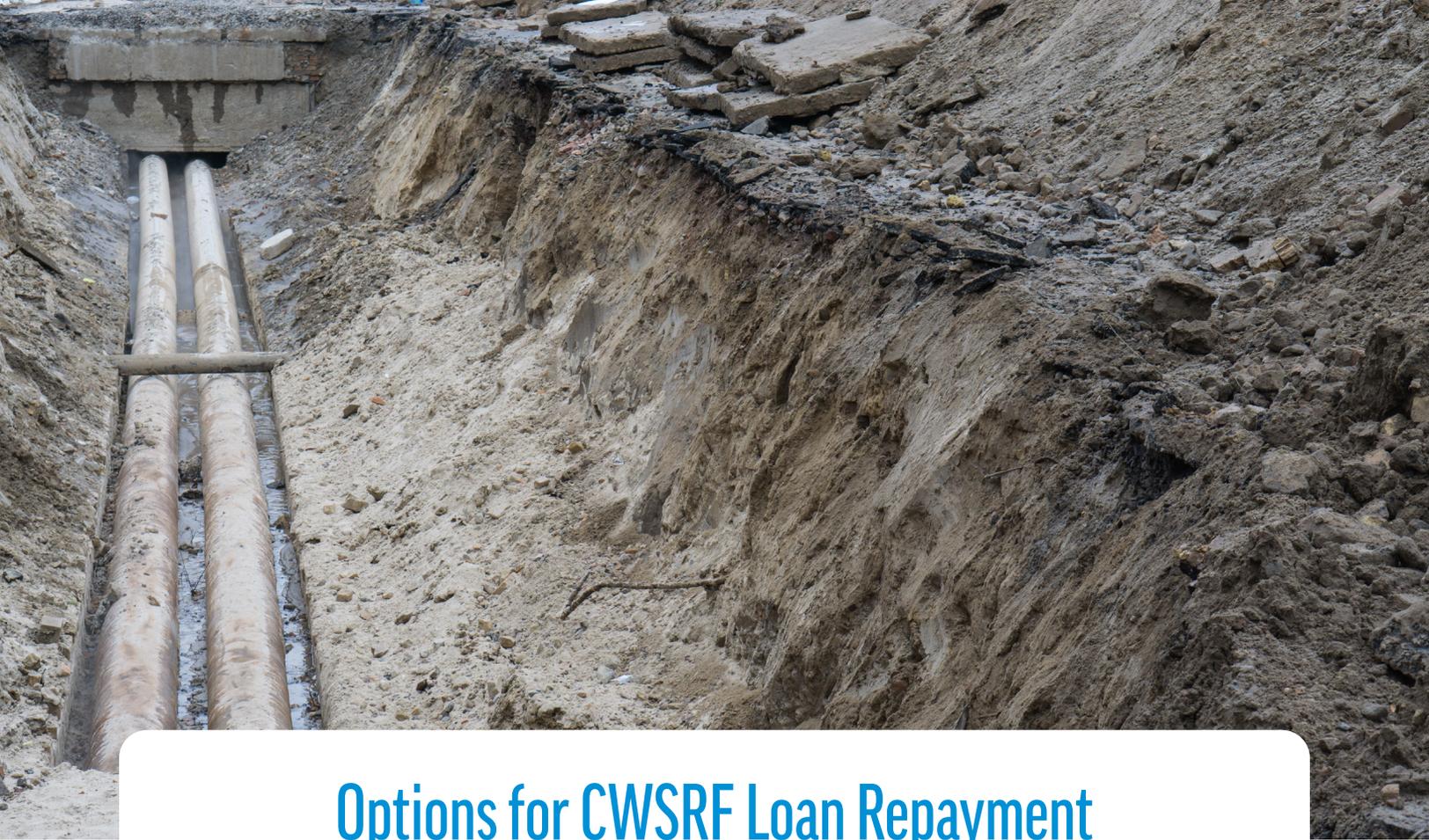
Presently, co-financing arrangements typically involve a direct loan from the CWSRF. They are often used for complex projects, such as package plants, cluster systems, or septic-to-sewer conversions. Co-financing can also assist with other financing mechanisms, such as establishment of a sub-state revolving fund. The eligibility restrictions of the CWSRF, as well as any co-financing sources, must be considered in any such arrangement. Each of the financing mechanisms presented may be used to fund a wide range of projects to address decentralized wastewater system needs (Figures 13 and 14).



