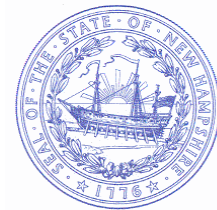




The State of New Hampshire
Department of Environmental Services

Thomas S. Burack, Commissioner



October 6, 2009

Via email

Jeff Butensky
Drinking Water Quality and Protection Unit
US EPA - New England
One Congress Street, Suite 1100 (CDW)
Boston, MA 02114
butensky.jeff@epa.gov

Re: New Hampshire's Annual Capacity Development Report – July 2008 to June 2009

Dear Jeff:

In accordance with Section 1420 (c) of the 1996 Amendments to the Safe Drinking Water Act, we are hereby submitting New Hampshire's Capacity Development program report for FY 2009.

New Hampshire's capacity assurance program is focused on very small water systems serving fewer than 250 persons, because they incur over 75 percent of our health based and monitoring and reporting violations. This report details the various financial, managerial and technical assistance programs and tracking measures to help these very small systems to become more self-reliant and comply with the ever-increasing requirements of the Safe Drinking Water Act.

Please contact our Capacity Development program staff Cynthia.Klevens@des.nh.gov (603) 271-3108 and Susan.Willoughby@des.nh.gov (603) 271-2472, with any questions or additional information about New Hampshire's Capacity Development program efforts.

Sincerely,

Sarah A. Pillsbury, PG
Administrator
Drinking Water and Groundwater Bureau

Encl.

cc. C.Klevens, D. Kelly, S.Willoughby - NHDES

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

**ANNUAL REPORT TO USEPA ON
NEW HAMPSHIRE'S CAPACITY DEVELOPMENT
PROGRAM FOR PUBLIC WATER SYSTEMS**

July 2008 to June 2009



Drinking Water and Groundwater Bureau

dwgbinfo@des.nh.gov

www.des.nh.gov/dwgb/capacity/

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Prepared by Susan Willoughby and Cynthia Klevens

September 30, 2009

TABLE OF CONTENTS

I.	INTRODUCTION	1
1.	Background	1
2.	Profile of New Hampshire Public Water Systems	2
II.	CAPACITY ASSURANCE FOR NEW SYSTEMS	3
1.	Changes in state regulations for capacity assurance	3
2.	Modifications to the state’s control points for capacity assurance	3
3.	New PWS approvals vs. significant non-complier lists	3
III.	CAPACITY ASSURANCE FOR EXISTING PWS	4
1.	Programs, tools, and activities to assist existing systems	4
a)	Source Water Protection & Emergency Preparedness Assistance	4
b)	Grants and Loans	5
c)	Water System Regionalization Assistance	6
d)	Engineering and Hydrogeology One-on-One Technical Assistance	6
e)	As-Built Drawings Initiative	7
f)	Leak Detection Assistance	7
g)	Groundwater Rule Outreach	8
h)	Municipal Drinking Water Lab Advisory Group	8
i)	Seasonal Water Systems: Operations, Maintenance and Inspection	8
j)	Operator Certification Program Outreach	9
k)	Small Public Water Supply Help Center web traffic	9
l)	ASDWA Small Systems Tools Survey	10
2.	Identification and prioritization of systems in need of assistance	10
3.	Non-compliance trends	12
a)	Bacteria MCL Violations	12
b)	Arsenic and Uranium compliance outreach	13
c)	Lead and Copper Action Level Outreach	14
4.	Statewide Capacity Concerns or Needs Identified this Period	14
5.	Statewide review of implementation progress	15
6.	Modifications to the existing systems capacity development strategy	15

FIGURES & TABLES

Figure 1 – Small Water System Challenges	1
Figure 2 – Profile of New Hampshire Public Water Systems	2
Figure 3 – Community Water Systems by Population Served	2
Figure 4 – New Water Systems Approvals	3
Figure 5 – Technical Assistance Visits by DWGB Staff	7
Figure 6 – Existing PWS in Capacity Development Program	11
Figure 7 – SWDA Violations at New Hampshire Community Water Systems	12
Figure 8 – Boil Orders and Bacteria MCL Violations	13
Figure 9 – Arsenic and Uranium MCL Violations	13
<hr/>	
Table 1 – New PWS Approvals	4
Table 2 – ARRA / DWSRF assistance to water systems serving <500 people	7
Table 3 – Quarterly visits to the Small PWS Help Center Webpage	9
Table 4 – Env-601 Deficiency Schedule for Capacity Assurance (adopted Mar 2008)	11

