State of Connecticut
Department of Public Health, Drinking Water Division
Annual Capacity Development Report
for the period
July 1, 2003 – June 30, 2004

Introduction:

The Federally approved Capacity Development Strategy for Connecticut has served to consolidate all programmatic activities within the Drinking Water Division (DWD) into a more cohesive, consistent effort. In establishing a directive to support viable systems and eliminate those systems unable to sustain acceptable levels of capacity, the Capacity Development Strategy has defined the direction toward which the DWD's resources can be applied effectively. It has also identified an intricate weave of program activities critical to its implementation.

As such, the Strategy has been determined to be positive and it is recommended that it be maintained as approved. Modifications to the Strategy, as indicated in this report, are for the most part, changes in emphasis, or prioritization of certain components, not redirections or elimination of elements. Significant from this review is the necessity that certain program areas will need emphasis as the DWD moves forward. These areas include:

- Emphasis on outreach activities due to its demonstrated, positive contribution to local health departments, municipal officials and the general public.
- Emphasis on outreach, compliance and technical assistance to all regulated Public Water Systems (PWS).
- Emphasis on operator certification activities as supportive of professionalizing operators capable of addressing our new national infrastructure security concerns.
- Emphasis on data management/data entry procedures and processes critical to efficiently processing compliance determinations and supporting enforcement efforts.
- Emphasis on staff and local health director training to support NC system program activities.
- Emphasis on providing technical assistance to the Water Planning Council's technical review in the areas of the WUCC, the Certificate of Public Convenience and Necessity process and Water Supply Planning.
- Consideration of new mechanisms that will allow small PWSs easy access to DWSRF low interest loans.

I) Implementation Activities

The State of CT, Department of Public Health (DPH), conducted the following activities in accordance with Section 1420(C) of the Safe Drinking Water Act and Amendments during state fiscal year ending June 30, 2003:

A. Methods or Criteria to Identify and Prioritize PWSs in need of Technical, Managerial and Financial (TMF) assistance. (Section 1420(C)(a))

As stipulated in our original strategy, the DPH intends to prioritize systems for assistance using compliance data in the Safe Drinking Water Information System (SDWIS) State database and from results of sanitary surveys. The selection of PWSs requiring additional assistance is primarily accomplished by 2 mechanisms. The first is the sanitary survey and the resulting compliance determinations, and the second is the level of enforcement activity as a result of maximum contaminant level (MCL) exceedance and/or a monitoring/reporting (M/R) violation. Proactive determinations of which systems require additional technical assistance is identified through the PWS's ability to respond to compliance requirements for prescribed regulation implementation (see attachment #2). These targeted systems are then addressed by various compliance related training and one-on-one technical assistance activities as defined in Section C of this report.

The failure of an existing PWS to comply with either the Department of Public Utility Control (DPUC) or the DPH regulations could require joint hearings to determine the PWS's economic viability. If it is determined that the PWS is not viable, the DPUC, with DPH's consultation, may order the acquisition of the PWS by the most suitable entity. This is a two-step process; the first step is a thorough evaluation of the PWS's ability to

provide TMF capacity. The second is the determination of possible restructuring or acquisition by a more reliable and sound PWS.

The "take-over" process has typically resulted in more viable systems or the elimination of an existing PWS. Non-viable PWSs tend to chronically fail to achieve compliance in areas such as monitoring for contamination issues, difficulty meeting the more comprehensive treatment requirements, infrastructure deficiencies and financial constraints due to the smaller customer base. The process has proven to help prevent system failure, water service interruption, lack of monitoring and/or reporting, etc. elimination of non-viable systems has had positive impacts on application of resources, risk reduction and compliance success. Successful "take-overs" also result in a deterrent to other PWSs operating in inefficient or ineffective manners.

B. **Identification of Factors that Enhance or Impair Capacity (Section 1420(C)(c))**

Factors within this element have not changed from the original strategy, however, the activities of the Water Planning Council, consisting of a diverse group of industry, environmental and state/federal agencies, has assessed capacity development issues. The Water Planning Council was established to prepare a report, after evaluating 11 issues, one of which deals with TMF issues of PWSs. Although draft reports are being prepared, the process has spawned an excellent myriad of suggestions that may lead to the DWD's update or modification of some of its original Capacity Development Strategy.

Sanitary surveys, vigilant enforcement and "take-over" proceedings are tools to assist in either maintaining viable PWSs or initiatives that act as deterrents to non-viable PWSs.

C. **How States are Using the Authorities and Resources of the SDWA (Section 1420(C)(c))**

The State of Connecticut uses authorities and resources of the SDWA as follows:

Compliance Section Activities

The DWD Compliance Section was reorganized in this fiscal year to split the Section functions between the Monitoring, Reporting & Enforcement (MR&E) unit and the Implementation & Response (I&R) unit. These two units work under the supervision of a Section Supervisor and ensure that all public water systems are monitoring and reporting in accordance with the Safe Drinking Water Act (SDWA) and the State regulations, and that enforcement actions are implemented to bring the public water systems back in compliance with the applicable rules and regulations, and are surveyed to verify that compliance is being sustained.