Figure 13. A failed home septic system.



Figure 14. A neighborhood cluster system.



Options for CWSRF Loan Repayment

Identifying a repayment source is key to securing CWSRF financing as it is a federal statutory requirement that borrowers have a viable source of repayment. The flexibility of the CWSRF program offers creative financing and favorable lending terms for all types of decentralized system borrowers. This includes homeowners obtaining direct loans, associations constructing a cluster system, public entities setting up a conduit lending platform for individual homeowners, or large utilities. EPA's report, [Financing Options for Non-Traditional Eligibilities in the CWSRF](#), features a variety of potential sources for repayment of CWSRF loans. Below are a few of the more common methods for securing and repaying decentralized system loans.

Property Tax Assessment Financing (PTAF)

- A common tool for repayment of decentralized wastewater projects is property taxes. To help homeowners avoid high upfront costs with decentralized system projects, the PTAF approach allows the lender to secure the loan using a lien against the property when the system is being installed. Then the loan is repaid through incremental increases on the property owner's property tax bill. If done properly, this cost of financing becomes almost undetectable. It allows the homeowner to pay for the project through a long-term, fixed-cost financing option underwritten by the value of the property. The first priority lien position guarantees repayment of the loan and is attached to the property to be assumed by the new owner in the event of sale or ownership transfer. New owners may either assume the obligation or require the seller to pay off the debt in full as part of the sales agreement.

Septic Utility Fees

- Some areas are already collecting fees for the operations and maintenance of a cluster system or package plant. Or a group of households may collect fees for the maintenance of their individual septic systems through a designated organization called a Responsible Management Entity (RME). This fee may also be used as a potential repayment source for installation, repair, or replacement costs of decentralized systems.

