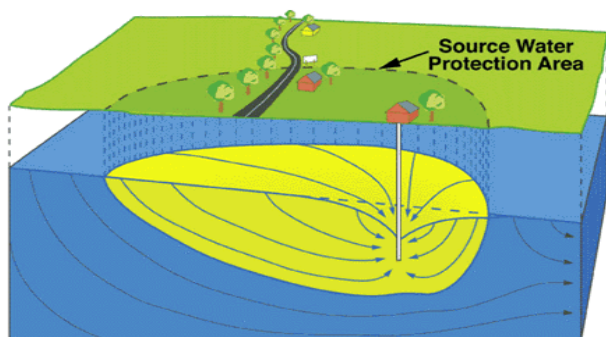




## Using the Drinking Water State Revolving Fund for Source Water Protection Loans

Providing safe, clean drinking water to the more than 250 million people served by community water systems in the United States is an important goal of federal, state, and local officials. The Safe Drinking Water Act (SDWA) Amendments of 1996 developed a new tool for the protection of drinking water – the Source Water Assessment and Protection Program. Through this program, state drinking water agencies assess the threats to each community's drinking water and have an opportunity to establish a comprehensive contamination prevention program. Communities and public water systems can work with their states to ensure the assessments are accurate and to decide how to best protect drinking water sources.

Funds are available from the Drinking Water State Revolving Fund (DWSRF) set-asides to finance a variety of local land use controls and other management tools for source water protection. States can provide loans to water systems to acquire land or conservation easements needed to protect drinking water sources. States can also provide loans for voluntary, incentive-based source water protection measures. These loans are offered by the states at interest rates that are equal to or below the market rate and can be repaid over terms as long as twenty years. Repaid funds are recycled to fund other drinking water projects.



### *What is Source Water Protection?*

Source water is the water from the rivers, streams, lakes, and ground water that systems use to supply communities with drinking water. Source water protection involves taking positive steps to manage potential sources of contamination and prevent pollutants from reaching or contaminating sources of drinking water. There is a growing recognition that protecting the source from contaminants is often more efficient and cost-effective than treating drinking water later. The types of protection measures that a community can implement include local land use controls such as land acquisition and ordinances and other management tools such as contingency plans and public education initiatives. EPA's source water protection website includes information on a wide range of best management practices for communities to consider ([www.epa.gov/safewater/protect/swpbmp.html](http://www.epa.gov/safewater/protect/swpbmp.html)). The protection activities that a community pursues will depend on the results of the source water assessments and the community's prevention plan.

### *Acquisition of Land or Conservation Easements*

Some communities have found that an effective way to protect the quality of drinking water sources is to own or control land in upstream watershed or ground water recharge areas where development or other land activities can impair the quality of the drinking water source. States can use DWSRF funds to provide loans to water systems for the following land use controls:

- < **Land Acquisition** – Purchase of land at or below the fair market value to control the types of activities that can take place.
- < **Conservation Easement** – A legal agreement with a landowner that permanently protects the land by limiting the amount and type of development that can take place, but continues to leave the land in private

ownership. Donating the easement can result in reduced income and estate taxes.

Land acquisition and conservation easements can protect a water supply by preventing pollution-generating activities from occurring in critical areas and can provide community benefits such as preserving open space, enhancing recreational opportunities, and reducing flood damage.

### **Success Story**

#### ***Protecting Lake Auburn in Maine***

The Auburn Water Department received a loan for \$570,000 to acquire 434 acres of land in the watershed of the "Basin," a small pond which drains directly into Lake Auburn. Lake Auburn serves as a source for two water systems. The systems collaborated with the Lewiston-Auburn Watershed Commission and the Androscoggin Land Trust (ALT) and negotiated a joint easement. Under this easement, the Commission will review the landowner's forest management plan to ensure that best management practices for water quality are used and ALT will share overall easement monitoring responsibilities. By protecting land around Lake Auburn, the water systems will be able to maintain water quality standards.

#### ***Protecting Land Use in Vermont***

The Town of Bradford received a \$140,000 loan to purchase a tract of farmland within Zone I of the system's source protection area. The purchase was a high priority because the Town's source protection plan identified high risk land use activity on the property.

### ***Source Water Protection Measures***

**S**ome communities are focusing protection efforts on undertaking local source water protection measures. States can use DWSRF funds to provide loans to water systems for implementing voluntary, incentive-based source water protection measures. This approach emphasizes a local stakeholder process that could produce a plan for implementing a wide range of local land use controls and management tools including:

- < **Fencing** – Building fences that keep cattle away from the water's edge can reduce contamination in drinking water downstream.



- < **Capping Wells** – Sealing abandoned ground water wells and underground injection wells can keep contaminants out of ground water, which serves as a source of drinking water for close to 80% of community water systems.
- < **Riparian Buffers** – Strips of vegetation along streams and around reservoirs can significantly reduce the amount of pollution entering the water system by serving as natural filters of contaminants. Tree and shrub roots hold stream banks in place to prevent erosion which causes sedimentation and increased turbidity levels. Buffers have the additional benefit of providing habitat for wildlife.
- < **Public Outreach Activities** – Educating the public through activities such as workshops on best management practices and hazardous waste collection events can help to build community support for source water protection.

