

A History of Clean Water Funding and Future Funding Needs

by Matthew Millea

“Out of sight, out of mind” captures how most people view water and wastewater infrastructure. Unlike deteriorating roads and bridges that people can see, deteriorating water and wastewater infrastructure is hidden away. Unfortunately, the average citizen does not see the critical need to fund improvements to these systems.

The condition of water and wastewater infrastructure is at the forefront of concerns for water utility managers.¹ They recognize how critical these systems are to maintaining and protecting public health and water quality. For municipalities, obtaining the funding for needed facility improvements is a major concern.

Water and wastewater infrastructure are imperative to human health and safety, economic stability, water quality and aquatic habitat. Properly maintained drinking water and wastewater treatment systems protect people from water borne diseases. According to the US Conference of Mayors, every dollar of water infrastructure investment increases the Gross Domestic Product in the long term by \$6.35.² EPA estimates that 67 percent of US stream miles are in poor or fair condition. Approximately 95,000 lakes, including the Great Lakes, are under fish consumption advisories due to chemical contaminants. One-third of shell fishing beds in America are closed or restricted due to toxic pollutant contamination. Such statistics illustrate the importance of water quality projects for the control of point source and nonpoint source pollution and estuary management projects.

Since 1970, the New York State Environmental Facilities Corporation (NYSEFC) has been assisting municipalities throughout the state with funding for design, construction, repair, rehabilitation and upgrade of water quality projects. Funding initially came through the Construction Grants Program, which was phased out in the 1980s. Today the major funding resource is the Clean Water State Revolving Fund (CWSRF), which is administered by NYSEFC and the New York State Department of Environmental Conservation (NYSDEC).

The CWSRF and the Construction Grants Program initially focused on wastewater treatment and sewage systems. Eligibility for CWSRF financing now includes a wide variety of point source,



Photo by John Campani, NYSEFC

The New York State Clean Water State Revolving Fund has financed over \$6.5 million in projects to protect the water quality of the Great Sacandaga Lake watershed, just one example of many financed since 1990.

nonpoint source and estuary projects and is not limited to, or focused solely on, wastewater.

Funding History for Water Quality Projects

The Water Pollution Control Act of 1948 was the first comprehensive federal action to address clean water.³ It marked the beginning of federal aid for municipal wastewater treatment. The Act initiated a grant program and authorized loans up to \$250,000 to assist local governments with planning, design and construction of wastewater treatment facilities.

Amendments to the Act increased federal assistance, most notably the passage of the Federal Water Pollution Control Act Amendments of 1972, popularly known as the Clean Water Act. The 1972 Amendments strengthened the role of the federal government in regulating clean water and established national standards for wastewater treatment. Federal funding to achieve the Act’s goals increased dramatically; the Construction Grants Program was spending \$41 billion, the largest non-military public works program since the Interstate Highway System. New York State received approximately \$6.8 billion from the Construction Grants Program and added a 12.5 percent required state match, bringing total funding to \$7.93 billion. Most municipalities were required to pay for only the remaining 12.5 percent of project costs, often with in-kind contributions of employee staff time or equipment.

But federal budget concerns resulted in the phase out of the program. However, strong state support for the Clean Water Act’s water quality goals resulted in amendments to the Act in 1987, authorizing a total of \$18 billion for wastewater treatment plant construction. It would be spread over a nine year period through the new State Water Pollution Control Revolving Fund (WPCRF).

