

Capacity Development Program Implementation



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ATTACHMENT A - Vermont DWGPD Operator Certification Program Annual Report for Calendar Year 2011, dated August 8, 2012

Executive Summary

In the 1996 Amendments to the Federal Safe Drinking Water Act (SDWA), Congress mandated that states develop capacity development strategies to enhance the ability of public water systems to provide safe drinking water. These strategies are aimed at helping water systems acquire and/or maintain the technical, managerial and financial (TMF) abilities needed to properly operate, manage and finance their systems. With the assistance of a stakeholder group made up of State agencies, public water suppliers, technical assistance providers, local government representatives, and environmental groups, the Vermont Drinking Water & Groundwater Protection Division (DWGPD) issued their initial Capacity Development Strategy Report on August 28, 2000.

Each State's strategy had to include provisions for new systems, for systems applying for funding from the Drinking Water State Revolving Fund (DWSRF) program, and for existing systems. Vermont's strategy requires all new community and non-transient non-community water systems, and systems applying for funding from the DWSRF to obtain a capacity determination. Existing systems not applying for funding are given direct assistance with capacity issues.

The 1996 SDWA Amendments also require that each State submit an annual report of its Capacity Development Strategy and document the progress made towards improving the TMF capabilities of its public water systems. This report satisfies the statutory requirements of the SDWA and assures that Vermont will not be penalized twenty percent of the DWSRF capitalization grant for failure to comply.

The SDWA as amended in 1996 brought significant improvements to the national drinking water program. Capacity development is an important component of the Act's focus on mitigating drinking water issues. Capacity development provisions offer a framework within which States and water systems can work together to ensure that systems acquire and maintain the TMF capacity needed to achieve the public health protection objectives of the SDWA.

The report is divided into four sections.

- ❖ Section 1 provides a general overview of the SDWA and the Capacity Development Program.
- ❖ Section 2 describes the capacity development review provisions that apply to new systems, existing systems applying for a DWSRF loan, and other existing systems. The new system provision requires all new community water systems (CWSs) and non-transient non-community water systems (NTNCs) that begin operation after October 1, 1999 demonstrate adequate capacity. The Drinking Water State Revolving Fund provision prohibits states from providing DWSRF assistance to public water systems that lack adequate capacity, unless the project for which funding is requested will ensure compliance with the SDWA. The existing system provision is intended to provide direct assistance to existing public water systems to help them acquire and maintain adequate capacity.

Five objectives that were identified in the Capacity Development Strategy:

- (1) Identify methods or criteria that the State will use to identify and prioritize the water systems most in need of capacity assistance;
- (2) Identify institutional, regulatory, financial, tax, or legal factors at the federal, State, or local level that encourage or impair capacity development;
- (3) Describe how the state will use the authorities and resources of the SDWA to: assist water systems in complying with applicable laws and regulations; encourage the development of partnerships among water systems; assist with the training and certification of water system operators; and develop methods for establishing a baseline and measuring improvements in capacity;
- (4) Identify interested stakeholders; and,
- (5) Utilize other available resources within the State of Vermont to assist water systems with their TMF capacity.

Additionally, a variety of initiatives were undertaken to address the objectives, and a summary of the status of each initiative is provided.

- ❖ Section 3 describes the state's approach to offering or providing assistance.
- ❖ Section 4 describes the progress made assisting public water systems to improve their TMF capabilities. Successes are measured through existing programs and new initiatives that assist public water systems to acquire, maintain, and build upon their TMF capabilities.

1. Introduction

The objective of the 1996 Safe Drinking Water Act (SDWA) Amendments (Amendments) was to ensure that public water systems provide safe drinking water to the public. The Amendments seek to mitigate compliance activities and associated health risks by ensuring that public water systems have the capability to produce safe drinking water now and in the future. To achieve these goals, the Amendments included provisions for several prevention programs – one of which is the capacity development program.

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

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

The purpose of this report is to provide an assessment of the capacity development program in Vermont and the statewide strategy for assisting public water systems. The report highlights progress made toward improving the TMF capabilities of public water systems in Vermont as a result of the Vermont Drinking Water & Groundwater Protection Division's Capacity Development Program.

2. Capacity Development Provisions in the Safe Drinking Water Act

2.1. New Systems Provisions

There has been no change, nor is any currently planned, to Vermont's legal authority to implement the New Systems Program since it was established by state law in 1998.

Vermont's Capacity Development program utilizes a self-developed 'Capacity Review Check-list' to determine when and what a qualifying system needs to complete to demonstrate capacity. For potential CWSs and NTNCs, the checklist is a two-step process, completing items before receiving a Permit to Construct (PTC) and another set of items before receiving a Permit to Operate (PTO). Items included on the checklist include, but are not limited to, submittal of a Source Protection Plan, Long Range Plan, project As-Built plans, and required sampling plans, and retention of a Certified Operator.

Additionally, to ensure newly permitted water systems are able to maintain capacity, the Capacity Development Coordinator conducts quarterly check-ins with either the design engineer or the applicant to determine where in the construction process the proposed system is. Often this acts as a reminder to the applicant that their PTC will expire shortly and if they still intend to complete the project they must reapply for a new permit. This is also beneficial to systems that have finished construction and will be serving water to the public by serving as a reminder that more steps need to be completed before they have officially achieved capacity and can receive a PTO.

2.1.1. New Water System Capacity Reviews

During state fiscal year 2012, the capacity development program either began or completed a capacity review on three potential new systems at varying steps in their approval process. As indicated above, a system will receive a capacity review up to two times; before they receive a Permit to Construct and again before receiving a Permit to Operate. Their information is summarized below in Table 1.