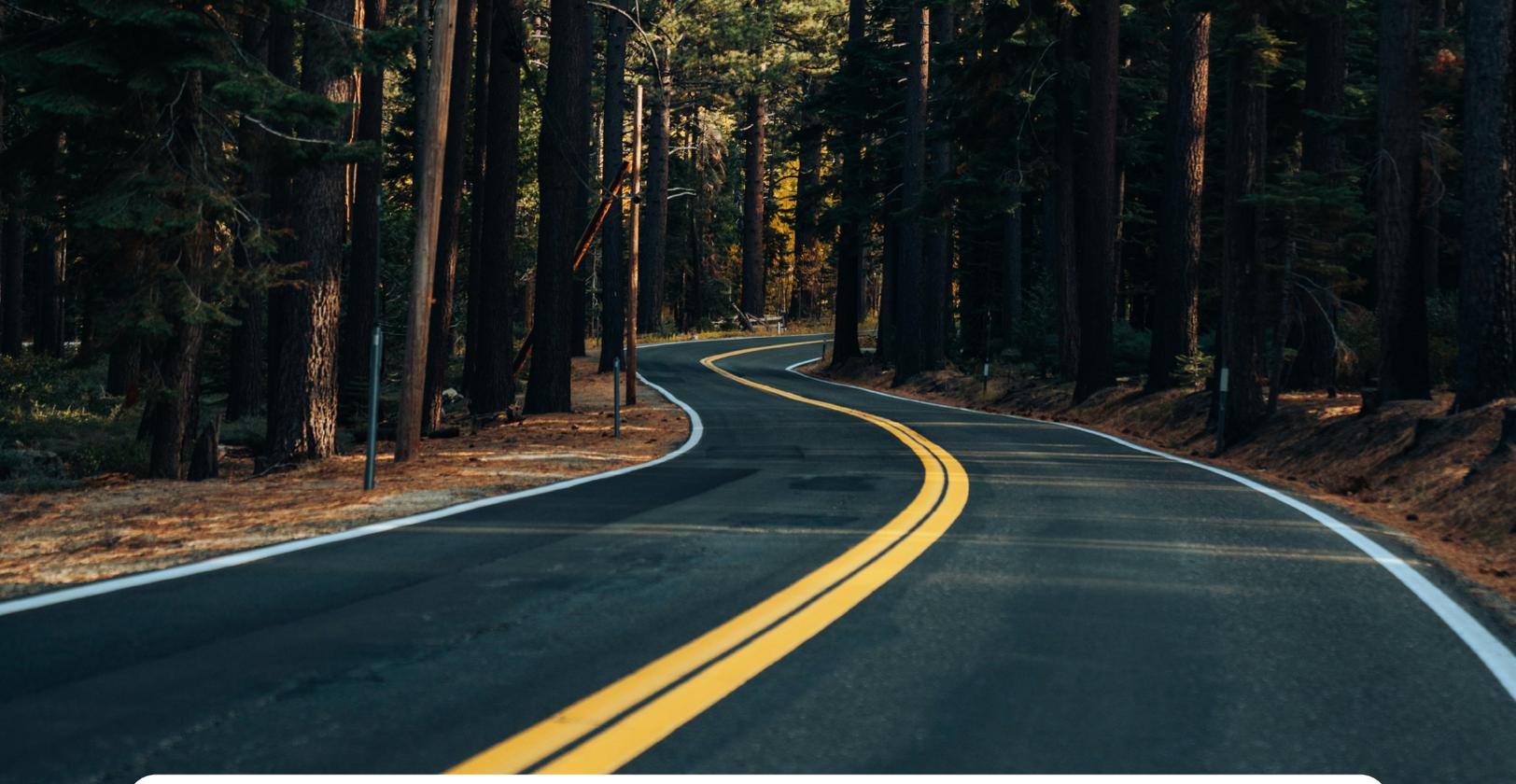
Homeowner’s Association Dues

- The CWSRF can make loans directly to homeowner’s associations (HOAs), which are then repaid with revenues from HOA dues. Maryland has used this approach for several types of nonpoint source projects and could also include decentralized system projects.

Other Repayment Sources

- The table in Appendix B provides more examples of non-traditional repayment sources used by recipients to repay their CWSRF loans. Not every example has been used for decentralized systems, but these nonpoint source projects could be transferable for financing decentralized wastewater projects.





Initiating a Financing Program for Decentralized Wastewater Systems with the CWSRF

Now that you're armed with the basic information on how to finance decentralized wastewater projects with the CWSRF, it's time to start moving down the path to success! Stakeholders may approach a CWSRF with a decentralized system financing proposal if the CWSRF does not already offer decentralized financing or if a different mechanism than what is offered would be a better fit. Individual homeowners may pursue CWSRF financing through any of the mechanisms discussed previously. A community, homeowner's association, or other group of residents may also choose to create a decentralized system financing program with the CWSRF as a partner. Figure 15 shows a sample step-by-step roadmap for how a decentralized system program can be successfully financed by the CWSRF.

Examples of Community Involvement in New York

The Town of Lake George has a comprehensive [outreach program and materials](#), including a Septic Summit.

Suffolk County, on the eastern end of Long Island, has a website for stakeholders including a form for property owners to sign up for their [Septic Improvement Program](#).

Financing with CWSRF: Steps to Success

1. Identify the Problem and Technical Solution

Evaluate the public health, environmental, and economic impacts of failing septic systems in your community. This includes identifying the potential technical solutions needed to address the problems. The process will likely require an outreach campaign that encourages community involvement through holding public meetings, distribution of brochures and information, and social media engagement. Include the appropriate regulatory authority (e.g., Department of Health) and consulting engineer/designer early in the process. The state CWSRF program must ensure the proposed project is the most effective solution to the problem.

2. Review CWSRF Financing Options

Consider your state's CWSRF program options including whether the borrower and projects are eligible, what the sources of repayment will be, and whether a conduit mechanism will be necessary to finance decentralized system projects. If a viable CWSRF financing mechanism does not already exist in your state, consider utilizing one (or more) of the alternative financing mechanisms available (linked deposit, pass-through, sponsorship, etc.).

3. Identify Potential Partners

Conduit lending and sponsorship mechanisms involve a partnership with a local or state agency, utility, nonprofit, bank, or other financing institution. Identify a partner that is an eligible CWSRF participant, and willing and able to participate in the project. Meet with potential partners in advance to discuss the CWSRF and potential financing options.

