



State Of Vermont
Existing Public Water System Capacity
Strategy

July 28, 2000

Prepared by
Water Supply Division
Department Of Environmental Conservation

With Assistance From
The Capacity Strategy Advisory Workgroup
Northeast Rural Water Association
Interested Stakeholders

Contents

List of Acronyms ii

Introduction 1

Public Participation and Comment 3

Components of the Capacity Development Strategy 5

 Element A. 5

 Element B. 6

 Element C. 9

 A. Existing Tools 9

 B. Tools in Development 11

 C. Tools to be Developed 18

 Element D. 19

 Element E. 20

A Cohesive Strategy 21

Appendix A: Letter Sent to Stakeholders Requesting Their Participation on Advisory Workgroup . 23

Appendix B: Public Meeting Schedule and Attendance Summary 24

Appendix C: Public Meeting Materials, Meeting Minutes and Lists of Attendees from the
 Owner/Operator Meetings 25

Appendix D: Public Comments on the Draft Strategy 28

Appendix E: Letter Sent to Solicit Public Comment on the Draft Strategy 31

Appendix F: Advisory Workgroup Mailing List 32

List of Acronyms

<u>Acronym</u>	<u>Meaning</u>
APA	Aquifer Protection Areas
ANR	Agency Of Natural Resources
AWWA	American Water Works Association
CCR	Consumer Confidence Report
CWS	Community Water System
DEC	Department Of Environmental Conservation
DWSRF	Drinking Water State Revolving Fund
GMWEA	Green Mountain Water Environment Association
IUP	Intended Use Plan
NeRWA	Northeast Rural Water Association
NPDWR	National Primary Drinking Water Regulation
NTNC	Nontransient Noncommunity Water System
O & M	Operation and Maintenance
PWS	Public Water System
RFP	Request For Proposal
SDWA	Safe Drinking Water Act
SPA	Source Protection Area
SPP	Source Protection Plan
SWAP	Source Water Assessment Program
TOP	Temporary Operating Permit
TNC	Transient Noncommunity Water System
VEDA	Vermont Economic Development Authority
VSA	Vermont Statute Annotated
WSD	Water Supply Division
WSR	Water Supply Rule

Introduction

This report presents the results of the Vermont Agency of Natural Resources (ANR), Water Supply Division's (WSD) efforts to meet the capacity development provisions of the Safe Drinking Water Act (SDWA). Section 1420(c)(1)(C) of the 1996 Amendments to the SDWA directs the EPA Administrator to withhold a portion of a State's annual Drinking Water State Revolving Fund (DWSRF) allotment unless the State develops a strategy to help all existing public water systems (PWSs) achieve and maintain technical, managerial, and financial (TMF) capabilities. The State must be developing and implementing the strategy by August 6, 2000.

In developing a strategy, SDWA §1420(c)(2) requires the State to consider, solicit public comment on, and include as appropriate:

- A. The methods or criteria that the State will use to identify and prioritize the PWSs most in need of improving capacity.
- B. The institutional, regulatory, financial, tax, or legal factors at the federal, State, or local level that encourage or impair capacity development.
- C. A description of how the State will use the authorities and resources of the SDWA to:
 1. Assist PWSs in complying with applicable laws and regulations,
 2. Encourage the development of partnerships among PWSs, and
 3. Assist with the training and certification of water system operators.
- D. Methods for establishing a baseline and measuring improvements in capacity.
- E. The identification of interested stakeholders.

WSD has spend the past several months soliciting public comments on the five elements listed above as part of its preparation of the capacity development strategy. One way WSD obtained comments was by forming a Capacity Strategy Advisory Group to provide input on the five SDWA elements and to review other public comments. WSD and the Stakeholders Group reviewed and considered each comment and responded where appropriate.

WSD has been helping systems increase their capabilities for years. WSD and the Advisory Group determined that the overall goals of the strategy would be to determine the reasons for system non-compliance, identify solutions, and effectively allocate resources to improve the capabilities of those

systems most in need. The State's capacity development strategy is based on existing drinking water programs and activities and new programs and activities that will allow the State to meet its goals.

This report addresses each required element of a capacity development strategy as set forth in SDWA §1420(c). Each element constitutes a piece of the overall effort to help existing PWSs develop their T&E capabilities.

Public Participation and Comment

To develop the strategy and ensure its effectiveness, WSD turned to the public water systems, system operators and employees, and the general public. WSD provided many opportunities for interested parties to learn about the Drinking Water Program and the development of the strategy, and provided many avenues for those parties to provide comments. The Department solicited public comment through:

1. **The Development of a Capacity Development Advisory Workgroup.** Prospective members of the Advisory Group were solicited in January 2000 through a mailing to over 2000 stakeholders. (Appendix A) The Advisory Group members come from:

- Federal, State, and local government
- Water Districts, Fire Districts, and Water Systems
- Homeowners Associations
- Mobile Home Parks
- School Districts, Schools, and Daycare Centers
- Camps
- Consulting/Engineering Firms
- Environmental Organizations

The Group was formed to provide WSD with public input on the development and implementation of the strategy. The workgroup met numerous times to provide comments and suggestions on the development of the strategy and met on June 28th to discuss the draft of the strategy. The Group will continue to meet as necessary (including a meeting in September 2000) to provide recommendations, suggestions, and comments on the new initiatives and on the strategy's implementation. (Additional information on the activities of the Advisory group is included in Element E.)