Table 1
Vermont Annual Capacity Program Report
New CWSs and NTNCs, State FY12
July 1, 2011 - June 30, 2012

Construction Permit Reviews	Proposed WSID	PID # (internal tracking)	Capacity Review Status	Notes
Advanced Illumination	VT0021345	N-2745-11.0	Not Complete	Capacity review in progress
Burr and Burton Academy Mountain Campus	VT0021368	N-2831-12.0	Completed	Permit to Construct issued
Foundations for Success Daycare	VT0021361	N-2790-12.0	Completed	Permit to Construct issued
Operating Permit Reviews	WSID		Capacity Review Status	Notes
NVRH Water System	VT0021311	N-2622-10.1	Completed	Initial Permit to Operate issued

2.1.2. Most Recent Three-Year Period

In any given fiscal year, the DWGPD receives numerous inquiries from developers, landowners, and other entities about creating a new public water system. In most cases, the DWGPD promotes alternatives to creating a new public water system, such as consolidation with, or annexation by, existing public water systems. Since the Vermont Legislature enacted Act 156 in 2008, *An Act Relating to Public Water Systems*, which authorized consecutive water systems serving less than 500 persons to qualify for an exemption from Federal and State Drinking Water Regulations, the DWGPD has seen an increase in the number of systems applying for and receiving consecutive exempt status at the beginning of the permitting process.

Table 2 below shows the ETT status of new public water systems that were activated during the past three state fiscal years and reported on in the federal annual new system capacity reports.

Table 2
New Public Water System Activity
7/1/2009 – 6/30/2012

WSID	WS Name	PWS Type	Date Activated	On ETT list? Number?
VT0021345	ADVANCED ILLUMINATION INC	NTNC	4/20/2012	No
VT0020355	2178 AIRPORT ROAD	NTNC	4/19/2012	No
VT0006069	SUNNY LANE DAYCARE	NTNC	4/13/2012	Yes- 6*
VT0021079	NE WASTE SERVICES	NTNC	3/20/2012	No
VT0021127	VT MUTUAL	NTNC	12/8/2011	No
VT0021349	802 TOYOTA	NTNC	11/1/2011	Yes- 8*
VT0021348	PARKER OFFICE BUILDING	NTNC	10/25/2011	No
VT0021311	NVRH WATER SYSTEM	NTNC	6/30/2011	No
VT0021339	SMUGGLERS OPERATIONS CENTER	NTNC	5/16/2011	No
VT0006086	HANCOCK VILLAGE SCHOOL	NTNC	5/4/2011	No
VT0000196	CORTINA INN RESORT	NTNC	1/10/2011	No
VT0020453	SOUTHWORTH MILTON INC	NTNC	10/20/2010	No
VT0021303	KING ARTHUR FLOUR COMPANY	NTNC	9/8/2010	No
VT0008321	CABOT FARMERS COOP	NTNC	8/13/2010	No
VT0021302	HIGHGATE SPRINGS POE	NTNC	8/5/2010	No

VT0021295	BRATTLEBORO PROFESSIONAL CENTER	NTNC	6/28/2010	No
VT0021287	JOHNSON STATE COLLEGE	NTNC	4/5/2010	No
VT0021276	CASPIAN AREA SCHOOL SYSTEM	NTNC	2/16/2010	No
VT0021167	HILLTOP MONTESSORI SCHOOL	NTNC	10/22/2009	No
VT0021121	WHEELER BROOK HOUSING DEVELOPMENT	C	1/27/2010	No
VT0021057	OUTLOOK AT MT SNOW	C	10/21/2009	No
VT0021254	LEISURE LODGE CORPORATION	C	7/23/2009	No

*- action is only required on systems that exceed 11 on the ETT scale. These systems, however, will be tracked more closely.

2.2. DWSRF Applicants Provision

The DWGPD will make a determination on system capacity based on information available in DWGPD records, the priority list application, construction loan application and, most importantly, completion of a capacity evaluation. A capacity evaluation is a meeting between the applicant, their operator, and the Capacity Development Coordinator; often the system's designated engineer and a representative from VT's DWSRF program will also attend.

Components of the capacity evaluation include discussions related to source capability, monitoring and compliance reporting, relationship with the certified operator, whether a contract with the operator exists, unaccounted-for water, water and energy efficiency, managerial competency, and fiscal responsibility. Discussions regarding financial capacity involve current and projected water rates, delinquent water accounts, and financial long-range planning. The presence of an active organization with identified responsible officials and business practices are considerations in managerial capacity determinations. If a loan applicant is determined to have a lack of capacity in an area, a list of action items will be established and considered a condition of loan forgiveness, if applicable. Otherwise, the action items are recommendations and are usually not significant enough to keep the system from maintaining TMF capacity needed to protect public health and maintain the system. The DWGPD continues to update the survey as needed to reflect the changing needs of the program. More emphasis is now placed on implementation of the action items with consideration being given to withholding planning loan forgiveness, where applicable, until certain capacity milestones are achieved.

Many capacity evaluations have resulted in further work with systems on budgeting, user rates and asset management. Additionally, many of our school water systems have had, for the first time, a written contract with their operator. Most of these school-operator relationships evolved over many years and a frequent change in personnel at the school has resulted in lack of communication of who is responsible for what, causing the system unnecessary NOAVs. Another benefit to many water systems is the 'Exit Budget Review' the Capacity Development Coordinator conducts along with the Capacity Evaluation for systems seeking planning and/or construction loan forgiveness. The Exit Budget Review consists of filling out a simple spreadsheet where major system assets are listed with their current age and expected useful life, current cost to replace, projected cost to replace at the end of its useful life, and a projected annual contribution to a capital reserve fund. This exercise is often the first time very small systems put the proverbial pen to paper to determine what the system may cost to replace. This is a useful starting place when having discussions with school boards, for example, for annual contribution to a capital reserve fund.

2.3. Existing Systems Provision

More than ten years have passed since Vermont's Capacity Development Strategy was established and the water system landscape has changed significantly since that time. The Strategy should also reflect this change. At the end of State FY11, the Capacity Development Coordinator, along with stakeholders, began an update of the Strategy, discussing emerging water system managerial and financial issues.

