

**State of New Jersey  
Department of Environmental Protection  
Water Supply Administration  
Bureau of Safe Drinking Water**

**State Program  
Capacity Development Strategy**

**Submitted to the United States Environmental Protection Agency  
August 2000**

**Governor  
Christine Todd Whitman**

**Commissioner  
Robert C. Shinn, Jr.**

## TABLE OF CONTENTS

Table of Contents	page 2
Background	page 3
Public Water Systems of New Jersey	page 3
Assessment of Public Water Systems	page 4
Capacity Development Criteria & Standards	page 4
Implementation of Capacity Development Enhancement	page 6
Regulatory and Enforcement Issues	page 6
Partnerships	page 7
Training/Certification of Operators	page 7
Baseline and Measuring Improvements	page 8
Stakeholder Involvement	page 8
Conclusion	page 8
Appendix A - Definitions	
Appendix B - Significant Non-Compliance Determinations for Various Contaminants	
Appendix C - Technical, Managerial, Financial Assessment Form	
Appendix D - Minimum Standards for Technical, Managerial and Financial Capacity	
Appendix E - Contents of a Managerial Plan and a Financial Plan	
Appendix F - Capacity Development Strategy Implementation Schedule	

## **Background:**

The 1996 Amendments to the federal Safe Drinking Water Act (P.L. 104-182) require all states to develop and implement a strategy to assist all public water systems in acquiring and maintaining technical, managerial, and financial (TMF) capacity. This requirement is also known as the concept of “Capacity Development”. The emphasis of Capacity Development is on public water system viability through enhanced water system management. A viable public water system is self-sustaining and has the TMF resources to comply with federal and state Safe Drinking Water Act Regulations.

In complying with the Federal regulations, the State of New Jersey will use capacity development assessments to target the needs of public water systems and to develop a strategy list of public water systems. The State will address the identified needs through specific activities ensuring that each water system will acquire and maintain the TMF capacity for returning to and remaining in compliance with Safe Drinking Water Act regulations.

The Federal Drinking Water State Revolving Fund (DWSRF) serves as the primary source of funding for implementing New Jersey’s capacity development strategy to ensure adequate technical, managerial and financial capacity for public water systems. New Jersey is allowed to set aside up to 10% of each capitalization grant for state program management activities, which includes establishing and funding the capacity development program. New Jersey has submitted workplans to the United States Environmental Protection Agency (USEPA) for \$760, 268.00 from previous grant applications to the USEPA and is proposing to utilize \$570,000.00 from the Federal Fiscal Year 2001 allotment.

Also, New Jersey is allowed to set aside 2% of each capitalization grant for small systems technical assistance and 15% (no more than 10% per activity) for activities to assist development and/or implementation of source water protection, well head protection, or capacity development strategies, including financial and technical assistance. Although the DWSRF provides New Jersey with financial support to establish and implement capacity development programs, the USEPA can withhold funds starting October 1, 2000 if New Jersey does not develop and implement a capacity development strategy and meet the required deadlines.

This document prepared by the New Jersey Department of Environmental Protection (NJDEP) outlines the State of New Jersey’s strategy to assist public water systems in achieving and maintaining TMF capacity. Refer to [Appendix A](#) for definitions of frequently used terms.

## **Public Water Systems of New Jersey:**

New Jersey is a densely populated state with highly diversified geology and land use. Approximately 80% of the state’s residential population are served by public water systems, with the remainder of the population served by private domestic wells. New Jersey’s current inventory of public water systems is 606 community, 931 non-transient non-community, and 2,753 transient non-community water systems. The total number of public water systems in New Jersey is 4,290 as of June 2000. The variation of community systems found in New Jersey range from very small mobile home park systems serving 25 individuals to a regional system serving many communities, extending over several counties serving a population in excess of 1 million.

## **Assessment of Public Water Systems:**

The NJDEP's effort to assess public water systems in need of capacity development is delegated to the Bureau of Safe Drinking Water (BSDW) with support from the Bureaus of Water Compliance and Enforcement (BWCE). In addition, in accordance with the County Environmental Health Act (CEHA), delegated county health departments participate in the assessment process.

The BSDW will review all public water systems to identify and prioritize those systems requiring capacity development enhancement. The review will include an assessment of a public water system's compliance history and the status of significant non-compliance with federal and state Safe Drinking Water Act regulations and Water Supply Management Act regulations. Refer to **Appendix B** for the United States Environmental Protection Agency's Charts for determining significant non-compliance status for various contaminants. In addition, New Jersey will use the findings of compliance inspections that note significant deficiencies of a system's infrastructure to further assess community water systems.