2. **Public Meetings.** In addition to the Advisory Workgroup, the WSD utilized the knowledge and experience of water system owners, operators, and employees; WSD staff; interested stakeholders; and the general public. The Division solicited public comment through a series of public meetings and a meeting of WSD staff.

These meetings were designed to educate the public on the State's Capacity Program and to gather input on:

- a. The five strategy elements (emphasis was placed on the factors that impair or encourage capacity).
- b. The use of DWSRF set-asides to encourage capacity.
- c. 10 VSA §1684 (conservation requirements) and 10 VSA §1685 (capacity).

WSD held eight owner/operator public meetings to obtain comments, suggestions, and recommendations on the development of the draft strategy. (See Appendix B for a schedule of meetings and attendance summary.) The results of the meetings and all of the public comments were posted on the WSD Web site (<http://www.anr.state.vt.us/dec/watersup/capacity/publicmeetings.htm#Comments From the Meetings>) and were distributed to Advisory Workgroup members. (See Appendix C for meeting materials, meeting minutes, and lists of public meeting attendees.)

An additional public meeting was held on June 15, 2000 to obtain comments, suggestions, and recommendations on the draft of the strategy. (See Appendix D for the public comments on the draft of the strategy and WSD's responses.)

3. **The Internet.** Meeting results and other strategy documents including the draft strategy were posted on the WSD Web page.
4. **Mailings.** In addition to the over 2,000 letters sent to invite stakeholders to participate in the development of the strategy, over 2,500 owners, operators and stakeholders were notified via mail that the draft strategy was available on the WSD Web page. The letter also notified the stakeholders of the public meeting to discuss the draft strategy and of the deadline for public comments. (See Appendix E for a copy of the letter.)

Components of the Capacity Development Strategy

Vermont's strategy to assist PWSs in achieving or maintaining TMF capacity combines many of the programs and activities that WSD has implemented for years. WSD also will develop or implement new activities in response to the comments received during the public participation process. Each element of the strategy is described in more detail below.

Element A. The methods or criteria that the State will use to identify and prioritize the PWSs most in need of improving TMF capacity.

Prioritizing is not necessary for technical assistance because providers can provide assistance to all PWSs that request assistance. WSD is aware of systems needing technical assistance because of sanitary surveys, compliance monitoring, and other frequent contacts with the systems. The staff responds to those needs and notifies technical assistance providers when appropriate. PWSs will be made aware of the available assistance and the procedures for requesting it.

In the future, if the need for technical assistance exceeds WSD staff or contract assistance resources, WSD will prioritize systems using the following factors:

1. DWSRF priority list status
2. System ownership (municipal, private non-profit, private profit)
3. System type (CWS, NTNC, TNC)
4. System size (design population)
5. Permanent residents

WSD may also utilize the prioritization procedures of financial assistance and strategy related programs including:

1. **Planning Loan Fund and the Source Water Protection Loan Fund.** DWSRF set-aside funds are used to provide low-interest planning and source water protection loans to municipalities. The Division has devised a priority ranking system which scores projects based on information submitted by water systems and from information in the WSD files. The numerical scores in the DWSRF priority ranking system are based on technical and non-technical criteria.
2. **Enforcement.** The enforcement committee of the WSD prioritizes systems for enforcement actions.

3. **Operator Certification.** The operator certification committee identifies and prioritizes training needs.

Element B. A description of the institutional, regulatory, financial, tax or legal factors at the federal, State, or local level that encourage or impair capacity development.

A number of factors in Vermont **encourage** the development and maintenance of capacity in Vermont's PWSs. The following factors are based on the comments, suggestions, and recommendations of the Advisory Workgroup, and stakeholders at public meeting and written comments received in response to the initial mailing:

1. **Operator Training Program.** The Northeast Rural Water Association (NeRWA) provides training classes for operators seeking certification. This activity is supported in part with DWSRF set-aside funds.
2. **DWSRF.** The fund provides financial assistance primarily in the form of below market loans to municipalities and other eligible PWSs. The funds can be used to improve or construct water treatment, storage, and distribution systems that will improve drinking water infrastructure and allow the system to achieve and maintain compliance.
3. **Planning Loan and Source Water Protection Loan Programs.** DWSRF set-aside funds are used to provide low-interest planning and source water protection loans to municipalities.
4. **Facility Evaluation Program.** Contract engineers provide free facility evaluations and reports to small water systems. The engineers identify current and future improvements that should be made by the system. The engineer also provides cost estimates. This program is funded with DWSRF set-asides.
5. **Sanitary Survey Program.** WSD conducts sanitary surveys to evaluate the TMF capabilities of all PWSs. Technical assistance is available to help the system correct any deficiencies.
6. **Source Water/Wellhead Protection Program.** All CWSs are required to perform certain source water protection activities. The WSD works with these systems to avoid contamination and to make plans to minimize the impact of contamination, should it occur.
7. **Water Treatment Technical Assistant Contract.** WSD has a contract with a private consultant to provide direct assistance to water systems with water treatment operational problems and concerns.