The following is a summary of the initial meeting, which occurred on June 20, 2012:

Representatives at the first meeting were:
 Department of Environmental Conservation

Ashley Lucht, Capacity Development Program
 Eric Law, DWSRF program
 Eric Blatt, Engineering and Financial Section Chief
 Bryan Redmond, DWSRF program
 Winslow Ladue, Facilities Engineering Division Director
 Christine Thompson, DWGPD Director
 David Mears, DEC Commissioner
 Doug Kievit-Kylar- facilitator
 USDA- Rural Development
 Rhonda Shippee, Community Programs Director
 Vermont Rural Water Association
 Shaun Fielder, Executive Director
 Vermont League of Cities and Towns
 Karen Horn, Public Policy & Advocacy Director
 Environmental Protection Agency- Region 1
 Jeff Butensky, Capacity Development
 Others that were invited and participated in subsequent meetings:
 Green Mountain Water Environment Association
 Vermont Municipal Bond Bank
 Vermont Economic Development Authority

The group put ideas in response to the question, 'What factors contribute to a lack of managerial and financial capacity in the public drinking water community?' on sticky notes, shared them one-by-one with the group and then put them up on the wall. After all the ideas were shared, the group was tasked with grouping the sticky's. A sentence or two was formed to summarize the concepts in each group. Please know that some ideas the group determined fell under multiple headers and that's reflected below. Successive meetings during the Summer of 2012 and continuing into the Fall 2012 further expanded on the user rate/financial IQ/asset management issue. Next year's Capacity Development report will further elaborate on our efforts.

Results of the groupings are below—please keep in mind that these are mostly unedited notes with what may seem like cryptic language.

Table 3 Managerial and Financial Capacity Brainstorming Session June 20, 2012		
Group Header	Header Summary	Sticky Notes
Public Relations	A well-functioning public relations effort would improve the appreciation for how clean drinking water, well-trained operators and sustainable infrastructure ensures economic vitality and viability. A well-functioning public relations effort would also help public water systems make aware that the process of providing clean drinking water is costly and complex.	Industry has done a poor job promoting value of drinking water product
		Product is undervalued compared to other utilities
		Industry recognition lacks (roads and bridges get press, but sub-surface stuff doesn't)
		Operators underappreciated
		Under appreciation for the critical role that water infrastructure plays in economic vitality
		Operators underpaid
		Lack of money of pay for training, operations at systems

		<p>Understand connection between adequate managerial and financial capacity and clean water</p> <p>Many systems bill only annual or semi-annual basis → larger bill to customers on infrequent interval = customer thinks cost is high</p> <p>Streamlining SRF projects for time/cost (Irene Transportation as example)</p> <p>Streamlining SRF projects for time/cost (Irene Transportation as example)</p> <p>Career path not contemplated by many new graduates</p> <p>Aging workforce</p>
Conflicting and confusing regulations and requirements	<p>Coordination and consistency between programs and technical assistance providers is imperative for small water systems to succeed. The development of tools/parameters/standards to apply to new and existing public water systems will assist with determining system capacity.</p>	<p>Limited mechanism for capturing savings from system improvements (benchmarking)</p> <p>Small systems have insufficient funds to cover emergency expenses</p> <p>Lack of incentives for saving money</p> <p>Are rules enforced requiring financial and managerial capacity?</p> <p>Policies! Lack of regulatory teeth to encourage managerial (and financial) capacity</p> <p>Lack of oversight of management</p> <p>Regulators/regulations/requirements not coordinated or consistent between divisions/programs</p> <p>Don't tell folks what to do</p> <p>Feeling of futility—new rules and regulations—never ending demands</p> <p>Unfunded mandates</p> <p>Limited mechanisms for regional or state role in planning, design, construction & operation</p> <p>Willingness to allow small unsustainable systems to be created</p> <p>Adjust priority system to benefit AM projects</p> <p>Lack of clear definition of financial and managerial capability</p> <p>Regulators, funders & TA providers often encourage establishment of new small systems that lack capacity from the start (Fire Districts)</p> <p>Need to develop tools or identify indicators for us (regulators) to evaluate a system's TMF; if they come up short deny loan/creation or put on schedule to achieve</p> <p>Regulatory/technical assistance functions at state (and other programs) are in the same department → pressure on occasion</p>
Mentoring (professional enhancement)		<p>Provide mentoring program (NEWIPCC does some of this)</p> <p>Collaboration between systems with capacity and systems without</p>

<p>Appropriate and sustainable user rates/operating costs/full cost pricing</p>	<p>Establish an equitable user rate structure to cover current and future expenses</p>	<p>Recognize that M&F capacity will result in reasonable rates</p> <p>Inequitable distribution of ERUs</p> <p>Reduced water use = increased user rates</p> <p>Inequitable rate structure</p> <p>Focus more on keeping rates low v. product quality</p> <p>Unwilling to adjust rates</p> <p>Unwillingness to raise rates on a regular basis to keep up with inflation</p> <p>Don't charge based on usage (don't use meters or don't read meters)</p> <p>Ignore water loss and recognize its costs</p> <p>Insufficient revenue</p> <p>Economy a factor in public infrastructure spending</p> <p>Small systems with very scant capacity</p> <p>Water customer politics—don't understand the value of water</p>
<p>Communication</p>	<p>Recognize the necessity of different perspectives as it relates to drinking water system functionality. Require communication between operator and governing boards in order to surface issues and resolve them.</p>	<p>Poor communication between the business manager, operations manager and decision makers</p> <p>Remote and rural locations make it more difficult to trade ideas and experience</p> <p>No communication between managers and operators</p> <p>Lack of access to internet</p> <p>Lack of communication between governing body and system operator</p> <p>Operators and boards don't communicate</p> <p>Expand/include others in community (planners, etc.) in conversation</p> <p>Water customer politics—they don't want to pay for the full cost</p>
<p>Resource Availability</p>	<p>Recognize the need to have operator and board member redundancy. Water system personnel are the most important asset.</p>	<p>Challenges of competing priorities</p> <p>Operators stretched thin; works for many different systems</p>
<p>Internal education and awareness (job responsibilities) and AM</p>	<p>By embracing an asset management strategy, systems and personnel will become familiar with and aware of system functionality. Water system personnel are the most important asset.</p>	<p>Employees of small systems don't know where their water comes from</p> <p>Employees clueless→ we have a well?</p> <p>If it ain't broke don't fix it</p> <p>Poor knowledge of system assets (the 1st building block)</p> <p>Not knowing what the systems assets are</p> <p>Not knowing where infrastructure is</p>

