

Water Line

Fall 2005

A Publication of the Water Supply Division of the Vermont Department of Environmental Conservation

SWAP & GWUDI Programs, Completed At Last!

Contributed by Heather C. Young, *TNC Specialist*



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60 days per year. TNC water systems are typically campgrounds, inns, summer camps, restaurants, and ski areas. They can either have a groundwater or surface water source, or sometimes both. These establishments play host to regional, national, and international visitors to the Green Mountain State. TNC owners have made it their business to offer the "Made in Vermont" experience and keep visitors returning year after year. These systems not only host visitors, but also serve Vermonters.

WHAT IS SWAP?

The Source Water Assessment Program (SWAP) was established under the Federal Safe Drinking Water Act Amendment of 1996 and requires each state to perform source water assessments on all public drinking water supplies. Assisting communities and TNC owners/operators in developing a strategy for protecting their drinking water source is central to this program.

SWAP Components

➤ The first component is identifying the area around the water source that is vulnerable to contamination. The standard radius for TNC water systems using a groundwater source is 200 feet; however, it may be increased to 300, 400, or 500 feet. Radius size is based on site or source characteristics such as shallow water sources, which

include springs, dug wells, and drilled wells less than 100 feet. Other factors are local hydrogeology and sources that have a high daily demand.

- The second component is identifying land uses and potential sources of contamination (PSOCs) in the source water assessment area. Typical land uses are agricultural, industrial, commercial, and residential. Common PSOCs are septic systems, roads, parking areas, and aboveground storage tanks. If a hazardous waste site, underground storage tank, or landfill is located within the source water assessment radius, it is investigated to ensure it does not threaten a particular TNC water system.
- The third component is determining the source susceptibility to contamination from the land uses and PSOCs. Susceptibility is rated low, medium, or high. This rating is mostly based on the required horizontal minimum separation distance (Chapter 21, Section 11.4.0). In some cases, PSOCs must be moved or eliminated. For example, a parking lot would either need to be relocated or provided additional protection, if closer than 25 feet from the well.
- The fourth component, recommending and requiring actions for source water protection, is probably the most important facet of the source water assessment. This component educates the TNC operator/owner for enhanced water source stewardship. Source recommendations include: pump out septic tank every two to five years, clean out water storage tank yearly, and inspect the area around well head regularly for possible spills of toxic materials. Source requirements include: installing a new well vent, replacing a well conduit with a flexible or frost-proof connection. Additionally, unused wells are required to be properly abandoned with neat cement grout (Chapter 21, Section 12.4.18). Properly abandoning an unused well prevents direct or indirect groundwater contamination by toxic chemicals, small animals falling inside, or other undesirable materials from entering the aquifer.

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A Note from the Director

Contributed By Jay Rutherford,
Water Supply Division Director



The state's drinking water program is largely patterned after federal requirements. The federal requirements have become much more complex and expensive over the past 15 years, and the state program has had to follow suit. As many operators and owners know too well, the regulations continue to evolve, and we will have three more coming in the next few months.

One of our challenges in managing the state oversight program is in reaching you and communicating the various requirements to you. Given that many of you have "day jobs" and serve your neighbors as volunteers, it's always a challenge for us to be able to communicate effectively with you. This newsletter is one of our most important means to get information out, conveying information about safe and affordable drinking water.

Aware of how busy as you are, I urge readers who are responsible for public water systems to take the time to read the newsletter and correspondence we send to you. Although the program has grown much more complex over the years, the vast majority of Vermont operators are improving with their compliance of state and federal rules.

If you have any suggestions for how we might communicate more effectively with you, please give me a call (toll free in Vermont) at 1-800-823-6500 or on my direct line at 802-241-3434.

O & M Manual, check...

Contributed by Don Haddox,
Water Systems Analyst

"Yes, I have an Operations and Maintenance Manual, it's in the bottom drawer in the back room....I think." Is that your response when asked about an Operations and Maintenance (O&M) Manual for your water system? Unfortunately, that is too common of a response and one that is probably predicated in the mistaken belief that an O&M Manual is just one more item to check off on a list of things that the Water Supply Division (the Division) requires water systems to complete. We want to change that idea and challenge systems to create a document that not only complies with the Vermont Water Supply Rule (WSR), but is a truly useful tool in the daily production of safe drinking water.

