



State of New York  
Department of Health

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**REPORT TO THE GOVERNOR:**

**AN ASSESSMENT OF THE PUBLIC WATER  
SYSTEM CAPACITY DEVELOPMENT PROGRAM**

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September 2011

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## Executive Summary

In the 1996 Amendments to the Federal Safe Drinking Water Act (SDWA), Congress mandated that states develop capacity development strategies to enhance the ability of public water systems to provide safe drinking water. These strategies are aimed at helping water systems acquire and/or maintain the technical, managerial, and financial abilities needed to properly operate, manage, and finance their systems. With the assistance of a stakeholder group of State agencies, public water system owners, technical assistance providers, local government representatives, and environmental groups, the New York State Department of Health (the Department) issued their Capacity Development Strategy Report on August 6, 2000.

Each state's strategy had to include provisions for new water systems, for water systems applying for funding within the Drinking Water State Revolving Fund (DWSRF) program, and for existing water systems. Under this program, new and existing water systems are to be evaluated for their technical, managerial, and financial capabilities. The ultimate goal of New York's Capacity Development Program is to improve the capabilities of the approximately 9,000 public water systems throughout the state. Some of the key achievements made toward meeting this goal during this reporting period (FFY 2008 through 2010) include:

- Providing over \$1 billion of financing (including short-term loans, long-term loans, and grants) to public water systems under the New York State Drinking Water Revolving Fund (DWSRF) program;
- Providing, through a new DWSRF financing program (SRF Bond Guarantee Program), access to preferred market rate financing for public water system projects that are not eligible for grants or interest subsidies;
- Selecting thirty projects to receive American Recovery and Reinvestment Act (ARRA) funds to finance water system improvement projects. The total ARRA funding capacity was approximately \$141.4 million;
- Conducting over 1,360 on-site visits to provide direct assistance to approximately 628 public water system;
- Conducting over 20,000 sanitary survey inspections of public water systems;
- Conducting over 50 security inspections of public water systems as an effort to increase the system's level of security and emergency preparedness;
- Providing or sponsoring direct training to over 1,600 water system operators at no cost to the operator; and
- Providing \$17.5 million to assist local health departments to enhance their drinking water programs.

As a result of these achievements, during FFY 2010, 1,476 public water systems demonstrated improvements in system capacity relative to the previous year; and 103 public water systems were no longer considered to be in “critical” need of capacity development.

The Capacity Development Program, along with other state resources, has helped public water systems in New York acquire and maintain the technical, managerial and financial capabilities necessary to properly operate, manage, and finance their systems. Although the goals of the Capacity Development Program are being achieved, the Department and its partners, including public water systems, must be vigilant in maintaining the capacity of public water systems. Sufficient technical assistance, owner and operator training, and financial assistance, particularly for economically distressed communities, must continue to be made available.

The 1996 SDWA Amendments require that each state submit a report to the Governor assessing the efficacy of its Capacity Development Strategy and documenting the progress made towards improving the technical, managerial, and financial capabilities of its public water systems. This report satisfies the statutory requirements of the SDWA and assures that New York will not be penalized (i.e., withholding twenty percent of the DWSRF capitalization grant) for failure to comply.

## Glossary of Terms

**Community water system (CWS)** is a public water system with at least five service connections used by year-round residents or that regularly serves at least 25 year-round residents.

**Drinking Water State Revolving Loan Fund (DWSRF)** was created in 1996 as a result of New York State's enactment of Chapter 413 of the Laws of 1996 (Clean Water/Clean Air Bond Act) and passage of the 1996 Amendments to the Safe Drinking Water Act by the U.S. Congress.

**New York State Department of Health (Department)** is the agency responsible for administering the drinking water program in the state.

**Noncommunity water system (NCWS)** is a public water system that provides water to people in places other than their residences, such as restaurants, hotels/motels, campgrounds, and parks.

**Nontransient noncommunity water system (NTNCWS)** is a public water system that does not serve a resident population but serves at least 25 of the same persons, four hours or more per day, for four or more days per week, for 26 or more weeks, such as schools, offices and day care facilities.