		<p>Program staff has other responsibilities beyond water operations</p> <p>Different learning styles: written materials, group, one on one, web</p> <p>Lack of managerial and financial skills</p> <p>Lack of computer skills</p>
Board governance	<p>By establishing clear standards, governing boards will be provided the tools and goals to run a sustainable water system.</p>	<p>Unwillingness to share responsibilities</p> <p>Lack of community involvement</p> <p>Lack of skills- financial and managerial</p> <p>Lack of ready access to legal & financial expertise</p> <p>Small systems have scant capacity</p> <p>Water systems are a business</p> <p>Different learning styles</p> <p>Lack of board training</p> <p>Too much information; not knowing what's really important</p> <p>Not knowing tools available to system or knowing how to use them</p> <p>Lack of handbook/website on 'how to...'</p> <p>Don't know what's expected of volunteer boards</p> <p>Insufficient commitment of governing board members (high turnover and vacancies)</p> <p>Turnover- boards and DEC</p> <p>Lack of time; too many volunteers</p> <p>Volunteer boards</p>
Financial IQ	<p>Recognizing that long term financial planning is integral to a sustainable water system will ensure water systems meet their future infrastructure needs. Systems will also need to recognize that there are shrinking federal and state dollars to continue to support infrastructure improvements and adequate financial planning will help them weather that storm.</p>	<p>Financial internal controls are difficult—no staff capacity to separate duties</p> <p>Lack of financial IQ</p> <p>It may be wiser to borrow than to save</p> <p>Public concerns</p> <p>Less cost if inflation is high</p> <p>Lack of oversight on finances</p> <p>Money for TA is available but not effectively used</p> <p>Expectation of a state or federal bailout</p> <p>Financial disincentives to savings</p> <p>Higher user rates = public concerns</p> <p>Attractive federal/state money</p> <p>Low interest rates on borrowing</p> <p>Water systems are a business</p>

2.3.1. Vermont Public Water Systems Demographics

There are 1348 public water systems in Vermont that fall into three different categories.

Public Community water systems regularly serve at least 25 year round-residents or have 15 or more connections serving year-round residents. There are 429 systems serving an estimated aggregate population of 441,332. About half of these Community systems are privately owned home-owners associations or mobile home parks; approximately 14 are private-for-profit water systems that are regulated by the Public Service Board and the Department of Public Service.

Non-Transient Non-Community water systems serve at least 25 of the same persons daily for more than six months per year. Schools, factories, and office buildings meet these criteria. There are 247 systems in this category serving an aggregate population of 44,745. More than half of these systems are small rural schools, the remainder are mostly privately owned businesses.

Transient Non-Community water systems serve more than 25 persons a day for at least 60 days during the year. Restaurants, motels, and campgrounds are examples. Approximately 672 systems are classified as transient non-community water systems. Nearly all of the transient systems are privately owned businesses

Additionally, there are approximately 6 water bottling companies whose sources are in Vermont and are regulated by the Drinking Water & Groundwater Protection Division. Also new to our regulated community and unique to Vermont is the large groundwater withdrawal for industrial and/or commercial entities of which there are currently 14. A large groundwater withdrawal is defined as a non-potable water supply source where the withdrawal will be more than 57,600 gallons per day; agricultural uses are exempted.

Regulatory requirements vary for the different types of systems and the major focus of the strategy is on CWSs and NTNCs. Factors weighing on strategy development and implementation are system size and ownership type. Given the small size of most of Vermont's water systems, operation, maintenance and capital planning costs have a major impact on the ability of small volunteer or part-time system operators to maintain their systems in compliance with the ever increasing and more complex Federal and State regulatory requirements. Our capacity program is focused primarily, although not exclusively, on those most in need of assistance-- the very small community system and small rural school system. A significant number of these systems would not be able to comply with regulatory requirements and protect public health without the technical and financial assistance provided through this program. This strategy has proved successful and we are now working to focus more on small municipalities and systems on the verge of enforcement action with onsite managerial and financial assistance.

Additionally, the capacity program has become increasingly involved in assisting public community water systems regulated by the Department of Public Service and Public Service Board as a utility restructure into a more equitable, user-owned system by means of forming a fire district. Vermont Statutes allow for the formation of a fire district- a municipal entity with taxing authority established for a variety of reasons (maintain sidewalks, street lights, provide fire protection, water, etc.). A fire district is given authority to organize and operate by the Selectboard of the town(s) or by the State legislature. Once formed, the fire district is a sovereign entity in or among town boundaries and establishes a prudential committee, by-laws, collection practices, etc. A town may have an unlimited number of fire districts and are numbered in the order they are formed (1, 2, 3, etc.). A benefit to being a fire district is the potential for more favorable financing terms from our DWSRF program, including access to SRF set-aside programs and the ability to adequately charge for water service without having to obtain Public Service Board approval.

2.3.2. Implementation of the Existing Capacity Strategy

Vermont has a long history of providing both financial and technical assistance to water systems. The 1996 Amendments to the SDWA provided an opportunity to use federal and state dollars to improve and expand this program to more nearly meet the need. Based on public input, the Vermont Existing Public Water System Capacity Strategy was developed and submitted to EPA in July of 2000. Reference should be made to prior reports for a detailed summary of achievements for each initiative. New initiatives or capacity undertakings are included in detail below. Major components of any capacity program are technical and financial assistance, and training opportunities, but the Division is currently focusing on providing managerial assistance as the backbone for overall Capacity Development. We believe emphasis on each of these components will be most successful in assuring Vermont water systems are able to comply with regulatory requirements and protect public health.

The Capacity Development Strategy discussion below includes ongoing work related to the original initiatives detailed in the Vermont Existing Public Water System Capacity Strategy of July 28, 2000, as well as initiatives and major activities introduced since then.