To assist the public water systems (PWSs) in sustaining their compliance and enhancing their capacity we have developed numerous forms and technical sheets that were made available to all public water systems in several methods, such as regular mail to each system, posting on the DWD Web page, on-site meetings, phone calls, and during routine sanitary survey visits.

These technical sheets and forms are designed to:

1) Assist the PWSs in reporting contact and emergency information
2) Guide the PWSs in understanding the annual monitoring requirements
3) Summarize the annual testing requirements into a simple easy to read schedule
4) Guide PWSs on completing a sampling plan and selecting the most representative sampling points
5) Provide PWSs with instructions & templates on the CCR requirements & distribution
6) Instruct PWSs about the Filter Backwash Rule, and assist in developing forms for record-keeping
7) Guide the PWSs on the requirements of the radionuclides rule

Furthermore, the Compliance Section has turned over through the viability review and hearing process five (5) troubled community water systems to the ownership and management of viable large water systems.
Also, The Section's non-community staff continued its initiative of training local health authorities statewide in various drinking water issues related to non-community and small community PWSs. Under this initiative,

staff engineers provided hands-on sanitary survey training to individual local health departments (LHD) including Farmington Valley Health District, Torrington Area Health District, Northeast District Department of Health, Chesprocott Health District, Quinnipiack Valley Health District, Naugatuck Valley Health District, Pomperaug Health District, Uncas Health District, Wallingford Health Department, New Milford Health Department, Ledgelight Health District, Greenwich Health Department, East Shore Health District and Eastern Highlands Health District. During these training events Sanitary Engineers from the Section performed on-site inspections of TNC systems in the respective jurisdictional areas of each health department. These inspections focused on food service establishments for which local health departments license and have enforcement authority with regard to well construction and the purity and adequacy of the water supply as outlined in Section 19-13-B42(g) of the Regulations of Connecticut State Agencies. Where appropriate, local enforcement actions were taken to correct water system deficiencies identified in these sanitary surveys. These efforts were initiated in an attempt to provide LHDs the necessary training to assist the DWD in identifying and correcting deficiencies at these small public water systems. In many instances LHDs played a significant role in getting many of these TNC systems connected to Community Public Water Systems and abandoning their on-site wells. This type of training continues to be a successful process in raising local attention to drinking water issues, gaining assistance from local authorities in obtaining compliance, and helping to assure that new PWSs are constructed to proper design standards.

The initiative of ensuring Capacity Development at public schools across the state has continued, and many schools have opted to install completely new facilities, and the remaining schools are almost equally split where approximately half have been identified as needing to plan for the construction of completely new water system facilities and the other half require minor to moderate improvements to their existing water systems. DWD staff will continue to assist these systems and will continue as necessary to link them with the Schools Facilities-Grants Unit under the Division of Grants Management, State Department of Education. Schools who sign DWD Consent Orders are eligible for grants ranging from 20-80% (based upon the respective town/district's reimbursement rate) of the entire project to correct both existing CT PHC violations and system capacity deficiencies. This school capacity project will continue to be prioritized by DWD over the next few years until all public schools have adequate capacity.

31% of the Drinking Water State Revolving Fund (DWSRF) Activities

The DWD also utilizes the full set-aside of 31% available from the DWSRF to fund various initiatives that would not have been otherwise funded by either state or federal funds. The summary of set-aside funds is as follows:

- 4% - Administration of the DWSRF
- 10% - Augmentation to the existing Public Water Supply Supervision Grant
- 2% - Small system technical assistance through outreach activities
- 15% - local assistance activities which include 5%-wellhead protection activities; and 10%-capacity development activities

4% - Administration of the DWSRF

The majority of funds from this set-aside paid salaries and associated expenses of personnel administering the DWSRF program. The state is currently not charging fees to supplement available set-aside funds. Implementation of the DWSRF has required work to the following agencies staff: 1) Department of Public Health 2) Department of Environmental Protection, 3) Office of the Treasurer, 4) Department of Public Utility Control and 5) Office of Policy and Management. The latter does not receive set-aside funding.

The following administrative activities have been accomplished:

- Prepared Capitalization Grant Application
- Development of program documents (i.e. Bond Sale documents)

- Development of Program procedures
- Development of work plans
- Development of comprehensive list of projects
- Development of Accounting Management Reports
- Completion of DWSRF program audit
- Legal Notices in the local media
- Evaluation of DWSRF Program performance
- Solicitation of applications
- Project selection and development of Intended Use Plan
- Evaluation of eligible public water systems for technical, financial and managerial capacity.
- Conducted Public Hearing on Priority List of Projects and Intended Use Plan
- Meet with stakeholders
- Other administrative activities as necessary (authorized travel, etc.)