8. **Knowledge of WSD Staff and Other Technical Assistance Providers.** The regulatory staff of the WSD is aware of system facilities and capabilities. This knowledge is gained through sanitary surveys, the review of system planning documents, analytical testing, and personal contact with the system's owners and operators. This knowledge, in addition to the information available from private technical assistance programs, allows the WSD to develop a clear picture of the TMF capacity of PWSs in Vermont, and to identify those systems that need additional technical assistance.

Just as there are factors that encourage and enhance TMF capacity, there are factors that impair the capacity of water systems in the State. The following represent the factors that **impair** the development and maintenance of TMF capacity of PWSs in Vermont:

1. **Regulatory Requirements.** Requirements and rule explanations can be complex and administrative and reporting requirements can be excessive.
2. **Cost of Compliance with Present and Future Regulations.** There is a lack of cost effective, feasible treatment technologies available to small systems. The overall cost of compliance for all systems will rise as additional federal regulations become effective. Economy of scale makes cost increases per user for small systems excessive. The static user base of small systems will result in better than average cost increase.
3. **Owner/Operator Perceptions.** Owner/Operator perceptions of the cost and difficulty to complete O&M manuals, long range plans, and source water protection plans impair the development of capacity.
4. **Part-time Operators.** Many operators are part-time, volunteer employees with little time to manage and operate the system. Full-time employees have numerous other responsibilities.
5. **Customer Awareness.** Ancillary systems (e.g. systems that are part of another business such as a day care, mobile home park, gas/service station) may not even recognize that they are a regulated PWSs. In addition, many citizens may be unaware of the drinking water regulations or even who is supplying their drinking water.
6. **Training Opportunities.** Owners and operators need forums to discuss issues with their peers. These training sessions need to be convenient and affordable. In addition, board members need guidance or information on their responsibilities, available resources, and applicable laws and regulations.

7. **Communication.** There is a lack of good, meaningful communication between WSD and system owners and operators.
8. **Engineering Costs.** Engineering costs are high and there is a lack of available engineering technical assistance for small systems. Facility requirements are excessive for small simple systems and most engineers have little experience with these types of systems.
9. **DWSRF.** The DWSRF is not structured to meet the needs of small systems or to provide small loans. The State and federal government does not provide adequate funding for infrastructure upgrades or for monitoring required by new regulations.
10. **Act 60.** The Education Opportunity Act has a negative impact on improving school water systems.
11. **Unsustainable Systems.** Additional procedures, policies, or statutes need to be developed to address non-viable systems.
12. **Compliance Incentives.** There are too few financial incentives that encourage small water systems to make improvements.
13. **Consolidation.** Over the long term, consolidation of water systems will increase regulatory compliance and improve overall capacity through the coordination of resources. Financial incentives and regulatory requirements to encourage consolidation are not adequate.
14. **State Laboratory Facilities.** State laboratories are not certified to provide all compliance analyses.
15. **Water Conservation.** Water conservation is an important part of maintaining an adequate water supply during periods of peak usage and over the long term. Water systems do not place adequate emphasis on water conservation.
16. **Regulatory Process.** There is a lack of regulatory and administrative consistency among the agencies and departments that regulate the provision of drinking water. Also, the Public Service Board procedures for rate increases are complex, long, and difficult for small water systems.

As part of the State's approach to capacity development, WSD is initiating many new programs and activities to address some of the impairments to capacity (described further below). WSD will also continue to use the existing tools that encourage capacity and improve the drinking water programs and activities as needed.

Element C. A description of how the State will use the authorities and resources of this title (SDWA) or other means to assist PWSs in complying with NPDWR, encourage the development of partnerships between PWSs to enhance the TMF capacity of the systems, and assist PWSs in the training and certification of operators.

In developing a description of how the State will help existing systems gain or maintain capacity, WSD and the Advisory Group looked at all the current authorities and resources, the factors that encourage and impair capacity, and discussed possible tools that could be developed to help water system achieve or increase capacity. WSD will continue and expand the use of all current authorities and resources to carry out an effective strategy. The following are the elements of this effort:

A. Existing Tools

1. **Permits and Plan Review.** All new water systems must secure construction and operating permits from WSD. All existing systems must obtain construction permits for modifications, improvements, or expansions to the system and must renew operating permits periodically. WSD reviews plans and specifications, engineering reports, long range plans, O & M manuals, and other information submitted by water systems as required by regulations.
2. **Sanitary Surveys.** WSD performs sanitary surveys to evaluate the capabilities of all PWSs in Vermont. The system is given time and technical assistance to correct any deficiencies. Technical assistance is provided by WSD Staff and technical assistance providers.
3. **Financial Assistance Programs.** There are many financial assistance programs including the Department of Agriculture Rural Development program, the Community Development Block Grant program, the DWSRF, the Planning Loan program, the Source Protection Loan program, the Source Water Assessment program, and the Facility Evaluation program. These programs provide funds to PWSs needing to repair or replace infrastructure, expand to meet demand growth, protect a source of supply, or for other activities.
4. **Source Water Assessment Program (SWAP).** All public CWSs must have an approved Source Protection Plan (SPP) in order to receive an Operating Permit. Those Public CWSs that do not have a SPP are issued a Temporary Operating Permit (TOP) that includes a schedule for compliance. Non-community systems are strongly encouraged to develop a SPP and must do so in order to qualify for monitoring waivers. WSD is going to require all NTNCs to prepare an SPP as part of the federal SWAP. TNCs will have a Source Water Assessment prepared for them by the WSD.