4. Meet with CWSRF Staff

Meet with CWSRF staff to discuss the proposed project and the best financing mechanism according to state rules/laws. CWSRF programs are always willing to work with borrowers to get high priority water quality projects financed, utilizing the available flexibilities in their laws and regulations. Meeting with CWSRF staff ensures that the community is on the right track and that all technical, managerial, and financial aspects are taken into consideration. It is best to involve your state's CWSRF program "early and often."

5. Develop an O&M Plan

Operations and maintenance (O&M) is not an eligible expense for CWSRF financing yet is an essential aspect of successfully managing a decentralized system. Provide education and training tools to property owners to empower them to properly maintain and care for decentralized systems including tutorials, inspection schedules, and access to technical assistance providers.

6. Communicate Potential Costs and Benefits

Meet with community members and leaders to discuss the costs, benefits, timelines, and plans to help ensure buy-in and continued progress. Develop informational brochures or hold in-person workshops detailing how failing decentralized systems impact the public health of local community members, demonstrate how the CWSRF program can make decentralized wastewater projects accessible and affordable, and address questions or concerns.

7. Put Together a CWSRF Financing Proposal

Tailor the CWSRF application to suit the financing mechanism that will be used. If a linked deposit loan is selected, the bank will need to work with the CWSRF program to establish the financing and investment terms. If a pass-through loan is selected, the conduit partner will secure financing from the CWSRF program and develop its own application and loan approval process. Whatever financing mechanism is used, CWSRF program staff can advise on the procedures necessary for securing financing.

8. Sign Financing Agreements

The financing agreement will be dependent on the type of financing mechanism selected. For example, in a pass-through loan or sub-revolving fund, the loan agreement will be between the borrower and the pass-through partner. In a linked deposit program, an investment agreement signed between the borrower and partner bank is more likely. In each mechanism, an MOU or financing agreement will be necessary to formalize the relationship between the conduit partner and the CWSRF.

9. Implement Decentralized System Projects

Congratulations! You can now begin to implement your decentralized wastewater treatment system construction, repair, and replacement projects.

Figure 15. Sample steps for successfully financing a decentralized system program with CWSRF.

Best Practices for Successful Decentralized System Project Implementation

In the CWSRF, success is measured not only in project implementation, but also the longevity of the assets that have been financed. Proper care and maintenance are required to ensure the integrity of decentralized wastewater assets. Providing homeowners and decentralized wastewater professionals access to education and training is key to the safe and effective use of these systems. There are educational tools available for decentralized wastewater professionals (e.g., system designers, installers, inspectors, and service providers), as well as individual homeowners. These tools are offered by EPA, state, regional, and local governments. It is important to let borrowers know that the development and initial delivery of public outreach and education materials is eligible.

For a decentralized system financing program to thrive, communication to stakeholders about the financing options available is critical. Brochures and websites can be effective tools to reach some audiences, but messaging through regulators, inspectors, contractors, installers, and real estate/housing agencies can also be highly effective. Surveys, focus groups, and community meetings can help CWSRF programs determine the most effective ways to reach potential borrowers with decentralized systems. Considering the appropriate phrasing and terminology for the target audience is equally important. Appendix C offers several outreach examples from Pennsylvania (a pass-through program through the state housing agency) and Craft3 (a pass-through program via a CDFI), respectively. They demonstrate the clear, concise language that can be instrumental to successful decentralized system financing tools.

To participate in Ohio's Decentralized Wastewater Treatment System Pass-Through Program, local government partners must agree to:					
 <p>Use effective and efficient means to solicit eligible homeowner applications.</p>	 <p>Evaluate and select local applicants and confirm homeowner income.</p>	 <p>Work with local health districts and/or contractors for permits and installation.</p>	 <p>Certify and document that all financing conditions and installation/permit requirements will be met.</p>	 <p>Use generally accepted accounting practices to document payments to contractors.</p>	 <p>Prepare and file project documentation that the CWSRF requires as a condition of the loan.</p>

Appendix A

How Do CWSRF Decentralized System Financing Programs Work?