**Public water system (PWS)** is a community, noncommunity, or nontransient noncommunity water system that provides piped water to the public for human consumption. The system must have at least five service connections or regularly serve an average of at least 25 individuals daily for at least 60 days out of the year.

**Safe Drinking Water Act (SDWA)** is the federal law passed by the U.S. Congress in 1974 and amended in 1986 and 1996, which authorizes the United States Environmental Protection Agency and the states to oversee public water systems and set standards for drinking water to protect public health.

**Significant noncomplier (SNC)** is a public water system that persistently violates drinking water standards specifically defined in USEPA policy.

**Technical Assistance (TA) Provider** is a person, organization or group who assists small public water systems with activities such as troubleshooting operational issues, conducting leak detection, developing emergency response plans, conducting security and vulnerability assessments, collecting water samples for analysis, and other tasks to help improve operations and achieve compliance with drinking water regulations.

**United States Environmental Protection Agency (USEPA)** is the federal agency responsible for overseeing the state drinking water programs.

## **1.0 Introduction**

The objective of the 1996 Safe Drinking Water Act Amendments (Amendments) is to ensure that public water systems provide safe drinking water to the public. The Amendments seek to prevent compliance problems and associated health risks by ensuring that public water systems have the capability to produce safe drinking water now and in the future. To achieve these goals, the Amendments include provisions for several prevention programs – one of which is the Capacity Development Program.

Water system capacity is the ability to plan for, achieve, and maintain compliance with all applicable drinking water standards. There are three components to capacity: technical, managerial, and financial. Technical capacity refers to a water system's ability to operate and maintain its infrastructure. Managerial capacity refers to the expertise of the water system's personnel to administer the system's overall operations. Financial capacity refers to the financial resources and fiscal management that support the cost of operating the water system. Adequate capability in all three areas is necessary for the successful operation of a public water system.

Capacity development is the process by which water systems acquire, maintain, and build upon their technical, managerial, and financial capabilities to enable them to consistently provide safe drinking water to their customers in a reliable and cost-effective manner. The capacity development program provides a framework for state agencies, local governments, stakeholder groups or organizations, water systems, and the public to ensure that drinking water systems acquire and maintain the technical, managerial and financial capacity needed to achieve compliance with applicable state and federal drinking water regulations.

The 1996 SDWA Amendments also require that each state submit a report to the Governor assessing the efficacy of its Capacity Development Strategy and documenting the progress made towards improving the technical, managerial, and financial capabilities of its public water systems. The purpose of this report is to provide an assessment of the capacity development program in New York and the statewide strategy for assisting public water systems in need. The report highlights the progress made toward improving the technical, managerial, and financial capabilities of public water systems in New York as a result of the Department's Capacity Development Program. This report satisfies the statutory requirements of the SDWA and assures that New York will not be penalized (i.e., withholding twenty percent of the DWSRF capitalization grant) for failure to comply.

## **2.0 Capacity Development Provisions in the Safe Drinking Water Act**

The Amendments included three capacity development provisions.

1. All new community water systems and all new nontransient noncommunity water systems that begin operation after October 1, 1999, must first demonstrate that they possess adequate capacity.
2. States are prohibited from providing Drinking Water State Revolving Fund (DWSRF) assistance to public water systems that lack adequate capacity, unless that assistance is directly related to improving the system's technical, managerial, or financial capacity.
3. States must develop and implement a strategy to assist existing public water systems in acquiring and maintaining the necessary capacity to remain a viable system over the long term.

## **2.1 New Systems Provision**

Section 1420(a) of the Amendments, the new systems provision, applies to all new community water systems (CWSs) and all new nontransient noncommunity water systems (NTNCWSs) that begin operations after October 1, 1999. New York State was required to demonstrate to the United States Environmental Protection Agency (USEPA) that it had the legal authority to ensure that all new CWSs and all new NTNCWSs had the technical, managerial, and financial capacity to comply with all applicable state and federal drinking water regulations. On February 26, 1999 the USEPA determined that New York State met the guidance and statutory requirements under Section 1420(a). On October 1, 1999, New York State began implementing the new systems provision of the Amendments.