5. **Technical Assistance and Training.** NeRWA, the Rural Community Assistance Program, Green Mountain Water Environment Association, and other technical assistance providers provide training for water system operators and employees. WSD has formed an operator certification committee to ensure that operator certification training is useful and effective.
6. **Information and Guidance.** WSD provides many documents to the water supply industry to update owners and operators on regulations and policies and to help systems plan for the future. Some of these documents include the WSR, IUP, DWSRF Guidance Documents, State Statutes, SDWA, EPA Regulations and Guidance, and fact sheets. Many of these documents can be found on the Department's web site.
7. **Enforcement.** The WSD Enforcement Committee routinely discusses non-complying water systems and the appropriate action to take against those systems. The Enforcement Division of ANR has the authority to take action as deemed appropriate including the assessment of fines and penalties.
8. **Sampling and Reporting.** The WSD collects all water quality monitoring data and periodically sends monitoring schedules to all systems.
9. **Operator Training and Certification Programs.** Since knowledgeable and well-trained operators are essential to efficient operation of a water system and the provision of safe and adequate water, WSD and technical assistance providers conduct water operator training at locations around the State. The training programs provide operators with up-to-date information and the opportunity to interact with, and learn from, their peers. Certification examinations are also given. This year, operator certification training classes are being held:

Oct 10, 2000	Small System Basic Course	Rutland
Oct 17, 2000	Small System Basic Course	Rutland
Oct 24, 2000	Small System Basic Course	Rutland
Nov 2, 2000	GMWEA Fall Meeting	Burlington
Nov 3, 2000	EXAM for Class 2 Certification	Waterbury& Rutland
Nov 3, 2000	ABC EXAMS for Class 3, 4, & D Certification	Waterbury& Rutland

10. **Newsletters.** WSD, other State Agencies, and many technical assistance providers publish a number of newsletters that can be used to provide ongoing training and education for water system operators.

B. Tools in Development

1. **Monitoring Cost Study.** The WSD plans to complete a report evaluating the options, advantages and disadvantages, and impediments to providing water systems with financial assistance for compliance monitoring activities. The report will include cost estimates, funding sources, and implementation recommendations for NTNCs, TNCs, and small CWSs.

<i>Activity Leader</i>	DWSRF Program Manager	
<i>Resource Personnel</i> (tentative)	<ul style="list-style-type: none"> • WSD Director • Health Department • Monitoring & Compliance Section (WSD) • Water Supply Section (WSD) • Advisory Workgroup 	
<i>Schedule</i>	Initiate	February 2001
	Complete	April 2001
<i>Funding</i>	In-House Study	

2. **DWSRF Program Changes.** Legislative and program changes are needed to provide additional financial assistance to small water systems and to make the program more responsive to small systems. A Workgroup will propose changes and submit them to the administration. Possible changes include providing grants or small loans to schools, providing grants for consolidation studies and start up costs, using set-aside funds to provide loans or grants for planning and design, and simplifying the loan and grant procedures for small loans to small systems.

<i>Activity Leader</i>	DWSRF Program Manager
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<p>Resource Personnel (Tentative)</p>	<ul style="list-style-type: none"> • WSD Director • Advisory Workgroup Representative • Project Development Specialist (WSD) • Department Of Environmental Conservation (DEC) • Vermont Economic Development Authority (VEDA) • Vermont Bond Bank • Rural Community Assistance Program Representative • Department Of Agriculture Rural Development Representative 	
<p>Schedule (Tentative)</p>	<p>Prepare outline of legislative changes for ANR consideration</p>	<p>August 2000</p>
	<p>Prepare legislative language</p>	<p>September and October 2000</p>
	<p>Submit to legislature</p>	<p>January 2001</p>
	<p>Provide support for legislation</p>	<p>January - May 2001</p>
	<p>Include changes in 2001 IUP</p>	

3. **Technical Training and Assistance.** WSD and technical assistance providers are planning on conducting group training programs and providing one-on-one assistance. WSD and the technical assistance providers will provide information on O&M Manuals, long range plans, financial management, and how to perform a capacity assessment. Group programs will be conducted around the State, with evening meetings scheduled every two months. WSD may provide additional contract resources if additional assistance is needed.

Activity Leader	Vermont SRF Specialist (NeRWA)	
Resource Personnel (tentative)	<ul style="list-style-type: none"> • DWSRF Program Manager • Capacity Development Specialist • NeRWA • WSD • Contractor 	
Schedule	Initiate	April 1, 2001
	Complete	On-going
Funding	DWSRF Program Management - \$30,000 Materials, Supplies, Travel, Contractor	

4. **Legal Assistance.** WSD will award a contract to a technical assistance provider for work with small systems on DWSRF loan applications and municipal agreements. This will be a 1-year pilot program and continuation will be based on pilot program results. Priority for assistance will be based on the DWRSF priority list. Funding for any one system may be limited.