### **Success Story**

#### ***Implementing Protection Measures in California***

California has reserved more than \$8 million in DWSRF set-aside funds for loans to community water systems to implement measures to protect vulnerable drinking water sources from contamination. The types of projects eligible for funding include: hazardous waste collection programs, education on best management practices, destruction of abandoned wells, and fencing out cattle from intakes, tributaries, or reservoir boundaries.

## ***Partnership Opportunities***

Loans for land acquisition and conservation easements and source water protection measures can only be made to public water systems. However, there are plenty of partnership opportunities available for land trusts, nonprofit organizations, community groups and others that have expertise in land protection issues to work closely with water suppliers.

The following are some examples of the types of activities that land trusts and other organizations can do to facilitate source water protection:

- < provide technical assistance to water suppliers in identifying properties that qualify for funding;
- < offer expertise in negotiating land acquisitions or conservation easements with willing sellers;
- < monitor a conservation easement once it is acquired by a willing seller; and
- < assist with public outreach efforts to demonstrate the benefits of protecting water supplies within a community.

In addition, an organization can work with water suppliers to become a co-signatory to the loan agreement. In this way, the organization could help those water suppliers that would like to implement measures to control land use around their water sources, but do not want to be responsible for loan repayment. The loan agreement would describe the specific responsibilities of the organization and the water supplier with respect to the assistance provided by the state.



Such partnerships may complement the ongoing work of organizations to preserve parts of a watershed or ground water recharge area for other purposes. Contact your state agency, community leaders, and/or local public water suppliers to find out about opportunities

for local involvement or to explore partnership opportunities.

### **Success Story**

#### ***Forming Partnerships in New Hampshire***

New Hampshire provides loans to systems to purchase land or conservation easements to protect vulnerable drinking water sources from contamination.

A contract with the Society for the Protection of New Hampshire's Forests provides technical assistance to water systems in prioritizing projects for land acquisition and facilitating purchases. In addition, New Hampshire identified protection of sources of drinking water as a priority and budgeted \$1.5 million in state grants as a 25% match to help communities purchase land.

## ***Getting a Project Funded***

Since the DWSRF program is managed by the states, project funding varies according to the priorities, policies, and laws within each state. States develop annual Intended Use Plans (IUPs) that describe how they will use funds in the program. As part of this process, a state determines which set-asides it will take, including whether it will use funds to establish a loan program for source water protection. Those states that decide to develop a loan program for source water protection must fund projects based on a priority system (see Box 1).

Given that each state administers its own DWSRF program differently, the first step in seeking a loan is to contact your state DWSRF representative – who can be found on the DWSRF website. Your state representative will be able to assist you.

## ***Sources of Loan Repayment***

Each state must approve a source of loan repayment as part of the application process. Although finding a source of repayment can prove challenging, it is not impossible. The source of repayment need not come from the project itself. Loan recipients can be creative in developing sources of repayment.

Some potential repayment sources include:

- , property owner's ability to pay (determined during loan application)
- , fees paid by developers
- , dedicated portions of local, county, or state taxes or fees
- , drinking water fees
- , donations or dues made to nonprofit groups

**Box 1**

**Establishing a Priority System for Loans for Source Water Protection**

Each state that establishes a loan program for land acquisition or conservation easements and source water protection measures must develop a priority setting process to determine which projects to fund.

As part of the priority setting process, a public water system must demonstrate how the land, easement, or measure to be funded will protect the source of the system from contamination and ensure compliance with national drinking water regulations.

Each state that has established a loan program has developed a unique priority system for ranking projects. Many of these priority systems include the requirement that the land be within an delineated source water or wellhead protection area.

**Challenges Ahead**

EPA encourages states to open their DWSRFs to the widest variety of drinking water projects while still addressing their highest priorities. As source water assessments for water systems are completed, systems will be looking for ways to implement protection measures. Those interested in source water protection should seek out their DWSRF program and learn how their state program works.

**Other Funding Sources**

The Clean Water State Revolving Fund (CWSRF) program authorized by the Clean Water Act can also be a powerful tool to help states finance a variety of protection activities. The CWSRF program can provide assistance to communities, water systems, and other organizations (including land conservation associations), for projects that protect source water and enhance water quality. For more information on the CWSRF program, visit the Office of Wastewater Management website at [www.epa.gov/owm/finan.htm](http://www.epa.gov/owm/finan.htm). For more information about other water quality funding programs, visit the Office of Water website at [www.epa.gov/water/funding.html](http://www.epa.gov/water/funding.html).

**For More Information**

For more information about the DWSRF or source water protection programs, or for a program representative in your state, contact:

Drinking Water State Revolving Fund Program  
Office of Ground Water and Drinking Water  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
(Mailcode 4606)  
Washington, DC 20460  
[www.epa.gov/safewater/dwsrf.html](http://www.epa.gov/safewater/dwsrf.html)



Prevention Branch  
Office of Ground Water and Drinking Water  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
(Mailcode 4606)  
Washington, DC 20460  
[www.epa.gov/safewater/protect.html](http://www.epa.gov/safewater/protect.html)