Far too many people attempt to create an O&M Manual without ever contemplating what the goals of the finished document should be. In accordance with Appendix D of the WSR, an O&M Manual should be:

1. Useful as a stand alone document to allow daily routine and trouble shooting operation by a properly trained operator, including testing and monitoring requirements necessary for the particular system; and
2. Useful in conjunction with "as-built" system prints for full system maintenance to insure adequate quality water supply to the residents served.

Most operators in Vermont will look at those two goals and say "I can do that without any book to tell me how to do it!" My response is: "Great! But what if you quit tomorrow? Or get hurt and can't come to work? Or go on vacation?" Does the system owner(s) know what they need to do to continue the

safe operation of their water system? There are a host of reasons why the current certified operator may not be able to complete their duties, many of them beyond their own control. By failing to share the information that they have accumulated, in an easy-to-access compilation, these operators can be doing a great disservice to the water system that they serve.

Collecting the wealth of information that operators maintain in their heads in no easy task! Operators are required to have an incredibly large amount of information at their fingertips and many carry all of that around in their heads. Some of the best in the state truly have no need to ever look at a book to tell them how to do their jobs and to be very successful at them. However, Appendix D of the WSR gives a summary of all of the items that must be included in an O&M Manual, and is useful in assimilating all of the knowledge that operators have collected into one place. This also allows for the consistent organization of information that will allow others to find it useful. Where, how and when water samples are collected; the type, location and maintenance records of important system components; how to identify, how to fix and whom to contact in an emer-

gency situation. These are all very important pieces of information (along with hundreds of others) necessary for the daily operation of a water system and should all be found in the same location for any water system.

Perhaps the most important, yet rarely identified aspect of a useful O&M Manual, is the fact that it is a growing, changing, "living" document that must be updated routinely. The O&M Manual should reflect conditions in the water system today, not when it was written 5, 10, or 12 years ago. For this reason, your O&M Manual should be re-evaluated by the system owner(s) and their operator(s) most intimately familiar with the system at least annually and more often than that if any system changes have occurred.

Both the Division and Vermont Rural Water Association have many staff members who are both capable and eager to assist water systems in the creation, update and maintenance of O&M Manuals. It isn't just "that book that you throw in a drawer" any more. It's your opportunity to shine as operators; it gives you a place to leave your mark on the system that you have been such a large part in creating and maintaining over the years. It's your O&M Manual.



Don Haddox, System Analyst

Enforcement and Other Administrative Actions

Contributed by Alex Elliot,
Staff Attorney



On April 8, 2005, Thomas J. Synnott, of Wilmington, Vermont, pled guilty to the criminal misdemeanors of false claims (13 V.S.A. §3016) and false statement (10 V.S.A. 1681(c)). The violations involved the false representation to water system operators and to the Agency of Natural Resources that the public water supply tests Thomas Synnott submitted to the agency had been conducted by a laboratory certified to conduct such tests. At the time of the respective tests, Synnott owned and operated Environmental Water Works, a laboratory in Wilmington, Vermont, which did not hold a state certification. Synnott was sentenced to 60 days in jail, all suspended, with 12 months probation. He was fined a total of \$618.00, and required to make full restitution to his customers in the amount of \$5,975.00.

Allen Chouinard relinquished his Class 4 operator certification on February 1st, 2005. Prior to the relinquishment, the Department of Environmental Conservation ("DEC") had initiated the revocation of his certification, due to the alleged events surrounding a caustic discharge that took place at the Montpelier Water Treatment Plant in July 2003. Pursuant to an agreement with DEC, Mr. Chouinard relinquished his certification, with restrictions placed on his ability to receive a new operator certificate. On July 1st, 2005, Mr. Chouinard became eligible to apply for a Class 1 or Class 2 certification. He will not be eligible to apply for a Class 3 or Class 4 certification until July 1st, 2007.

Flowing Forward

The Water Supply Division is pleased to have added a new face to the staff in the Support and Planning Section. The addition of this position will ensure that our new database systems will be operating silky smooth thus enabling staff to perform their functions more efficiently and effectively, providing Vermont's water suppliers with better service up front.

Tim Pricer hit the ground running with the Water Supply Division as the new Safe Drinking Water Information System (SDWIS) Administrator July 11, 2005. Before joining staff at the Water Supply Division, Tim worked at the Hinesburg Community School as a Paraeducator. He also spent a semester as an adjunct professor at Vermont Technical College teaching C-language computer programming. Prior to entering into the educator realm, Tim worked for IBM as an Integration Engineer for the Semiconductor section. Tim has an undergraduate degree in Chemical Engineering from the Clarkson University and a PhD in Chemical Engineering from the University of Illinois.