The BSDW will generate reports on the compliance history of the public water systems and the BWCE will conduct compliance inspections and provide report documents. The county health departments under agreement of CEHA will conduct compliance inspections at non-community water systems and provide report documents to the BSDW.

The BSDW will be responsible for compiling the information on each public water system and will develop a strategy list to ascertain the public water systems most in need of improving their TMF capacity.

Public water systems on the strategy list will be encouraged to participate in the NJDEP's capacity development program. Those public water systems who elect to participate in the capacity development process, with assistance from the NJDEP, will be requested to complete a TMF assessment form developed by the BSDW that reviews all three aspects of capacity development. Refer to **Appendix C** to view the assessment form. The BSDW will use the findings of the TMF assessment form to further assess the system's needs.

## **Capacity Development Criteria & Standards:**

The established criteria for each component of capacity are:

1. Technical capacity refers to the adequacy, operation, and maintenance of a water system's infrastructure. Infrastructure refers to the source water, treatment, storage and distribution network of the public water system. To assure adequate technical capacity, a public water system must demonstrate that its water system has a satisfactory infrastructure and must also demonstrate that qualified personnel with technical knowledge about applicable standards operate its water system.
2. Managerial capacity refers to the expertise required of the personnel who administer the overall water system operations. To assure adequate managerial capacity, the public water system must demonstrate that relative to its water system it has clear ownership, proper and organized staffing, and effective interaction with regulators and customers.

3. Financial capacity refers to the monetary resources available to a public water system to support the cost of operating, maintaining, and improving the water system. To assure adequate financial capacity, the public water system must demonstrate that relative to its water system it has sufficient revenues, fiscal controls and credit worthiness.

The public water system must meet the minimum standards for TMF capacity as established in Appendix D. The minimum standards for TMF capacity as established in Appendix D are from the document entitled “New Jersey Capacity Development Program for Projects Financed through the Drinking Water State Revolving Fund” dated November 19, 1999 and will be used by the BSDW for capacity assessments, as appropriate.

In addition to the minimum standards defined in *Appendix D*, the BSDW will use two ratios developed by the United States Environmental Protection Agency to assess a water system’s financial status: an operating ratio (OR) and a debt service coverage ratio (DSCR). Both ratios utilize readily available data.

The operating ratio measures a system’s overall financial health. The OR shows whether or not a system has enough revenue to cover its expenses. An operating ratio of 1.2 or greater indicates that a system is in good financial health. A ratio of less than 1.0 means that expenses are greater than revenues.

$$\text{Operating Ratio (OR)} = \frac{\text{TOR}}{\text{O\&M}}$$

TOR = total operating revenues

O&M = operating and maintenance expenses

(Excluding depreciation, interest, or other debt service)

The debt service coverage ratio measures the ability of a system to pay debt. As with the operating ratio, a system must have adequate revenue to cover its debt service. The DSCR measures a system’s ability to cover its debt, over and above its operating expenses. A debt service ratio of 1.5 or greater is considered very good; a ratio of between 1.0-1.5 is considered acceptable; and a ratio of less than 1.0 means that there is inadequate revenue to cover the system’s debt service.

$$\text{Debt Service Coverage Ratio (DSCR)} = \frac{\text{AGR} - \text{O\&M}}{\text{AP \& IC}}$$

AGR = Annual Gross Revenues

O&M = Operating and Maintenance Expenses

AP & IC = Annual Principal & Interest Charges

Although these ratios do not represent a complete financial assessment, they do provide an indication of a system’s financial capacity and will benefit the BSDW in prioritizing systems most in need of financial assistance and capacity development.

## **Implementation of Capacity Development Process:**

Based on the findings of the assessment, public water systems that fail to demonstrate adequate TMF capacity will be targeted for capacity development. The capacity development process will identify the underlying causes for the inadequate capacity and will develop an improvement plan that outlines corrective actions to address the causes. Technical assistance in this regard will be provided by the NJDEP or through third party contracts with technical assistance providers such as New Jersey Rural Water Association.

The BSDW within the NJDEP will establish a technical assistance unit comprised of staff from the drinking water and enforcement programs. The technical assistance unit will be principally responsible for providing one-on-one assistance to designated public water systems. Training for technical assistance unit participants on all aspects of the capacity development program is to be proposed annually through Rutgers University and other educational institutions.

As part of the capacity development enhancement process, public water systems in need of assistance will be required to develop a managerial and a financial plan in accordance with the requirements at N.J.A.C. 7:10-13. Refer to [Appendix E](#) for details on the contents of a managerial plan and a financial plan.