2% - Small System Technical Assistance Activities

The DWD Programs Unit accomplished the following:

- The DWD has continued 3 contractors for four consecutive years. The contractors performed numerous outreach and/or technical assistance to PWSs. This year the contractors were not used due to the revisions to the State of Connecticut contract process, which did not allow a timely process for FY04 contracts. The situation was outlined in a site visit by EPA on September 21, 2004. This process has since been finalized and is currently available again. The DWD is reconsidering development of contractor work plans.
- Revision of DWD Incident Command Standard Operating Procedure in coordination with the Water Emergencies Assessment and Response (WEAR) Team. The WEAR Team is the assessment and response mechanism for all identified drinking water emergencies in the State. At each response to a PWS, and based on the situation findings, WEAR Team members can make a referral to the Compliance Unit for further technical, managerial and financial review.
- The Unit has been very proactive within the DWD concerning the OIG report and capacity development future activities. The Programs Unit developed a "Quick Analysis" report (attachment #1) that identified possible activities that DWD Units could incorporate into their current structure to enhance technical, managerial and financial review.
- The DWD web page was completely redone to meet the standards of the new State of CT web portal system. All materials have been revised and updated along with the addition of an easily identified DWSRF, Operator Certification, PWS Emergency Preparedness and required forms pages. The DWD will be increasingly utilizing the web to provide PWS with the information and guidance that enhance capacity.
- Presented capacity elements at two large conferences. On May 26th and 27th at the CT Section AWWA and CWWA 33rd Annual Joint Conference capacity concerning consolidation and other strategy areas were discussed. On May 20th and 21st at the 1st National Water Security Risk Communication Symposium the elements of the necessity of a certified operator were discussed.

5% Wellhead Protection Set-aside

The following are some accomplishments of the Wellhead Protection Set-Aside:

Developed Initial 5 year Strategic Plan for Source Water Protection. A strategic plan for the movement from assessment to protection was developed. First drafted in August 2003, this plan was in a final draft form in November 2003. The action items within the plan set the course for the Source Water Protection Unit within the DWD. This plan has been shared with all stakeholders in numerous forums and presentations across the state. Both EPA Region I and EPA Headquarters have endorsed the plan's goals and objectives. The goals and objectives are closely linked to EPA's five-year strategic planning goals for drinking water source protection. Met specifically with staff of both Region I and HQ to outline details contained within the plan. The Strategic Plan for Drinking Water Source Protection in Connecticut is posted on the DPH DWD web site.

This plan is a living document that will be continuously updated and enhanced. The plan will be updated at least on an annual basis, and will continue to guide the SWP Unit in meeting the stated goals and objectives.

Developed and continued to enhance the DWGIS system. The Drinking Water Geographical Information System (DWGIS) was developed by the SWP Unit working with ERSI, Inc. This project started in February 2003 and was complete and available to all DWD staff on May 1, 2003. This new GIS based system links SDWIS, the SWAP assessments reports and GIS information into one intranet application available to the entire staff of DWD. The DWGIS system requires direct oversight by an experienced GIS staff person on a continuous basis. Since the DWGIS was developed on a fast track, testing and debugging the system has taken place during the first few months of actual system use. A three-hour training course for DWD staff on the use of the DWGIS was accomplished, as well as numerous one-on-one training sessions. An operations and maintenance manual has been drafted and an internal DWD GIS tech group has been formed in order to keep DWGIS in optimum working condition. The manual also addresses the need for continuous maintenance of the drinking water GIS data layers.

Drafted and continued to develop regulations for an evaluation of drinking water source protection measures. Required under Public Act 02-102, the SWP Unit initiated and continued through state fiscal year of 2003, to draft and develop regulations to add a new section to the existing individual water supply plans emphasizing the use of the SWAP assessment information in an evaluation of drinking water source protection measures. Through the fall and winter of 2003, these regulations were developed along with the CT Section AWWA Source Water Protection Committee. During the spring and summer of 2004, the regulations underwent an extensive internal review and reformatting. Forms were drafted to use as a tool to assist public water systems meet the new regulation requirements.

Redeveloped the drinking water source protection stakeholders group. Utilizing the SWAP technical and citizen advisory group members as a base, a Drinking Water Source Protection Stakeholders group was developed. Forty-five stakeholder groups have volunteered to be members, out of seventy groups initially contacted. One stakeholder group meeting was held in April 2004. At this meeting, the results of the SWAP assessment reports were summarized with an outline of the 5-year strategic plan presented.

Redeveloped the requirements of RSCA 19-13-B102(b). Reviewed thirty-three land use survey reports as required to be produced under RSCA 19-13-B102(b). Initiated a new strategy to link SWAP assessment reports, the new water supply plan source water protection evaluation regulations, the enforcement strategy, and violation identification. Initiated discussions with the CT Section AWWA Source Water Protection Committee concerning the need to link processes and requirements.

Initiated the development of an education strategy concerning the SWAP assessment reports and drinking water source protection. Planned for and initiated the development of an educational outreach strategy to focus local decision makers on swap source water protection areas and review potential effects of proposed development on existing source of supply. This strategy focuses on education of local decision makers.