Tim Pricer,
Support and Planning

SWAP & GWUDI Programs

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WHAT DOES GWUDI MEAN?

GWUDI is an abbreviated way of saying Ground Water Under the Direct Influence of surface water. While conducting the Source Water Assessment, the water sources serving TNC water systems are also evaluated for GWUDI. All public systems using a groundwater source must have a GWUDI determination (Chapter 21, Section 6.2.3). Groundwater found to be under the direct influence of surface water could potentially contain protozoa, such as Giardia and Cryptosporidium that may pose a serious risk to public health. Shallow water sources like dug wells and springs and some bedrock and gravel wells are considered high risk. If a source is found to be GWUDI, it will need additional testing, such as six month coliform sampling and/or Microscopic Particulate Analysis (MPA). Source improvements may also be required to make a final determination.

PROJECT CHANGES

This project has undergone numerous

staff changes and I am the last one conducting source water assessments and GWUDI determinations. The following staff have been a vital part of this program: Patricia Coppolino, Ashley Desmond, Ashley Lucht, Steve O'Malley, Jonathan Moll, and Kellie Merrell. Jim Siriano, TNC Program Supervisor, and Carey Hengstenberg, former Source Water Coordinator, have been indispensable for the success of this project. They have conducted source water assessments, in addition to, dealing with TNC compliance issues. Also, thanks to Rodney Pingree, Water Resources Section Chief, who reviewed the source assessment reports and has been the lead coordinator for this program.

FINAL THOUGHTS

Conducting source water assessments and GWUDI determinations has brought me to the shore of Lake Champlain in Alburg, to atop a mountain in Killington, and all 14 counties in between. I have done groundwater protection work both in South Dakota and Michigan; however, my work here at the Water Supply Division has been the most travel intensive, and even a bit fun.

Meet Our Staff: Billy Kahn, Environmental Analyst

Billy Kahn came on board with the Water Supply Division (WSD) back in October of 1993 and has played an integral roll in the WSD over the last dozen years. At some point or another, water systems throughout the state of Vermont have had to work with Billy for any number of reasons. Some of you might be familiar with his part in the state and out-of-state bottled water program. Billy also worked on providing updated policies for the implementation of the new Surface Water Rules.

Billy's current charge is the oversight of the implementation of the Phase II/V Rule of the Safe Drinking Water Act, as well as being responsible for the Radionuclides and Arsenic Rules. In addition to Billy's rule responsibilities, he also reviews all of the chemical and disinfection byproduct results, and issues the violations for systems failing to monitor or exceeding Maximum Contaminant Levels (MCLs) for contaminants and exceeding Vermont Actions Levels (VALs) for certain contaminants. Billy has to keep on the pulse of what is going on with drinking water throughout Vermont to work hand-in-hand with the State's Toxicologist to issue "Do Not Drink" advisories. Billy also provides a good deal of compliance assistance to systems by creating and issuing the monitoring schedules for all water systems in the state. He also keeps tabs on the chemical waiver program, providing waivers to reduce sample monitoring.

Billy graduated from Florida State University in Tallahassee, Florida, with a bachelor's of science degree in Geography and a minor in Meteorology. He then stayed on to earn his Master's of Science in Geography and Land Use

Planning. Feeling the strong pull from the west coast he headed for California and immediately put his education to work carrying out various planning tasks such as land use, zoning, scenic highway and solid waste planning for several counties in California. Upon "fixing" all of California's planning problems Billy hightailed it back to Tallahassee where he spent 11 years working for the State of Florida in various roles revolving around environmental conservation and planning. During his tenure there Billy took a 2 month sabbatical to walk across the state of Florida (770 miles) to promote the preservation of endangered species and natural areas.