I. INTRODUCTION

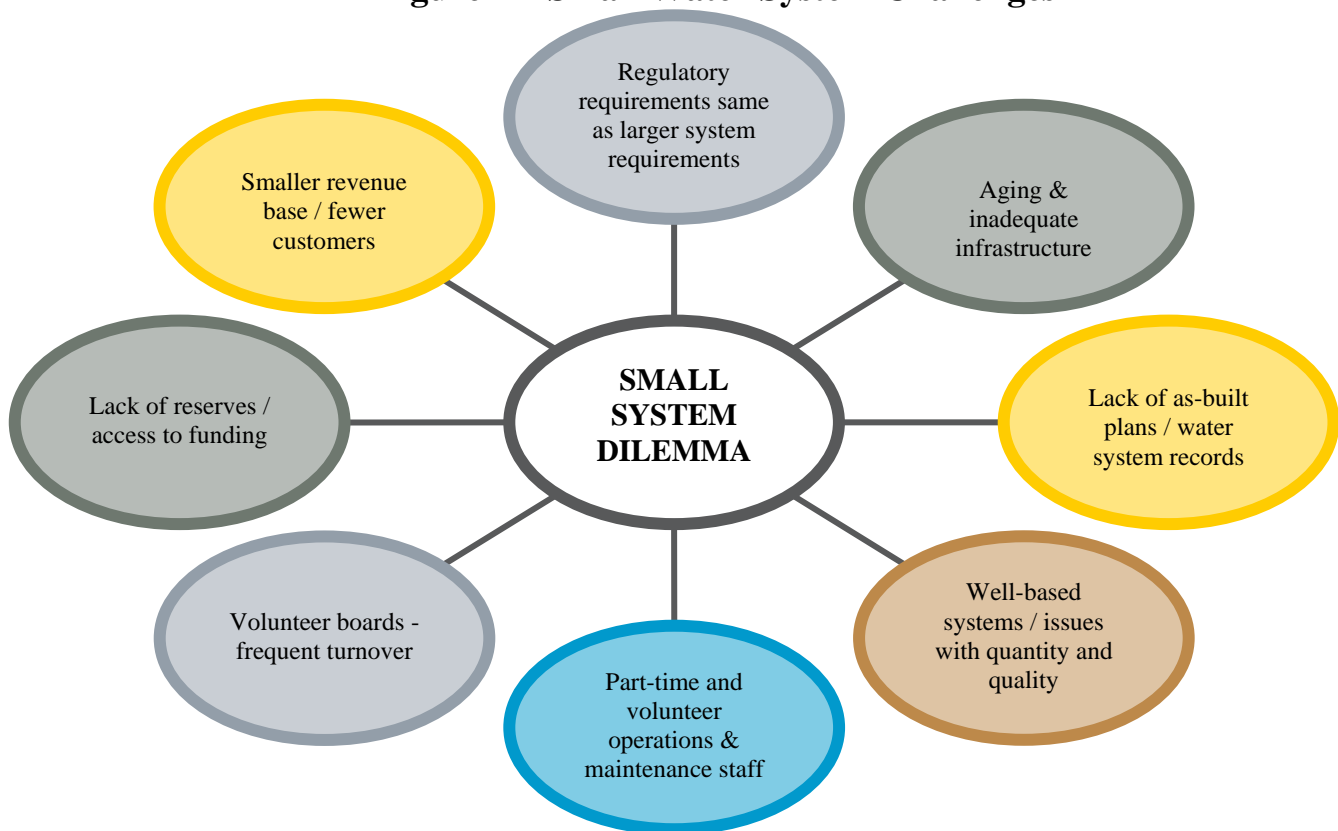
1. BACKGROUND

Under the 1996 Amendments to the Safe Drinking Water Act (SDWA), Section 1420(c), states must develop, implement, measure, and report on their *capacity assurance* efforts to ensure that all new and existing public water systems (PWS) have adequate technical, managerial and financial means to provide clean, safe and reliable water. States failing to comply with these requirements are subject to withholding of up to 20 percent of their Drinking Water State Revolving Fund allotment.

The overall goal of capacity assurance is to improve the rate of compliance and long-term sustainability of water systems. New Hampshire’s program is administered through the DES Drinking Water and Groundwater Bureau (DWGB). It is focused on water systems serving communities fewer than 250 people, because these present the highest number of violations, due to the many challenges in meeting the public health and reporting requirements of the SDWA. Figure 1 depicts the most common hardships faced by small water systems today.

This report is structured in accordance with reporting criteria developed by EPA under its 2006-2011 Strategic Plan Goal 2: *Clean and Safe Water*. These criteria were developed to establish consistent reporting between the States. Activities for *new* PWS are presented in Section II, and activities for *existing* PWS are included as Section III.

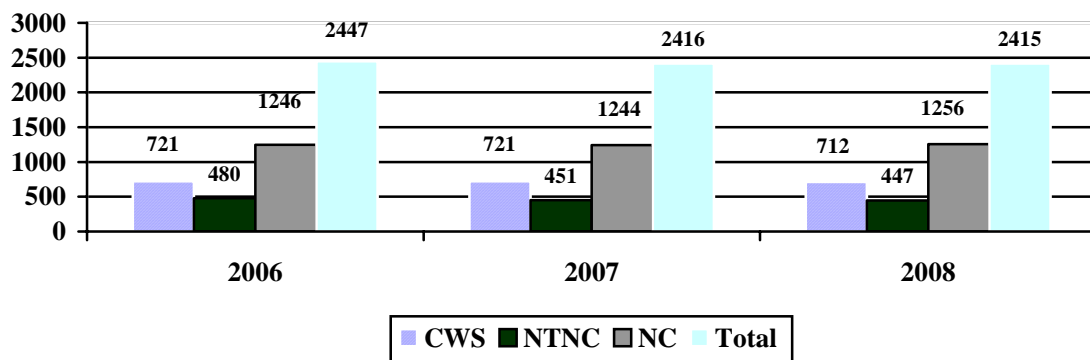
Figure 1 – Small Water System Challenges



2. PROFILE OF NEW HAMPSHIRE PUBLIC WATER SYSTEMS

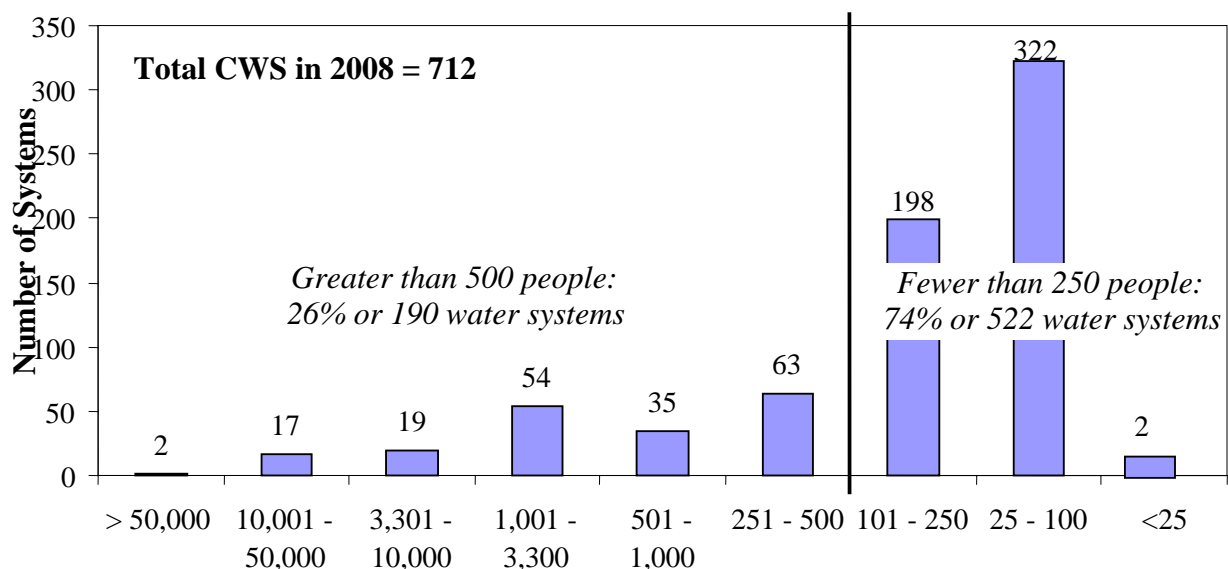
The capacity assurance program applies to all non-transient water systems, including residential (community) as well as schools and businesses (non-community, non-transient). The state regulates approximately **2,415** PWS (2008 data, Figure 2). About **65 percent** of the total state population of 1,315,809 (Office of State Planning 2008 estimate) are served by public water systems. The remaining **35 percent** of New Hampshire's population obtains their water from private wells that are not regulated by the state or federal SDWA. Note that outreach provided to transient systems such as campgrounds, restaurants and hotels, are not covered by the federal capacity assurance rules and therefore are not included in this report.