By 1991, the Clean Water State Revolving Fund (CWSRF) program replaced the WPCRF. Through the CWSRF program, federal money capitalizes state-administered loan programs. Municipal borrowers

Fast Facts About NYS CWSRF Financing	
\$689.1 million	Total FY 2008 appropriation for national CWSRF funding
\$75.1 million	Total FY 2008 EPA capitalization grant for New York State
\$555 million	Total FY 2009 appropriation requested by EPA for national CWSRF funding
\$62 million	Total FY 2009 EPA capitalization grant for New York State
\$3,437,647,439	Total amount of federal capitalization and state match since inception of CWSRF
2,275	Total number of long term loans financed by NYS CWSRF
\$24.5 billion	Total needs for CWSRF-eligible projects in New York State (from 2004 CWNS)
\$24.7 billion	Total annual needs for Water Infrastructure Investment (from WIN)
\$13 billion to \$20.9 billion	Total annual needs for Water Infrastructure Investment (from CBO)

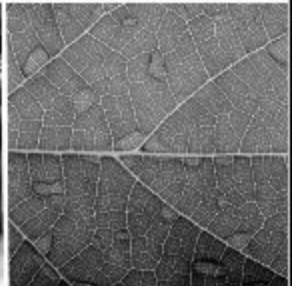
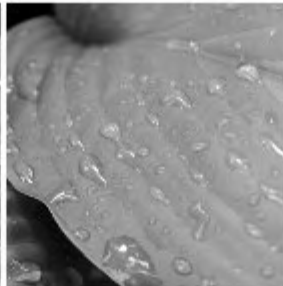
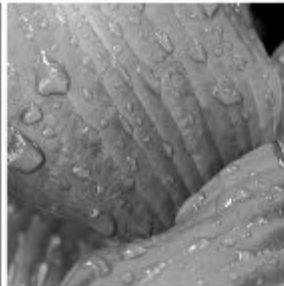
continued on page 13

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continued from page 11

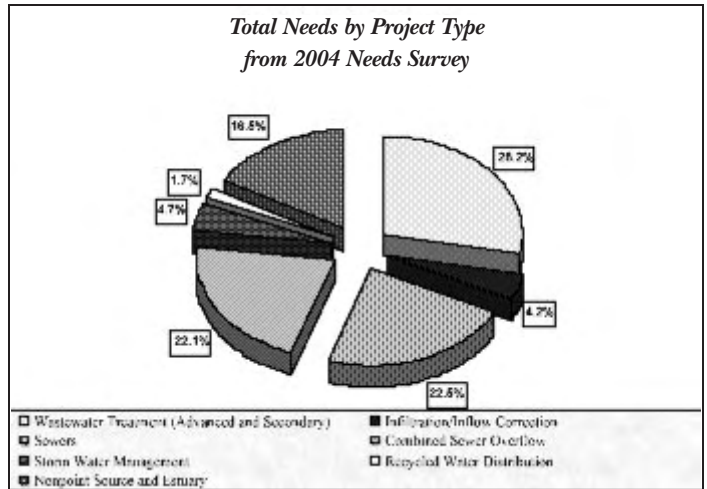
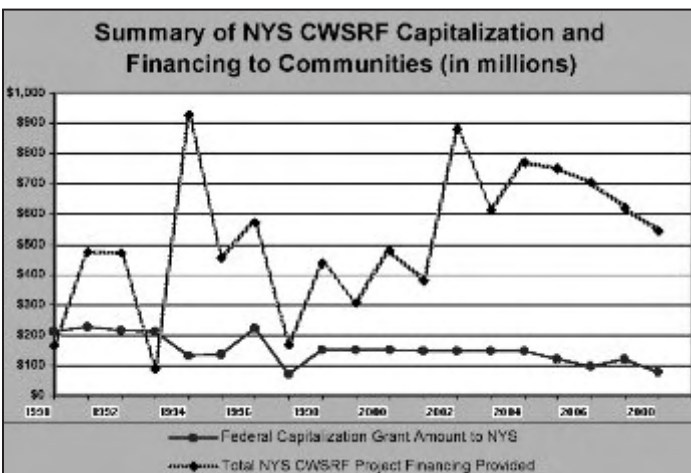
repay their loans to the states, re-capitalizing the “revolving fund.” Federal CWSRF aid was to end after 1994. But increased regulatory requirements, the ongoing need for infrastructure repair, replacement and upgrade, expanded project eligibility, and increased costs, heightened demand for project funding and federal funding continued.