**Table 4
Existing Capacity Development Strategy Initiatives
2000- Current**

Capacity Initiative	Status	Target Audience	Notes
Monitoring Cost Study	Completed	TNCs	This consisted of a study completed in 2002 that identified the cost of quarterly compliance sampling for TNCs. Based on the study's findings; the state developed a budget for conducting the water quality (WQ) samples, which included providing technical support to TNCs. The work was accomplished in 2004 – 2005 through contracts with private engineering firms and use of the DEC laboratory, at no charge to the water systems.
DWSRF Program Changes	Ongoing	Potential DWSRF loan recipients	The Program has undergone occasional changes, mostly (but not exclusively) in response to new federal or state requirements, such as the recent requirement to use 20% of the federal capitalization grant for Green Project Reserve projects, and greater loan subsidy. All major changes are identified in each year's DWSRF Intended Use Plan.
Training and Assistance	Ongoing	Water System owners and operators	VRWA (a technical assistance provider), under contract, conducts group and individual training and technical assistance for water system operators and owners. A summary of these sessions are included in the Appendix.
Legal Assistance	Ongoing	CWS, NTNCs, loan recipients	Pays for legal services associated with DWSRF loan closings. Additionally, will assist with legal reviews for systems acquiring/merging/purchasing another system or land.
Engineering Technical Assistance	Completed	CWS, NTNC	DWGPD had several engineering firms under contract to provide operational troubleshooting assistance to small public water systems.
Small System Templates and Self-Assessment	Completed	CWS, NTNC	Templates for O&M manual and long range plan, and a capacity assessment form was developed. These documents form the basis for some of the individual on-site and group-training sessions provided. Capacity assessments are completed for all loan applicants and are a prerequisite for both planning and construction loan eligibility. Additionally, a customer complaint policy and form and <i>How to Form a Fire District</i> (currently in draft form) were developed.
User Rate Reviews and Budgeting/Assisting in the Development of Financial Capacity	Ongoing	CWS	Systems have contacted the Capacity Coordinator for assistance in establishing an equitable user rate structure. To date, six systems are in varying stages of the process.

Public Service Board (PSB) Technical Assistance	Completed	Private, for-profit CWS (regulated utilities)	Beginning in early summer of 2009, DWGPD met with representatives from the PSB and DPS to discuss better coordination between the three entities. The aim is to help the very smallest of regulated public water systems with rate review, tariffs, and reporting. This coordination is still in its early stages, but just starting the conversation is a significant milestone. Additionally, a guidance manual was developed to assist small systems in the rate approval process.
Board Member Owner Manual	Developed; printing needed	All PWSs	The manual outlines the responsibilities and liabilities for PWS board members and includes information on relevant laws, regulations, and policies, and a list of resources.
Small System Design Guidance Manual	Ongoing		Consists of the development of a design criteria guidance manual for small water systems to address system modification and replacement requirements and new regulatory requirements.
Consolidation Study	Completed	CWS	Consolidation Study was replaced with a Facilitation and Mediation contract beginning in June 2008.
Drinking Water & Groundwater Protection Division Newsletter- <i>Waterline</i>	Ongoing	All PWSs, Consultants, interested organizations	This is an effective means for communicating to a broad audience interested in hearing from the state on issues affecting public water systems. We have received feedback from readers that is highly supportive of the newsletter.
Communication Workgroup	Completed		A workgroup was formed to evaluate and develop recommendations on mass mailing procedures, newsletters, use of the Electronic Bulletin Board, electronic communication with water systems, and general publicity issues. A number of those recommendations were implemented.
Development of a Cross Connection Guidance Manual	Dropped		Numerous guidance manuals exist; a decision was made that Vermont did not need to develop one of its own.
Reservoir Water Quality Study	Completed	Surface water CWS	The study collected and analyzed data on changes in source water characterization during the year for two small surface water bodies used by public community water systems in Vermont. Field data collection occurred between April 2002 and May 2003 for the Town of Brattleboro and City of St. Albans Water Systems. Data was analyzed and results evaluated and communicated to the participating water systems.
Comprehensive Performance Evaluation Program	Completed	CWS	Evaluations were completed for 3 surface water systems and additional CPEs may be performed in the future on a voluntary basis
Operation & Maintenance Manual Template for Small Surface Water Systems	Dropped	CWS	The need no longer exists.
Small System Engineering Evaluations	Completed	CWS, NTNC	An extremely successful initiative and may resume in the future for those systems that did not already receive an evaluation
Regulation of Consecutive Water Systems and New Water Line Extensions	Completed	CWS	Successful passage of H806 to Act 156 <i>An Act Relating to Public Water Systems</i>
Asset Management Pilot	Ongoing	CWS	In summer 2011, DWGPD approached the Village of Waterbury regarding the pilot. The Village was excited to participate; unfortunately, the Village was devastated by flooding from Tropical Storm Irene. However, the Village is still interested in moving forward and work will be restarting work in early winter 2011. The MOU with the

			Village was signed in spring 2012, we hired a temp in June 2012 and she began asset identification shortly thereafter. We anticipate the pilot to continue through the end of 2012 with Waterbury taking a more active role as we get closer to the end of the year.
Determination of non-profit status	Completed	Loan Applicants	After exhaustive research, the DWGPD was given the authority to determine if a water system was not-for-profit without being a tax-exempt (through the IRS) entity. This distinction is beneficial in it reduces a potentially significant time and money delay in the DWSRF loan process
WaterSense Pilot	Ongoing	CWS, NTNC	The initial candidate was not eligible as it was clear that the water system needed to improve internal practices and repair infrastructure to address water shortage needs as opposed to there being an actual need to reduce source demand or increase production. Since then the DWGPD has worked with two other entities on water conservation as an alternative to capital improvement. Harwood Union High School was considered a potential candidate; however, it was clear that the school had already taken significant steps to achieve water conservation/efficiency and the next step to address water demand is outside the scope of this project. The current water system to be considered for efficiency gains in order to avoid capital expenditures is Orange Center School. DWGPD is still in the information collection stage, but this may turn out to be our first documented case where a system has saved on capital expenditures through efficiency improvements. In June of 2012, a grant was offered to the Orange Center School to purchase new WaterSense labeled toilets and faucet aerators, and a new dishwasher. The fixtures were installed summer of 2012. Reporting on the outcome of the project will be in the next Capacity report.

A comprehensive overhaul of the Capacity Development Strategy began in June 2012. A summary of the initial brainstorming session is above with further summaries to be included in future Capacity Development Strategy reports.