Figure 2 - NH Active Public Water Systems



About 76 percent of New Hampshire's PWS are very small, serving fewer than 250 people (Figure 3). These systems are the main target of New Hampshire's capacity assistance efforts because of their higher rate of non-compliance. Based on the past three years of enforcement records, **72 percent of the violations** issued by the state are directed to water systems serving fewer than 250 people.

Figure 3 - Community Public Water Systems by Population Served



II. CAPACITY ASSURANCE FOR NEW SYSTEMS

From their inception, new public water systems must have adequate technical, financial and managerial resources to ensure their long-term sustainability and reliability. The capacity assurance program for new systems includes regulatory requirements and control points to verify that new approvals are issued only to systems that have demonstrated these capabilities.

1. CHANGES IN STATE REGULATIONS FOR CAPACITY ASSURANCE

There were no changes in the Capacity Assurance state regulations in fiscal year 2009.

2. MODIFICATIONS TO THE STATE’S CONTROL POINTS FOR CAPACITY ASSURANCE

New Hampshire’s main control point for capacity assurance is the water system **Business Plan**. The business plan is a tool for the system to document its managerial and financial assets, to improve its ability to provide effective and reliable service to its customers over the long term. There were no changes to the business plan in this reporting period.

3. NEW PWS APPROVALS VS. SIGNIFICANT NON-COMPLIER LISTS

On average, about seven to eight new non-transient water systems are approved each year (Fig 4), though this past year has been lower likely due to the economic downturn. New PWS approved over the past three years (FY06 – FY08) are identified below. One measure of the new systems program is that none of these systems have been cited on the federal “Significant Non-Compliers” (SNC) list, for systems with repeated violations.

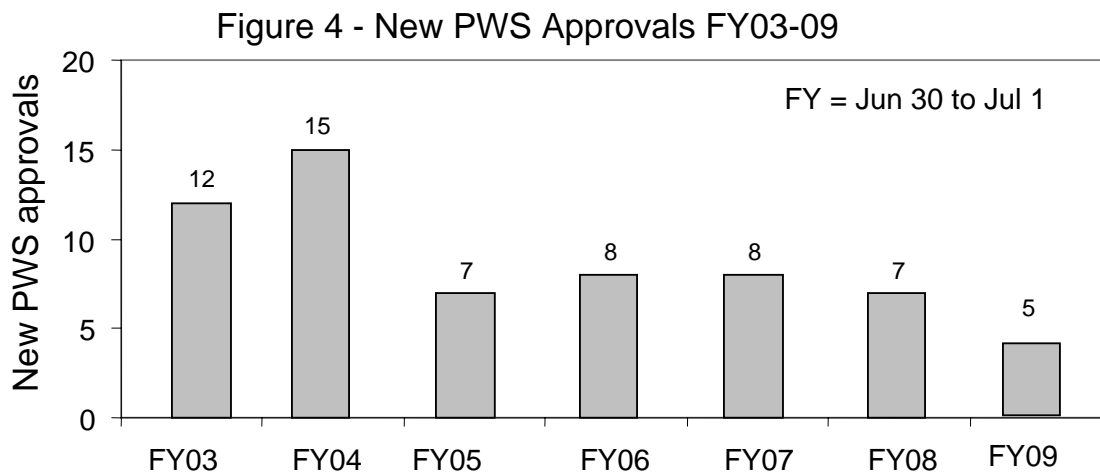


Table 1 - New PWS Approved July 1, 2005 to June 30, 2009

EPA ID	Town	Public Water System Name	Type
0025010	Albany	White Mountain Waldorf School	NTNC
0265050	Bow	Bow Youth Center	NTNC
1333060	Lee	Packers Falls Village	CWS
1402030	Loudon	VOA/NNE Senior Housing	CWS
2295030	Sutton	Kearsarge Regional Middle School	NTNC

Type

CWS = community public water system

NTNC = Non-transient non-community public water system

III. CAPACITY ASSURANCE FOR EXISTING PWS

This section describes the different assistance programs administered by the DWGB to improve the capacity of **existing** PWS, including general outreach activities, prioritization of systems in need of assistance, and review of the program needs and strategies for improvement for the next reporting period.

1. PROGRAMS, TOOLS, AND ACTIVITIES TO ASSIST EXISTING SYSTEMS

Activities targeted to improve the capacity of existing water systems in this reporting period included the following:

a) Source Water Protection & Emergency Preparedness Assistance

- Trained 154 water suppliers, local officials, regional planners, and consultants at our annual Source Water Protection Workshop, co-sponsored by DES and the American Ground Water Trust and held at the Grappone Center in Concord.
- Conducted 59 source water protection outreach events throughout the state.
- Provided individual technical assistance (TA) to the towns of Andover, Mason, Campton, Concord, Lebanon, Fitzwilliam, Freemont, Merrimack, Hinsdale and Stratford.
- Trained 12 municipal employees to conduct inspections and enforce best management practice regulations for handling and storing regulated substances.
- Trained and certified almost 30 water system representatives in the National Incident Management System (NIMS) and Incident Command System (ICS) programs.
- Continued support for the NH Public Works Mutual Aid Program (NHPWMA), which is a mutual aid program for communities including water and wastewater systems. We provided assistance with membership recruitment, creating member binders and conducting the annual workshop. Currently the program is only available to municipal water systems however legislation is being developed to allow the ability of private water systems to join the program.