In consideration of the potentially high number of public water systems that may be targeted for capacity development, the NJDEP proposes to address them in the following order: 1) the community water systems with populations less than 3,300, 2) the non-transient water systems that are schools, day care facilities and health care institutions 3) the transient non-community water systems which are restaurants and campgrounds, and 4) all other public water systems not covered above.

Public water systems that are actively pursuing project financing through the Drinking Water State Revolving Fund Program or systems that may be encouraged to apply for Drinking Water State Revolving Fund loans will have the highest consideration for receiving technical assistance in the development of their TMF capacity.

The Bureau will perform follow-up TMF assessments annually to monitor the progress of public water systems participating in the capacity development enhancement process. Public water systems not on the strategy list will receive an initial TMF assessment within 4 years of implementing the strategy as part of the routine compliance inspection performed by the BWCE and/or the delegated county health departments.

## **Regulatory and Enforcement Issues:**

The NJDEP has not established the statutory and regulatory authority to compel a public water system to participate in the capacity development process except as indicated at N.J.A.C. 7:10-2.7, which was adopted July 31, 2000 with an effective date of August 21, 2000. Therefore, the implementation of the capacity development process may be dependent upon the voluntary involvement of public water systems.

However, public water systems may seek the technical assistance being offered by the NJDEP in consideration of the NJDEP's implementation of a Zero Tolerance Policy for non-compliance with certain types of violations of the Safe Drinking Water Act regulations.

The Zero Tolerance Policy requires the NJDEP and/or other designated administrative authority to pursue a penalty against any public water system for violations which include but are not limited to, any failure to monitor for primary contaminants; failure to perform follow up monitoring when a maximum contaminant level is exceeded; or failure to provide public notice when required. The Zero Tolerance Policy was put in place a few years ago by the NJDEP for public community water systems, and as of July 1, 2000, is in effect for public non-community systems.

The existence of the Zero Tolerance Policy to reduce violations may also encourage participation in the capacity development process. Public water systems are likely to recognize the benefit from entering into an open and cooperative relationship with the NJDEP to improve their TMF capacity. It is through the improvement of a public water system's TMF capacity that formal enforcement action and/or penalties may be avoided.

A public water system that is in significant noncompliance and is incapable of, or refuses to undertake feasible and appropriate actions to develop adequate TMF capacity, will be excluded from this process and subject to any enforcement actions deemed appropriate. The NJDEP will encourage consolidation of the public water system when assistance through the enhancement process can not effectively improve a system's TMF capacity to meet the minimum standards. In some instances, the NJDEP may pursue the acquisition of any failing public water system in accordance with the Small Water Company Takeover Act (N.J.S.A. 58:11-59).

### **Partnerships:**

The NJDEP will sponsor workshops and encourage participation by all public water systems in order to enhance interaction and the opportunity for networking among the different sizes and types of systems. Large systems will be encouraged to invite small system representatives to their training sessions when appropriate. In addition, the NJDEP will promote the interaction of similar size public water systems to discuss and learn from peers demonstrating adequate TMF capacity.

### **Training/Certifications of Operators:**

The NJDEP will provide basic training classes for water treatment plant operation and distribution system operation and maintenance. Also, through coordination with community colleges, universities, and other organizations, additional training programs will be developed and implemented.

The NJDEP will also create and maintain a library of resources to help operators and managers increase their TMF capacity. The availability of these resources will be publicized through hardcopy announcements by the BSDW and by the NJDEP Water Supply Administration's homepage.

### **Baseline and Measuring Improvements:**

The NJDEP will use various indicators to establish the baseline and measure improvements during implementation of the capacity development strategy. The following indicators will be assessed to measure capacity improvements: significant non-compliance status, maximum contaminant level violations, and monitoring and reporting violations of public water systems.

The NJDEP will look beyond compliance data as the sole means for assessing capacity improvements. The NJDEP will include the following additional factors as a measure of the capacity development strategy's success: Drinking Water State Revolving Fund dollars allocated, operator training attendance, number and types of operator certifications, public notifications required and formal enforcement actions taken. In addition, the follow-up TMF assessments of public water systems on the strategy list will be used to measure improvements in capacity development.

### **Stakeholder Involvement:**

The NJDEP has identified the following agencies/groups and will solicit their input and involvement in the development and implementation of this capacity development strategy: CEHA Certified Agencies, BPU, DCA-DLGS, New Jersey Environmental Federation (Belmar and Trenton Offices), New Jersey Chapter of the Sierra Club, Association of New Jersey Environmental Commissions, New Jersey Health Officers Association, New Jersey Chapter of the American Water Works Association, New Jersey Rural Water Association, New Jersey Manufactured Housing Association, and the New Jersey Rural Community Assistance Program. In addition, the NJDEP will solicit comments from the public water systems and the general public on the capacity development strategy by publicizing in several newspapers and mailings to all active public water systems.