3. State's Approach In Offering or Providing Assistance

As indicated in the original strategy, the DWGPD continues to identify systems in need of capacity development assistance, however because assistance is available to meet all requests, prioritization of systems is not necessary. In the future, if the need for *technical assistance* exceeds DWGPD staff availability, DWGPD will prioritize systems using a number of factors including, but not limited to:

- ◆ DWSRF priority list status
- ◆ System ownership (municipal, private non-profit, private profit)
- ◆ System type (CWS, NTNC, TNC)
- ◆ System population- the smaller the population, the higher the priority
- ◆ Permanent residents
- ◆ System willingness

Specific forms of *technical capacity assistance* include:

- ◆ Sanitary surveys every 3-5 years
- ◆ On-site or phone consultation of system troubleshooting
- ◆ Chemistry, disinfection by-product (DBP), lead and copper, and treatment expertise
- ◆ Publish *Waterline*, and contribute articles to other publications
- ◆ Conduct operator training on new rules

- ◆ Conduct informational meetings on new rules
- ◆ Conduct source water assessments

Specific forms of *financial capacity assistance* include:

- ◆ Low-interest loans for water system improvements
- ◆ Zero-interest loans for planning & final design
- ◆ Low-interest loans for land purchase and conservation easements for source water protection
- ◆ Negative-interest construction loans to low-income communities with high water rates relative to Median Household Income (MHI)
- ◆ Planning and final design loan forgiveness for small municipalities
- ◆ Construction loan forgiveness for municipal school system improvement projects
- ◆ Budgeting and user rate reviews

Specific forms of *managerial capacity assistance* include:

- ◆ Review of fire district, coop, homeowners association by-laws
- ◆ Review of water ordinances, interlocal agreements, consecutive exempt agreements
- ◆ Formation of fire districts or other management structure
- ◆ Reorganization/restructuring assistance
- ◆ Resource for voting, elections, due process
- ◆ Legal assistance
- ◆ Moral support

Currently, the Division is actively providing intensive ongoing capacity assistance to:

- ◆ Lyndonville Water System
- ◆ Crystal Springs Water Co./East Montpelier FD #1
- ◆ Catamount Bolton Water System/Bolton FD #1
- ◆ Chelsea Water System
- ◆ East Berkshire Water Coop
- ◆ Four Seasons of Early Learning/Greensboro Bend FD #2
- ◆ Orange Center School
- ◆ Graniteville FD #4
- ◆ Wells River Water System
- ◆ Waterbury Village
- ◆ Richmond Water Department
- ◆ Rutland Town FD #10

4. Review of Implementation of the Existing System Strategy

There is a great deal of flexibility in program administration and implementation as it relates to providing capacity assistance. This has been instrumental in making the capacity program work for those systems that need it most. The DWGPD does not conduct regularly scheduled reviews of the implementation of its Capacity Development Program; however, there is significant interest in re-visiting the efficacy of the initial Capacity Initiatives and how they relate to program goals. The objective of re-visiting would be to re-establish, re-write and/or develop new initiatives given the program is past the 10-year mark and significant experience was gained during that time. In reviewing the existing strategy, it is apparent that much of the initial 18 initiatives were heavily focused on technical capacity. The focus of the program is shifting increasingly to managerial and financial capacity. Additionally, there is a push from within the program to re-work initiatives and incorporate the principles of Sustainable Water Infrastructure (Sustainable Infrastructure, Sustainable Systems and Sustainable Communities).

Availability of the Report to the Public

The DWGPD posts its annual Capacity Development Program Report to EPA on its web site at: <http://www.vermontdrinkingwater.org>.

Prepared by: /s/ Ashley J. Lucht
 Ashley J. Lucht
 Vermont Capacity Development Coordinator

Date: 9/21/2012

Vermont Drinking Water & Groundwater Protection Division

Operator Certification Program

Annual Report for Calendar Year 2011

This Annual Report documents Vermont's program compliance with the EPA Operator Certification Guidelines for the calendar year ending December 31, 2011. The US Environmental Protection Agency published guidelines for the "Certification and Recertification of the Operators of Community and Non-transient Non-community Public Water Systems" in February 5, 1999. Vermont adopted the revised rules in the Vermont Water Supply Rule on December 29, 2000 to comply with the EPA guidelines. EPA approved the State of Vermont Operator Certification Program on February 14, 2001 and awarded the Operator Certification Expense Reimbursement Grant (ERG) which was full utilized by 12/31/2009.

Program overview and Enforcement efforts

The total number of certified operators for Community, Non-Transient Non-Community, and Transient Non-Community systems is 1131 as of 12/31/11.

Vermont offers Operator-in-Training and Provisional Certification to help new water systems and operators become fully certified. SWOCS currently lists 4 operators with Provisional Certification and 15 with Operator-in-Training Certification.

The number of systems without certified operators as of 12/31/2011 is listed in the table below.

System type	Number of systems	Number of systems with no certified operator
Community	429	3
Non-Transient Non-Community	247	2
Transient Non-Community*	671	68

* TNC certification is not mandated by EPA.

The Division Certification Officer continues to work closely with new and delinquent community and non-transient non-community water systems to help them obtain a certified operator. The Certification Officer runs a report monthly to identify community and non-transient non-community systems without a certified operator. The Certification Officer will call these systems and follow up with an initial warning letter, if necessary. The water system has thirty days to notify the Water Supply Division in writing of their certified operator. If the system does not obtain a certified operator, we will issue a Notice of Alleged Violation (NOAV) shortly after the thirty-day period. At this stage, most water systems comply with the NOAV. For the few remaining, the Division attorney may contact the water system and warn the system of a potential enforcement action. If the system still does not obtain a certified operator, we will refer the system to the Agency of Natural Resources Enforcement Division for further action.

Most community and non-transient non-community water systems find themselves without certified operators because their operator(s) fail to renew their certification on time. In calendar year 2011 no NOAVs were issued to water systems for failure to have a certified operator.

The Agency of Natural Resources has the authority to revoke or suspend an operator's certificate. Failure to comply with the regulations may require revocation or suspension. On October 17, 2011 the Agency of Natural Resources revoked a water system operator's certification indefinitely for falsifying records of sampling results for three different water systems on five separate occasions. The operator was given the opportunity for a hearing regarding the evocation. During the hearing, no facts were disputed.

Training and exams

The operator training program is coordinated with the Vermont Rural Water Association (VRWA). Communication between the VRWA Coordinator and Water Supply Division and Compliance & Certification staff occurred frequently throughout the year. Additional courses have been coordinated with the Green Mountain Water Environment Association (GMWEA) and the New England Water Works Association (NEWWA).

Ongoing training coordination occurred throughout the year between the Water Supply Division, VRWA, and GMWEA. We continued to hold courses in various locations throughout the state to reach small water systems. The attendance for each class ranged from 10-20 participants (depending on location).

Our courses were publicized on our web site, listed in our newsletter, and mailed to operators before a renewal period. In calendar year 2011 approximately 5767 training contact hours were awarded to 1488 water professionals.