Lending Structure	Who is the partner?	How does it work?	Who is doing it?*
Direct homeowner loan	None	The state CWSRF signs a loan directly with the property owner.	DE
Linked deposit loan	Local bank	The borrower applies for funding at a participating bank. The CWSRF buys down the interest rate that the bank charges the borrower.	IA, MD, OH
Pass-through loan	State or local government unit	The CWSRF makes a loan to a state or local government unit (agency, county, or special district), which uses the funds to make loans for decentralized projects. The government unit ensures repayment of the CWSRF loan.	CT, MA, MN, NJ, OH, PA, WV
CDFI pass-through	Community Development Financial Institution	Same as above, but through a CDFI or other financial institution.	ID, OR, WA, WV
Sub-state revolving fund	State or local government agency, non-profit, other eligible borrower	The CWSRF makes a loan to the partner to capitalize another revolving fund. Returns on the sub-state revolving fund are used to repay the CWSRF and to make new loans.	MO, OH, RI, VA, WA
Sponsorship	Utility, local government	A utility increases the size of its loan to sponsor a NPS project. In exchange, the CWSRF reduces the interest rate on the loan to cancel out the cost of the NPS project.	DE, IA, OH, OR all have sponsorship programs, but they have not yet been used for decentralized projects.
Co-funding	Other funding programs	The CWSRF co-finances projects with another funding entity.	Every state does this, but may not have used this approach for financing decentralized projects.

*May not be a complete list. Septic-to-sewer conversions are not included.

Appendix B

Creative CWSRF Loan Repayment Strategies

Potential CWSRF borrowers must identify a dedicated repayment source, that need not come from the project itself, before a loan is approved.

Revenue Source	State CWSRF Example
Business Revenues (resorts, schools, factories etc. with onsite wastewater treatment)	Many manufacturing facilities have their own localized treatment systems. For example, Ohio's CWSRF provided a five-year, \$60,000 loan to conduct a site assessment and cleanup on a brownfield site adjacent to its dry-cleaning facility. The loan was repaid using a revenue stream from accounts receivable, with inventory and cash as extra collateral. This approach could also be used for decentralized projects.
Homeowner Association Fees	The CWSRF program can make loans directly to homeowner's associations, which are repaid by HOA fees. The state of Maryland CWSRF program made a \$529,000 loan to the Dennis Point Homeowners Association for an erosion control and shoreline stabilization project. CWSRF loans could also be made to homeowners' associations for decentralized systems and other eligible projects.
Property Taxes	The Massachusetts CWSRF Community Septic Management Program utilizes a "betterment agreement" that channels loans through a municipality to individuals for septic system improvements and allows the municipality to ensure that the loan is repaid as part of a property tax bill. The municipality can place a municipal lien on property if the homeowner defaults on the loan.
Resort Taxes/Fees	Many areas use resort taxes or fees to fund water quality efforts. Big Sky, Montana uses resort tax dollars to fund water and sewer improvement projects. The Montana CWSRF program has loaned \$19.4M to the Big Sky County Water and Sewer District for wastewater treatment plant improvements, and resort tax dollars could equally be used as a repayment source for NPS and decentralized projects, especially cluster systems and package plants.
Watershed Improvement Districts	Watershed Improvement Districts are local government entities formed pursuant to state statute, which provides them with taxing authority. These entities are controlled by landowners/farmers and the structure allows them to collaborate on NPS projects, generate revenues needed for projects, and secure additional financing. In Maine, the Cumberland County Soil and Water Conservation District repaid their \$2.1 million CWSRF loan through revenues generated by Restoration Program Participation Fees assessed to participating landowners.
Watershed Protection Fees/Taxes	A number of utilities across the country (including Central Arkansas Water, City of Austin, Howard County, Maryland) utilize an on-bill watershed protection fee to pay for various watershed protection projects. For example, in Raleigh, North Carolina water customers pay 10 cents per thousand gallons of water used (approximately 45 cents per month per customer). This fee typically generates about \$1.8 million per year that is used to conserve critical land in the watershed to provide protection for drinking water sources and reduce treatment costs.