Activity Leader	Capacity Development Specialist	
Resource Personnel	<ul style="list-style-type: none"> • DWSRF Program Manager • Contractors 	
Schedule	Initiate RFP	November 2000
	Award Contracts	January 2001
	Assistance Provided	2001
Funding	Program Management Set-Aside - \$10,000	

5. **Engineering Technical Assistance.** WSD will award contracts to technical assistance providers for work with small systems on operation and maintenance problems, DWSRF loan applications, preparation and review of technical assistance agreements, and review and comment on technical work products. This will be a 1-year pilot program and continuation of the program will be based on the program's results. Priority for assistance will be based on request date; DWSRF priority list status; system ownership, type, and size; and percent permanent occupancy. Funding for any one system may be limited.

Activity Leader	Capacity Development Specialist	
Resource Personnel	<ul style="list-style-type: none"> • DWSRF Program Manager • Contractors 	
Schedule	Initiate RFP	November 2000
	Award Contracts	January 2001
	Assistance Provided	2001
Funding	Program Management Set-Aside - \$40,000 (multiple contracts)	

6. **Small System Templates and Self-Assessment.** WSD will develop templates for a small system O&M manual, long range plan, and financial documentation. The electronic and hard copy templates will be provided to water systems on request and will be used in training programs. In addition, WSD will modify the Capacity Self Assessment Form and establish capacity criteria. WSD is considering the development of additional templates such as ordinances, activity calenders, and OSHA requirements.

Activity Leader	Vermont SRF Specialist (NeRWA)	
Resource Personnel (tentative)	<ul style="list-style-type: none"> • WSD Capacity Development Specialist • WSD DWSRF Program Manager • WSD Water Systems Section Representative • Advisory Workgroup Members 	
Schedule	Initiate	October 1, 2000
	Complete Templates	January 1, 2000
	Field Test Templates	January and February 2001
	Modify Templates	March 2001
	Activity Complete	April 2, 2001
Funding	Program Management Set-aside - \$2,000 (Supplies, Materials, and reproduction)	

7. **User Rate Reviews and Budgeting.** Technical assistance will be provided to help water systems develop budgets, and analyze and establish user rates. The DEC currently provides some assistance to larger systems. WSD staff and NeRWA will work with small systems using the templates developed under the template initiative. WSD may award a contract to provide this assistance. Priority will be based on request date, DWSRF priority list status, system ownership, system type, system size, and percent permanent occupancy. Funding for any one system may be limited.

Activity Leader	Capacity Development Specialist	
Resource Personnel (tentative)	<ul style="list-style-type: none"> • DWSRF Program Manager • NeRWA • Contractors • DEC 	
Schedule	Large Systems	On going
	Small Systems:	Initiate April 1, 2001
Funding	Program Management Set-Aside - \$35,000 DEC Staff Time - \$25,000 Contract time if needed - \$10,000	

8. **Public Service Board Technical Assistance.** WSD may award a contract to a technical assistance provider to help small water systems with public service board rate change procedures.¹ This will be a one year pilot program and continuation will be based on the program's results. Priority for assistance may be based on system size, date of submittal, and DWSRF priority loan application status. Funding for any one system may be limited.

¹This activity will not be implemented unless the Public Service Board agrees that the assistance will benefit both the board and the water systems.

<i>Activity Leader</i>	Project Development Specialist	
<i>Resource Personnel</i>	<ul style="list-style-type: none"> • DWSRF Program Manager • Public Service Dept. 	
<i>Schedule</i>	Initiate RFP	October 2001
	Award Contract	January 2001
	Administer Contract	2001
<i>Funding</i>	DWSRF Program Management Set-Aside - \$10,000	

9. **Board Member-Owner Manual.** A PWS board member manual is being developed. The manual will outline the responsibilities and liabilities for PWS board members. The manual will include information on relevant laws, regulations, and policies, and will include a list of resources.

<i>Activity Leader</i>	Capacity Development Specialist	
<i>Resource Personnel</i> (tentative)	<ul style="list-style-type: none"> • DWSRF Program Manager • Contractor • NeRWA • RCAP 	
<i>Schedule</i>	Initiate RFP's	January 2001
	Award Contract	March 2001
	Complete Contract	July 1, 2001
<i>Funding</i>	Program Management Set-Aside - \$25,000	

10. **Small System Design Guidance.** WSD will develop a small system design criteria guidance manual to address system modification and replacement requirements and new regulatory requirements. The manual will target consultants and system owners and operators.

<i>Activity Leader</i>	DWSRF Program Manager	
<i>Resource Personnel</i>	<ul style="list-style-type: none"> • WSD • Advisory Workgroup Members 	
<i>Schedule</i>	Initiate	February 2001

	Complete	August 2001
Funding	In-house effort	

11. **Consolidation Study.** The WSD will award a contract to identify opportunities for physical or operational consolidation of water systems in the State. Small CWSs and school water systems will be evaluated. The contractor will identify impediments to consolidation, the cost and benefits of consolidation, and the advantages and disadvantages to water systems and their customers. The contractor will develop a screening process to identify systems that may benefit from consolidation.

