

Chapter 5 Where can I find more information to support our management program?

5.1 Potential Funding Sources

U.S. Environmental Protection Agency

Clean Water State Revolving Fund

The Clean Water State Revolving Fund (CWSRF) is a low- or no-interest loan program that has traditionally financed centralized sewage treatment plants across the Nation. Program guidance issued in 1997 by EPA emphasized that the fund could be used as a source of support for the installation, repair, or upgrading of onsite systems in small towns, rural, and suburban areas. CWSRF programs are administered by the states and the territory of Puerto Rico and operate like banks. Federal and state contributions are used to capitalize the fund programs, which make loans for water quality projects. Funds are then repaid to the CWSRF over terms as long as 20 years. Repaid funds are recycled to fund other water quality projects. Projects that may be eligible for CWSRF funding include new system installations, replacement or modification of existing systems, and costs associated with establishing a management entity to oversee onsite systems in a region, including capital outlays (e.g., trucks, storage buildings). Approved management entities include city and county governments, special districts, public or private utilities, and private for-profit or nonprofit corporations. For more information, visit www.epa.gov/owm/cwfinance/cwsrf or call 202-564-0752.

Environmental Finance Program

The U.S. Environmental Protection Agency developed the Environmental Finance Program to assist communities in their search for creative approaches to funding their environmental projects. The Environmental Finance Program provides financial technical assistance to the regulated community and advice and recommendations on environmental finance issues, trends, and options. The university-based Environmental Finance Centers help communities lower costs, increase investment, and build capacity by creating partnerships with state and local governments and the private sector to fund environmental needs. For more information, visit www.epa.gov/efinpage/ or call 202-564-4994.

Nonpoint Source Pollution Program

The Clean Water Act (CWA) section 319 (nonpoint source pollution) funds can support a wide range of polluted runoff abatement, including onsite wastewater projects. Authorized under section 319 of the federal CWA and financed by federal, state, and local contributions, these projects provide cost-share funding for individual and community systems and support broader watershed assessment, planning, and management activities. Projects funded in the past have

included direct cost-share for onsite system repairs and upgrades, assessment of watershed-scale onsite system contributions to polluted runoff, regional remediation strategy development, and a wide range of other programs dealing with onsite wastewater issues. For example, a project conducted by the Gateway District Health Department in east-central Kentucky enlisted environmental science students from Morehead State University to collect and analyze stream samples for fecal coliform “hot spots.” Information collected by the students was used to target areas with failing systems for cost-share assistance or other remediation approaches (EPA, 1997). The Rhode Island Department of Environmental Management developed a user-friendly system inspection handbook with CWA section 319 funds to improve system monitoring practices and then developed cost-share and loan programs to help system owners pay for needed repairs (EPA, 1997). For more information, visit www.epa.gov/owow/nps/319hfunds.html or call 202-566-1163.

U.S. Department of Agriculture (USDA)

Rural Development programs provide loans and grants to low/moderate income individuals. State Rural Development offices administer the programs. For state office locations, see http://www.rurdev.usda.gov/recd_map.html. A brief summary of USDA Rural Development programs is provided below.

Rural Housing Service

The Rural Housing Service (RHS) Single-Family Housing Program (http://www.rurdev.usda.gov/rhs/Individual/ind_splash.htm) provides homeownership opportunities to low- and moderate-income rural Americans through several loan, grant, and loan guarantee programs. The program also makes funding available to individuals to finance vital improvements necessary to make their homes decent, safe, and sanitary. The Direct Loan Program (section 502) provides individuals or families direct financial assistance in the form of a home loan at an affordable interest rate. Most loans are to families with income below 80 percent of the median income level in the communities where they live. Applicants may obtain 100 percent financing to build, repair, renovate or relocate a home, or to purchase and prepare sites, including providing water and sewage facilities. Families must be without adequate housing, but be able to afford the mortgage payments, including taxes and insurance. These payments are typically within 22 to 26 percent of an applicant's income. In addition, applicants must be unable to obtain credit elsewhere, yet have reasonable credit histories. Elderly and disabled persons applying for the program may have incomes up to 80 percent of area median income (AMI).

