



Protecting Water Quality and Human Health

Our nation's water infrastructure is in peril. The networks of pipes and facilities that bring safe water to our tap and clean and deliver used water back to rivers, lakes and streams is decaying from decades of neglect. Experts indicate that 25 percent of our water infrastructure is already beyond its useful life, leading to more frequent structural failures. Further, the capacity of sewer systems and treatment plants often is still insufficient to handle both wastewater and stormwater flows. Water and wastewater infrastructure is vital to our environment, public health and safety, and economy, yet these buried assets – and their deteriorating condition – are largely “out of sight, out of mind.”

Our aging wastewater infrastructure allows the release of partially or wholly untreated sewage into local waterways every year. The majority of this untreated sewage comes from combined and sanitary sewer overflow systems (CSOs and SSOs), which release untreated wastewater into rivers and streams during storms when the volume of water flowing into these facilities exceeds their capacity. This is a particularly significant problem in the Great Lakes region. According to U.S. EPA estimates, 65 percent the nation's CSOs are in the eight Great Lakes states. In just ten of the Great Lakes region's largest cities, almost 28 billion gallons of raw or partially treated sewage is released into the lakes every year through CSOs and SSOs.¹ Since this estimate represents just 15 percent of the total population of the eight-state Great Lakes region, the true figure is considerably larger. These sewage discharges contain not only suspended solids and oxygen-consuming materials, but also pathogens (such as *E. coli*) and toxic chemicals.

The *Clean Watersheds Needs Survey 2004 Report to Congress*, released in 2008 by U.S. EPA, estimates the nationwide capital investment need for wastewater pollution control at \$205.5 billion, with a cost of \$73 billion for the Great Lakes states. In addition, the 2005 *Drinking Water Infrastructure Needs Survey and Assessment Third Report to Congress* reported that \$276 billion needs to be invested in U.S. drinking water infrastructure over the next 20 years.

Fortunately, programs exist that can provide solutions to these problems. The Clean Water State Revolving Fund (CWSRF) provides annual funding to states for wastewater treatment, nonpoint source pollution control, and watershed and estuary management. Similarly, the Drinking Water State Revolving Fund (DWSRF) provides annual funding to states for drinking water treatment, storage facilities, transmission and distribution systems, and consolidation of systems. Through these SRF programs, each state maintains revolving loan funds to provide independent and permanent sources of low-cost financing for water quality protection projects. Despite the significant contribution the CWSRF program has made to improving water quality in our country, federal funding has steadily declined. Federal support accounted for 78 percent of overall wastewater infrastructure spending in 1978, but makes up just 3 percent today. The impact of decreasing federal funding cannot be over emphasized.

Great Lakes Commission Requests to Congress

The Great Lakes Commission requests congressional support for the following priorities to protect water quality and human health in the Great Lakes basin:

- **Provide \$1.35 billion for the CWSRF in FY2010**, and include directives that funding shall be used, to the extent practical, to support sustainable approaches to water and wastewater management, including green infrastructure.
- **Fully fund the DWSRF** at \$1.0 billion in FY2010 to support critical drinking water infrastructure upgrades.

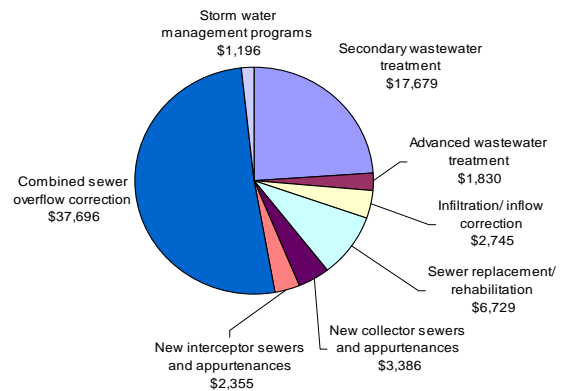


Figure 1: Total spending needs for the Great Lakes as of January 2004, in millions of dollars¹

