



CWSRF PISCES AWARDS

**Performance and Innovation in the SRF
Creating Environmental Success**



Clean Water
State Revolving Fund



Congratulations to the winners of the 4th annual Performance & Innovation in the SRF Creating Environmental Success (PISCES) Awards. The 2008 PISCES Awards recognize those individual projects that best represent the CWSRF's commitment to innovative and sustainable water quality financing.

Each state program was asked to nominate one or more assistance recipients for PISCES recognition. One recipient from each state was selected to receive the Award. Threshold nomination criteria consist of leadership and innovation in Clean Water Act compliance and financial integrity.

In addition, each borrower had to demonstrate a commitment to one or more of the following criteria:

- Better management practices
- Full-cost pricing
- Efficient water use
- Watershed approach
- Innovation in financing
- Innovative approach to project implementation,
- Creative use of partnerships

The winners will be announced at the national meeting of the Council for Infrastructure Finance Authorities (CIFA) in Providence, Rhode Island in October of 2008. EPA Regional Administrators will present the winning projects with a plaque and certificate at a later date.

The CWSRF program is pleased to share with you the winners of the 2008 PISCES Awards.



REGION 1:

Point O'Woods Association, Town of Old Lyme, Connecticut:

Point O'Woods is a beach community served by an onsite septic systems and a seasonal water system. CWSRF loan assistance financed the construction of a sanitary sewer system and a year-round water distribution system. This combined water and sewer project is being completed under one construction contract, reducing administrative costs and DWSRF construction costs, since much of the trench work is covered by CWSRF funds. This project provides an excellent example of neighboring communities working together with state partners to address their wastewater and water needs.

Town of Bucksport, Maine:

Bucksport used a CWSRF loan to construct a combined sewer overflow treatment facility that utilizes an innovative, low-energy swirl concentrator technology to treat wet weather flows to primary level plus disinfection. The new facility is located at the former site of old, derelict buildings that were an eyesore to the community. The land adjacent to the facility now contains a park, a fishing pier, and access to a new waterfront walking path. The combination of energy efficient technology and the multi-use nature of the site provides an outstanding example of an innovative approach to project implementation.

Town of Cohasset, Massachusetts:

Designed to treat stormwater runoff prior to its

entry into the stormwater collection system, this project included the construction of approximately 40 rainfall gardens and a water quality inlet. Together they will help prevent considerable litter, suspended solids, and other contaminants from polluting the local watershed, which is important for protecting Cohasset's drinking water. Funded through a CWSRF loan in combination with a Section 319 Non-point Source Grant, this project is an excellent example of the use of sustainable, low impact development practices and received a Smart Growth Award from Massachusetts in 2006.

Middletown, Rhode Island:

Bailey Brook is the primary feeder stream to Easton's Pond, the main drinking water reservoir for the City of Newport. In order to protect the water quality in Bailey Brook, Middletown used a \$1 million CWSRF loan to purchase forty five acres of an agricultural nursery adjacent to the brook. Once in danger of being developed, the parcel has now been turned into a park. The project's success is in part a result of the dynamic partnership between Middletown, the State of Rhode Island, the City of Newport Water Department, and the Aquidneck Island Land Trust.

Town of Colchester, Vermont:

Colchester received \$450,000 in CWSRF funds to capitalize a homeowner septic system revolving loan fund. The Town's location on the shore of Lake Champlain makes water quality a priority, but plans to extend existing sewer lines were unpopular with residents due to affordability



Rain garden in Cohasset, MA.



concerns. The revolving fund allows Colchester to assist local property owners in repairing and replacing septic tanks without adding a significant financial burden to the community at large. This project demonstrates that a municipality can develop and effectively run a complete financing and regulatory program for individual septic systems.

REGION 2

Rahway Valley Sewerage Authority, New Jersey:

The Rahway Valley Sewerage Authority (RVSA) used a \$110 million CWSRF loan to undertake a comprehensive wastewater treatment plant expansion and upgrade in order to accommodate increased stress on the system caused by wet weather events. Ultimately, RVSA will be able to blend filtered effluent with primary effluent to achieve a composite level of secondary treatment. This will be made possible by modifications to new pumping stations, primary treatment improvements, and a new UV disinfection system.