With all of this background information of Billy's work experience you might get the impression that his "M.O." is all work and no play. To the contrary...He is quite the well rounded employee at the Water Supply Division. Billy lives a very full life outside of the halls of the Water Supply Division. Billy lives in a historic house that was at one time part of the Civil War hospital in Montpelier where he, his wife Dian and their 4 and a half year old daughter, Kali, take full advantage of the amenities that the capitol of the Green Mountain State offers. According to Billy, he and his wife's quality of life greatly improved two years ago when they brought Kali into their lives. As a rabid sports fan, Billy loves to follow his old alma



Billy Kahn, Environmental Analyst

mater's teams, the Florida State Seminoles. He is also a strong supporter of the Montpelier's amateur baseball team, the Mountaineers and fan of the Boston Red Sox, even though he grew up a Yankee fan watching the NY Yankees in their glory days of Mickey Mantle and Roger Maris. Billy is also an outdoorsman of sorts, cycling in the summer and fall, and enjoying XC skiing and snowshoeing in the colder months. Although with all of his interests, Billy wouldn't blink an eye when he told you that his activity/hobby of choice is weather tracking. There isn't a day at the office that you can't hit Billy up for an accurate forecast.

Keep your eyes open for a new and improved monitoring schedule coming your way from Billy...

New email addresses for the Water Supply Division

As general progress moves forward so are the information technology folks here at the State. The entire Agency of Natural Resources (ANR), including The Department of Environmental Conservation (DEC) and Water Supply Division, updated their email systems. This update created a change to the email addresses of all employees in DEC. Effective immediately when you send an email to staff at the Water Supply Division, or anyone else at ANR you should no longer include anr in the suffix of the address. An example of an old address is ryan.mccall@anr.state.vt.us The new and improved address is ryan.mccall@state.vt.us Notice the absence of the anr in the new and improved email address. To locate email addresses for state employees you can also search the State of Vermont phone and email directory at the following link, <http://www.dii.state.vt.us/empbook/index.html>.

Water Well Information

Contributed by Ken Yelsey,
Staff Hydrogeologist

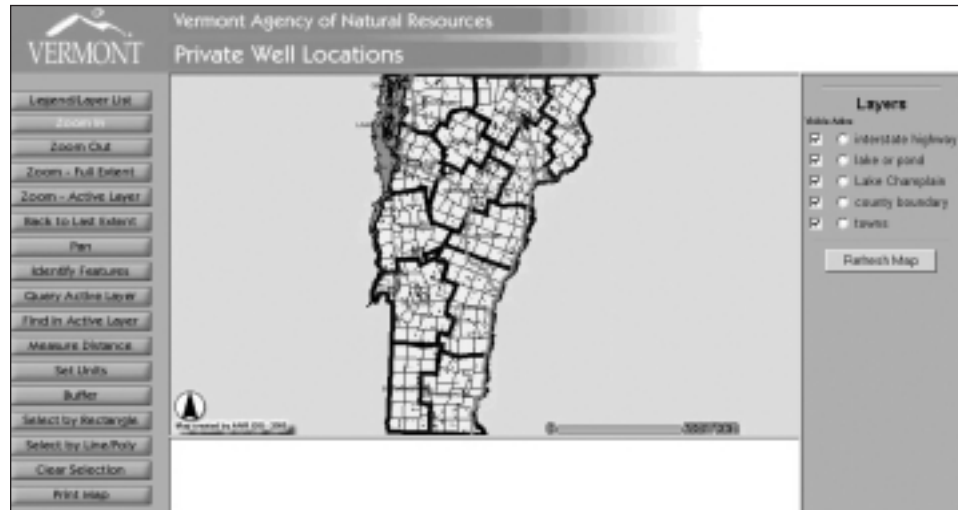
Are you interested in knowing the depth of your water well or how much water it produces? Maybe you are thinking about buying a house and want information on that home's well. Or perhaps you are interested in purchasing some property for a future residence and want to know if wells in the

area are productive. If the answer to any of the above questions is yes, then the Water Supply Division may be of help to you.

The Water Supply Division maintains an extensive database on water wells in the state. There are approximately 90,000 wells in our inventory dating from the 1970's to the present. Licensed well drillers are required to submit well reports for each well they drill in the state. The reports contain information on the date each well was drilled and its location, the type of well and its intended use (e.g., residential), the

depth to bedrock and the total depth of the well, the amount of well casing installed, the water yield of the well, and a description of the subsurface materials the driller encountered while constructing the well. This information is reviewed by us and entered in our well reports database including our geographic information system.