Home Repair Loan and Grant Program

For very low-income families who own homes in need of repair, the Home Repair Loan and Grant Program offers loans and grants for renovation. Money may be provided, for example, to repair a leaking roof, to replace a wood stove with central heating, or to replace an outhouse and pump with running water, a bathroom, and a waste disposal system. Homeowners 62 years and older are eligible for home improvement grants. Other low-income families and individuals receive loans at a 1 percent interest rate directly from RHS. Loans of up to \$20,000 and grants of up to \$7,500 are available. Loans are for up to 20 years at 1 percent interest.

Rural Utilities Service

The Rural Utilities Service (www.usda.gov/rus/water/programs.htm) provides assistance for public or nonprofit entities, including wastewater management districts. Water and waste disposal

loans provide assistance to develop water and waste disposal systems in rural areas and towns with a population not in excess of 10,000. The funds are available to public entities such as municipalities, counties, special-purpose districts, Native American tribes, and corporations not operated for profit. The program also guarantees water and waste disposal loans made by banks and other eligible lenders. Water and Waste Disposal Grants can be accessed to reduce water and waste disposal costs to a reasonable level for rural users. Grants can be made for up to 75 percent of eligible project costs in some cases.

The Rural Business-Cooperative Service (http://www.rurdev.usda.gov/rbs/busp/b&i_gar.htm) provides assistance for businesses that provide services for system operation and management. Business and Industry Guaranteed Loans can be made to help create jobs and stimulate rural economies by providing financial backing for rural businesses. This program provides guarantees for up to 90 percent of a loan made by a commercial lender. Loan proceeds may be used for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing. Assistance under the Guaranteed Loan Program is available to virtually any legally organized entity, including a cooperative, corporation, partnership, trust or other profit or nonprofit entity, Native American tribe or federally recognized tribal group, municipality, county, or other political subdivision of a state.

U.S. Department of Housing and Urban Development

Community Development Block Grants

The U.S. Department of Housing and Urban Development (HUD) operates the Community Development Block Grant (CDBG) program, which provides annual grants to 48 states and Puerto Rico. The states and Puerto Rico use the funds to award grants for community development to smaller cities and counties. CDBG grants can be used for numerous activities, including rehabilitation of residential and nonresidential structures, construction of public facilities, and improvements to water and sewer facilities, including onsite systems. EPA is working with HUD to improve access to CDBG funds for treatment system owners by raising program awareness, reducing paperwork burdens, and increasing promotional activities in eligible areas. More information can be found at www.hud.gov/cpd/cdbg.html or by calling 202-708-1112.

Appalachian Regional Commission

The Appalachian Regional Commission's (ARC) mission is to be an advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life. The ARC will help communities in Appalachia fund the development of onsite management programs. For more information, visit www.arc.gov or call 202-884-7799.

The National Decentralized Water Resources Capacity Development Project

The National Decentralized Water Resources Capacity Development Project (NDWRCDP) funds new projects, enhancement or expansion of existing work, and cooperative ventures with other organizations in the onsite/decentralized wastewater treatment field. For more information, visit www.ndwrcdp.org/funding.cfm or call 510-651-4210.

Tribal Sources

U.S. EPA Clean Water Indian Set-Aside Program

Section 518(c) of the 1987 Amendments to the Clean Water Act established the program and authorized EPA to administer grants in cooperation with the Indian Health Service (IHS). This partnership maximizes the technical resources available through both agencies to address tribal sanitation needs. The ISA Program uses IHS's Sanitation Deficiency System (SDS) to identify high priority wastewater projects for funding. For more information, visit www.epa.gov/owm/mab/indian/cwisa.htm or call 202-564-0621.

Indian Health Service-Sanitation Facilities Construction Program

The IHS's Division of Sanitation Facilities Construction administers a nationwide Sanitation Facilities Construction (SFC) Program that is responsible for the delivery of environmental engineering services and sanitation facilities to American Indians and Alaska Natives. The SFC Program allocates available resources to the twelve IHS area offices. For more information, visit www.dsfc.ihs.gov or call 301-443-1046.