To date, the Department has submitted eleven annual new systems progress reports to the USEPA. In those reports, the Department documented that the evaluation of new systems is ongoing and addresses the required capacity determinations for new water systems. Since 2004, the new systems progress report has been included in the overall program implementation report submittal entitled, "*Capacity Development Program Implementation Report.*" The Implementation Report must be submitted to the USEPA annually.

## **2.2 DWSRF Applicants**

Section 1452(a)(3) of the Amendments applies to those public water systems that seek assistance from the DWSRF. Under this provision, states are prohibited from providing DWSRF assistance to a public water system that lacks the technical, managerial, and financial capability to ensure compliance with the Amendments or that is in significant noncompliance with applicable state and federal drinking water regulations. However, states are allowed to provide DWSRF assistance to such a public water system if the use of the assistance will assure compliance, or if the owner or operator of the system agrees to undertake feasible and appropriate changes to acquire and maintain the system's technical, managerial, and financial capabilities over the long term.

To comply with the DWSRF provision of the SDWA Amendments, the Department and the New York State Environmental Facilities Corporation (EFC) conduct capacity assessments of all DWSRF applicants. New York State's capacity development review criteria for DWSRF applicants are described in each year's Intended Use Plan. An annual summary of the results of capacity assessments conducted on those systems seeking funding under the DWSRF is included in the Intended Use Plan, available on-line at <http://www.nyhealth.gov/environmental/water/drinking/water.htm>.

### **2.2.1 Technical Capacity Assessment**

To assure adequate technical capacity, the applicant must demonstrate adequacy of source water, adequacy of infrastructure and technical knowledge. The Department reviews central office and local office records to assure that the system is being properly operated and maintained. The water system must not have outstanding drinking water compliance problems unless the project is aimed at correcting those problems. The engineering report and plans and specifications for the proposed project are evaluated to insure that the system has a reliable source for its drinking water and that it is adequately protected; that the project will maintain system compliance; and that the education, experience, and technical skills and capabilities of the system operator are appropriate for that system.

### **2.2.2 Managerial Capacity Assessment**

To assure adequate managerial capacity, the water system must have clear ownership identity and be appropriately staffed by personnel with expertise to administer overall water system policies and operations. The Department reviews the applicant's managerial capacity to assure that management is involved in the day to day supervision of the water system, is aware and responsive to all required regulations, is available to respond to emergencies, is capable of identifying and addressing all necessary capital improvements, is responsive to their customers and is capable of keeping accurate records and assures financial viability. The water system must have a qualified water operator in accordance with the State's existing Operator Certification Program.

### **2.2.3 Financial Capacity Assessment**

To assure adequate financial capacity, the applicant must have sufficient rates, charges and revenues to cover necessary costs, demonstrate credit worthiness and fiscal condition in accordance with EFC criteria. The EFC reviews the applicant's financial capacity during the application process to determine financial viability before awarding financial assistance. The EFC's review includes, but is not limited to, the project budget, municipal bond resolution(s), annual financial reports to the Office of the State Comptroller, and other financial information to assure adequate financial capacity of the applicant.

#### **2.2.4 Systems with Inadequate Capacity**

For all systems that seek funding under the DWSRF, the Department reviews any history of violations, outstanding compliance problems, reported source contamination or inadequacies, treatment failures, needs survey data, operations and maintenance issues, and operator and owner coverage to determine whether a system lacks adequate capacity. A system that requires improvements to obtain adequate capacity can apply to the DWSRF provided the improvements will ensure compliance and render the water system viable. Using the procedures outlined in Sections 2.2.1, 2.2.2, and 2.2.3 to evaluate the system's technical, managerial, and financial capacity, the Department assesses whether DWSRF assistance will help to ensure compliance. In addition, the Department consults with the local health department, which provides the daily oversight and regulation of the water system, to make this assessment.

### **2.3 Existing Systems Provision**

Section 1420(c)(2) of the Amendments requires that New York State develop and implement a capacity development strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. With the assistance of a stakeholders group of state agencies, public water suppliers, technical assistance providers, local government representatives, and environmental groups, in 1999 and 2000, the Department developed a comprehensive Capacity Development Strategy to assist public water systems. The Strategy considered:

- identifying and prioritizing public water systems most in need of improving their technical, managerial, and financial capabilities;
- identifying the institutional, regulatory, financial, tax, or legal factors that encourage or impair capacity development at the federal, state, or local level;
- describing how the State will use the authority and resources of the Amendments to assist public water systems in need;
- establishing a baseline measure of public water system capacity and a means to measure improvements in capacity of public water systems; and
- identifying those persons with an interest in capacity development.