Appendix C

Effective Communication Strategies for Launching a New Decentralized System Program

Pennsylvania's Homeowner Septic Loan Program

PENNVEST HOMEOWNER SEPTIC PROGRAM

The PENNVEST Homeowner Septic Loan Program helps qualified homeowners:

- repair or replace an **existing connection to public sewer OR** an individual, on-lot sewage disposal system;
- connect an existing home for the first time to public sewer.

This low-cost loan is funded by PENNVEST and administered by the PA Housing Finance Agency.

TERMS

- Fixed interest rate for life of loan, currently as low as 1.75 percent.
- Up to 20 years to repay the loan balance.
- Funds can be used for design, construction and permit costs.

SAMPLE PAYMENTS

- If you borrow \$15,000 at 1.75 percent (2.55 percent APR¹) for 20 years, you pay \$75 monthly.
- If you borrow \$25,000 at 1.75 percent (2.22 percent APR¹) for 20 years, you pay \$124 monthly.



Tom Wolf, Governor
Robin Wiessmann, PHFA Executive Director & CEO
Brion Johnson, PENNVEST Executive Director

LOAN ADVANTAGES

- Pay an attractive interest rate for this vital home improvement.
- No prepayment penalties if the loan is paid off early.

WHY REPLACE YOUR SEPTIC SYSTEM?

- Increase the value and marketability of your home.
- Eliminate worries about your septic system when you sell your home.
- Improve the environmental health of your property.
- Avoid or respond to citations from your municipality.

LEARN MORE AND APPLY

1. Call PHFA's Solution Center at **855-U-ARE-HOME** (855-827-3466) or visit **www.phfa.org** to learn more and view a list of participating lenders.
2. Visit or call one of the listed participating lenders to begin the loan application.
3. Work with design and construction professionals of your choice to develop an approved system.

¹ Subject to credit approval and eligibility restrictions including loan use and owner occupancy. Interest rate quoted as of 1/1/2019. The APR is fixed for the term of the loan. Borrower pays origination and closing charges. Sample payments based on \$15,000 and \$25,000 loan examples have twenty year term and 240 payments. Total finance charge for a \$15,000 loan is \$3,869 and for a \$25,000 loan is \$5,727.



855-827-3466 | www.PHFA.org

PV 2/20

Washington's Regional Onsite Sewage System Loan Program

A LOAN THAT WORKS FOR YOU





BENEFITS AND FEATURES

- Covers the full cost of designing, permitting and installing your septic system.
- Competitive interest rates.
- No upfront costs.
- Works for many property types and incomes.
- Deferred payment options may be available for homeowners with lower incomes.

ELIGIBILITY

- Residential properties in many Washington counties.
- Loan-to-value and loan amount maximums apply to repayment types.
- One of the following must apply:
 - Your septic system is at least 25 years old.
 - Your system is failing.
 - You've been contacted by Health Officials.
 - You are under orders to fix your system.

DID YOU KNOW?

Annual care can stretch the life of your septic tank and prevent early failures. That's why all Craft3 Clean Water Loans include a \$2,000 reserve to support your system's ongoing health. If you're already a client, contact us to access your reserve today!

ABOUT US

Craft3 is a non-bank community lender that's been delivering capital throughout Oregon and Washington since 1994. We lend to established nonprofits and growing and start-up businesses — including those that don't qualify for traditional loans.

The Craft3 Clean Water Loan is offered thanks to the support of many public and private funders and organizations, including the U.S. Environmental Protection Agency, and the State of Washington.

REACH US

888-231-2170, ext. 125
www.Craft3.org/CleanWaterWash
CleanWater@Craft3.org

Oregon
 Astoria | Bend | Klamath Falls | Portland

Washington
 Port Angeles | Seattle | Spokane | Walla Walla

 Craft3 is an equal opportunity lender, provider and employer. 07/01/20

CLEAN WATER LOAN

Repair failing septic systems in Washington





REPLACING YOUR SEPTIC SYSTEM IS EASY

- Apply online at www.Craft3.org/CleanWaterWash. Receive pre-approval in as soon as three business days.
- Work with your contractor¹ to design your system, receive permits and finalize project cost.
- Sign your loan documents electronically.²
- Begin your project! Make sure work is completed to your satisfaction.
- Authorize final payment to your contractor once your project gets final approval from local officials.
- Loan payments, if required, will be automatically withdrawn from your bank account.