Redeveloped a standard review process for local proposed development projects. Developed standard forms and standard review procedures for the review of proposed development projects. The standard review process includes a GIS determination of project location versus SWAP delineated source water areas.

Developed an enforcement initiative. Utilizing public health source protection laws that have existed since the early 1900s, the SWP Unit developed an enforcement initiative concerning the protection of drinking water quality for all sources of public drinking water. A draft on-site Notice of Violation (NOV) report was prepared for field inspection and same-day notice of violations. This on-site NOV will become part of a formal process, linking an on-site inspection to compliance with existing source water protection laws and regulations. This process will continue to develop with a formal standard operating procedure planned. Initial discussions have taken place with the necessary regulatory agencies and other stakeholders in order for the DPH to receive appropriate and timely notice.

Drafted new process for siting of proposed wells. The SWP Unit, working with other units within the Drinking Water Division, developed a well application form. A formal standard process has been initiated, with a formal standard operating procedure drafted.

Initiated redeveloped of standard operating procedures for both water company land reviews and recreational land use permitting. Began a process of reviewing the requirements under existing state statutes and regulations concerning change of use of water company land and recreational use permitting in order to institute a structured and simplified approach. Initiated discussions to link the water company lands laws to public water supply land use management plans.

Redeveloped the SWP Unit's web site. Restructured the source water protection unit's web site in order to emphasize the importance of drinking water source protection and SWAP assessment report information. New categories were added that address each major responsibility of the SWP Unit.

Developed a program to review and provide education on swap assessment information with ASRWA. Met with the ASRWA to discuss future collaboration on projects concerning drinking water source protection. A program was developed that has ASRWA field verifying the most highly susceptible small community bedrock well sources of supply. Also initiated a discussion concerning a possible agriculture initiative to work with the newly hired ASRWA staff to utilize the SWAP assessment reports.

Operator Certification Expense Reimbursement Grant

The DWD has consolidated the Operator Certification Expense Reimbursement Grant into the Operator Certification Program. The DWD has had a long standing Operator Certification Program and the additional Federal funding allowed us to expand this program to NTNC systems and to institute the requirement for renewal training. We also recently changed our work plan to allow us to incorporate a DWD training program for operators. It has been long recognized that properly trained and certified water supply professionals reduce non-compliance and enforcement actions.

The following are some accomplishments of the Operator Certification Program:

- Obtained approval of amendment of the Expense Reimbursement Grant (ERG, $ 2.2+ million) for the Drinking Water Division staff to provide operator training
- Achieved 99% system compliance with operator certification requirements, with 72 systems achieving compliance as a result of formal and informal enforcement in FY 2004
- Incorporated security elements (training, background check position)
- Added many outreach items to web page (majority of the program's publicly distributed documents are available on web)
- Increased outreach work (presentations, articles, committee participation)
- Developed internal process improvements including project and task databases, mailing document center, Standard Operating Procedures (SOP) for staff, and phone call tracking spreadsheet
- Created operator renewal training course database
- Modified the training approval guidance document to strengthen training approval criteria
- Completed review for the first year of renewal applications that required training credits
- Developed a process to issue Continuing Education Units (CEUs) for Drinking Water Division courses
- Gave various presentations on certification and security at various state, regional national forums.

D. **Method of Establishing a Baseline and Means of Measuring Improvements (Section 1420(c)(D))**

The DWD's Capacity Development Strategy with the EPA has in effect, established baseline activities. Data is compared and analyzed via yearly reporting of qualitative and quantitative indicators to EPA. Yearly analyses

are used to determine necessary program modifications. The following is the Capacity Development benchmarks and progress:

Drinking Water Benchmark	**2002/2003**	**2003-TNCs**	**2003/2004**	**2004-TNCs**
1. Total number of PWS	1245 -575 CWSs -670 NTNCs	1677	3028 CWS-593 NTNC-667	TNC-1768
2. Number of PWS Maximum Contaminant Level (MCL) Violations	151	119	427 CWS-103 NTNC-113	TNC-211
3. Percentage of PWS types of MCL violations	59 CWSs (11%) 92 NTNCs (14%)	119 (.07%)	CWS-103 (18%) NTNC-113 (17%)	TNC-211 (12%)
4. Percentage of PWS with monitoring and reporting violations	70 CWSs (12%) 225 NTNCs (33%)	1030 (61%)	CWS-42 (7%) NTNC-64 (10%)	TNC-383 (22%)
5. Percentage and type PWS w/no violations (review by size, ownership)	446 CWSs (77%) 353 NTNCs (52%)		CWS-462-(78%) NTNC-510 (77%)	TNC-1207 (68%)
6. Number of violations – by type	MCL: 59 CWSs 92 NTNCs	119	MCL: C-103 NTNC-113	TNC-211
	Non-Reporting: 70 CWSs 225 NTNCs		M&R: C-42 NTNC-64	TNC-383
7. Sanitary surveys (frequency) enumeration of deficiencies	188 CWSs 101 NTNCs	1030	34 CWS 69 NTNC	155 TNC
8. Track significant non-compliers (SNC)	17 CWSs 61 NTNCs			
9. Number of Certified Operators (by type - community, non-community)	1207*		1253	
10. Tracking technical assistance provided by other sources (contractors, local governments, etc.)	110 NTNC sanitary surveys		0 (no contracts executed)	
11. Number of new CWSs being created	3**		22*	
12. Number of new NTNC's being created	18**		15**	
13. Number and types of consumer complaints (Calls related to aesthetics)	9		50	