The New York CWSRF is a critical source of financing for communities like the Town of Moriah and the Village of Port Henry in Essex County that need help in order to comply with regulations. The Moriah/Port Henry Wastewater Treatment Plant needed considerable improvement to bring it into compliance with State Pollutant Discharge Elimination System (SPDES) permit requirements. Moriah received a \$3.12 million interest-free CWSRF loan to cover its share of 60 percent of the project costs, while Port Henry received a \$2.38 million interest-free CWSRF loan to cover 40 percent of the project costs. The zero percent SRF financing will save the Town of Moriah \$2.55 million and the Village of Port Henry \$1.94 million in avoided interest costs over the 30-year term of their loans.

The NYSEFC administers one of the most innovative and successful CWSRF programs in the country. By leveraging and investing program funds, NYSEFC is able to provide two to three times more funding for projects at much lower interest rates. With a total of \$3.4 billion in state and federal capitalization funds, the New York CWSRF has financed over \$9.8 billion in eligible water quality projects since 1990.

NYSEFC has provided CWSRF financing recipients with approximately \$1 billion in direct interest subsidy on project financings. The benefit of this subsidy is often overlooked as an advantage of the CWSRF program, yet it provides municipalities with significant cost savings over the life of their CWSRF loan.

For example, on a CWSRF \$2.8 million 30-year interest-free loan for the Village of Canaseraga, the Village will save \$2.18 million in avoided interest expense. The financing supports new collector sewers and a wastewater treatment plant that the Village urgently needed to address health risks and environmental hazards caused by failing individual septic systems that were discharging sewage into storm sewers. Onondaga County has been a long term NYSEFC client receiving approximately \$200 million in CWSRF low cost financing which saved the County \$31.7 million in avoided interest expenses over the term of their loans. CWSRF financing has provided critical assistance for projects for the Onondaga Lake Improvement Project to clean up the lake and prevent pollution, particularly from phosphorus and ammonia. The CWSRF also financed much needed improvements to the Metropolitan Syracuse Wastewater Treatment Plant.



Since 1990, New York State has received approximately \$2.9 billion in CWSRF capitalization grants from the federal government and contributed an additional \$580 million in required match dollars. Municipalities throughout New York have received interest-free or low-interest rate financing for terms up to 30 years, saving many communities millions of dollars in avoided interest costs. More than 1,800 projects have been financed in more than 650 communities across the state.

Congress has appropriated over \$26 billion in CWSRF capitalization grants to the states. Over the past 20 years, however, federal funding of the CWSRF has steadily declined by 70 percent dropping from \$2.4 billion in 1987 to \$687 million in 2008. For New York State, this means that only 16 percent of the projects eligible for low cost CWSRF loans will be funded in the 2008–09 funding period.

Identifying Needs

Federal funding for the CWSRF is allocated to the states based on need, as it was for the Construction Grants Program. From 1972 through 1992 needs were determined by the EPA biennial Clean Water Needs Survey (CWNS). The states would collect data for the CWNS to assess their water quality needs. Renamed the Watersheds Needs Survey (WNS) to indicate a greater range of water quality needs, the survey is now required every four years by the 1987 CWA Amendments.⁴

The 2004 CWNS Report to Congress, the most recent, was released in January 2008. It showed CWSRF-eligible needs for the United States were \$254.1 billion, an increase of 26 percent or \$52.3 billion in overall national needs from 2000.

The NYSEFC compiles the CWNS for New York State. In 2004, NYSEFC documented approximately \$24.5 billion in needs, an increase of 20 percent or \$4.1 billion more than in 2000. New York City represented approximately \$16.3 billion or 67 percent of the entire state’s needs. For the 2004 CWNS, NYSEFC enhanced its data collection efforts for nonpoint source projects, such as brownfield remediation and land acquisition for water quality protection. New York State documented approximately \$2.6 billion in nonpoint source needs in 2004, compared with \$1.4 billion in 2000.