The Department submitted a Capacity Development Program Strategy Report: Improving the Technical, Managerial and Financial Capabilities of Public Water Systems in New York in August 2000. On September 29, 2000, the USEPA determined that the New York State capacity development strategy met the guidance and statutory requirements under Section 1420(c) of the Amendments. On October 1, 2000, the

Department began implementing the existing systems provisions of the Capacity Development Strategy.

To date, the Department has submitted ten annual “Capacity Development Program Implementation Report”(s) to the USEPA. The Implementation Reports documents that the Department is implementing a fully functioning existing water system plan according to its capacity development strategy.

### **3.0 Assessment of Capacity Development Strategy**

#### **3.1 Objectives**

In the Capacity Development Program Strategy Report, the Department identified and indicated that it would undertake the following activities:

- identify and prioritize those public water systems that need assistance with their technical, managerial, and/or financial capacity;
- establish a baseline measure of capacity for public water systems;
- establish a method of measuring improvements in system capacity;
- provide direct assistance to public water systems in need;
- identify and attempt to overcome a prioritized number of barriers to capacity development;
- utilize other available resources in New York State to assist public water systems with their technical, managerial, and/or financial capacity; and
- continue to involve the public in the capacity development of public water systems.

#### **3.2 Accomplishments**

The Department has conducted a number of activities to fulfill the objectives specified in the Capacity Development Strategy Report. Below is a summary of these activities.

- Initially, to identify and prioritize public water systems that need assistance with technical, managerial, and/or financial capacity, local health department staff were requested to identify public water systems in need and to provide a list of those public water systems to the Department’s capacity development

coordinator. Examples of systems in need of capacity include those with deteriorating infrastructure, inadequate source water quality and quantity, or lack of adequate rates to finance capital improvements or system operation. Local health department staff provided the list of systems in need and the capacity development coordinator prioritized the list and coordinated follow-up action such as coordinating technical assistance or training efforts, or providing information to the water system.

Currently, the Department identifies systems in need of capacity development utilizing a data management system, along with direct input from local health department staff. The data management system is able to prioritize systems in need of capacity development by evaluating the system against specific criteria established in the Capacity Development Strategy Report. Local health department staff review the prioritized list and provide additional information regarding the specific type of assistance needed. In addition, the local health department staff may request that particular systems be classified at a higher or lower priority based on their intimate knowledge of the systems within their jurisdictions.

- To establish the initial baseline measure of capacity for public water systems, local health department staff reviewed public water systems identified to be in need against the capacity development evaluation criteria and provided this data to the Department's capacity development coordinator. The evaluation criteria along with compliance information, sanitary survey information, and/or comprehensive performance evaluation information were used to establish the initial baseline measure of capacity for public water systems.

Enhancements to the initial baseline were made as a result of improved methods of collecting and storing data related to public water system operations and new data reported by the local health departments. As discussed previously, a data management system was created to prioritize systems in need of capacity development by evaluating each system against the capacity development criteria.

- To measure improvements in the capacity of public water systems, the data management system determines a score for each individual public water system based on the capacity development evaluation criteria. The capacity score for each system can be compared from year to year to determine the improvements in system capacity (see Section 4 for specific details). In addition, local health department staff provide feedback on particular systems in need of assistance as another way to track progress in system capacity development.
- Department staff, in conjunction with the local health department staff, provide direct technical assistance to systems in need through ongoing sanitary surveys, comprehensive performance evaluations, security

inspections, and direct technical advice. In addition, prior to taking enforcement action on a public water system that persistently fails to comply with drinking water regulations, the Department engage in activities designed to assist the troubled system to come into compliance. These activities include engineering support, training, and establishing compliance schedules. Also, the Department has contracted with the New York Rural Water Association to provide technical assistance to small public water systems (see Section 4 for specific details).