Activity Leader	DWSRF Program Manager	
Resource Personnel (tentative)	<ul style="list-style-type: none"> • Capacity Development Specialist • NeRWA • WSD • RCAP • Advisory Workgroup 	
Schedule	Initiate RFP	November 2000
	Award Contract	February 2001
	Complete Contract	July 2001
Funding	Program Management Set-aside - \$50,000	

12. **WSD Newsletter.** The WSD will begin publishing a newsletter in October, February, and June to improve communications between WSD and systems and to provide timely information. The newsletter will be distributed to all water systems, consultants, and appropriate stakeholders. The newsletter may be targeted to different types of systems or include sections applicable to different types of systems. The newsletter will be posted on the Department's Web page.

Activity Leader	Capacity Development Specialist
Resource Personnel	<ul style="list-style-type: none"> • WSD Staff - Prepare articles • Compliance Section Representative • Water Systems Section Representative • Contract Assistance

Schedule	1 st letter	October 2000
Funding	Program Management Set-Aside - \$20,000	

13. **Communications Workgroup.** WSD will establish a Workgroup to evaluate and develop recommendations on mass mailing procedures, Newsletters, the Electronic Bulletin Board, Electronic Communication with Water Systems, and publicity.

Activity Leader	Capacity Development Specialist	
Resource Personnel (tentative)	<ul style="list-style-type: none"> • Water System Section (WSD) • Compliance Section (WSD) • Administrative Section (WSD) • Advisory Workgroup Members • NeRWA 	
Schedule	Initiate	November 2000
	Complete	March 2001
	Initiate Recommendations	On-going
Funding	Program Management Set-Aside - \$15,000	

C. Tools to be Developed

1. **Encourage Cooperation.** WSD understands the value of PWSs working together. Partnerships can help systems obtain materials and supplies at reduced cost and share knowledge and experiences. To encourage the development of partnerships between PWSs in an effort to enhance the TMF capacity of the systems, WSD is considering developing information on, and supporting the following options:
- a. Public-private Partnerships. Continue to build on partnerships between the public water supplies and water associations (AWWA, NeRWA, GMWEA, etc.). Examples include water operator schools and distance learning (video conferences).
 - b. "Big brother" Arrangements. O & M services voluntarily provided by large systems.
 - c. *Peer Review Program.* Any drinking water system experiencing difficulties can fill out a comprehensive self-assessment to evaluate its present condition and focus attention on deficient areas in its operation or management. A Peer Review Team, consisting of

volunteers from the surrounding communities, operators or managers from other utilities, and customers of the system, is then assigned to use the self-assessment and complete an in-depth evaluation of the system.

Element D. A description of how the State will establish a baseline and measure improvements in capacity with respect to NPDWRs and State drinking water law.

Under this element, WSD identifies potential information and methods that can be used to establish a baseline and measure improvements. This information provides the tools that the WSD needs to produce and submit a report to the Governor on the efficacy of the capacity development strategy and the progress made toward improving the capacity of PWSs in the State (SDWA Section 1420(c)(3)).

WSD compiled some of the following data on June 30, 2000. It will be used as the baseline year for evaluation purposes. The same data will be gathered June 30 each year, to enable WSD to measure improvements in capacity.

1. **Regulatory Activities**
 - Number of major deficiencies in TOPs.
 - Number of major deficiencies in TOPs corrected during the previous year.
 - Number of systems with long range plans.
 - Number of systems with approved O&M manuals.
 - Number of systems meeting TMF capacity criteria.
 - Number of systems with SPP.
 - Number of systems with Bacteriological Sampling Plans.

2. **Compliance Data**
 - Number of systems out of compliance with water quality monitoring and reporting requirements and the number of systems out of compliance with water quality monitoring and reporting requirements in the current year that were not out of compliance in the previous year.

 - Number of systems out of compliance with Consumer Confidence reporting requirements and the number of systems out of compliance with Consumer Confidence reporting requirements in the current year that were not out of compliance in the previous year.

3. **Operator Certification**

- Number of systems with certified operators.

4. **Other Indicators of Capacity**

- Number of systems on boil water notices during the year and the number of systems on boil water notices during the current year that were not on boil water notices during the previous year.
- Number of systems requiring facility improvements and number of systems that require improvements this year that did not require improvements last year.
- Number of systems on "Do Not Drink" orders during the year.

Element E. An identification of the persons that have an interest in and are involved in the development and implementation of the capacity development strategy (including all appropriate agencies of federal, State, and local governments, private and non-profit public water systems, and public water system customers).

Element E requires WSD to involve the interested public in the development of a capacity development strategy. The WSD sent an invitation for the Advisory Workgroup to over 2000 stakeholders in January 2000. The letter also requested comments and suggestions on the development of the strategy.

Over 50 representatives from water systems, various State and local agencies, technical assistance providers, environmental organizations, and other interested parties serve on the Advisory Workgroup (See Attachment F for the Advisory Group mailing list). The Workgroup met March 1, 2000; May 3, 2000; and June 28, 2000. The Workgroup:

1. Reviewed and provided guidance on the draft work plan.
2. Identified additional interested stakeholders.
3. Provided initial input and recommendations on the five Strategy elements and 10 VSA §§1684 and 1685.
4. Reviewed and provided recommendations on the agendas of the various meetings.