Rockland County Sewer District No. 1, New York:

Rockland County received an \$80.8 million CWSRF loan to replace septic systems with a new collection system and advanced wastewater treatment plant. Because effluent will be discharged into a water supply that serves millions of downstream users, the District is installing advanced treatment technology that exceeds Clean Water Act requirements. The health of the aquifer and the river are expected to improve dramatically when the plant becomes operational in early 2009.



REGION 3

City of Lewes, Delaware:

Lewes used a CWSRF loan to expand and upgrade its wastewater treatment facility. The expansion was necessary because the average flows entering the facility were approaching treatment capacity. The plant now removes an additional 7,000 pounds of pollutants per month from the effluent stream. The improved facility reflects the city's commitment to environmental stewardship and has created a system that will serve the needs of the Lewes community for years to come.

Town of Easton, Maryland:

This project is designed to cap the Town of Easton's nutrient load discharge to the Chesapeake Bay through a renovation of the existing wastewater system. A \$20.5 million CWSRF loan was used to expand the system's overall capacity and install state-of-the-art enhanced nutrient removal technologies. This project addresses the Town's long-term wastewater needs and exceeds Chesapeake Bay water quality goals.

Schuylkill Valley Sewer Authority, Pennsylvania:

Due to concerns about the high rate of direct discharge of residential sewage and stormwater runoff into local streams, mine shafts, and stripping pits, several southeastern Pennsylvania communities created the Schuylkill Valley Sewer Authority (SVSA) in order to develop a regional solution. The SVSA utilized \$17.6 million in CWSRF funds to build a state-of-the-art wastewater treatment facility. The result is a cost effective, regional solution to the public health risks of direct discharge sewers that provides a long-term solution for wastewater and stormwater treatment in the Schuylkill Valley.

Town of Abingdon, Virginia:

Abingdon used a \$9.8 million CWSRF loan to upgrade and expand the Wolf Creek Water Reclamation Facility. The project expanded the facility's capacity and incorporated advanced treatment. Upgrades included the construction of a special waste handling facility so the plant can receive and treat septic tank wastewater, grease, and other special wastes. The culmination of a decades-long asset management plan, the plant upgrades have provided for the optimization of the existing facility and have resulted in cleaner effluent being released into local waterbodies.

Morgantown Utility Board, West Virginia:

In 2003, the Morgantown Utility Board (MUB) formed West Virginia's first stormwater util-

ity. MUB's priority has been to reduce stream-bank erosion and water quality degradation in two streams in urban watersheds. An existing wetland was reconstructed to improve storm-water detention and natural stream restoration techniques were used to stabilize the streambanks. MUB developed a unique funding strategy for this project that included user fees, reinvestment of Business & Occupation taxes, state grants, and a CWSRF loan, the first loan issued for a storm-water project in West Virginia.

REGION 4

City of Marathon, Florida:

Marathon is utilizing CWSRF funds to implement a comprehensive approach to wastewater management, including the construction of an innovative vacuum wastewater collection system. Because the vacuum collection system is water tight, the trench for the collection system will be used as an exfiltration treatment system for stormwater. GIS mapping of the wastewater/stormwater system is being done in conjunction with construction. Once completed, the City will use GIS asset mapping data to help develop an asset management system.

City of Gainesville, Georgia:

As part of a watershed-wide water quality plan designed to protect northern Georgia's drinking water sources, Gainesville used CWSRF funds to expand two water reclamation facilities. By combining biological activated sludge treatment and energy efficient membrane filtration for enhanced nutrient removal, the plants will reduce the pollutant load to the local watershed by more than 1.5 million pounds annually.

Brunswick County, North Carolina:

Brunswick County used a \$30 million CWSRF loan to construct a tertiary treatment water reclamation facility and create a regional wastewater collection and treatment system. The regional wastewater system produces reuse quality water, which is then applied to silvicultural areas and several local golf courses. The project utilizes a regional management approach to encouraging efficient water use and protecting North Carolina's coastal environments.