Exams were again administered in the spring and fall (May and December), on the same day at two different locations in the state (Rutland, Burlington). There were 77 individuals who took the exams.

Stakeholder Involvement

The Vermont Operator Certification Advisory Committee met two times in calendar year 2011. The following major topic reviewed and discussed was changing and updating Subchapter 21 -12 of the Water Supply Rule – Operator Certification.

Expenditures

The Division continues to use DWSRF Local Assistance money to fund operator training provided by the Vermont Rural Water Association and Green Mountain Water environment Association.

Month	Training provided January 1, 2011 – December 31, 2011 Course Title	TCH	# of attendees	TCHs Awarded
Jan	VRWA Courses offered in calendar year 2011			
	Water Distribution Systems: Proactive or Reactive?-Brattleboro	3	11	33
	Water Distribution Systems: Proactive or Reactive?-Lyndonville	3	9	27
	Water Metering with Advanced Metering Infrastructure (AMI)-Springfield	3	6	18
	VOSHA Incident Investigation-Waterbury	3.5	11	38.5
	Water Supply Rule Update-Middlebury	4.5	9	38.5
	Onsite Training- Westminster Aqueduct Society-Westminster-Chlorination	1	1	1
	Onsite Training- Salisbury Community School-O & M Manual	4	1	4
	Onsite Training-Whitcomb Hyde-Fair Haven-Pandemic Plan & Chlorination	4	1	4
	Onsite Training--Town of Fair Haven-Pandemic Planning & Chlorination	4	1	4
Feb				
	How to Respond to a Sanitary Survey-Springfield	3	14	42
	VOSHA Incident Investigation-Springfield	3.5	14	49
	Water Supply Rule Update-Lyndonville	4.5	20	90
	VTWARN Tabletop Exercise-Waterbury	5.5	35	189
	Water Metering With Advanced Metering Infrastructure-Morrisville	3	13	39
	On-Site Training-Microbiology & Chlorine Chemistry-Barton	5	3	15
	On-Site Training-Chlorine Chemistry-Northfield Water Treatment-Northfield	3	5	15
	On-Site Training-Chlorine-Windsor Correctional Facility-Windsor	0.5	1	0.5
March				
	Advanced Operator Certification Class 3 & 4-Montpelier-Session-1-PA	5	10	50
	Advanced Operator Certification Class 3 & 4-Montpelier-Session-2-PA	5	10	50
	Advanced Operator Certification Class 3 & 4-Montpelier-Session-3-PA	5	11	55

	Advanced Operator Certification Class 3 & 4-Montpelier-Session-4-PA	5	10	50
	Advanced Operator Certification Class 3 & 4-Montpelier-Session-5-PA	5	11	55
	Distribution Certification-Montpelier-Session-1-PA	5	6	30
	Distribution Certification-Montpelier-Session-2-PA	5	6	30
	Distribution Certification-Montpelier-Session-3-PA	5	5	25
	Distribution Certification-Montpelier-Session-4-PA	5	6	30
	Water Audits and Leak Detection-Lyndonville-PJ	3	12	36
	Water Audits and Leak Detection-Brattleboro-PJ	3	16	48
	New Ground Water Rule-Middlebury-PA	3	21	63
	On-Site Training--Tri Town Water-Microbiology/Distribution-Bridport	5	3	15
	On-Site Training--Town of Hardwick-Microbiology/E.coli-Hardwick	2	1	2
	On-Site Training--Weybridge School-UV System, Ion Exchange, Cartridge	2	1	2
	On-Site Training--Fair Haven Water-Microbiology-Fair Haven	4	4	16
	On-Site Training--Windy Hollow MHP-Water Audits/Leak Detection	5.5	1	5.5
	On-Site Training-Essex Jct. Water-Water Distribution Math-Essex Jct.	2	1	2
	On-Site Training-Pittsford Water System-Microbiology-Pittsford	4	4	16
	On-Site Training-VT State Parks-Surface Water Treatment/Chlorination	5	5	25
April				
	Advanced Water Certification-Montpelier-Session 6-PA	5	11	55
	Advanced Water Certification-Montpelier-Session 7-PA	5	11	55
	Advanced Water Certification-Montpelier-Session 8-PA	5	11	55
	Advanced Water Certification-Montpelier-Session 9-PA	5	10	50
	Distribution Certification-Montpelier-Session 5-PA	5	6	30
	Distribution Certification-Montpelier-Session 6-PA	5	5	25
	Total Coliform Rule-Middlebury-PA	3	22	66
	Everything You Need to Know About Water System Repair-Bennington-PA	5	24	120
	Everything You Need to Know About Water System Repair-Springfield-PA	5	28	140
May				
	Small System Class 2 Certification-Springfield-Session 1-PJ	4	11	44
	Small System Class 2 Certification-Springfield-Session 2-PJ	4	11	44
	Small System Class 2 Certification-Springfield-Session 3-PJ	4	12	48
	Small System Class 2 Certification-Springfield-Session 4-PJ	4	12	48
	Small System Class 2 Certification-Montpelier-Session 1-PA	4	7	28
	Small System Class 2 Certification-Montpelier-Session 2-PA	4	7	28
	Small System Class 2 Certification-Montpelier-Session 3-PA	4	7	28
	Small System Class 2 Certification-Montpelier-Session 4-PA	4	7	28
	Basic Math for Water Operators-Springfield-PJ	4	14	56
	Advanced Math for Water Operators-Springfield-PJ	4	6	24
	Class 3 Water Certification Review Class-White River Jct.-PJ	4	2	8
	Small System Class 2 Certification Review-Springfield-PJ	4	7	28
	Class 4 Water Certification Review Class-White River-PJ	7	9	63
	On-site Training-Williston Fire District #1-Water Audit/Leak Detection	4	1	4
	On-site Training-Essex Jct. Water Department-Distribution Math-Montpelie	2	1	2
	<i>Vermont Rural Water Association Spring Conference and Trade Show-Fairlee:</i>			
	<i>GPS</i>	1	32	32
	<i>Energy Efficiency</i>	1	20	20
	<i>Rates and Budgets</i>	1	32	32