State-Specific Sources (check with your state to learn more about their financial assistance programs)

Kentucky PRIDE Program

PRIDE is a local, state, and federal cooperative effort designed to address the challenge of cleaning up the Kentucky's rivers and streams of sewage and garbage, ending illegal trash dumps, and promoting environmental awareness and education while renewing pride in southern and eastern Kentucky. Visit www.kypride.org for more information.

Pennsylvania PENNVEST Community Septic Management Program

The Pennsylvania Infrastructure Investment Authority (PENNVEST) provides low cost financing for wastewater systems across the Commonwealth. These systems typically serve an entire community with many users who are unable to tie into the central system. For more information, visit www.phfa.org/programs/singlefamily/pennvest or call (717) 780-3837.

Texas Supplemental Environmental Project

A Supplemental Environmental Project (SEP) is a project that prevents pollution, reduces the amount of pollution reaching the environment, enhances the quality of the environment, or contributes to public awareness of environmental matters. For more information, visit <http://www.tnrcc.state.tx.us/legal/sep/index.html> or call 512/239-3400.

Washington Centennial Clean Water Fund

The Centennial Clean Water Fund provides low-interest loans and grants for wastewater treatment facilities and fund related activities to reduce nonpoint sources of water pollution. The fund provides low-interest loans and grants for projects that protect and improve water quality in Washington State. For more information, visit www.ecy.wa.gov/programs/wq/funding/index.html or call 360-407-6566.

Other funding sources

Other sources of funding include state finance programs, capital reserve or savings funds, bonds, certificates of participation, notes, and property assessments. Nearly 20 states offer some form of financial assistance for installation of onsite treatment systems, either through direct grants, loans, or special project cost-share funding. Capital reserve or savings funds are often used to pay for expenses that might not be eligible for grants or loans, such as excess capacity for future growth. Capital reserve funds can also be used to assist low and moderate-income households with property assessment or connection fees. Bonds usually finance long-term capital projects such as the construction of onsite wastewater systems. Bonds are issued by states, municipalities, towns, townships, counties, and special districts. The two most common types of bonds are general obligation bonds, which are backed by the faith and credit of the issuing government, and revenue bonds, which are supported by the revenues raised from the beneficiaries of a service or facility. General obligation bonds are rarely issued for wastewater treatment facilities because communities are often limited in the amount of debt that they may incur. These bonds are generally issued only for construction of schools, libraries, municipal buildings, and police/fire stations.

Revenue bonds are usually not subject to debt limits and are secured by repayment through user fees. Issuing revenue bonds for onsite projects allows a community to preserve the general obligation borrowing capacity for projects that do not generate significant revenues. This mechanism works well for ongoing management programs, but does not work for new management programs. A third and less commonly used bond is the special assessment bond, which is payable only from the collection of special property assessments. Some states administer state bond banks, which act as intermediaries between municipalities and the national bond market to help small towns that otherwise would have to pay high interest rates to attract investors or would be unable to issue bonds. State bond banks, backed by the fiscal security of the state, can issue one large, low-interest bond that funds projects in a number of small communities.

Certificates of Participation (COPs) are issued by communities to lenders to spread out costs and risks of loans to specific projects. If authorized under state law, COPs can be issued when bonds would exceed debt limitations. Notes, which are written promises to repay a debt at an established interest rate, are similar to COPs and other loan programs. Notes are used mostly as a short-term mechanism to finance construction costs while grant or loan applications are processed. Grant anticipation notes are secured by a community's expectation that it will receive a grant. Bond anticipation notes are secured by the community's ability to sell bonds.

Finally, property assessments may be used to recover capital costs for wastewater facilities that benefit property owners within a defined area. For example, property owners in a specific neighborhood could be assessed for the cost of installing sewers or a cluster treatment system. Depending on the amount of the assessment, property owners might pay it all at once or pay in installments at a set interest rate. Similar assessments are often charged to developers of new residential or commercial facilities if developers are not required to install wastewater treatment systems approved by the local regulatory authority. Funding for ongoing management of onsite systems in newly developed areas should be considered when these assessments are calculated.