Lexington County, South Carolina:

Lexington County received a CWSRF loan to replace 26 septic tanks in a local subdivision with a public sewer connection in the Town of Chapin. The tanks had been deemed inadequate due to high water tables and improper maintenance. By replacing these septic tanks Lexington County addressed potential health and groundwater



contamination hazards. This project was done in conjunction with a DWSRF project to connect the subdivision's failing drinking water system to Chapin's system.

REGION 5

Fox Metro Water Reclamation District, Illinois:

This project used CWSRF funds for wastewater treatment plant process improvements. These include adding a sludge-to-sludge heat exchange system to reduce energy costs and the installation of a sludge dryer to reduce the volume of dewatered sludge produced. These improvements eliminated the need to construct additional sludge storage facilities and increased the efficiency of plant operations.

City of Peru, Indiana:

Using CWSRF funds, the City of Peru upgraded its wastewater treatment plant to convert the existing anaerobic digestion process to an aerobic/anaerobic sequencing digestion and sludge-holding process. This innovative project has doubled the average daily capacity of the plant and increased peak flow fourfold, while significantly reducing the amount of sludge produced. This has reduced operational costs as Peru spends less money to pump, haul, and land apply sludge. The sludge that is now produced is cleaner and better for the environment due to its reduced levels of nitrogen.

Delhi Charter Township, Michigan:

Delhi Charter Township received a \$9.85 million CWSRF loan to increase their wastewater treatment plant's capacity for processing biosolids. This project uses innovative technologies to cost



effectively produce biosolids suitable for direct land application. The biosolids will be stabilized through a process that produces methane gas, and the captured methane will fuel two micro-turbines that can generate up to 60 kilowatts of electrical energy. This renewable source of onsite electricity and heat production will save the Township approximately \$30,000 each year.

City of Le Center, Minnesota:

Le Center received a CWSRF loan to address increasing industrial flow and phosphorus loads in wastewater by expanding its treatment facility. The City made a landmark deal with the largest local producer of industrial flow, which agreed to install an oil/water separator and monitoring station if the City increased plant capacity to treat the additional load. This partnership provided a cost effective solution for the treatment of waste and helped move the City to a full-cost wastewater fee model.

Madison Metropolitan Sewerage District, Wisconsin:

The District used CWSRF funds to construct an effluent force main to return treated wastewater to the Sugar River basin to augment stream flows. The \$5 million project also involved the construction of public bike paths along the route of the force main, allowing dual use of the easement. This project utilized a watershed-based approach to replenish the watershed and provide additional recreational benefits to Madison residents.

REGION 6

City of Beebe, Arkansas:

Beebe used a CWSRF loan to restructure its wastewater system, replacing several pump stations with gravity lines. The resulting drop in operation and maintenance costs allowed the system to implement a full-cost pricing structure. These improvements demonstrate Beebe's strong commitment to best management practices and cost-efficient wastewater systems.

Lafourche Sewer District No. 1, Louisiana:

This project will increase the local wastewater system's capacity and upgrade the plant to meet advanced treatment criteria. The upgrades will improve the water quality of the stream and allow for recreation, fish and wildlife propagation, drinking water supply, and agricultural uses in and along the waterway. The District is also planning to implement a full-cost wastewater fee plan.

Grand Lake Public Works Authority, Oklahoma:

This project was implemented due to water quality concerns around Oklahoma's Grand Lake, which is surrounded by state parks and is one of the largest fresh water lakes in the U.S. A \$3.5 million CWSRF loan was used to build a new facility with secondary treatment capacity to replace a large number of residential septic systems. Water from the new facility is used to irrigate the local golf course, which has dramatically reduced the amount of commercial fertilizer the golf course uses.

City of Eagle Pass, Texas:

As part of a regional water and wastewater plan, Eagle Pass expanded its treatment capacity in order to treat waste from previously un-served areas of Maverick County. Funded with an \$11.1 million CWSRF loan, the project included the construction of sewage collection systems in Colonias communities along the Texas-Mexico border that are often without water and sewage facilities. A water reuse program has also been implemented to save water used in irrigation of municipal areas. The result is improved public health and a decrease in operation and maintenance costs despite system expansion.