You can access this well data from your computer through the Water Supply Division's webpage by clicking on GIS Internet Mapping and then clicking on Private Well Locations or typing the following link <http://maps.anr.state.vt.us/website/welldriller> into your web browser. A map of the state appears and you can view well locations and data by zooming in on your area of interest until dots representing well locations appear. Then, using the Identify Features item, you can click on specific wells to reveal the well data – please note that information is not available for all wells. If you do not have a computer, you can call us at the Water Supply Division and we can provide you the information or you can come to our office and access the data through one of our computers.



Stage 2 Rules Coming Soon

Contributed by Jeannine McCrumb,
Compliance Analyst

New EPA rules, consisting of the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2) and the Stage 2 Disinfectant Byproducts Rule (Stage 2 DBP), are expected to be finalized in early 2006. These rules were drafted with rapid implementation schedules so affected systems should plan accordingly.

LT2 will require large (serving more than 10,000 persons) surface water or groundwater under the direct influence of surface water (GWUDI) systems to monitor for Cryptosporidium, E. coli and turbidity on a monthly basis for two years. Monitoring for these systems is proposed to begin 6 months after rule finalization or as early as the summer of 2006. Cryptosporidium analyses cost around \$500 per sample. Small surface water or GWUDI systems will be required to monitor for E. coli on a biweekly basis and may be required to monitor for Cryptosporidium if an E. coli trigger level is

reached. Monitoring for these systems is required to begin no later than 2-4 years after rule finalization. A typical cost for an E. coli analysis is \$25 per sample.

Stage 2 DBP will require all systems that deliver disinfected water to complete an Initial Distribution System Evaluation (IDSE). The EPA expects most systems to complete their IDSE using a Standard Monitoring Plan approach. The exact number of samples needed for systems using this approach has not been finalized but for VT systems will potentially be the following: 1) large surface water or GWUDI systems will collect as many as 8 DBP samples every 60 days for one year, 2) smaller surface water or GWUDI systems will be required to collect 2-4 samples every 90-180 days for one year, and 3) groundwater systems will be required to collect 2 samples every 180 days for one year. A typical cost for DBP (trihalomethanes and haloacetic acids) analyses is \$300 per sample. These samples would be in addition to sampling under the Stage 1 Rule, unless waivers can be granted, base upon previous samples in the proper location.

Summarized from Safe Drinking Water Act Newsletter, August 2005

DWSRF Loan Program Retrospective

Contributed by Eric Blatt,
Engineering and Financial Services
Section Chief

The Vermont Drinking Water State Revolving Fund was established in 1997 in conjunction with the adoption of the 1996 amendments to the federal Safe Drinking Water Act (SDWA). The SDWA authorized congress to appropriate federal funds on an annual basis in the form of capitalization grants to the states to be used, in large part, to finance improvements to existing public water systems through low interest loans. States are required to make a 20% match to the federal funds.

All state and most of the federal funds are used to capitalize low interest loans to qualifying public water systems. Vermont has received on average \$8.3M in federal funds per year, with roughly \$6.7M of that allocated annually for the loan program. Together with the state match of roughly \$1.7M per year, the loan program has received on average \$8.4M annually for the loan

program. Additionally, the program has been in existence long enough that repayments from past years' loans are becoming a significant source of capital. As of the end of state fiscal year 2005, approximately \$3.6M in loan repayments and fund interest was received. (See chart below for a summary of state and federal dollars that have been made available to the loan program through June 30, 2005.)

The SDWA amendments established an emphasis on preventing contamination through source water protection and enhanced water system management. The amendments also emphasized the needs of small water systems. Thus, states were allowed to use portions of the grant funds (known as set-asides) for programs that work toward attaining some of these goals and were required to reserve at least 15% of the loan funds for small water systems.

The SDWA limits funding to system improvements that are intended to facilitate compliance with applicable national primary drinking water regulations or to significantly further the health protection objectives of the Act. Projects to address SDWA health standards that have been exceeded or to prevent future violations of the federal rules are eligible. These include proj-

ects to maintain compliance with existing regulations for contaminants with acute health effects (i.e., the Surface Water Treatment Rule, the Total Coliform Rule and nitrate standard) and regulations for contaminants with chronic health effects (i.e., Lead and Copper Rule, Phases I, II and V rules, and safety standards for total trihalomethanes, arsenic, barium, cadmium, chromium, fluoride, mercury, selenium, combined radium-226, -228, and gross alpha particle activity). However, projects such as extending municipal water service to areas served by private water supplies experiencing water shortages are typically not eligible, unless there is a documented widespread source contamination problem. Unfortunately, the loan program has had to turn down three such projects thus far.