Note

* Corrected from the 2002/2003 report

** See attachment #3 new system report for period

The number and significance of benchmarks may change as programmatic requirements change. However, for a State program to effectively run a "capacity development" process, a high level of staff training and good internal communications are critically important. Routine and frequent evaluation of the program is also necessary and program adjustments must be made, as necessary.

Through the performance of sanitary surveys, compliance with water system construction and protection, operator certification, cross connection control, monitoring and reporting, water quality and operational regulations are evaluated in the identification of system deficiencies. The most common occurrences of noncompliance or deficiencies are with the water system construction and protection regulations. Well construction regulations refer to the physical structure of the well in requiring a watertight seal with all appurtenances in order to protect the well from storm water drainage and runoff. Well protection regulations refer to location of the well in reference to sources of pollution. Water storage facility regulations refer to the construction, location and structural integrity of the facility protecting it from sources of pollution. Other common deficiencies include cross connection violations, on-site water treatment residual disposal violations (DEP) and operational violations.

II) Changes to Strategy

There were no changes to the Capacity Development Strategy for public water systems. It is recommended that it be maintained as approved. Any modifications to the Strategy, as indicated in this report, are for the most part, changes in emphasis, or prioritization of certain components: not redirections or elimination of elements.

III) Conclusion

Effective, continued implementation of the Capacity Development Strategy is dependent upon the continuation of the current Federal directive to develop system capacities, and upon EPA's ability to maintain adequate Federal funding support for the states. The Drinking Water Division of the Department of Public Health will continue to partner with Region 1 EPA, and participate through its affiliation with the Association of State Drinking Water Administrators, to support continuation of critical Capacity Development Strategy initiatives.

Attachment #1

Revision of DWD Capacity Development Strategy
"A Quick Analysis"

EPA is scrutinizing the DWD Capacity Development Program increasingly. With every Federal dollar comes increasing responsibility to report and justify use to the EPA. The September 30, 2003 Office of Inspector General Evaluation (OIG) Report "Impact of EPA and State Drinking Water Capacity Development Efforts Uncertain", has fueled this situation. In addition, as a direct result of the OIG report, EPA has established a national committee, under side direction from the OIG, of all States Capacity Development Coordinators in an attempt to establish national reporting measures as a direct response to the OIG report recommendations.

All of this federal activity has in wave affect caused the DWD the need to quickly produced a strategy concept that could address all of the identified issues and concerns noted by the 2003 OIG Evaluation Report to assist in the development of a re-furbished DWD, Connecticut Capacity Development Program. Most of the information you know already, but the true intent is to solidify all of the "ideology" of Capacity Development, and identify the key operational components that require the DWD to develop performance measures for, and in some cases completely new initiatives.

Introduction:

Congress amended the SDWA in 1996, providing for a variety of initiatives to assist States and public water systems in providing safe drinking water to the public. Capacity development, the Drinking Water State Revolving Fund (DWSRF), operator certification programs, and such resources as the Environmental Finance Centers and Small System Technical Assistance Centers, were instituted to provide assistance to States and community water systems. Congress established capacity development with the intent of **focusing on those systems most in need of assistance**. These were primarily small systems (serving populations of 3,300 or less).

In 2000, small systems accounted for 90 percent of all systems that had a "History of Significant Noncompliance" (a system violating one or more National
Primary Drinking Water Regulations in any three quarters within a 3-year period).
All **three components** of capacity development (**technical, managerial, and financial**) are critical to the successful operation of community water systems. EPA stresses the interrelated nature of T/M/F capacity. EPA, States, and drinking water systems house T/M/F expertise in different program areas at different levels. The success of water systems' achieving capacity to run their operations in an efficient, business-like manner rests on **water system owners and operators** being able to effectively understand, communicate, and coordinate the various T/M/F needs. States, through the design and
implementation of their capacity development strategies, have approached capacity development in different ways, to meet the unique issues facing their systems.

Capacity Development Ideology:

A Capacity Development Program for us can be:

- **Flexible** so that we can maximize the use of resources and capabilities to implement processes that meet the unique needs of our PWS's.
- **Proactive** in identifying and prioritizing those water systems most in need of improving T/M/F capacities.
- **Integrated** so that the resources of all Units are utilized.
- **Accountable** in being able to demonstrate that a capacity development strategy helps water systems provide safe water to customers.