REGION 7

Charles City, Iowa:

Charles City received a CWSRF loan for the expansion and upgrade of its existing water pollution control plant to address capacity needs. The improvements were completed early and were \$400,000 under budget. Charles City, though only 7,800 in population, completes at least \$50,000 in replacement of sanitary sewer lines every other year. The City does an excellent job of preparing for regulatory requirements by planning for and initiating system improvements before they are required to do so.

City of Hutchinson, Kansas:

Hutchinson has committed to improving groundwater quality by constructing a facility to pump water from the local aquifer and treat it. A \$10 million CWSRF loan was used to fund the numerous components of the water treatment facility associated with groundwater contaminant removal and wastewater disposal. This included the construction of 25,000 feet of pipeline to convey groundwater from extraction wells to the treatment plant, and to move wastewater from the plant to disposal wells. Hutchinson combined

both CWSRF and DWSRF funds with local financing to ensure this project contributes to their watershed management goals.

REGION 8

City of Sioux Falls, South Dakota:

Sioux Falls was the first City to receive funding through South Dakota's new CWSRF nonpoint source incentive rate program, which rewards wastewater and stormwater projects with a lower interest rate for including a nonpoint source component. CWSRF loans totaling approximately \$57 million funded storm sewer improvements and the construction of a new sanitary sewer, while simultaneously contributing over \$4 million to cost share best management practices for the Central Big Sioux River Watershed Restoration project.

Town of Alpine, Wyoming:

The Town of Alpine utilized a CWSRF loan to replace the existing wastewater treatment plant with a new, larger wastewater treatment facility and a new sewage collection system. The project addressed concerns with the inadequate construction and failure of several local septic systems. The result is improved groundwater and surface water protection.

REGION 9

Town of Prescott Valley, Arizona:

Prescott Valley converted underused oxidation ditches at its wastewater treatment plant to activated sludge processors and replaced existing sand filters with cloth disk filters, thereby increasing the plant's capacity and increasing the quality of the effluent. The Town has begun to sell this effluent at auction, and the proceeds will be used to finance a drinking water pipeline project.

Orange County Water District, California:

The District is using \$162.9 million in CWSRF funds to implement a groundwater replenishment system, the largest indirect potable reuse project of its kind in the world. Highly treated wastewater will be pumped to recharge basins where it will percolate into the ground and blend with the County's other sources of groundwater. This innovative project will improve the quality and reliability of the Orange County water while increasing supply.

County of Hawaii, Hawaii:

The County used a CWSRF loan as match for a Federal SAAP grant awarded for the protection



Orange County Water District's Groundwater Replenishment System.

of groundwater and surface water resources. The project replaced existing cesspools at publicly owned facilities with onsite wastewater systems. County facilitation allowed the project to address the needs of multiple partners including several small, private wastewater systems that otherwise would have found it difficult to obtain SRF funding.

REGION 10

Eastern Idaho Regional Wastewater Authority, Idaho:

Designed to protect groundwater in the Upper Snake River Plain Aquifer, this project connects four cities in two counties to a modern wastewater treatment facility. The multi-jurisdictional effort included the creation of a long-range plan to coordinate development and to protect groundwater and surface water. Effluent from the treatment facility will be supplied to a local manufacturing company for reuse, and unused effluent will be treated so as to allow for discharge into the Snake River.

Community of Rieth, Umatilla County, Oregon:

A community of 150 people, Rieth's economic viability and environmental integrity were being threatened by the lack of wastewater treatment facilities in the community. A \$330,000 CWSRF loan was used to fund the construction of a new collection system, pump and sewer line that now moves Rieth's wastewater to the nearby City of Pendleton's sewer system. The project has significantly improved quality of life for the residents of Rieth.



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Office of Water EPA 832-F-08-062 October 2008 • www.epa.gov/owm/cwfinance/cwsrf