¹ Your contractor must be approved by your area's health jurisdiction to conduct septic system replacement work. Contact it for a list of approved contractors.
² By request, document signing is also available via postal mail or in-person.

RATES & TERMS

Rates and terms are determined by applicants' annual household income.

Annual Household Income	Interest Rate	Term Options	Examples
Up to \$25,000 owner-occupied	2.49% (2.33% APR)	Deferred Payments* Interest-Only Payments** Fully-Amortized Payments	Deferred Payment Option: \$24,000 loan amount, No monthly payments for 179 months, Balloon payment of \$33,873 due on the 180th month based on 2.33% APR.
Up to \$45,000 owner-occupied	4.49% (4.75% APR)	Interest-Only Payments** Fully-Amortized Payments	Interest-Only Payment Option: \$24,000 loan amount, \$94 interest payment for 179 months, Balloon payment of \$24,094 due on 180th month based on 4.75% APR.
Greater than \$45,000 - or - non-owner-occupied, secondary home	5.49% (5.93% APR)	Fully-Amortized Payments	Fully-Amortized Repayment: \$24,000 loan amount, \$201 for 180 months at 5.93% APR.

APR, Annual Percentage Rate
*Deferred Payment option maximum loan amount is \$35,000 and maximum loan-to-value is 80 percent.
**Interest-Only Payment option maximum loan amount is \$45,000 and maximum loan-to-value of 100 percent.
Loan availability, terms and conditions current as of 01/1/19 and are subject to change. Visit our website for latest terms and rates. Examples include financing of Craft3 \$695 loan fee. All loan applications are subject to credit, property and project approval. Maximum loan amount and Loan to Value apply and are subject to equity value and underwriting requirements for all programs. Loans are secured by a UCC-1A filing recorded with the county. Subordination may be available with lender approval, fees may apply. Principal balance and interest (if applicable) is due on sale, transfer, refinancing or maturity. Due to Clean Water Loan funding sources, financed projects require a cultural resource review by the Department of Ecology. If a designation is made, the property owner will be responsible for costs incurred. Visit our website for details.

Apply Now | Learn More
www.Craft3.org/CleanWaterWash

Endnotes and References

- 1 U.S. Census Bureau (2015). American Housing Survey.
- 2 U.S. EPA (2020). Specific State Causes of Impairment Report from the Assessment and Total Maximum Daily Load Tracking and Implementation System (ATTAINS).
<https://www.epa.gov/waterdata/about-online-attains-separate-impaired-and-assessed-waters-reports>
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- 4 U.S. EPA (nd). The Clean Water State Revolving Fund Program.
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- 5 2020 EPA National Information Management System report Annual CWSRF Funds Available for Projects.
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- 7 <https://www.epa.gov/cwsrf/financing-options-nontraditional-eligibilities-cwsrf>
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- 9 US EPA (2016). Funding Disadvantaged Communities with the Clean Water State Revolving Fund. https://www.epa.gov/sites/default/files/2016-11/documents/funding_disadvantaged_communities_with_the_clean_water_state_revolving_fund.pdf
- 10 Section 603(i) of the Water Resources Reform and Development Act of 2014.
- 11 Personal correspondence with Desiree Sideroff of Craft3 on February 5, 2018.
- 12 Graphic identifies states with currently active decentralized wastewater treatment system programs, and that have reported more than \$1 million in decentralized system financing agreements to EPA. Septic-to-sewer conversion loans are not shown, as they are universally covered in all states as part of their traditional financing of centralized wastewater treatment systems.
- 13 2020 EPA National Information Management System report Clean Water SRF Program Information National Summary, including septic-to-sewer conversion projects. <https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports>
- 14 Craft3 also offers loans for septic system installation, repair, and replacement in the state of Oregon. A separate program is available for Clackamas County Residents. <https://www.oregon.gov/deq/Residential/Pages/Onsite-Loans.aspx>
- 15 All State Revolving Fund (SRF) loans can be used to fulfill matching requirements for Federal grants, and SRF programs may also use non-Federal (i.e., recycled) funds to match Federal grant funding.