On a more positive note, over 100 public water systems have received financing for construction improvements since the inception of the loan program. System improvements have included source, storage, treatment, and distribution upgrades, totaling \$56.8M. At the close of state fiscal year 2005 (6/30/05), a balance of approximately \$13.5M remains and is reserved principally for projects on the FY04 priority list and for a few remaining projects on past years priority lists.

DWSRF Loan Funds Through June 30, 2005

SFY	Capitalization Grant	Set-Asides	Federal Portion of Loans	State Match	Loan Payments & Fund Interest	Total Available For Loans
1998	12,558,800	(2,159,408)	10,399,392	2,511,760	7,406	12,918,558
1999	7,121,300	(1,615,278)	5,506,022	1,424,260	41,596	6,971,878
2000	7,463,800	(1,417,828)	6,045,972	1,492,760	206,007	7,744,739
2001	7,757,000	(1,515,420)	6,241,580	1,551,400	452,451	8,245,431
2002	7,789,100	(1,932,346)	5,856,754	1,557,820	388,534	7,803,108
2003	8,052,500	(1,788,400)	6,264,100	1,610,500	772,116	8,646,716
2004	8,004,100	(1,410,786)	6,593,314	1,600,820	752,760	8,946,894
2005	8,303,100	(1,911,356)	6,391,744	1,660,620	1,013,004	9,065,368
Total	67,049,700	(13,750,822)	53,298,878	13,409,940	3,633,874	70,342,692

Developing an Effective Bacterial Sampling Plan

Contributed by
Bryan Redmond,
Certification and Compliance Officer

The purpose of the bacterial sampling plan is to ensure samples are collected at sites that represent water quality throughout the entire distribution system. As you are aware, public water systems in the State of Vermont are required to monitor for total coliform on a regular basis in accordance with their written sampling plan. During recent sanitary surveys, Water Supply Division (WSD) staff found that many sampling plans need revisions. Historically, sampling plans were approved based on the spatial distribution of the samples with little consideration to other factors that can affect water quality. The following briefly describes the three required components of a sampling plan. The plan should also include the water system name and WSID number, contact person, population served, and the date the plan was developed.

1. Written Rationale:

The written rationale describes what critical factors in the water system were used to select sampling locations. Examples of critical factors that can affect microbial water quality include:

- Source variation
- Disinfectant levels
- Pressure zones
- Pipe materials and age
- Demand variations
- Land use variations
- Dead ends
- Sensitive populations and varying population densities
- Reservoirs and storage tanks
- Areas of historical water quality problems
- Low water pressure and slow water movement
- Deteriorating water mains
- Accessibility and sanitary condition of sampling locations.

2. Water System Map:

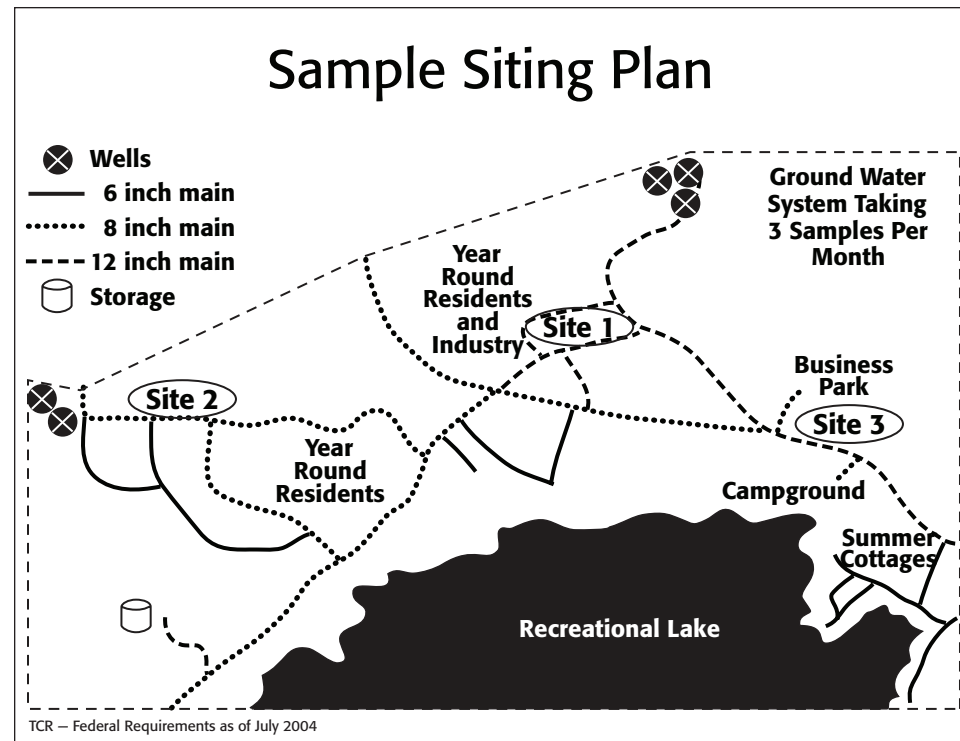
The water system map should include:

- All water sources and their entry points into the distribution system
- The area served by each water source (if the water from various sources is not combined prior to distribution)
- Transmission and distribution water mains
- Treatment plants, storage tanks and reservoirs
- Pressure zones
- Pump stations
- Disinfection facilities
- Routine sampling locations
- Repeat sampling locations
- Interconnections to other systems
- Pipe sizes and pipe materials

3. Sample Schedule:

The sample schedule should include:

- The minimum number of routine samples required per monitoring period
- Any additional samples needed to represent all areas of the distribution system.
- Specify which sample location(s) will be used during each of the compliance periods.
- A description of the repeat sampling sites following the confirmed presence of coliforms.
- A description of the five routine sampling sites that will be used for routine sampling the following month after the presence of coliforms is confirmed.



Operator Training and Examination Schedule

Date	Time	Class Name	Contact	TCHs	Fee	Location & Comments
October 12	TBA	Pumps and Pumping: a one day overview	NEWWA		\$120	Champlain Water District, South Burlington
October 13	TBA	Pumps and Pumping: a one day overview	NEWWA		\$120	TBA
October 18, 20 & 25	8:30 – 12:00	Small Systems Certification Course	VRWA	10	\$50*	Waterbury: VT State College, Stanley Hall
October 19, 21 & 25	8:30 – 12:00	Small Systems Certification Course	VRWA	10	\$50*	St Johnsbury: Morrill Conference Room, Annex Bld, UVM Extension, 107 Eastern Ave
October 26	8:30-3:30	Waterworks Math Review	VRWA	3	\$30*	St Johnsbury: Morrill Conference Room, Annex Bld, UVM Extension, 107 Eastern Ave
October 27	8:30-3:30	Waterworks Math Review	VRWA	3	\$30*	Waterbury: Cyprian Center, Hazens Notch Room
November 2	Class 2 9:00-12:00	Water System Operator Exams	Pre-Registration Required,		Class 2 \$15*	Waterbury: Stanley Hall, Room 100
	Class 3,4 & D 1:00-4:00		Contact WSD		Class 3,4,&D \$40*	Rutland: Howe Center, UVM Extension
November 5	TBA	Vermont Water System Rule Update and Sampling Seminar	VRWA	5	\$50*	Rutland
November 11	TBA	GMEWA Fall Trade Show and Technical Program	GMWEA	2 (possible)	\$45**	Sheraton Hotel and Conference Center, Burlington
November 28 – December 1	8:00 – 4:30	Training and Certification of Backflow Device Inspectors	NEWWA	20	\$620	Champlain Water District, South Burlington
November 29	TBA	Capacity Development Seminar – Operation and Maintenance Manuals	VRWA	3	\$50*	Rutland

Date	Time	Class Name	Contact	TCHs	Fee	Location & Comments
December 1	TBA	Capacity Development Seminar – Operation and Maintenance Manuals	VRWA	3	\$50*	Middlebury
December 6	TBA	Vermont Water System Rule Update and Sampling Seminar	VRWA	3	\$30*	Waterbury
December 7	TBA	Creating a Flushing Program to Meet SDWA Requirements	NEWWA	TBA	\$100	Champlain Water District, South Burlington
December 7	TBA	Capacity Development Seminar – Operation and Maintenance Manuals	VRWA	3	\$50*	Hyde Park
December 8	TBA	Creating a Flushing Program to Meet SDWA Requirements	NEWWA	TBA	\$100	TBA
December 8	1:00 – 4:30	UV Disinfection/Disinfection Alternatives	VRWA	3	\$30*	TBA

*Fee is waived for any Vermont Public Community or Non-Transient Non-Community Water System Operator who operates a water system serving a population of 3,300 or fewer.