5.2 Technical resources

Technical Information on Onsite Wastewater Systems

Barnstable County, Massachusetts Department of Health and the Environment Alternative Septic System Information Center

This web site contains information on alternative onsite technologies.
www.barnstablecountyhealth.org/AlternativeWebpage/index1.htm

City of Austin, Texas Onsite Wastewater Treatment and Disposal Fact Sheets

The set of fact sheets covers many onsite topics from conventional systems to alternative systems. The fact sheets can be downloaded from www.ci.austin.tx.us/wri/fact.htm.

Constructed Wetlands for Wastewater Treatment

This document describes constructed wetlands for wastewater treatment and has numerous case studies. This document can be downloaded from www.epa.gov/owow/wetlands/construc/content.html.

Delaware Department of Natural Resources and Environmental Control fact sheets

These fact sheets describe different wastewater disposal systems. They can be downloaded from www.dnrec.state.de.us/dnrec2000/P2/Septic.htm.

The Easy Septic Guide

This guide describes everything a homeowner needs to know about their septic system. It has chapters on checking your septic system, understanding your septic system, how to maintain a health system, and the septic shopping guide. The guide can be downloaded from www.cessnock.nsw.gov.au/scripts/CESSremdm.pl?Do=page&Page=PNum326.

Everything You Wanted to Know About Your Septic System: But Didn't Know Who to Ask

The Volusia County, Florida Department of Health developed this interactive CD-ROM to educate homeowners on septic systems. To order a copy of the CD, call 904-736-5579.

Homeowner's Guide to On-Site Wastewater Disposal Zone

The Sea Ranch Association, an onsite management entity, developed this guide for new homeowners. The guide explains a septic system and explains a typical inspection. This guide can be downloaded from www.tsra.org/Zone.htm.

Massachusetts Department of Environmental Protection Publications

This web page contains links to many publications concerning septic systems and alternative technologies. For more information, visit www.state.ma.us/dep/brp/wwm/t5pubs.htm.

National Environmental Services Center

National Environmental Services Center provides technical assistance and information about drinking water, wastewater, environmental training, and solid waste management to communities serving fewer than 10,000 individuals. Visit www.nesc.wvu.edu/ for more information.

National Small Flows Clearinghouse

Funded by grants from EPA, NSFC helps small communities and individuals solve their wastewater problems. Its services include a web site, online discussion groups, a toll-free

assistance line (800-624-8301), and informative publications. Visit www.nesc.wvu.edu/nsfc/nsfc_index.htm for more information.

Ohio State University Extension Fact Sheets

This series of fact sheets cover topics from Septic System Maintenance, to Septic Tank - Mound System, to Onsite Wastewater Management: Cost and Financing. They can be downloaded from [//ohioline.osu.edu/aex-fact/](http://ohioline.osu.edu/aex-fact/).

Onsite Wastewater Training Centers

Alabama, Alabama Onsite Wastewater Training Center

aowtc.uwa.edu/

Arizona, Institute for Tribal Environmental Professionals and Northern Arizona University

www4.nau.edu/itep/twwtc.html

Arizona, Onsite Wastewater Demonstration Project

www.cet.nau.edu/Projects/WDP/

California, California Wastewater Training and Research Center

www.csuchico.edu/cwtrc/Pages/home.htm

Florida, Florida Department of Health Onsite Sewage Training Courses

www.doh.state.fl.us/environment/ostds/training/maintra.htm

Kentucky, Kentucky Onsite Wastewater Training Center

www.kentuckyonsite.org/

New England, NEIWPC Environmental Training Center

www.neiwpc.org/

New York, SUNY Morrisville Environmental Training Center

www.nyruralwater.org/aquafacts/winter2000/9.shtml

North Carolina, National Training Center for Land-Based Technology and Watershed Protection

www2.ncsu.edu/ncsu/CIL/WRRI/news/jf99trainingcenter.html

North Carolina, NC State University Soils and On-Site Wastewater Training Academy