- There were 165 factors identified in the Capacity Development Program Strategy Report that impair capacity development in New York State. Since it was not feasible to address each barrier, a prioritized number of barriers were selected to be addressed.

Since implementing the capacity development strategy, the Department has addressed the following barriers that impair capacity development:

- lack of formal coordination among funding organizations;
- lack of knowledge at the community level regarding capacity development issues, community water systems, and how the capacity development of a water system ties into a community's overall well being;
- lack of up-front money for water project engineering and planning purposes;
- lack of emergency preparedness plans;
- lack of a statewide well registration program and a certification program for well drillers;
- cost of training and certification of operators;
- lack of knowledge of source and land use around the source;
- public water system's lack of awareness of applicable drinking water regulations;
- public water system's lack of ability to keep up with regulatory changes;
- lack of adequate training for operators;
- lack of knowledge of the availability of loan and grant opportunities;
- numerous rules and regulations becoming burdensome to small governments;
- difficulty for staff at public water systems in keeping up with continuing regulatory changes mandated at the federal level. Numerous regulatory changes can be financially and technically burdensome to public water systems, particularly small water systems;
- lack of knowledge of local boards;
- local board failure to understand importance of training and proper staffing;
- lack of communication between government officials;
- lack of adequate staffing in local health departments to maintain oversight of public water systems in their jurisdiction; and

- lack of thorough sanitary inspections;

Addressing many of the barriers listed above involves ongoing efforts by the Department and its partners. For example, to ease the burden of numerous drinking water rules and regulations on small local municipalities and small private water systems, the Department sponsors and provides training throughout the state to water system operators at no cost to the operators. Since the last triennial Report to the Governor, training was provided to over 1,600 operators. In all, 33 training sessions were conducted on the following topics:

- Protecting Your Water – Cross Connection Control (11 sessions);
- Small Water System Management (11 sessions); and
- Small Water System Energy Efficiency and Management (11 sessions).

Another ongoing effort to address barriers to capacity development is training of Department and local health department staff. The difficulty of staff keeping up with regulatory changes was identified as a barrier to capacity development at the state and local levels. To address the training needs of the Department and local health department staff, the Department implemented a professional staff development program in which staff members are able to attend various training courses or workshops that provide continuing education credits for professional licenses. Through 2010, approximately 1,021 professional staff received training. In addition, the Department and/or local health departments provided or sponsored training for staff. Some of the topics for which training has been conducted include the following:

- Total Coliform Rule
- Stage 2 Disinfectant/Disinfection Byproducts Rule
- Violations of Stage 2 Disinfection Byproducts Rule
- Long Term 2 Enhanced Surface Water Treatment Rule
- Filter Backwash Recycling Rule
- Groundwater Rule
- Arsenic Rule
- Water Treatment Technologies
- Operator Safety/National Institute Management System
- Water System Security
- Sampling Issues and Laboratory Certification
- Water Valves
- Source Water Protection
- Disinfection By-Products
- Sanitary Surveys of Ground Water and Surface Water Systems
- Concepts of Public Water Supply
- Realty Subdivision Laws, Regulations, and Design Plan Submittals
- Plan Review for Water Improvement Projects

- UV Disinfection
- Cross Connections
- Community Water Fluoridation
- Identification of Ground Water Sources Under the Direct Influence of Surface Water (GWUDI)

The lack of knowledge of the availability of loan and grant opportunities was identified as a financial barrier to capacity development. The New York State Water & Sewer Infrastructure Co-funding Initiative was created to address this barrier. In the past the New York State Water & Sewer Infrastructure Co-funding Initiative provided free workshops throughout the state that provided detailed information on available government funding and application processes and procedures. A co-funding committee continues to meet on a monthly basis to discuss issues related to sources of funding for water projects. In addition, the New York State Water & Sewer Infrastructure Co-funding Initiative maintains a website that provides detailed information on various funding opportunities for water and sewer projects. The free co-funding workshops may be continued in the future depending on the availability of funds.