- Worked with sanitary survey staff to provide assistance to water systems with source capacity deficiencies. Surveyors fill out a source vulnerability questionnaire (implemented in 2007), to identify water shortages or bulk water hauling that may have occurred since the last system visit. If so, the system is added to the capacity assistance list for follow up by source water protection technical staff.
- Continued outreach for emergency planning and security through newsletters, mass e-mails, direct mailings, and presentations at water works meetings. Provided assistance to community systems with submitting updated emergency plans to DES by March 31, 2009.

b) Grants and Loans

- 13 Local Source Water Protection Grants funded through the Drinking Water State Revolving Fund (SRF) set-asides for a total of \$181,582.
- 13 Businesses United for Water Security grants for a total of \$39,333. This is a pilot program between DES and EPA, which awards up to \$4,500 for installation costs associated with security improvements for public water systems, including generators, transfer switches, fencing, gates and alarms.
- 18 loans provided through the Drinking Water State Revolving Loan (July 2008 round), of which 1 or 5 percent (total \$300,000) were awarded to systems serving <500 population.
- 62 grant/loans provided through the American Recovery and Reinvestment Act of 2009 (ARRA) and the Drinking Water State Revolving Loan, of which 27 or 44 percent (total \$7,031,411) are intended to be awarded to systems serving <500 population (i.e., on the Intended Use Plan priority list), as follows:

Table 2 – ARRA / DWSRF assistance to water systems serving <500 people

EPA ID	PWS Name	Population	Project Description	Total Project Cost
0043020	Allenstown, Olde Towne	243	Uranium treatment and second source	\$ 394,600
0043040	Allenstown, Catamount Hill Coop	383	Distribution upgrades, new storage tank and PH	\$ 792,000
0202010	Belmont, Lakeland	388	New storage tank for off-peak demand pumping	\$ 95,000
0202030	Belmont, Tioga River Water Co	55	New pump station, iron and manganese treatment	\$ 115,000
0413030	Charlestown, Windy Acres Coop	180	Water main and service line improvements	\$ 190,750
0437020	Chester, Wason Pond	30	Replacement well to resolve chronic bacteria vios	\$ 17,875
0512050	Conway, Echo Lake Woods	112	Water main replacement 2000 LF	\$ 161,000
0512130	Conway, Woodland grove	155	Upgrade pump station and storage tank	\$ 145,000
0612070	Derry, PEU Glen Ridge	255	Storage tank replacement	\$ 98,000
0612120	Derry, Meadowbrook	145	Deepen BRW 3 + water conservation program	\$ 40,000
0832010	Francestown, Crotched Mtn Maint	115	Raise wellhead, new pump house and storage tank	\$ 200,000
0881010	Gilford, Village Water Dist	130	Replace booster pumps, Fe & Mn trt, backup power	\$ 115,000
0882090	Gilford, Gunstock Glen	138	Main replacement 8000 LF	\$ 750,000
0993020	Greenville Estates Village Dist	480	Interconnection w/Town of Greenville	\$ 2,500,000
1203010	Hudson MHE	220	Replacement well, storage tank, distribution piping	\$ 112,000
1323020	Lebanon, Mascoma Meadows	125	Pump house and distrib upgrades, raise wellhead	\$ 69,000
1373030	Litchfield, Olson's MHP	108	Interconnect with Pennichuck / Litchfield Water	\$ 80,000
1393050	Londonderry, Wagon Wheels	88	Uranium treatment	\$ 30,737
1562020	Milford, Ashley Commons (PEU)	73	Interconnection with Town of Milford	\$ 450,000
1972020	Raymond, Riverview Manor Condo	110	PH improvements to eliminate confined space	\$ 38,000
2003080	Rochester, Silver Bell Coop	53	Connect to City of Rochester Water System	\$ 19,000
2311010	Tamworth Water Works	265	Install uranium treatment system	\$ 46,000

EPA ID	PWS Name	Population	Project Description	Total Project Cost
2311010	Tamworth Water Works	265	Residential meters	\$ 32,000
2342010	Thornton, 175 Estates	108	Residential meters	\$ 21,000
2342010	Thornton, 175 Estates	108	Upgrade / replace water mains with 3" PVC	\$ 345,000
2462040	Webster, Pillsbury Lake District	275	Install residential water meters	\$ 130,449
2525010	Wilton, High Mowing School	140	Uranium trt, new well lines to eliminate x-connect	\$ 44,000

TOTAL ARRA / DWSRF AWARD TO SYSTEMS <500 POPULATION	\$7,031,411
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c) Water System Regionalization Assistance

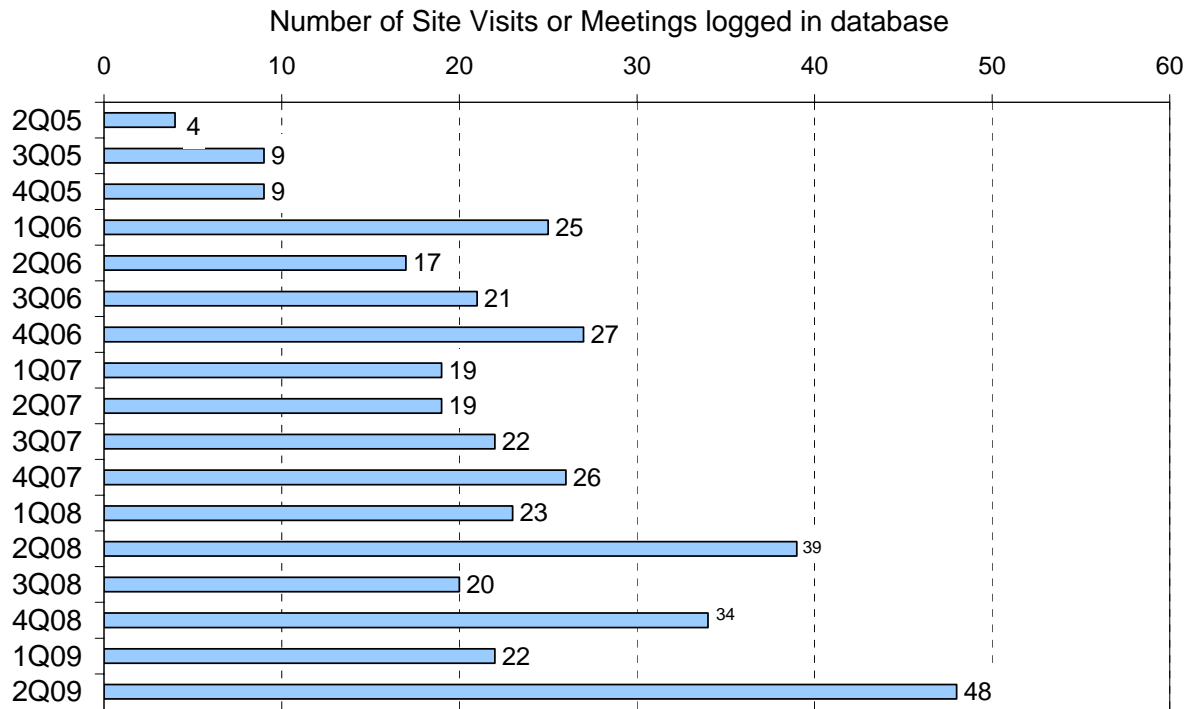
Interconnection is a key tool to aid struggling small water systems, because larger water utilities are better able to manage their systems both financially and technically. In FY09, grant programs to support water system regionalization efforts included:

- Funding for one interconnection study grant for the study of emergency interconnections of several communities in Central New Hampshire including Pembroke, Concord, Penacook-Boscawen and Bow.
- Grants totaling \$171,000 for the State Interconnection and Groundwater Investigation (SIGI) program for reimbursement of 25 percent of costs for planning, design and construction leading to interconnection of two or more PWSs. However, these grants are currently deferred for future funding due to the State's budget status.

d) Engineering and Hydrogeology One-on-One Technical Assistance

DWGB engineers and hydrogeologists provide ongoing assistance in new rule implementation and compliance. Extra effort is required to assist very small water systems with limited funding for specialized consultants. Activities include attendance at board meetings, site visits and investigations, troubleshooting for bacteria, nitrate, lead and copper, arsenic and uranium water quality violations, and developing new well sources to replace lost capacity or address problem sources. Quarterly technical assistance (TA) site visits and meetings attended by DWGB staff for FY06 to FY09 are shown in Figure 5. These site visits are *in addition* to regular sanitary surveys, permitting inspections, and special investigations performed by DWGB technical staff.

Fig 4 - Technical Assistance Visits & Meetings by DWGB Staff



e) As-Built Drawings Initiative

In June 2008, DES held a roundtable discussion with over a dozen small system stakeholders, to discuss the need and strategy for enforcement of “as-built” or record drawings for new and existing water systems. The Fall 2008 issue of DES “Supply Lines” newsletter dedicated the front page to communicate this important message, including a timeline for systems to develop these plans. Beginning April 1, 2009, sanitary surveys and emergency plan updates began to cite the lack of as-built drawings as a minor deficiency. This helps motivate systems to work with their operators to develop their record drawings in time for the next sanitary survey cycle in three years (community systems), or five years (non-community systems), when it will be cited as a significant deficiency. Also, starting with the 2009 construction season, new systems do not receive DES final approval until their record drawings are submitted.

To assist systems with this effort, the Capacity Program developed and posted guidance on as-built drawings on our webpage, and maintains a list of design firms who provide as-built drawing services. Outreach is increased based on a monthly review of systems having received minor deficiencies for lack of as-built drawings.

For FY2010, we are considering an “As-Built” grant match program to assist small systems to develop these drawings. Initial plans are to offer 50 percent grant match up to a project cost of \$1,000.

f) Leak Detection Assistance

As part of the ARRA/DWSRF funding, DES sent letters to all community water systems in April

2009 to identify statewide needs for leak detection services. Of these, 27 water systems were prioritized and selected to receive leak detection surveys valued at \$200,000 by a state subcontractor. The leak detection survey contract was advertised publicly through the state general bid opportunities website and the DES Recovery page. The survey work will be completed in FY2010. Oversight of the leak detection contract will be provided by DES Water Conservation/Water use Registration program staff.

g) Groundwater Rule Outreach

During FY09, DES conducted a series of 7 training courses and posted guidance on the new federal Groundwater Rule (GWR) requirements to be effective December 1 2009 for all systems using groundwater sources. The GWR will require “triggered monitoring” for *E.coli* (an indicator for waterborne viruses) at wells in service at the time coliform bacteria are detected as a result of monitoring under the Total Coliform Rule (TCR). Systems which provide 4-log virus disinfection will be exempt from the triggered monitoring requirement. Water systems choosing to do so have until December 1, 2009 to demonstrate that they provide 4-log disinfection.

In preparation for the federal requirements, New Hampshire systems that currently use chlorine or ultraviolet light disinfection were required to perform six months of “Investigative Monitoring” (IM) prior to disinfection, to demonstrate that these existing practices do not “mask” the occurrence of viruses (as indicated by E coli). The GWR training sessions conducted in early 2009 were held in Peterborough, Littleton, Conway, Plymouth, Derry, Concord, and Newfields, and were targeted primarily at public water systems required to conduct the 6 months of IM monitoring. In addition to a discussion of the state IM requirements, topics covered included triggered monitoring, identification and correction of significant deficiencies under the GWR, and requirements to demonstrate 4-log disinfection of viruses.

h) Municipal Drinking Water Lab Advisory Group

In FY09, DES and a group of volunteers from municipal public water system laboratories throughout New Hampshire formed the Municipal Drinking Water Lab Advisory Group. The Group’s goal is to work together to provide training and create a support network for exchange of ideas and expertise to enhance and ensure laboratory data accuracy and efficiency in data transfer. As part of this effort, a Drinking Water Lab webpage was created on the DES website and the laboratories are working with the Bureau to institute electronic data transfer of all public water system laboratory results.

i) Seasonal Water Systems: Operations, Maintenance and Inspection

In April 2009, the Capacity program staff worked with Granite State Rural Water Association (GSRWA) and the NH Department of Resources and Economic Development (DRED) to provide a comprehensive water system operations and maintenance class for private and public campgrounds and other seasonal public water systems. The day-long training sessions were held in Concord and Littleton, with recognized state experts serving as class instructors. Training topics included:

- Water cycle and groundwater flow to wells
- New Hampshire geology and naturally-occurring drinking water contaminants
- Well construction and water quality
- Common sources of groundwater contamination and well protection tips
- Storage, distribution & treatment system construction and maintenance

- Seasonal start-up and shut-down practices
- Bacteria problems – causes and cures
- Wastewater system considerations
- State inspections – what to expect

This training will be repeated in Spring 2010 and is proposed to be performed at least annually thereafter, based on overwhelmingly positive feedback from class participants. Requests for future content included: treatment for *E.coli* disinfection, softener discharge impacts, shoreland protection requirements, operator safety (e.g., during excavation, confined space entry, electrical). Additional training was also requested on shock chlorination practices, basic math review, water system repair/maintenance, and sampling procedures.

j) Operator Certification Program Outreach

The Operator Certification program funds a number of outreach and training activities through the Operator Expense Reimbursement Grant, to advance the skill and knowledge of small water system operators and board members. Highlights for FY09 included:

1. Contract with the New Hampshire Water Works Association (NHWWA) to organize and oversee the November 2008 NH Drinking Water Tradeshow and Exposition in Manchester, featuring 25 technical seminars (six parallel sessions), with guest instructors from engineering consultants, water industry professionals and state drinking water bureau staff. This event is our main opportunity for outreach to very small system operators as it regularly attracts attendance by over 250 certified drinking water operators.
2. Support to other DWGB programs by organizing training seminars for certified operators and owners of small public water systems. This fiscal year included training on the Stage 2/LT2 requirements for systems serving <10,000 population (Schedule 4).
3. Outreach table for the Granite State Rural Water Association Operator Field Day (Sep 2008). DES Drinking Water staff also participated in a roundtable forum on drinking water regulations and provided training on water conservation. This event is targeted to small municipal owned systems and water village districts, and attracts approximately 100 attendees each year.

k) Small Public Water Supply Help Center web traffic

New Hampshire’s capacity program webpage, “Small Public Water Supply Help Center” (see www.des.nh.gov , A to Z List) provides fact sheets and guidance to help small systems with the most pressing compliance issues. Web visit tracking is used to improve/expand content for better assistance to small water systems. Quarterly visits to this page for the past fiscal year are reported as follows:

Table 3 – Quarterly visits to the Small PWS Help Center Webpage

	Q3 2008	Q4 2008	Q1 2009	Q2 2009
Main page	No data collected for this reporting period	463	374	295
Consumer Confidence Reports		74	146	690
DW State Revolving Loan Fund		76	137	142
Small system tools survey (ASDWA)		--	89	45
Interconnection grants (SIGI)		55	87	55
General PWS grants and loans		24	32	25
Arsenic technical assistance		44	43	42
Radionuclides technical assistance		27	56	49

1) ASDWA Small Systems Tools Survey

In FY09, the Association of State Drinking Water Administrators (ASDWA) obtained a grant from USEPA to perform a survey of the usefulness of selected guidance documents and tools developed for small water system compliance. The survey was performed in five pilot states (Alaska, Arizona, New Hampshire, New York and Texas), to obtain feedback from water system owners, operators and technical assistance providers for the following 11 tools:

1. Small Systems Guide to the Safe Drinking Water Act Regulations (2003)
2. Stage 1 Disinfectants/Disinfection Byproducts STEP Guide (2006)
3. Total Coliform Rule STEP guide for Non-Community water systems (2006)
4. Total Coliform Rule guide for Community water systems (2001)
5. Setting Small Drinking Water System Rates for a Sustainable Future (2005)
6. The Multiple Barrier Approach to Public Health Protection Fact Sheet (2006)
7. Best Practice Guide – Roles and Responsibilities of Operators (2006)
8. Best Practice Guide – Roles and Responsibilities of Owners (2006)
9. Best Practice Guide – Talking to your Decision-maker (2006)
10. Interactive Sampling CD for Small Systems (2006)

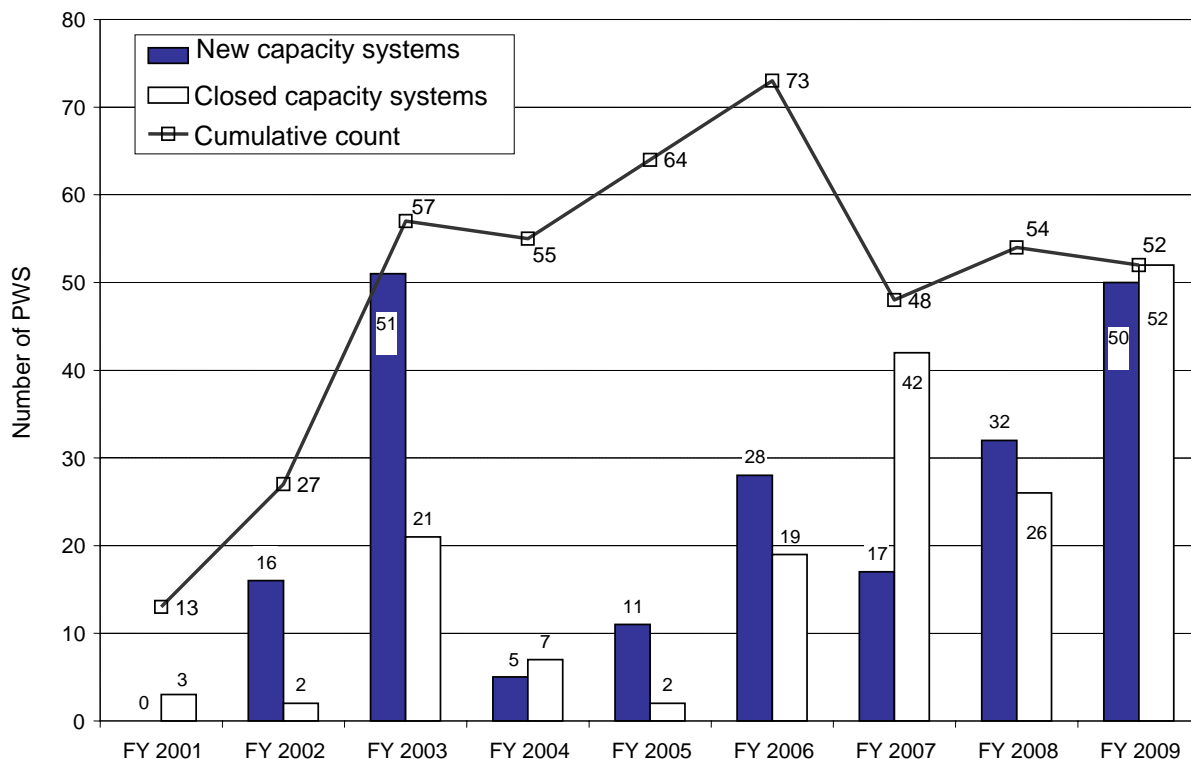
New Hampshire and New York teamed up to use a web-based survey tool to request responses posted on the New Hampshire Small System Help Center webpage. Responses were collected from March to May 2009 with results as follows:

No. of respondents	New Hampshire 17 / New York = 25, total 42
Affiliation	18 regulators, 19 operators, 5 TA providers, 2 owners
Never seen the tools before	22 to 63%
Used once or twice	8 to 40%
What do you like the most	Step by step sequence and worksheets
Preferred document format	Download off the web (43%); Paper copy (36%)

2. IDENTIFICATION AND PRIORITIZATION OF SYSTEMS IN NEED OF ASSISTANCE

Systems in need of tailored assistance through the capacity development program are identified through our regular interactions including sanitary surveys, referrals from contract operators, direct requests from the water system, customer complaints, and repeat enforcement and significant non-complier lists. At the close of FY09, **52** systems were being assisted and tracked in this program (Figure 6).

Fig 6 - Existing PWS in Capacity Development Program



For each capacity development system, a tailored work plan is developed and updated at least monthly to serve as a roadmap in identifying, evaluating and addressing the water system needs. An in-house project manager is assigned to be the work plan lead. The active “bucket list” is maintained as an on-line task log in Microsoft Outlook, accessible internally to all DWGB staff for review and edit of additional log entries. System progress (or lack thereof) is discussed at monthly meetings attended by the Bureau Administrator and technical/survey staff. Where appropriate, the Administrator personally attends meetings with water system commissioners or board members to review the deficiencies and agree on a suitable work plan and timeline for resolution. The work plan log is closed when the project manager deems that the system has become sufficiently self-sufficient such that active assistance and oversight is no longer necessary. Upon close-out, a chronological summary of the assistance provided is filed in the water system main file.

As part of the state’s new capacity assurance rules adopted March 2008, a Deficiency Schedule rating for existing systems (Table 3) was updated to better rank the needs of systems referred to the capacity program. Systems with a deficiency rating greater than 25 points can be required to prepare and submit a water system Business Plan in addition to addressing any outstanding water quality, quantity or infrastructure violations.

Table 4 - Env-601 Deficiency Schedule for Capacity Assurance (adopted Mar 2008)

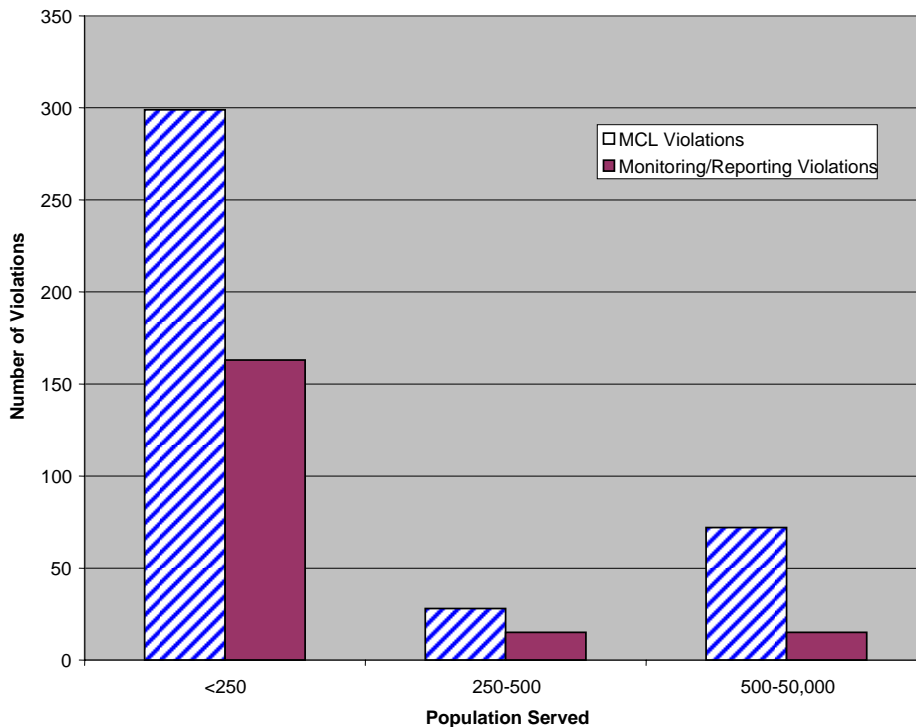
Area, Deficiency	Deficiency Points
Inadequate source water capacity	15
Inadequate infrastructure (flooding, electrical, mechanical equipment), per deficiency	10
Significant deficiencies, per deficiency	10

Area, Deficiency	Deficiency Points
Maximum Contaminant Levels, per violation	10
Lack of certified operator	10
Monitoring and reporting or Public Notice, per violation	10

3. NON-COMPLIANCE TRENDS

Although New Hampshire boasts a compliance rate of over 85 percent of community water systems *without* any health-based violations (EPA SDWISFED Rolling GPR, July 1, 2009), a review of the remaining 15 percent shows that the non-transient community and community water systems serving fewer than 250 people are the worst offenders (Figure 7). As the chart depicts, non-transient systems serving fewer than 250 people incurred approximately 76 percent of the health based violations, and about 80 percent of the monitoring and reporting violations issued in the past fiscal year.