### **Conclusion:**

Implementation of the NJDEP's Capacity Development Strategy is expected to achieve the goal of assisting existing public water systems in acquiring/enhancing their infrastructure and operations, management, and finances to ensure consistent compliance with the Safe Drinking Water Act regulations and provide safe drinking water consistently, reliably, and cost effectively. The NJDEP's strategy of applying a broad-based approach using one-on-one assistance and third party contractors should provide the flexibility needed to have an effective program. Please refer to [Appendix F](#) for the Capacity Development Strategy Implementation Schedule.

## APPENDIX A

### DEFINITIONS

**Public Water System** is a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A public water system is either a community water system or a non-community water system. Non-Community Water Systems are classified as a “non-transient” or “transient” water system.

**Community Water System** is a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

**Non-Transient Non-Community Water System (NTNCWS)** is a public water system that regularly serves at least 25 of the same persons per day more than six months in any given calendar year. Examples of NTNCWSs are schools, factories, offices, industrial parks and major shopping centers.

**Transient Non-Community Water System (TNCWS)** is a public water system that serves at least 25 transient persons for at least 60 days in any given calendar year. Examples of TNCWSs are restaurants, campgrounds, and hotels.

**Compliance Inspection** is an on-site review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of the source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

**Significant Non-Compliance** is a term to define a system that has violated one or more National Primary Drinking Water Regulation(s) repeatedly over an extended period of more than one monitoring period.

## APPENDIX B

### **New Jersey Department of Environmental Protection Reprint of Significant Noncompliance Definitions**

Significant non-compliers (SNCs) are community water systems, non-transient non-community water systems and transient non-community water systems (serving > 500 people) that have more serious, frequent, or persistent violations. SNCs are divided into monitoring/treatment (M/T) SNCs and chemical/radiological (C/R) SNCs. The criteria that designate a system as an SNC vary by contaminant.

In order to be more protective of public health, the SNC definitions for M/T and C/R parameters were revised to be more stringent. Once a system is designed as a SNC, it is subject to EPA's timely and appropriate (T&A) policy, and is added to EPA's SNCs/Exceptions tracking system. SNCs that were not addressed during their respective T&A periods are called exceptions.

#### **Significant Noncompliance**

##### **Total Coliform Rule (TCR) Maximum Contaminant Level**

- MONTHLY MONITORING: greater than or equal to 4 acute/monthly MCL violations in any 12 consecutive months.
- QUARTERLY MONITORING: greater than or equal to 3 acute/monthly MCL violations in any 4 consecutive quarters.
- ANNUAL MONITORING: greater than or equal to 2 acute/monthly MCL violations in any 2 consecutive periods.

##### **Total Coliform Rule (TCR) Monitoring/Reporting**

- MONTHLY MONITORING: In any 12 consecutive months, meeting one of the following criteria:
  - Greater than or equal to 4 major repeat M/R violations.
  - Greater than or equal to 4 combined major repeat M/R and MCL violations.
  - Greater than or equal to 6 combined major repeat M/R, Major Routine M/R, and/or MCL violations.
  - Greater than or equal to 10 combined major/minor routine/repeat M/R and/or MCL violations.

- **QUARTERLY MONITORING:** In any 4 consecutive quarters, meeting one of the following criteria:  
Greater than or equal to 3 major repeat M/R violations.  
Greater than or equal to 3 major repeat M/R, major routine M/R and/or MCL violations.
- **ANNUAL MONITORING:** In any 2 consecutive one-year periods, meeting one of the following criteria:  
Greater than or equal to 2 major repeat M/R violations.  
Greater than or equal to 2 combined major repeat M/R, major routine M/R, and/or MCL violations.

### **Turbidity MCL**

- **MONTHLY MONITORING:** Greater than or equal to 4 MCL violations in any 12 consecutive months.
- **QUARTERLY MONITORING:** Greater than or equal to 2 MCL violations in any 4 consecutive quarters.

### **Turbidity M/R and Combined M/R and MCL**

- **MONTHLY MONITORING:** In any 12 consecutive months, having either of the following:  
Greater than or equal to 6 major M/R and/or MCL violations, or  
greater than or equal to 10 major/minor M/R and/or MCL violations.
- **QUARTERLY MONITORING:** Greater than or equal to 3 major M/R and/or MCL violations in any 4 consecutive quarters.
- **ANNUAL MONITORING:** Greater than or equal to 2 major M/R and/or MCL violations in any 2 consecutive one-year periods.