www.soil.ncsu.edu/swetc/onsite2/onsite.htm

Minnesota, The Onsite Sewage Treatment Program

septic.coafes.umn.edu/Events/index.html

Missouri, Missouri Small Wastewater Flows Education and Research Center

aes.missouri.edu/bradford/news/mso-ftc.stm

Montana Environmental Training Center

msun.edu/grants/metc/

Rhode Island, URI On-Site Wastewater Training Center

<http://www.uri.edu/ce/wq/owtc/html/owtc.html>

Utah, Utah On-Site Wastewater Treatment Training Center

<http://www.engineering.usu.edu/uwrl/training/>

Wisconsin, Small Scale Waste Management Project

<http://www.wisc.edu/sswmp/>

Onsite Wastewater Treatment Systems Manual

This comprehensive reference manual is designed to provide state and local governments with guidance on the planning, design and oversight of onsite systems. This manual is useful for onsite wastewater professionals, developers, land planners, and academics. This manual can be downloaded from www.epa.gov/ORD/NRMRL/Pubs/625R00008/625R00008.htm.

Oregon Department of Environmental Quality On-Site Fact Sheets

These fact sheets include information on septic system installation and maintenance. The fact sheets can be downloaded from www.deq.state.or.us/wq/onsite/onsite.htm.

Protecting Water Quality: Understanding Your Septic System and Water Quality

This fact sheet explains the relationship between septic systems and water quality and recommendations for septic system maintenance.

This document can be downloaded from

<http://www.aces.edu/departments/extcomm/publications/anr/anr-790/WQ1.2.5.pdf>

The Septic Education Kit

The Department of Commerce's National Technical Information Service is distributing The Septic Education Kit, a toolbox that contains everything needed to organize an education program on the care and maintenance of septic systems. This kit can be ordered from www.ocrm.nos.noaa.gov/nerr/septickit/moreinformation.html.

Septic Systems: What You Don't Know Can Hurt You!

This brochure describes the potential problems caused by septic system if they are not maintained. It also offers maintenance recommendations. This brochure can be ordered from the Madera County, California Environmental Health Department 559-675-7823.

Septic Yellow Pages

This web site provides useful information concerning septic systems for homeowners. Visit www.septicyellowpages.com/homeowner.html for more information.

Subsurface Flow Constructed Wetlands for Wastewater Treatment: A Technology Assessment

This report verifies that subsurface flow constructed wetland can be a viable and cost-effective wastewater treatment option.

This document can be downloaded from www.epa.gov/owow/wetlands/pdf/sub.pdf.

U.S. EPA Municipal Technologies Branch Fact Sheets

These fact sheets cover different treatment technologies. These fact sheets can be downloaded from www.epa.gov/owm/mtb/mtbfact.htm.

University of Minnesota Fact Sheets

This set of fact sheets covers topics from homeowner education to alternative technologies and can be downloaded from www.extension.umn.edu/topics.html?topic=2&subtopic=110.

University of Rhode Island Fact Sheets

This set of fact sheets covers topics from what you should know about inspectors, to how to hire a contractor, to how to order and buy a distribution box and can be downloaded from www.uri.edu/ce/wq/has/html/has_septicfacts.html.

US EPA's Decentralized Onsite Management for Treatment of Domestic Wastes

This program provides operation and maintenance information for on-site wastewater treatment systems and can be downloaded from www.epa.gov/glnpo/seahome/decent.html.

Washington Sea Grant Septic Manuals

Five homeowner manuals are available from this web site, including Pressure Distribution, Gravity, Mound, Sand Filter, Proprietary Device. Visit www.wsg.washington.edu/outreach/mas/water_quality/septicse/relatedinfo.html for more information.

5.3 Management program development resources

The following is a list of websites and publications available related to wastewater systems and initiating and planning a decentralized wastewater management program.

Information on the initiating and planning a management program

Building Our Future: A Guide to Community Visioning

This manual provides community residents with a process for planning for their mutual future. This manual can be downloaded from www.drs.wisc.edu/vision/abtguide/index.htm.

Choices for Communities: Wastewater Management Options for Rural Areas

This 17-page document helps guide communities through exploring their wastewater treatment options. This document can be downloaded from <http://www.easternnc-ced.org/pdf-files/NCSU.WMOR.pdf>.