The Department's Drinking Water Enhancement (DWE) Program is another example of an ongoing effort to address several other barriers to capacity development. These barriers include lack of staffing, difficulty enforcing regulations, and lack of thorough sanitary inspections. The DWE Program provides grants to local health departments. The 2007-08 and 2008-09 state budgets included \$6 million, and the 2009-10 state budget included \$5.5 million for DWE grants. This funding has allowed local health departments to add new staff or to maintain existing staff that assist in enforcing regulations, conducting sanitary surveys, and improving the technical, managerial, and financial capabilities of New York's public water systems.

- The Department utilizes other available resources in New York State to assist public water systems with their capacity needs. Various other government agencies within the State, as well as other organizations that partner with the Department on water supply issues, have programs, services, tools, and other available resources that can be used to assist public water systems to acquire, maintain, and build upon their technical, managerial, and financial capabilities. In addition to the Department of Health, the New York State Department of State, New York State Environmental Facilities Corporation, New York State Public Service Commission, New York State Department of Environmental Conservation, New York Homes and Community Renewal and the Office of Community Renewal, New York Water Environment Association, New York Association of Towns, New York Conference of Mayors, New York State Association of Regional Councils, New York Rural Water Association, New York Section of the American Water Works Association, Resources for Communities and People (RCAP) Solutions, Tug

Hill Commission, and United States Department of Agriculture Rural Development provide education and training to water system owners, operators, and managers; direct technical, managerial, and/or financial assistance to public water systems; direct community assistance, training, and education to elected officials; and provide funding in the form of grants and loans to eligible systems in need.

- To involve the public in the capacity development of public water systems, the statewide capacity development strategy is promoted through the education and training of water system owners, managers and operators, government officials, other water system professionals, and consumers about the principles and goals of the program. This public outreach includes attending and participating in formal and informal meetings, making speaking engagements, and offering training or presentations to groups and individuals with an interest in the capacity development of public water systems. In addition, the Department posts relevant capacity development information on the Department's web site.

#### **4.0 Improving the Capabilities of Public Water Systems in New York**

The Department's Capacity Development Program is improving the operations of public water systems throughout the state, thus protecting the public health of all New Yorkers. Below is a summary of a number of specific achievements made towards implementing a successful capacity development program.

- The Department is a partner in the New York Water and Sewer Infrastructure Co-funding Initiative. The Co-funding Initiative was recommended in the Capacity Development Program Strategy Report and addresses key recommendations of the January 2001 report by New York State's Quality Communities Interagency Task Force entitled, "State and Local Governments Partnering for a Better New York." This initiative brings together those state and federal agencies that provide funding for drinking water and sewer projects to ensure optimum funding potential and assistance to New York's communities.
- The Department continues to provide a short-term financing program within its successful DWSRF program. The short-term financing program provides short-term interest free financing of up to three years in duration to recipients that are developing projects eligible for long-term DWSRF financing. In the three years since submitting the previous Report to the Governor (FFY 2008, FFY 2009, and FFY 2010) 55 short-term loans totaling \$276,287,259 were provided to public water systems under the short-term financing program. During the same period, the Department also provided 90 long-term loans totaling \$681,130,505 and 35 grants totaling \$47,695,631. Overall, total

financing and assistance of \$1,005,113,395 was provided to public water systems under the DWSRF program.

- The Department and the New York State Environmental Facilities Corporation created a new financing program called the State Revolving Fund (SRF) Bond Guarantee Program. The program offers eligible DWSRF recipients with project scores below the funding line on the Project Readiness List in the Intended Use Plan access to a low cost financing alternative that does not include the traditional interest subsidy of other types of DWSRF financing. During FFY 2010, there were approximately 570 projects listed below the funding line on the Project Readiness List in the Intended Use Plan.
- During FFY 2009, the American Recovery and Reinvestment Act of 2009 (ARRA) was passed by Congress and signed by the President as a means of stimulating the American economy. New York State received approximately \$86.8 million in ARRA funds for the DWSRF program. The DWSRF program is administered jointly by the NYSDOH and the New York State Environmental Facilities Corporation. Thirty projects were selected to receive ARRA funds to finance water system improvement projects or to finance projects that incorporate green infrastructure, energy efficiency, water efficiency, or other environmentally innovative activity. Approximately \$58.6 million was committed as ARRA principal forgiveness (i.e., a loan for which repayment of the principal is not required), \$12.9 million was committed as ARRA grants, approximately \$10 million was provided as ARRA financing (i.e., loan), which was leveraged to \$30 million, and approximately \$5.2 million was committed for set-asides for program administration and small system technical assistance. The total exceeds \$86.8 million due to the leveraging capabilities of the DWSRF program. Combined with direct financing and additional subsidies, the total financing capacity from ARRA funds was approximately \$141.4 million.
- The Department discourages the formation of new public water systems that lack technical, managerial, and/or financial capacity through a process of criteria and regulations. During FFY 2008 through FFY 2010, the Department approved 94 new community and nontransient, noncommunity public water systems to proceed with system development.
- During FFY 2008, FFY 2009, and FFY 2010, the Department determined that, 31 DWSRF applicants possessed adequate technical, managerial, and financial capacity and were thus eligible to receive DWSRF assistance. None of the DWSRF applicants during this period were determined to have lacked capacity and thus were ineligible to receive DWSRF assistance. Fifteen of the 31 applicants that received DWSRF assistance were in significant noncompliance with applicable state and federal drinking water regulations. Providing financing to these applicants helped them achieve compliance by improving their water systems.