### **Chemical/Radiological MCL (excluding Nitrate)**

- Exceeds the short-term acceptable risk to health level.

### **Nitrate MCL**

- Greater than 10mg/l.

### **Chemical/Radiological Monitoring/Reporting**

- Fails to monitor for, or report the results of any regulated contaminant for greater than or equal to 2 consecutive compliance periods.

### **Public Notification**

- Failure to provide public notification of the violation which caused the system to become an SNC.

## **Surface Water Treatment Rule (SWTR)**

- **Unfiltered Systems**

- A system informed of the requirement to filter before January 1992 that does not install filtration by June 29, 1993.
- A system informed of the requirement to filter after December 1991 that does not install filtration within 18 months of being informed that filtration is required.
- A system that has 3 or more major M/R violations in any 12 consecutive months.

- **Filtered Systems**

- A system that has 4 or more treatment technique violations in any 12 consecutive months.
- A system that has a combination of 6 violations including treatment technique violations and major M/R violations in any 12 consecutive months.

## **Lead and Copper Rule (LCR)**

- **Initial Tap Monitoring/Reporting**

A system which does not M/R as required and does not correct a violation within:

- 3 months for large systems
- 6 months for medium systems
- 12 months for small systems

- **Optimal Corrosion Control Installation**

- A system which fails to install optimal corrosion control on time and has a 90<sup>th</sup> percentile level of greater than or equal to 30 parts per billion in its most recent monitoring period.

- **Source Water Treatment Installation**

- A system which fails to install source water treatment on time and has a 90<sup>th</sup> percentile lead level of greater than or equal to 30 parts per billion in its most recent monitoring period.

- **Public Education**

A system which fails to complete public education as required and has a 90<sup>th</sup> percentile lead level of greater than or equal to 30 parts per billion in its most recent monitoring period.

### **Notes**

- (1) A “major” M/R violation (except for SWTR) occurs when no samples are taken or no results are reported during a compliance period. For SWTR, a major M/R violation occurs when at least 90% of the required samples are not taken or results reported during a reporting period.
- (2) A “minor” M/R violation (except for SWTR) occurs when an insufficient number of samples are taken or incomplete results are reported during a compliance period. For SWTR, a minor violation occurs when less than 100% but more than 90% of the required samples are not taken or results reported during a reporting period.
- (3) SNC definition is modified, if needed, to cover new regulations as they are promulgated.

**APPENDIX C**

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF SAFE DRINKING WATER  
CAPACITY DEVELOPMENT PROGRAM**

**TECHNCIAL, MANAGERIAL, & FINANCIAL ASSESSMENT FORM**

Water Purveyor	PWSID#	Municipality	
<b>TECHNICAL CAPACITY</b>			
	<b>YES</b>	<b>NO</b>	<b>N/A</b>
<b>1. System Description provided?</b>			
Does it contain?			
a. A detailed description of source of supply, treatment, storage, and distribution of the water system’s infrasturcture.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Identification and evaluation of all critical facilities and equipment whose failure would result in a water outage or water quality failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Evidence, including a description, of any deeds, leases or easements for land, water supply sources, or physical facilities used in the operation of the system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Evaluation of connecting to an adjacent Public Water System.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Emergency provisions for alternative water supply such as a back-up well or interconnection with another public water system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Infrastructure Replacement Plan provided?</b>			
Does it contain?			
a. A description and an estimate of the life expectancy of all sources of water supply, treatment, and transmission/distribution facilities including pipes, pumping stations, storage facilities, and meters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. An equipment replacement plan including expected replacement date, costs, and sources of funding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>MANAGERIAL CAPACITY</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
<b>1. Information available concerning the Organizational Structure of the System?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it contain?			
a. A description of the organizational structure with a chart indicating all aspects of water system management and operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A description of the primary responsibilities and identification of all key personnel involved in the management or operation of the system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The names and phone numbers of those responsible for policy decisions ensuring compliance with Federal/State regulatory requirements, and the day-to-day operation of the system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Proof of compliance with the operator certification regulations including the name of the operator and licenses held.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Is a Procedure for keeping management personnel informed concerning Regulatory Requirements for Operating a Public Water System available?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4. Is an Emergency Management Plan available?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it contain?			
a. Identification of known and potential natural and human-caused risks to the water system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Identification of key personnel for emergency management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A description of the notification procedures and means for implementation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A description of an emergency response plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **FINANCAL CAPACITY**