**Cost is reduced for GMWEA members and Vermont Water Operators serving 3,300 persons or fewer.

NEWWA New England Water Works Association, 125 Hopping Brook Rd., Holliston, MA 01746
Phone: 508-893-7979, Fax 508-893-9898, www.newwa.org

VRWA Vermont Rural Water Association, 187 St. Paul, Burlington, VT 05401
Call 800-556-3792 or 802-660-4988, Fax 802-660-4990, www.vtruralwater.org

GMWEA Green Mountain Water and Environment Association, VT League of Cities and Towns
89 Main St. Suite 4, Montpelier, VT 05602.
Contact: Jessica Hill at 802-229-9111, Fax 802-2292211, E-mail: jhill@vlct.org, www.gmwae.org

WSD Water Supply Division, DEC, Old Pantry Bldg., 103 South Main St. Waterbury, VT 05671
Toll Free in VT 800-823-6500 or 802-241-3400, Fax 802-241-3284, www.vermontdrinkingwater.org

For Operator Training
Contact: Bryan Redmond at 802-241-3415 or 800 823-6500, E-mail: bryan.redmond@state.vt.us

For Capacity Development
Contact: Roger Bergeron at 802-241-1411 or 800 823-6500, E-mail: roger.bergeron@state.vt.us



Vermont Celebrates Drinking Water Week

Contributed by Elizabeth Walker, VRWA

This year the VT Drinking Water Week Committee put together another great year of activities enjoyed by students and adults through out VT. VT Drinking Water Week was celebrated May 1st – May 7th. The National Theatre for Children traveled to 9 different locations performing 18 times during their 5-day visit in VT. This year's performance was "Water Pirates Run Aground" highlighting the importance of water conservation.

This years Water Fair was held on the state house lawn on May 6th. More than 250 students from around VT enjoyed theatre performances, many demonstrations and educational displays, lawn games, and this year special features were the Morse Farm Maple Kettle Corn and music by Resolution.



Elizabeth Walker, Lt. Governor Dubie, and EPA official Karen McGuire

The poster contest had numerous entries, and this year's winners are:

4TH GRADE	
1st: Katelyn Guillette	Charleston Elementary
2nd: Charlie Boardman	Mater Christi
Honorable Mention: Dominique Danco	Mater Christi
5TH GRADE	
1st: Abbey Hybl	Rochester Elementary
2nd: Walter Weaver	Home School
Honorable Mention: Anthony Plisko	Fairfield Center
6TH GRADE	
1st: Simon Lyon	Monument Elementary
2nd: Ashley Herring	Monument Elementary
Honorable Mention: Kara Spencer	Monument Elementary

The 1st place students received a \$100 savings bond, 2nd place students received a \$50 savings bond. All winners were recognized and received a certificate at the VT Drinking Water Week Water Fair from Lt. Governor Brian Dubie.

As always, the VT Drinking Water Week Committee would like to give special thanks to the following organizations donating the funds necessary to make this week the success that it is: Allen Engineering, Burlington Water Department, Champlain Water District, Dufresne & Associates, DuBois & King, Dufresne and Henry, Earth Tech Inc., ECS Environmental, Efficiency VT, EJ Prescott, Endyne, Forcier Aldrich & Associates, Inc., Green Mountain Engineering, Green Mountain Multisport, GMWEA, HA Manosh, Town of Hartford, Hartigan Company, Heindel & Noyes, Holland Company, Hoyle, Tanner & Associates, Montpelier City Public Works, Natgun, VRWA, New England Tank, Otter Creek, Pioneer Environmental, RCAP Solutions, Red Hed Supply, Stone Environmental, Ti-Sales, USA Blue Book, VT Courier, VT Water Supply Division, Weston Sampson, and the Town of Williamstown.

A special thanks also goes to the many volunteers from various organizations and water systems that help with managing and participating in the activities of the water fair.

If you wish to participate in or contribute in next years program or want to be on the VT Drinking Water Week Committee, please feel free to contact Elizabeth Walker at 800-556-3792 ext 321 or e-mail ewalker@neruralwater.org.



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If you have any comments or suggestions about this newsletter, please contact the editor, Ryan McCall, at 802-241-3417 or ryan.mccall@anr.state.vt.us.



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