- The Department provided technical, managerial, and financial assistance directly to public water systems in need to help them achieve and maintain compliance with applicable state and federal drinking water regulations. As a result of this initiative, during FFY 2010, 1,476 public water systems demonstrated improvements in system capacity relative to the previous year. Also during FFY 2010, 103 public water systems were no longer considered to be in “critical need” of capacity development when compared to the previous year.
  
- Since March, 2005 the NYSDOH has contracted the New York Rural Water Association (NYRWA) for a “circuit rider” assistance program to provide technical assistance to small community water systems and non-community water systems throughout the state. The current contract expires on July 31, 2013. The circuit riders are assigned tasks that include improving the capacity of the public water systems identified as being in need of capacity development. Through FFY 2010, the circuit riders conducted over 1,360 on-site visits to provide direct assistance to approximately 628 public water systems. The assistance provided included, but was not limited to:
  - Assisting small public water systems (PWSs) with compliance;
  - Identifying, evaluating, and troubleshooting PWS problems and violations;
  - Educating water operators, municipal officers, elected officials, and system owners;
  - Providing necessary training (on-site or in class rooms);
  - Assisting with the development of Emergency Response Plans;
  - Assisting small PWSs with security and vulnerability assessments;
  - Assisting small PWSs in developing rate structures;
  - Assisting PWSs with leak detection programs;
  - Collecting water samples for analysis;
  - Evaluating PWSs current operating procedures;
  - Locating funding and assisting with funding applications; and
  - Coordinating activities with other technical assistance providers.
  
- The Department continues to work on increasing the level of security and emergency preparedness at public water systems. These efforts have included training of water system personnel; reviewing vulnerability assessments and preparing emergency response plans; notifying systems of potential and real threats; developing response protocols; and providing financial assistance to systems. The Department also conducts on-site security inspections of public water systems. Through FFY 2010, over 50 security inspections have been conducted.

- In 2001, the Department amended the Operator Certification regulations to ensure that all water system operators are properly certified and have sufficient technical and managerial training and experience to operate their public water systems. Since submitting the previous Report to the Governor in 2008, the Department has certified over 1,000 new operators and has renewed the certification of over 5,000 operators.
- The Department continues to sponsor and/or provide training to water system operators at no cost to the operators. As discussed in Section 3.0, the Department conducted 33 training sessions throughout the state to over 1,600 operators.
- The Department's Comprehensive Performance Evaluation Program reviews and evaluates the capabilities of existing drinking water treatment facilities to determine if the facilities meet current standards and performance goals. During the FFY 2008 through FFY 2010, the Department completed 8 comprehensive performance evaluations that included detailed evaluation reports, recommendations, and follow-up meetings with the community.
  - The Department's Sanitary Survey Program provides for complete and detailed assessments of public water system physical plants, maintenance and operations, and administrative abilities. One of the goals of this ongoing program is to review and evaluate the capabilities of existing facilities to determine if they can assure compliance with current and future drinking water standards and regulations. During FFY 2008 through FFY 2010, approximately 20,000 sanitary surveys were completed.
  - The Department takes enforcement actions against public water systems that persistently fail to comply with state and federal drinking water regulations and demonstrate a lack of capacity. Prior to taking enforcement action against a public water system that persistently fails to comply with state and federal drinking water regulations, the Department engages in activities designed to assist the troubled system to come into compliance. These activities include engineering support, training, and establishing compliance schedules.
- The 2007-08 and 2008-09 state budgets each included \$6 million, and the 2009-10 state budget included \$5.5 million to assist local health departments to maintain and enhance their drinking water programs. This funding has allowed local health departments to add new staff or to maintain existing staff that assist in enforcing regulations, conducting sanitary surveys, and improving the technical, managerial, and financial capabilities of New York's public water systems.