<b>1. Is an annual Budget available that includes Revenues, Operating Expenses, Reserves, and Capital Improvements?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it contain?			
a. All operating and maintenance expenses such as salaries, chemicals, repairs, and utility expenditures for the year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
b. Identification of reserve accounts for emergency funding and equipment replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A capital improvement plan including identification of the project(s), estimated costs, and amount allocated for repayment of debt financing to meet current/new drinking water standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. A Description of the Budget and Expenditure Control Procedures and Reports that Assure Adequate Budget Control?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it contain?			
a. Quarterly reports comparing expenditures to budgeted expenses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Purchasing procedures or policy to prevent misuse of funds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Is a Statement of Credit Worthiness available?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does it contain?			
a. Certification that the system is not in arrears on existing debt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A current credit report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Other Agencies (Department of Community Affairs or Board of Public Utilities)**

The determination of technical, managerial, and financial capacity of the water system was made in consultation with the Director of the Division of Local Government Services, within the Department of Community Affairs, if the system is under the jurisdiction of this authority and regulated under N.J.S.A. 40A:1-1 et seq.

The determination of technical, managerial, and financial capacity of the water system was made in consultation with the Board of Public Utilities, if the system is under the jurisdiction of this authority and regulated under N.J.S.A. 48:1-1 et seq.

\_\_\_\_\_  
Person interviewed/position \_\_\_\_\_  
Signature & Date \_\_\_\_\_  
Telephone #

\_\_\_\_\_  
Capacity Evaluator \_\_\_\_\_  
Signature & Date \_\_\_\_\_  
Telephone #

## APPENDIX D

### **New Jersey Capacity Development Program for Projects Financed through the Drinking Water State Revolving Fund November 19, 1999**

#### **Background**

The Safe Drinking Water Act (SDWA) Amendments of 1996 (Pub. L. 104-182) authorize a Drinking Water State Revolving Fund (DWSRF). The DWSRF is designed to assist publicly owned and privately owned community water systems and nonprofit noncommunity water systems in financing the costs of infrastructure needed to achieve or maintain compliance with SDWA requirements, and to meet the public health objectives of the SDWA.

Section 1452(a)(3) of the SDWA prohibits a state from providing DWSRF assistance to a system that lacks technical, managerial, and financial capacity or is in significant noncompliance with any requirement of a national primary drinking water regulation or variance, unless: 1) the use of the financial assistance will ensure SDWA compliance, or 2) the owner or operator of the system agrees to undertake feasible and appropriate changes to assure that adequate capabilities will be put in place, and agrees to implement such changes.

The following is a screening process that will be used to assess the technical, managerial, and financial capacity of any DWSRF project sponsors.

#### **I. Technical Capacity**

Technical capacity refers to the adequacy, operation and maintenance of a water system's infrastructure. To assure adequate technical capacity, a project sponsor must demonstrate that its water system has adequate source water and adequate infrastructure, and must demonstrate that its water system is operated by personnel with technical knowledge about applicable standards. The project sponsor must demonstrate adequate technical capacity as follows:

1. The project sponsor and its water system are not in significant noncompliance as defined by the United States Environmental Protection Agency;
2. The project sponsor and its water system has no continuing violations of New Jersey's SDWA rules (N.J.A.C. 7:10) and Water Supply Allocation Permit rules (N.J.A.C. 7:19); and
3. The project sponsor is operating its water system under a licensed operator, of the appropriate license pursuant to N.J.A.C. 7:10A, 'Licensing of Water Supply and Wastewater Treatment System Operators.'

In addition to the above, the New Jersey Department of Environmental Protection may review any of the following items for technical capacity:

1. *SDWA Compliance data and inspection reports (Sanitary Surveys)* to identify actual and potential problems that might lead to noncompliance or degradation of drinking water quality.
2. *Operator Certification* to evaluate if the water system is being operated by an operator licensed by the State of New Jersey, with the appropriate license classifications.
3. *Vulnerability assessments* to determine potential source water contamination.
4. *Enforcement actions, administrative consent orders, or directives* issued to the water system, requiring corrective actions to ensure compliance with the SDWA.
5. *Comprehensive Performance Evaluations (CPE's)* to analyze a surface water treatment plant's performance.
6. *Consumer Complaint Records* to identify technical problems with the water system (e.g., odor, taste, or low pressure).
7. *Engineering reports, design plans, project and long-term planning documents, for improvements* to ensure compliance with Federal and New Jersey's SDWA regulations, rules, and statutes.

Note: Significant noncompliance refers to long term repeated violations that constitute a threat to public health. A detailed summary of significant noncompliance is available by contacting the NJDEP, Bureau of Safe Drinking Water, either by telephone at (609) 292-5550, or by writing NJDEP, Bureau of Safe Drinking Water, P.O. Box 426, Trenton, N.J. 08625-0426.