	<i>Regulatory Roundup</i>	1.5	57	85.5
	<i>Field and Bench Testing</i>	1	30	30
	<i>Storage Tank Construction</i>	1.25	25	31.25
	Water Distribution Systems-Springfield-PJ	3	16	48
	Chlorine Chemistry-White River Jct-PJ	4	19	76
	Chlorine Chemistry-Morrisville-PJ	4	19	76
	Water System Hydraulics-Springfield-PJ	4	19	76
	Hands-on Chemical Feed Pump Repair-Springfield-PA	4.5	22	99
	Water System Hydraulics-Lyndonville-PJ	4	19	76
	Lead and Copper Rule-Peru-PA	3.5	26	91
	On-site Training- -Ruthcliffe Lodge-Filtration/Disinfection-Isle LaMotte PJ	1	1	1
	On-site Training-Long Point Coop-System Contamination/Flooding/Chlorination-	1	3	3
	On-site Training--Moose Horn Café-Springs/Wells/TCR/V-Hardwick	1	3	3
	On-site Training--Tri Town-Chloramines/Distribution/Storage-Bridport PJ	1	6	6
	On-site Training-Tri Town-Chloramines/Distribution/Storage-Bridport PJ	1	6	6
June				
	Fluoridation Update and Chemical Feed Pump Operation-Waterbury-PA	3.5	20	70
	Water System Corrosion Control-Lyndonville-PJ	3	15	45
	Water System Corrosion Control-Rutland-PJ	3	18	54
	VOSHA Machine Guarding and Lockout/Tagout-Barre-PA	4.5	15	67.5
	Traffic Control Flagger Certification-Lyndonville-PA	4	11	44
	VOSHA Machine Guarding and Lockout/Tagout-Brighton-PA	4.5	9	40.5
	Traffic Control Flagger Certification-Brattleboro-PA	4	8	32
July				
	Corrosion Control: Getting Back in Compliance-Springfield-PJ	3	7	21
	Traffic Control Flagger Certification-Swanton-PA	4	32	128
	VOSHA Personal Protective Equipment-Newport-PA	3.5	6	21
	Multi-Meter Gas Calibration and Function-Swanton-PA	4	21	84
	VOSHA Confined Space Safety Training for Water and Wastewater-Swanton	3	24	72
August				
	VOSHA Personal Protective Equipment Safety Training-Middlebury-PA	3.5	7	24.5
	Small Water System O&M Refresher-Lyndonville-PJ	7	8	56
	Small Water System O&M Refresher-Springfield-PJ	7	13	91
	On-site Training Coliform Hit Ripton School	2	1	2
	On-site Training-Standby Chlorination Start-up-Salisbury School	2	1	2
	On-site Training--Water Math Review-Mountain Water Company-Warren	1.5	1	1.5
Sept				
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 1-PA	5	9	45
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 2-PA	5	11	53
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 3-PA	5	11	52
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 4-PA	5	8	40
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 5-PA	5	10	50
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 6-PA	5	11	55
	Advanced Operator Certification Class 3, 4, and D-Rutland Session 7-PA	5	10	49
Oct				
	Small Systems Class 2 Certification-Session 1-Morrisville-PJ	4	5	20
	Small Systems Class 2 Certification-Session 2-Morrisville-PJ	4	5	20
	Small Systems Class 2 Certification-Session 3-Morrisville-PJ	4	5	20
	Small Systems Class 2 Certification-Session 4-Morrisville-PJ	4	5	20
	Class 3 Water Certification Review-Essex Jct.-PJ	7	4	28
	Advanced Operator Certification Class 3, 4 and D Session 8-Rutland-PA	5	10	50

	Excavation Safety for Water and Wastewater-White River Junction-WG	6	18	108
	Class 4 Water Certification Review-Essex Jct.-PJ	7	7	49
	Rates and Budgets-Essex Jct.-PJ	4	10	40
	Basic Water Math-Essex Jct.-PJ	4	11	44
	Small Systems Class 2 Certification-Springfield-Session1-PA	4	5	20
	Small Systems Class 2 Certification-Springfield Session 2-PA	4	5	20
	Small Systems Class 2 Certification-Springfield Session 3-PA	4	5	20
	Small Systems Class 2 Certification-Springfield Session 4-PA	4	5	18
	Pipe Connections and Repairs-Lyndonville-PJ	4	17	68
Nov				
	Affordable Control/Telemetry Systems for Water and WW-Colchester-WG	4	14	56
	Pipe Connections and Repair for Water and Wastewater-White River Jct.-WG	4	24	96
	Class 3 Water Certification Review-Rutland-PJ	7	5	35
	Excavation Safety for Water and Wastewater-Lyndonville-WG	6	19	114
	On-Site Training--Corrosion Control-Lamoille UHS-Hyde Park	4	3	12
	On-Site Training-Class 3 Review-Lamoille UHS-Hyde Park	4	2	8
	On-Site Training--Class 3 Review-Eden Central School-Eden	4	1	4
	On-Site Training--Class 2 Review-East Montpelier Elementary School	2.5	1	2.5
Dec				
	ICS 300 and Advanced ICS 400 Training/Certification-Pittsford-Session 1-PA	5	12	60
	ICS 300 and Advanced ICS 400 Training/Certification-Pittsford-Session 2-PA	5	13	56
	ICS 300 and Advanced ICS 400 Training/Certification-Pittsford-Session 3-PA	5	13	61
	ICS 300 and Advanced ICS 400 Training/Certification-Pittsford-Session 4-PA	5	13	65
	Hands-on Chemical Feed Pump Repair-Middlebury-PA	4.5	14	63
	On-site Training-Class Review-East Montpelier Elementary School	2.5	1	2.5
	On-site Training-Class Review-East Montpelier Elementary School	2.5	1	2.5
	On-site Training-Class Review-East Montpelier Elementary School	2.5	1	2.5
	On-site Training--Class 3 Test Preparation-Lamoille UHS-Hyde Park	4	2	8
	On-site Training--Class 3 Test Preparation-Eden Central School-Eden	4	1	4
	On-site Training--General Safety Water/WW Chlorine Chemistry-Windsor	6	5	30
	GMMWEA training Sessions calendar year 2011			
	How to Operate and Maintain your Groundwater System NEWWA	6	23	138
	First Time Supervisor NEWWA	6	8	48
	Water System Hydraulic Overview NEWWA	6	12	72
	Totals	554.75	1488	5766.75