## **5.0 Challenges Remain for New York's Public Water Systems**

There are many factors that impair the capacity development of public water systems. Since implementing the statewide capacity development strategy, some of these barriers have been overcome (see section 3.2). In subsequent years, the Department will continue to meet the challenges faced by New York's public water systems and assure the safety of the State's public drinking water. The Department and its partners, including public water systems, will need to be ever-vigilant in maintaining the necessary technical, managerial, and financial capabilities of public water systems, especially smaller systems. Sufficient technical assistance, owner and operator training, and financial assistance, particularly for economically distressed communities, must continue to be made available.

## **5.1 Long-term Challenges**

Public water systems continually install, upgrade, and replace the infrastructure on which the public depends for safe drinking water. The cost of infrastructure investment is borne primarily by water system customers in the form of water rates. However, general revenues from federal, state, and local governments may supplement revenues from users. For major capital improvements, long-term financing is often critical; it allows communities to spread out the cost of improvements over the expected life of a project, thereby allocating the costs to those customers who benefit from the improvements. Despite the importance of these projects for protecting public health, many public water systems may encounter difficulties in obtaining affordable financing for such improvements. The DWSRF Program, along with other federal, state, and local programs can provide financing for improvements necessary to protect public health and comply with drinking water regulations. However, a significant gap still remains between the necessary capital improvements and the amount of available financing.

For most public water systems in New York, there is no mandated review of the rates that systems charge customers and no means to enforce appropriate rate structures. A public water system that is unable to raise the necessary revenues to support its operating expenses, risks its ability to produce safe drinking water. Legislation, regulations, and/or incentives that will encourage public water systems to review their water rates periodically and adjust them as necessary need to be considered.

Many public water systems, particularly small systems, have difficulty in understanding and complying with ever more comprehensive federal and state drinking water regulations. The Department has taken the lead in developing and implementing training programs to assist small public water system owners and operators to understand current and future drinking water rules and regulations. In addition, the Department continues to use the DWSRF to ease the economic impact on public water systems that must comply with new drinking water rules and regulations.

The events of September 11, 2001, Hurricane Katrina in 2005, and more recently, Hurricane Irene have resulted in greater awareness of the vulnerabilities of drinking water systems to intentional acts of terrorism as well as natural disasters. As drinking water infrastructure ages, it becomes more susceptible to failure, particularly during such

extreme circumstances. The enhancement of security and emergency preparedness are essential to maintaining reliable supply and delivery of drinking water. The Department's Office of Health Emergency Preparedness (OHEP) is responsible for the coordination and management of all activities for public health and healthcare facility preparedness. This includes preparedness planning, and ensuring emergency plans work in drills, exercises and real life. The Department must continue to work closely with local health departments and other key partners to ensure every county will be prepared for the unexpected.

## **6.0 Conclusion**

This report provides an assessment of the capacity development program in New York and the statewide strategy for assisting public water systems in need. In addition, this report summarizes the progress made toward improving the technical, managerial, and financial capabilities of public water systems in New York as a result of the Department's Capacity Development Program. Overall, New York State is achieving its goals through the effective implementation of capacity development strategy. The state's Capacity Development Program, along with other state resources, has helped public water systems in New York acquire and/or maintain the technical, managerial, and financial abilities needed to properly operate, manage, and finance their systems. The Department will continue to strive to achieve the fundamental goals of the capacity development program, and increase the awareness of stakeholders of public water systems as well as the general public about new challenges and issues related to water system capacity as they arise.