## **II. Managerial Capacity**

Managerial capacity refers to the personnel expertise required to administer the overall water system operations. To assure adequate managerial capacity, the project sponsor must demonstrate that relative to its water system it has clear ownership, proper and organized staffing, and effective interaction with regulators and customers. In assessing the managerial capacity of the water system, the New Jersey Department of Environmental Protection or the New Jersey Environmental Infrastructure Trust, shall consult with the Board of Public Utilities (in regards to investor-owned BPU-regulated water systems) or the Department of Community Affairs, Division of Local Government Services, as appropriate. The project sponsor must demonstrate adequate managerial capacity as follows:

1. A project sponsor or its water system is not in receivership;
2. The project sponsor demonstrates to the Department's satisfaction that it has clear ownership of the water system or that other arrangements are in place to satisfy the Federal Safe Drinking Water Act managerial capacity requirements; and

3. The project sponsor and its water system do not have any continuing violations of requirements, rules or statutes of the New Jersey Department of Environmental Protection, the Board of Public Utilities, or the Department of Community Affairs, Division of Local Government Services, as applicable.

In addition to the above, the NJDEP may review any of the following items for managerial capacity especially when the project sponsor's water system is not regulated by the Board of Public Utilities or the Department of Community Affairs, Division of Local Government Services:

1. *A summary of biographies, resumes, and other related material from the previous five years to determine the training, expertise and education of personnel.*
2. *Business or Water System Plan to evaluate management's overall practices and ownership accountabilities to assist in evaluating the owner's understanding of current New Jersey's SDWA regulations and professional practice.*
3. *A summary of billing and collection procedures used for the water system from the previous five years.*
4. *A summary of consumer complaint records within the previous five years to identify the water system's responses to customer complaints.*

### **III. Financial Capacity**

Financial capacity refers to the monetary resources available to a project sponsor for its water system to support the cost of operating, maintaining, and improving the water system. To assure adequate financial capacity, the project sponsor must demonstrate that relative to its water system it has sufficient revenues, fiscal controls and credit worthiness. In assessing the financial capacity of the water system, the New Jersey Department of Environmental Protection or the New Jersey Environmental Infrastructure Trust, shall consult with the Department of Treasury, the Department of Community Affairs, Division of Local Government Services, or the Board of Public Utilities (in regards to investor-owned BPU-regulated water systems), as appropriate, or may use the services of a financial consultant, to evaluate the financial capacity of the project sponsor. The project sponsor's water system meets the minimum standards for adequate financial capacity if the following is met:

1. A project sponsor regulated by the Board of Public Utilities (BPU) has obtained BPU approval of a financing petition for the project(s) to be financed through the DWSRF.
2. A project sponsor regulated by the Department of Community Affairs, Division of Local Government Services (DLGS), has obtained approval by the Local Finance Board in the DLGS for the project(s) to be financed through the DWSRF.
3. The NJDEP shall rely on the New Jersey Environmental Infrastructure Trust, with or without the assistance of a financial consultant for a project sponsor or water system not regulated by the Board of Public Utilities or the Department of Community Affairs, Division of Local Government Services, to evaluate any financial information, including, where available, but not limited to the following:

- a. Financial statements or annual audit reports for the previous three years.
- b. Current and proposed rate schedules, as applicable; or if rate schedules are unavailable, then documents indicating the project sponsor's access to credit for operations and contingencies to demonstrate the project sponsor's capability to repay debt.
- c. A summary of any pending litigation regarding current or proposed rates.
- d. Federal and state income tax returns of the project sponsor for the previous three years.
- e. Current operating budget and projected budget, for a five-year period, including debt service on the loan and any rate schedule adjustments:
  - i. Revenue projections including any assumptions on which the projections are based. Total annual percentage of budgetary increases, annual percentage increases to meet loan repayment and other non-loan project costs, and time when same shall take effect should be identified and included.
  - ii. Expense projections including a copy of the Capital Budget and assumptions on which the projections are based.
  - iii. Plans for rate increases.
  - iv. Security for the proposed loans
- f. Composition of customer base.

#### **IV. Long Term Capacity**

The NJDEP, where appropriate, will assess whether a project sponsor and its water system has a long term plan to undertake feasible and appropriate changes in operations necessary to develop adequate capacity. Information such as engineering reports, inspection reports, and other available information will be used in making these assessments. The NJDEP will encourage consolidation of water systems in an effort to improve capacity. The Small Water Utility Take Over Act (N.J.S.A. 58:11-59) and companion regulation (N.J.A.C. 7:19-5) may need to be reviewed and modified if necessary to address existing systems in significant noncompliance.