Working closely with NYSDEC, NYSEFC has been working on the 2008 CWNS⁵ which EPA has expanded to include water quality costs and projects that may not necessarily be eligible for the CWSRF, yet pose significant water quality issues. NYSEFC believes that the 2008 CWNS will once again show that while New York leads the nation in water quality investment, it also has the most significant

continued on page 15

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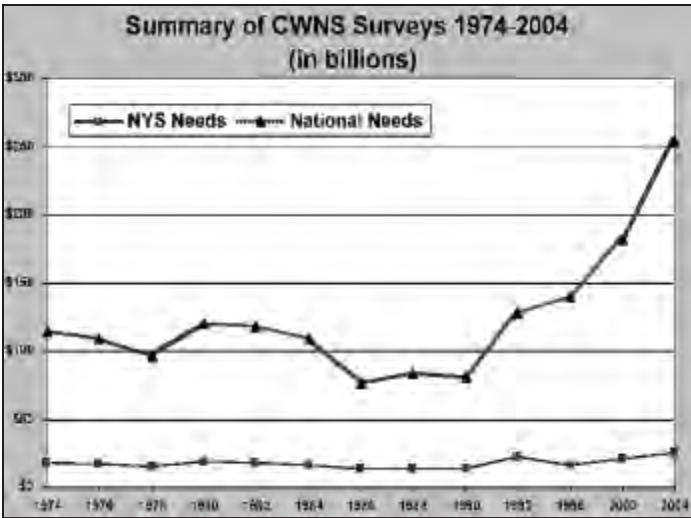
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capital needs as its aging infrastructure reaches or surpasses the end of its useful life.

Since 1972, New York State has consistently reported the highest total needs of any state. The 2004 CWNS showed the top five states to be New York, followed by California, Florida, New Jersey and Maryland. Since 1974, New York’s needs have grown from \$12.5 and \$24.5 billion, and nationally from \$76.2 to \$254.1 billion.

As mandated by federal statute, New York State has received 11.16⁶ percent of the national CWSRF appropriation since 1987. During much of this time, New York State’s documented percentage of the national needs has exceeded the percentage allowed for funding. And while New York State continues to report the highest total needs of any state, its percentage of overall national need has been decreasing because other states are increasing their efforts to document needs. So, it is imperative that New York State remains committed to documenting the largest amount of needs possible.

Need for Funding

In 2002, the Congressional Budget Office (CBO) projected that for the years 2000 to 2019, annual costs for investments in wastewater systems would range between \$13 billion and \$20.9 billion. Additionally, CBO estimated that annual operation and maintenance (O&M) costs, which are not eligible for CWSRF funding, would range between \$20.3 billion to \$25.2 billion for wastewater systems nationally.⁷

Water resources funding is a topic of very timely and urgent discussion on Capitol Hill and in State Houses throughout the nation. Governor David Paterson recently appeared before the House Ways and Means Committee to call on members of Congress to enact a second stimulus package to provide fiscal relief for the states. The Governor cited his main concerns, including greater emphasis on infrastructure repair. Underscoring the urgency to act now, the Governor advised that part of that investment should go to improving the critical condition of the country’s wastewater treatment systems.

In New York State today more than 200 municipalities are under consent order for Clean Water Act violations. Aging infrastructure requires costly repair or replacement and many cities and smaller communities are struggling with the financial burden of constructing wastewater treatment systems that achieve compliance with important environmental and public health objectives.

The demand for CWSRF assistance will continue to escalate. New York’s CWSRF stands as an example to federal appropriators that

every federal dollar invested in this program brings significantly greater returns at the local level, and it is imperative that Congress provides additional CWSRF funding to address the state’s critical wastewater needs.

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