The actual amendment to the SDWA in 1996 states these same four attributes of capacity development:

1. **Flexibility** was identified in the findings section of the Amendments, Public Law 104-182 §3(4), which stated: *States play a central role in the implementation of safe drinking water programs, and States need increased financial resources and appropriate flexibility to ensure the prompt and effective development and implementation of drinking water programs.*
2. **Proactivity** was required in the capacity development section of the Amendments, Public Law 104-182, §1420(c)(2)(A), which stated: *In preparing the capacity development strategy, the State shall consider, solicit public comment on, and include as appropriate – (A) the methods or criteria that the State will use to identify and prioritize the public water systems most in need of improving technical, managerial, and financial capacity.*
3. **Integration** was identified in the findings section of the Amendments, Public Law 104-182, §3(8)(B), which stated: *[M]ore effective protection of public health requires...maximizing the value of the different and complementary strengths and responsibilities of the Federal and State governments in those States that have primary enforcement responsibility for the Safe Drinking Water Act.*
4. **Accountability** was required in the capacity development section of the Amendments, Public Law 104-182, §1420(c)(1), which stated: ….*State[s] shall receive only [a portion] of the allotment that the State is otherwise entitled to receive under [DWSRF], unless the State is developing and implementing capacity development strategies that assist water systems in acquiring and maintaining technical, managerial, and financial capacity.*

There is no mandate that all four attributes need to be present to the same degree for capacity development programs to be successful. However, it is logical to believe that the combined presence of these attributes promotes a capacity development process that assists public water systems in attaining T/M/F capacity.

Operational Components:

The SDWA Amendments give four sequential, closely linked activities that describe how States can provide proactive capacity assistance to community water systems that can be focused on those systems most in need:

- **Assessing** water system T/M/F capacities.
- **Prioritizing** systems based on their capacity needs.
- **Delivering** T/M/F capacity development services to systems most in need.
- **Collecting information** to determine whether water systems are achieving results.

To utilize these activities, some of the most useful tools the DWD has is sanitary surveys, source water assessment, SDWIS, review of water system planning when a system is new or expanding, applying for a DWSRF loan, and when a PWS is experiencing problems. All could be used for assessing water system capacity.

DWD Strengths:

Based on the OIG report, which has been interpreted as negative to EPA and indirectly towards most States activities, the DWD has the strong identified components of a good capacity development program.

The DWD has available the following units and the associated activity:

1. **Compliance:** sanitary survey and technical assistance.
2. **Design Unit:** new or expanding water system plan review
3. **Enforcement:** identification of systems most in need of assistance
4. **DWSRF:** DWSRF loan
5. **Operator Certification:** ensuring professional delivery of drinking water
6. **Source Water Protection:** source water technical issues.
7. **2% Small System Technical Assistance Set-Aside:** addresses small system owners, operators and other stakeholders.
8. **SDWIS:** PWS data

DWD Weaknesses:

Currently the DWD has within its identified components the following weaknesses:

1. The sanitary survey is for compliance-oriented activities and is not related to capacity development. Although all States are required to use sanitary surveys to perform compliance assessments of public water systems, sanitary surveys may also be used to perform assessments of the managerial and financial capacity of water system management and operators. The DWD is successful in identifying significant deficiencies identified as part of the sanitary survey, but definitions for managerial and financial significant deficiencies do not exist. The managerial and financial assessments are just as important as technical, and these deficiencies are still a part of protecting public health.
2. Operators are responsible for the day-to-day management of a water system's technical operations and, therefore, are critical to ensuring the drinking water delivered to the public is safe, but can also be responsible for the management and financial budgets of systems, and can be a critical link to water boards and directors. All three aspects of T/M/F should be incorporated into the training portion of the operator certification program. Operators may not be receiving any coordinated State guidance in the management and financial budgets of systems.
3. Although enforcement is highly active, we are missing the chance to require systems in noncompliance to develop business plans that contain all three elements of capacity. We should also consider incorporated managerial and financial capacity requirements into our regulations, or include voluntary managerial and financial self-assessment as part of enforcement agreements. Enforcement is often seen as the last resort to address noncompliant
   water systems, our State enforcement program can be used to promote long-term managerial and financial capacity with systems.
4. When the DWD reviews plans, a method of assessment and prioritization should be followed, that also delivers T/M/F assistance to water systems through capacity development plans. The DWD maybe only delivering managerial and financial assistance to systems once a technical deficiency is identified.
5. EPA requires that DWSRF loans go to systems that either have adequate capacity or will achieve capacity through the loan project. The Drinking Water National Information Management System that EPA uses to track the DWSRF program cannot determine what T/M/F problems the loans were used to solve. Neither can the DWD. Furthermore, the DWD capacity information about the DWSRF program is focused mostly on the financial ability of systems to access and repay the loans, with no focus on the assessing and measuring of the overall T/M/F health of systems.
6. DWSRF-Set Asides needs new initiatives with a method of assessment and prioritization.
7. The SWP efforts are strong, however the DWD does not apply any measure for managerial and financial capacity in its design.
8. The 2% Small System Technical Assistance Set-Aside needs new 4-year work plan.
9. SDWIS has many data related deficiencies that inhibit or prohibit use of that data for capacity development use in measurement and assessment of the overall T/M/F. One example is the lack of verified legal owner information.