City of Vancouver Citizen Handbook on Building Community

The Citizens Handbook is meant to encourage more active citizens - people motivated by an interest in public issues, and a desire to make a difference. This document can be downloaded from www.vcn.bc.ca/citizens-handbook/Welcome.html.

Community Visioning: Planning for the Future in Oregon's Local Communities

This report describes how new approaches to anticipate and plan for change are needed - approaches that actively engage citizens in thinking about the future at the local level. This report can be downloaded from www.asu.edu/caed/proceedings97/ames.html.

Decentralized Wastewater Management

This brochure is for homeowners in the City of Austin, Texas. It explains their management program. The brochure can be ordered by calling 512-322-0101.

Funding Decentralized Wastewater Systems Using the Clean Water State Revolving Fund

This fact sheet explains the Clean Water State Revolving Fund and the types of activities that can be funded. This fact sheet can be downloaded from <http://www.epa.gov/owm/cwfinance/cwsrf/factsheets.htm#Decentralized>.

A Guide to Public Management of Private Septic Systems

This guide can be used by communities to examine their wastewater treatment options and design a unique program that meets their needs. This document can be downloaded from www.cardi.cornell.edu/clgp/septics_index.cfm.

The Neighborhood Charrette Handbook: Visioning and Visualizing Your Neighborhood's Future

The charrette workshop is designed to stimulate ideas and involve the public in the community planning/design process. This handbook can be downloaded from www.louisville.edu/org/sun/planning/char.html.

Pennsylvania Department of Environmental Protection Wastewater Management Fact Sheets

These fact sheets cover topics from sewage planning, to sewage disposal systems. The fact sheets can be downloaded from www.dep.state.pa.us/dep/deputate/watermgt/wqp/wqp_wm/Pubs-c.htm.

A Quick Guide to Small Community Wastewater Treatment Decisions

When deciding on the right treatment system, the community must have clear goals and specific criteria to use in making the decision. This document guides communities through choosing an effective and reasonably priced wastewater treatment system. The guide can be purchased from <http://www.extension.umn.edu/distribution/naturalresources/DD7735.html>.

Response to Congress on Use of Decentralized Wastewater Treatment Systems

This document describes the benefits and barriers to implementing an onsite wastewater management program. This document can be downloaded from <http://www.epa.gov/owm/mtb/decent/response/>.

Rural Empowerment Zone and Economic Community Program

The road to economic opportunity and community development starts with broad participation by all segments of the community. This web site provides information on how to involve the community and develop a strategic plan. Visit www.ezec.gov/index.html for more information.

A Simpler, Cheaper Alternative to Sewer Systems

The guide describes a wastewater project in Willard, a small village in New Mexico where the sole supply of drinking water is threatened by contamination from wastewater. Copies of this guide can be downloaded for free from www.sewerless-wastewater-solutions.org/guide.htm.

Wastewater Management Fact Sheets

Pennsylvania Department of Environmental Protection developed these fact sheets to assist wastewater managers and includes Process For Resolving Complaints About Malfunctioning Onlot Systems, Sales Contract Requirements Under Act 537, Understanding The Importance Of Soils In Siting An Onlot System. Some of the fact sheets explain Pennsylvania regulations. The fact sheets can be downloaded from www.dep.state.pa.us/dep/deputate/watermgt/wqp/wqp_wm/Pubs-c.htm.

U.S. Environmental Protection Agency Community-Based Environmental Protection

Community-Based Environmental Protection (CBEP) integrates environmental management with human needs, considers long-term ecosystem health, and highlights the positive correlations between economic prosperity and environmental well-being. Visit www.epa.gov/ecocommunity/ for more information.

U.S. Environmental Protection Agency for Onsite and Clustered (Decentralized) Wastewater Treatment Systems

EPA developed this web site to provide tools for communities investigating and implementing decentralized management programs. The Web site contains fact sheets, program summaries, case studies, links to design and other manuals, and a list of state health department contacts. Visit www.epa.gov/owm/onsite for more information.