#### **V. Systems with Inadequate Capacity**

A water system that requires improvements to obtain adequate capacity can apply to the DWSRF provided that the improvements will ensure SDWA compliance. The NJDEP in consultation with the New Jersey Board of Public Utilities and the Department of Community Affairs, as applicable, will make this assessment on a case-by-case basis, with emphasis on compliance with all applicable requirements, rules or statutes of the respective agencies. The project sponsor must agree and demonstrate to the agencies' satisfaction the implementation of any required technical, managerial or financial changes necessary to obtain approval by the agencies.

## **VI. Systems in Significant Noncompliance**

The SDWA prohibits a state from providing DWSRF assistance to a system in significant noncompliance with any requirement of a national primary drinking water regulation or variance, unless: 1) the use of the financial assistance will ensure SDWA compliance, or 2) the owner or operator of the system agrees to undertake feasible and appropriate changes to assure that adequate capabilities will be put in place, and agrees to implement such changes.

The following are procedures to evaluate systems in significant noncompliance;

1. Evaluate the project(s) in significant noncompliance;
2. Evaluate the reasons for significant noncompliance; and
3. Evaluate if the project sponsor's request for DWSRF assistance will resolve the significant noncompliance issue to the NJDEP'S satisfaction.

## APPENDIX E

### Managerial Plan/Financial Plan

**The requirements for developing a managerial plan and a financial plan have been extracted from N.J.A.C. 7:10-13.**

**A managerial plan shall contain:**

1. Information concerning the organizational structure of the system including:
  - i. A description of the organizational structure with a chart showing all aspects of water system management and operation;
  - ii. A description of primary responsibilities and identification of all key personnel involved in the management or operation of the system or personnel;
  - iii. Identification, including the names and phone number of those responsible for policy decisions ensuring compliance with State regulatory requirements, and the day-to-day operations of the system;
  - iv. Information showing that the operator or person in charge of operation will have sufficient time to execute all responsibilities reliably if this person has other responsibilities unrelated to the water system;
  - v. Copies of any contacts for management or operation of the water system by persons or agencies other than the system owner; and,
  - vi. Description of how legal, engineering, and other professional services are provided.
2. A description of the qualifications of the owners and managers of the water system, including any training and experience in owning or managing a water system. Also, system owners should include a list of any public water system(s) previously or currently owned as well as any systems previously or currently operated under contract for another owner;
3. A description of a plan for keeping management current with regulatory requirements of managing and operating water systems.
4. An emergency management plan that includes:
  - i. Identification of known and potential natural and human caused risks to the water supply;
  - ii. Identification of personnel responsible for emergency management;
  - iii. A description of the notification procedures and means for implementation; and,
  - iv. A description of the emergency response plan for each identified risk.
5. A description of system policies that, at minimum, define the conditions under which water service is provided, the system responsibilities to the customer, the customer responsibilities, and conditions for new services. At a minimum, the system must develop policies on:
  - i. Water System responsibilities;

- ii. Customer Responsibilities;
- iii. Design and construction standards for system modifications and additions;
- iv. Cross-connection control;
- v. Developer and late-comer policies;
- vi. Customer information or public education;
- vii. Customer complaints;
- viii. Budget development and rate structure; and
- ix. Response and Notification if a water quality violation occurs

**A financial plan shall contain the following:**

1. A 5-year budget that includes revenues, operating expenses, reserves, and capital improvements including:
  - i. A revenue/expenditure analysis that compares all anticipated water system revenues with planned expenditures for a 5 year period;
  - ii. Identification of reserve accounts for emergency funding and equipment replacement;
  - iii. A capital improvement plan for the next 5 years including identification of the project, estimated costs, and amount of repayment of debt financing to meet new drinking water standards and growth accommodation.
2. A description of the budget and expenditure control procedures and reports that assure adequate budget control including:
  - i. Quarterly reports comparing actual expenditures to budgeted expenses; and
  - ii. Purchasing procedures or policy to prevent misuse of funds.
3. Credit Worthiness – This requirement would apply to existing community water systems undergoing physical modifications, a change in ownership, or that are found to be in significant non-compliance. At a minimum the system must provide the following:
  - i. Certification that the system is not in arrears on existing debt; and,
  - ii. A current credit report.

## APPENDIX F

### CAPACITY DEVELOPMENT IMPLEMENTATION SCHEDULE

<u>Milestone</u>	<u>Date</u>
Draft Document Prepared by NJDEP	June 30, 2000
Advertise and Distribute Document for Public Comment	July 05, 2000
End of Comment Period	July 21, 2000
Revise and Finalize Document in response to Comments	July 28, 2000
Submit Final Document to USEPA	August 6, 2000
Implement Capacity Development Strategy	Ongoing