5. Reviewed, commented on, and provided recommendations on the ideas and suggestions obtained at the meetings.
6. Reviewed and provide suggestions, comments, and recommendations on comments on the Draft Strategy and from other Stakeholders.
7. Provided recommendations for changes in the Draft Strategy.

A Cohesive Strategy

WSD solicited and considered public comments on the elements required by SDWA §1420(c) regarding the development of a strategy to assist PWSs in achieving and maintaining capacity. The capacity development strategy will be implemented primarily by WSD, with assistance from other State agencies and technical assistance providers. The strategy targets the factors that impair capacity as identified by stakeholders through the public participation process.

The overall goals of the strategy are to help systems improve their current abilities by continuing to implement all existing programs and beginning to implement a series of new initiatives. To summarize:

1. **Existing programs that address *technical capacity* include:**
 - Permit and plan review programs
 - Financial assistance programs (e.g. facility evaluation and planning loan program)
 - Sanitary surveys
 - Source protection programs
 - Operator training and certification programs
 - Technical assistance and training programs

2. **Major new initiatives that address *technical capacity* include:**
 - Small system design guidance
 - Engineering assistance
 - Regional group training and one-on-one assistance
 - The consolidation study
 - DWSRF Program Changes to target systems serving populations of less than 500
 - Small system templates and modifications to the Self-Assessment

3. **Existing programs that address *managerial capacity* include:**
 - Technical assistance programs of the WSD and other technical assistance providers.²
 - Sanitary surveys
 - Operator training and certification programs

4. **Major new initiative that address *managerial capacity* include:**
 - Regional group training and one-on-one assistance
 - The Board member/owner manual

²This capacity component does not receive the emphasis that technical capacity receives but it was not identified as high priority during public meetings.

- Small system templates and modifications to the Self-Assessment
 - Legal assistance
 - WSD Newsletter
5. **Existing programs that address *financial capacity* include:**
- Permits and plan review process
 - Assistance from WSD and technical assistance providers
 - DWSRF application criteria
6. **Major new initiatives that address *financial capacity* include**
- The consolidation study,
 - Public Service Board technical assistance,
 - Engineering, technical, and legal technical assistance,
 - DWSRF program changes,
 - User rate review and budgeting,
 - The monitoring cost study,
 - Financial management templates, and
 - Regional group and one-on-one training initiatives.
 - WSD Newsletter

WSD considers this strategy to be a work in progress. The Department will periodically evaluate the strategy and make adjustments to improve it based on the need of the PWSs in the State. WSD will also continue to solicit ideas from the public. This will be accomplished through Advisory Group meetings, by posting the strategy and future informational documents on the Department's Web site, and by periodically publishing articles in various newsletters.

Appendix A: Letter Sent to Stakeholders Requesting Their Participation on Advisory Workgroup

Appendix B: Public Meeting Schedule and Attendance Summary

Public Meeting Schedule

<i>DATE</i>	<i>TIME</i>	<i>LOCATION</i>
3/28/00	7:00pm	St. Albans State Office Building, 20 Houghton St.
3/29/00	1:30pm	Montpelier, Pavilion Auditorium, 109 State Street
3/29/00	7:00pm	Montpelier, Pavilion Auditorium, 109 State Street
3/30/00	7:00pm	Barton Municipal Building, Dining Room
4/4/00	7:00pm	Rutland U.S. Forest Service Office, 231 N. Main St.
4/5/00	7:00pm	White River Jct. V A Hospital, Yasinski Bldg., Room 103
4/6/00	7:00pm	Brattleboro, Municipal Ctr., 230 Main Street
4/12/00	1:00pm	Montpelier, Pavilion Auditorium, 109 State Street

Vermont Public Water System Capacity Meetings w/ Owners & Operators/Stakeholders/Advisory Workgroup										
Attendance Summary										Dated 6/28/00 rcb
Roster Statistics										
Date	Location	Meeting Type	Time	Total	Citizen	Owner/Operator	Political Body	Engineer	State	Special Interest
3/1/2000	Waterbury	Advisory Workgroup	1pm	28		17		5	5	1
3/15/2000	Waterbury	Water Division	1pm	24					24	
3/28/2000	St. Albans	Owner/Operator	7pm	11	2	4		1	4	
3/29/2000	Montpelier	Owner/Operator	1:30pm	14	1	5	1		6	1
3/29/2000	Montpelier	Owner/Operator	7pm	0						
3/30/2000	Barton	Owner/Operator	7pm	18	1	14	1	1	1	
4/4/2000	Rutland	Owner/Operator	7pm	25	2	18		1	4	
4/5/2000	White River Jct.	Owner/Operator	7pm	7		6			1	
4/6/2000	Brattleboro	Owner/Operator	7pm	10	2	7			1	
4/12/2000	Montpelier	Owner/Operator	1pm	12	2	4	1	2	2	1
5/3/2000	Waterbury	Advisory Workgroup	1pm	22		9		1	10	2
6/15/2000	Montpelier	Stakeholders	1pm	18		5		6	5	2
6/28/2000	Waterbury	Advisory Workgroup	1pm	14		6		2	4	2
Public Comments		Owner/Operator	n/a	12	2	7	2			1
Subtotal Of Participates				215	12	102	5	19	67	10

Appendix C: Public Meeting Materials, Meeting Minutes and Lists of Attendees from the Owner/Operator Meetings

RESPONSIVENESS SUMMARY

The following comments were made verbally during the public meeting in Montpelier and the Green Mountain Water Environment presentation in Rutland, or received verbally or in writing (i.e., letter, fax, or e-mail) during the public comment period. The comments have been edited and consolidated for brevity and clarity. The Water Supply Division has a file available to the public which contains the notes from the public meetings and written comments received during the public comment period.