Funding History

Water Quality and Human Health Priority	Fiscal Year Funding (in millions of dollars)					
	2005	2006	2007	2008	2009*	GLC Request
Clean Water SRF (Great Lakes States Allocation)	\$1,091.2 (\$396.2)	\$886.8 (\$322.0)	\$1,083.8 (\$393.6)	\$689.0 (\$250.2)	TBD	\$1350.0 (\$487.3)
Drinking Water SRF (Great Lakes States Allocation)	\$843.2 (\$223.6)	\$837.5 (\$193.3)	\$837.5 (\$193.2)	\$829.0 (\$191.4)	TBD	\$1000.0 (\$260.0)

*Appropriations for FY2009 are under a continuing resolution until March 6, 2009; final appropriations bills have not been passed.

Committee Jurisdiction

House Appropriations Subcommittee on Interior, Environment, and Related Agencies

Senate Appropriations Subcommittee on Interior, Environment, and Related Agencies

Progress to Date

Since passage of the Clean Water Act and the Safe Drinking Water Act, great progress has been made toward restoring the nation's waters and protecting human health and the environment. States, local governments, nonprofit organizations and others continue to receive financial assistance through these flexible federal programs that are designed to address current and future water pollution control challenges. The SRF programs provided an effective, national approach to funding water projects. Today, the SRFs are recognized as the most successful federal water funding programs in the nation's history. The Great Lakes Regional Collaboration identified the SRF programs as critical pieces of its *Great Lakes Restoration Strategy*, and the Great Lakes Commission's requests for the programs are consistent with the strategy's recommendations. The *Great Lakes Restoration Strategy* also recommends that federal water infrastructure funding give "priority to projects that pursue sustainable development." Land acquisition to protect water supplies is one sustainable approach to managing and protecting drinking water sources. Green roofs, tree boxes, rain gardens, vegetated swales, constructed wetlands, infiltration planters, and vegetated median strips are additional examples of "green infrastructure" that provides a more sustainable approach to stormwater management. These mechanisms take advantage of nature's filtering capacity to reduce demands on, and therefore the costs associated with, building and operating man-made treatment plants.

The recently approved economic stimulus legislation provides \$4 billion nationally to the CWSRF and \$2 billion for the DWSRF to repair and upgrade wastewater and drinking water infrastructure. Per existing formulas, the Great Lakes states are expected to receive nearly \$2 billion. While important, this is just a fraction of the \$74 billion that U.S. EPA estimates is needed to fully upgrade wastewater infrastructure in the Great Lakes region. Regular annual appropriations for these programs are needed to address this gap.

Economic and Environmental Benefits

The SRF programs allow states the flexibility to fund projects that will address high priority water infrastructure needs. While traditionally used to build or improve treatment plants, loans are increasingly used for agricultural, rural, and urban runoff control; estuary improvement projects; wet weather flow control, including stormwater and sewer overflows; alternative treatment technologies; and water reuse and conservation projects. In addition to financial savings from low to no-interest loans, loan recipients can realize significant environmental benefits, including protection of public health and conservation of local watersheds. In the Great Lakes region, reducing sewage discharges will also help prevent public health risks from bacterial contamination of beaches and drinking water. Building and maintaining water and sewer infrastructure also provides jobs for millions of Americans. USEPA reports that every federal dollar spent in the CWSRF program results in \$0.73 in additional clean water expenditures from state contributions and fund earnings. Restoring and fully funding the SRF programs will benefit the environmental and economic health of the Great Lakes region while helping local communities address the urgent infrastructure needs they are facing.

More Information

USEPA Clean Water State Revolving Fund: www.epa.gov/owm/cwfinance/cwsrf

USEPA Drinking Water State Revolving Fund: <http://www.epa.gov/safewater/dwsrf>

¹ Sierra Legal Defense Fund. 2006. *The Great Lakes Sewage Report Card*. A Sierra Legal Report Card. November. <<http://www.ecojustice.ca/publications/reports/the-great-lakes-sewage-report-card/attachment>>