Conclusion:

The DWD works to prevent technical deficiencies in water systems by providing assistance through activities such as conducting sanitary surveys. Although the DWD provides a strong technical assistance program, more effort toward assessing and delivering assistance to water systems is needed in developing system managerial and financial capacity.

The following activities should be used to revise the current Connecticut Capacity Development Program Strategic Plan:

1. Developing new performance measures to assess progress toward Connecticut Capacity Development Program Strategic Plan goals utilizing the DWD daily activities of sanitary surveys, source water assessment review, review of water system planning when a system is new or expanding, applying for a DWSRF loan, and when a PWS is experiencing problems;
2. Collect data on these capacity development performance measures (#1 above);
3. Analyze the data for reporting our capacity development performance results; and,

4. Develop an internal DWD Capacity Development Database utilizing the national CAPDAT identifiers for tracking all capacity development performance results.

With committed attention to these activities, the DWD can further develop its statewide capacity development strategy that promotes T/M/F in a proactive, integrated, flexible, and accountable manner throughout its key DWD Units.

Attachment #2

PWSID	SYSTEM NAME	CITY	LAST SURVEY DATE	SYSTEM TYPE	VIOL TYPE	VIOL NAME
CT0040011	AVON WATER CO	AVON	12/3/2003	C	26	MONITORING (TCR), REPEAT MINOR
CT0090354	SUNOCO, PUTNAM PARK ROAD	BETHEL	4/30/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0180564	PIZZA HUT	BROOKFIELD	4/30/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0180664	BROOKFIELD SUNOCO	BROOKFIELD	4/30/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0180664	BROOKFIELD SUNOCO	BROOKFIELD	4/30/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0180152	BROOKFIELD CENTER LLC	BROOKFIELD	5/7/2004	NTNC	21	MCL (TCR), ACUTE
CT0180664	BROOKFIELD SUNOCO	BROOKFIELD	4/30/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0210012	HOUSATONIC VALLEY REGIONAL H S	CANAAN	3/16/2004	NTNC	25	MONITORING (TCR), REPEAT MAJOR
CT0260044	CERAMICA IMPORTING INC.	CHESTER	10/3/2003	NC	21	MCL (TCR), ACUTE
CT0260044	CERAMICA IMPORTING INC.	CHESTER	10/3/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0290113	CAMP JEWELL-SUNRISE	COLEBROOK	9/4/2003	NTNC	21	MCL (TCR), ACUTE
CT0321172	MEADOWBROOK SHOPPING CENTER	COVENTRY	10/10/2003	NTNC	21	MCL (TCR), ACUTE
CT0321172	MEADOWBROOK SHOPPING CENTER	COVENTRY	10/10/2003	NTNC	26	MONITORING (TCR), REPEAT MINOR
CT0400051	OLD NEWGATE RIDGE WATER COMPANY INC	EAST GRANBY	10/8/2003	C	26	MONITORING (TCR), REPEAT MINOR
CT0400051	OLD NEWGATE RIDGE WATER COMPANY INC	EAST GRANBY	10/8/2003	C	26	MONITORING (TCR), REPEAT MINOR
CT0470071	EAST WINDSOR HOUSING AUTHORITY	EAST WINDSOR	1/9/2004	C	26	MONITORING (TCR), REPEAT MINOR
CT0470071	EAST WINDSOR HOUSING AUTHORITY	EAST WINDSOR	1/9/2004	C	25	MONITORING (TCR), REPEAT MAJOR
CT0540084	BUTLER FIELD	GLASTONBURY	9/24/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0610284	HIGGANUM UNITED METHODIST CHURCH-PRESCHL	HADDAM	11/24/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0610284	HIGGANUM UNITED METHODIST CHURCH-PRESCHL	HADDAM	11/24/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0610284	HIGGANUM UNITED METHODIST CHURCH-PRESCHL	HADDAM	11/24/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0610284	HIGGANUM UNITED METHODIST CHURCH-PRESCHL	HADDAM	11/24/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0670331	BIRMINGHAM UTIL - AMSTON LAKE DIVISION	HEBRON	2/2/2004	C	25	MONITORING (TCR), REPEAT MAJOR
CT0780161	MAPLEWOOD APARTMENTS	MANSFIELD	10/29/2003	C	21	MCL (TCR), ACUTE
CT0780014	ALTNAVEIGH INN & RESTAURANT, LLC.	MANSFIELD	5/4/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0820031	MIDDLEFIELD HOUSING AUTHORITY	MIDDLEFIELD	2/10/2004	C	25	MONITORING (TCR), REPEAT MAJOR