Comment #1: If there is not adequate funding for the complete project can the project be phased?

Response #1: Projects can be phased if the facilities for the phased project will be usable water system component when completed. The state will discuss phasing options with these projects that have only partial funding available.

Comment #2: When are projects bypassed on the list?

Response #2: We have bypassed projects when it appears that the water system will not either pass a bond vote by the April 1 deadline or be able to submit a complete application by the September 30 deadline. There is no established date for making these determinations. Decisions are made in consultation with the water system.

Comment #3: Are priority points awarded for readiness to proceed?

Response #3: Points for readiness to proceed were only given the first year. This was based on an EPA policy.

Comment #4: Are loan payments being returned to the State and will these funds be used to fund additional projects?

Response #4: We have received one loan repayment to date and yes these repayments will be used to fund additional projects.

Comment #5: The limit of \$500.00 for a specific type of technical assistance under the capacity program is too low and should be raised to a minimum of \$1000.00.

Response #5: We have removed any specific amount from the final Intended Use Plan. An amount may be established after program procedures are developed, contracts awarded and technical assistance requests received.

Comment #6: A number of comments were received with specific recommendation on the capacity program initiatives.

Response #6: These comments and responses are detailed in the State Of Vermont Existing Public Water System Capacity Strategy. The strategy is available on the Internet @ <http://www.anr.state.vt.us/dec/watersup/capacity.htm> and in hardcopy from the Water Supply Division.

Comment #7: Several comments were received on the priority scores.

Response #7: Based on the comments and additional review by the Water Supply Division, priority scoring changes were made:

Appendix D: Public Comments on the Draft Strategy

Comments and suggestions received at the owner/operator meetings and from the Advisory Workgroup are the basis of the strategy. WSD and the advisory group considered all public comments. In response, WSD is making changes to existing programs where appropriate, and is developing new initiatives. Following the completion of the draft strategy, we received a number of specific comments including:

Comment #1: Legal and technical assistance initiatives should be as broad as possible in scope and not have per system fund limits.

Response #1: We have made the description more general and not identified a specific dollar maximum for assistance to a system.

Comment #2: The consolidation initiative should be focused on a few specific cases and not a statewide study.

Response #2: We plan to do a screening process and target specific areas with high potential for successful consolidation.

Comment #3: USDA Rural Development and Community Development Block Grant should be included in the DWSRF program changes workgroup.

Response #3: We concur and plan to request such representation on the workgroup.

Comment #4: The electronic Bulletin Board should include technical assistance providers such as Northeast Rural Water Association Program, a DWSRF representative and a Rural Development representative as resources.

Response #4: We concur and will coordinate with technical assistance providers in development of the bulletin board.

Comment #5: The procedure used for providing technical assistance should be sensitive to the impacts on the private sector that offer such services.

Response #5: We concur and will request comments on our procedures for contracting for legal, financial, engineering and other technical assistance from appropriate stakeholders prior to initiating the process.

Comment #6: The template initiative should also include sample ordinances for enacting by small systems.

Response #6: Additional templates will be developed if warranted by the success of our initial efforts. Ordinances would be a high priority template.

Comment #7: A database of user rates should be established as part of the user rate budgeting technical assistance initiative.

Response #7: We concur and will attempt to incorporate development and maintenance of such a database in this effort.

Comment #8: Recommend that the consolidation study be more of a pilot that identifies options for a specific consolidation that might be implemented.

Response #8: We plan to focus the study on projects that have a chance for implementation.

Comment #9: The small system templates should be made available in both electronic and hard copy formats.

Response #9: The draft has been changed to indicate both formats.

Comment #10: The discussed limit of \$500.00 for a specific type of technical assistance to a system is too low and should be rised to a minimum of \$1000.00

Response #10: We have removed any specific limit from the draft.

Comment #11: The engineering technical assistance should not be managed through four contracts. There would be a more interest in one \$40,000.00 contract.

Response #11: We will obtain comments from stakeholders on the procedures for providing the assistance prior to implementing this initiative.

Comment #12: The state is planning to stop sending monitoring reminder notices. This has been effective in Vermont and should continue.

Response #12: We have a communication workgroup as one strategy initiative and will consider this issue as part of that initiative.

Comment #13: The Water Supply Division should consider using interactive television for some of these outreach efforts.

Response #13: We have used this in the past and will address in the communication's workgroup. It may be a good tool for new rule explanation and training.

Comment #14: Design assistance for small projects should be included under the engineering technical assistance initiatives for such things as pump replacements etc.

Response #14: We will consider describing the work to include this type of assistance but we must limit it to small projects. Funds will not be available under this program for major design efforts.

Appendix E: Letter Sent to Solicit Public Comment on the Draft Strategy

Appendix F: Advisory Workgroup Mailing List