CT0820031	MIDDLEFIELD HOUSING AUTHORITY	MIDDLEFIELD	2/10/2004	C	25	MONITORING (TCR), REPEAT MAJOR
CT0860634	RENALDIS ONE STOP	MONTVILLE	8/5/2003	NC	21	MCL (TCR), ACUTE
CT0920014	ALCOVE MOTEL	NEW HARTFORD	8/28/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT0970372	CURTIS PACKAGING	NEWTOWN	4/13/2004	NTNC	26	MONITORING (TCR), REPEAT MINOR
CT1020164	HIGHLAND ORCHARD RESORT PARK	NORTH STONINGTON	9/30/2003	NC	21	MCL (TCR), ACUTE
CT1020164	HIGHLAND ORCHARD RESORT PARK	NORTH STONINGTON	9/30/2003	NC	21	MCL (TCR), ACUTE
CT1060064	OLD SAYBROOK VFW	OLD SAYBROOK	6/15/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT1060064	OLD SAYBROOK VFW	OLD SAYBROOK	6/15/2004	NC	25	MONITORING (TCR), REPEAT MAJOR
CT1240044	LARRY LEGGIO INDUSTRIAL PARK	SEYMOUR	11/10/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT1430934	1063 EAST MAIN ST (CASA MIA RESTAURANT)	TORRINGTON	8/1/2003	NC	25	MONITORING (TCR), REPEAT MAJOR
CT1660244	FARMINGBURY CENTER (1585 MERIDEN RD)	WOLCOTT	8/28/2003	NC	25	MONITORING (TCR), REPEAT MAJOR

Attachment #3

New System Report

For the period
July 1, 2002 – June 30, 2003

Names of Proposed New CWSs*	II) Approved	Denied	Reason for Denial**
AQUA VISTA ASSOC, INC - LOWER SYSTEM	X		
CAMPBELL HEIGHTS APARTMENTS - SYSTEM #2	X		
CAMPBELL HEIGHTS APARTMENTS - SYSTEM #3	X		
*CARLSON SPRING****	X		
COVENTRY HOUSING AUTHORITY-UPPER SYSTEM	X		
EVANGELICAL BAPTIST CENTER – RESIDENTIAL	X		
FOXRIDGE APARTMENTS-WELL 2	X		
GROVE SCHOOL - SYSTEM #2	X		
HYDE SCHOOL - SYSTEM #2 (RESIDENTIAL)	X		
KENMORE ROAD ASSN.-LOWER SYSTEM	X		
LEBANON PINES, SYSTEM #2	X		
METACOMET HOMES-WELL 2	X		
RUMSEY HALL SCHOOL - HILLTOP	X		
RUMSEY HALL SCHOOL - MAIN CAMPUS	X		
RURAL WATER CO, INC-SCODON - WELL #4	X		
RURAL WATER CO, INC-SOUNDVIEW- INTERCONN	X		
STONEHOUSE COMMONS CONDO - BUILDING #3	X		
TOWN IN COUNTRY CONDOMINIUMS - LOWER SYS	X		
TOWN OF SOMERS - RYE HILL SYSTEM	X		
TOWN OF SOMERS - SOMERSVILLE SYSTEM	X		
WHISPERING HILLS, LLC - WELL D SYSTEM	X		
WILLINGTON RIDGE CONDOS - SYSTEM #2	X		
Names of Proposed New NTNCs*	**II) Approved**	**Denied**	**Reason for Denial****
464 WOLCOTT ROAD	X		
BARLOW MOUNTAIN & SCOTLAND ELEM SCHOOLS	X		
BRIARWOOD COLLEGE - ACADEMIC HALL	X		
*BUILDING BLOCKS LEARNING CENTER****	X		
*COMMUNITY CHILDRENS CENTER****	X		
DEVEREUX GLENHOLME SCHOOL - MAIN CAMPUS	X		
EVANGELICAL BAPTIST CENTER - REC CENTER	X		
*JONES HOLLOW MEDICAL COMPLEX****	X		
*LITTLE MUNCHKIN DAY CARE****	X		
MARIANAPOLIS PREP SCHOOL - ADMIN/SCHOOL	X		
MELISSA JONES SCHOOL - WELL #2	X		
NATHAN HALE-RAY MIDDLE SCHOOL-RAY WING	X		
STEVENSON LUMBER - GARAGE & LOCKER ROOM	X		

Names of Proposed New NTNCs* (continued)	II) Approved	Denied	Reason for Denial**
*WOLCOTT PUBLIC WORKS****	X		
WOODHALL SCHOOL-WELL 2	X		

*Attached more sheets if necessary
**If applicable, prepare a short narrative describing follow-up actions planned or performed to assist system in gaining adequate capacity.
*** Italicized PWS indicates an actual New System all other PWS's are a result of dividing existing PWS's into multiple entities each given a separate PWS ID.