Figure 7. SDWA Violations at NH Non-transient Water Systems

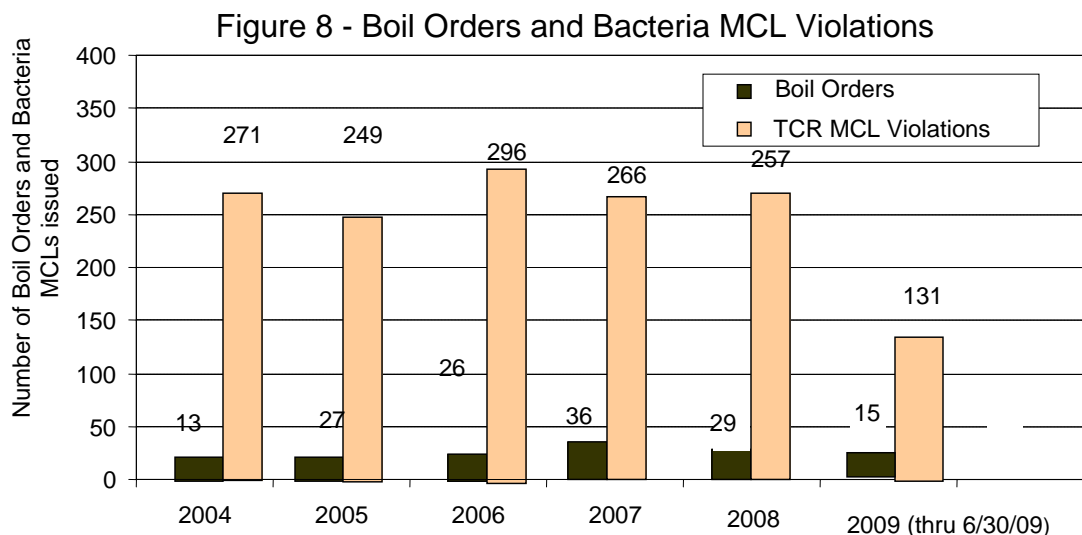


For the health-based violations, the capacity program’s compliance priorities for the past few years have focused on **bacteria, arsenic, uranium and lead and copper**. Specific outreach for these compliance priorities is described below.

a) Bacteria MCL Violations

Between 200 to 300 bacteria MCL violations are issued each year in New Hampshire (Figure 8), the majority of which are issued to systems serving fewer than 250 people. Based on this fact and in preparation for the new Groundwater Rule which applies to all water systems using groundwater, a step by step fact sheet for addressing bacteria contamination was developed in Spring 2008, and is included with all bacteria enforcement notices to non-community systems. In

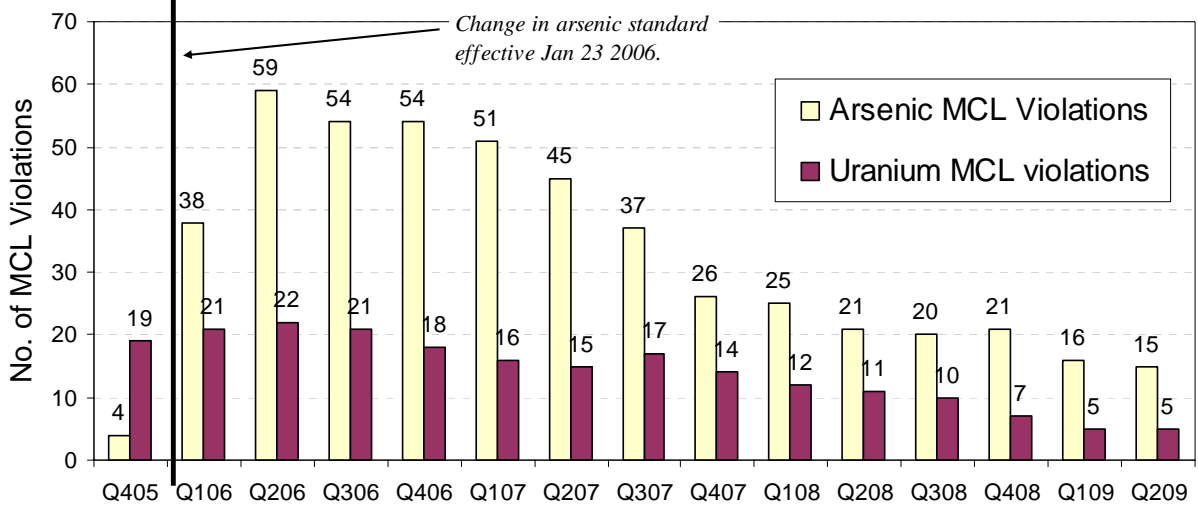
addition, drinking water engineering and enforcement staff prepared and delivered seven training sessions across the state in early 2009, directed to all groundwater systems in preparation of the Groundwater Rule - see Section III, 1, g) Groundwater Rule Outreach for existing public water systems. Groundwater systems that currently apply disinfection were required to collect 6 months of raw water *E.coli* samples to demonstrate well source integrity, and avoid additional requirements to be enforced Dec 1 2009 under the Groundwater Rule. Systems that showed positive *E.coli* are pro-actively correcting their deficiencies prior to December or, as a last resort, will be required to implement 4-log virus disinfection and reporting requirements.



b) Arsenic and Uranium compliance outreach

As anticipated, implementation of the new arsenic and uranium standards have demanded extensive outreach from DWGB staff to water system boards and operators. In New Hampshire, about 200 small water systems were impacted by the change of arsenic standard, and approximately 40 systems were impacted by the new uranium standard. Compliance progress has been achieved by parallel enforcement and technical assistance, and close cooperation between these two programs in the Bureau. As such, at the close of FY09 only 15 of 200 (7.5%) systems remain with water above 10 ppb arsenic, and five of 40 (12.5%) uranium systems remain above 30 ppb uranium (Figure 8). All continue under active enforcement and continue to demonstrate progress toward compliance. The non-compliant systems are generally those addressing major upgrades and funding challenges including the need for additional source capacity or other major infrastructure and funding needs to implement the corrective actions.

Fig 9 - NH Arsenic & Uranium Violations Jan 2006 - Jun 2009



Additional outreach on arsenic treatment included technical presentations by Capacity program staff in Cincinnati, Ohio (August 2008), EPA Office of Research & Development workshop on Inorganics Treatment Challenges and Solutions, and at Portsmouth (March 2009) Operator training seminar. The capacity program also authored and published a technical article on arsenic treatment performance in New Hampshire for the NHWWA Spring 2009 Journal, distributed to approximately 1,200 water system professionals.

c) Lead and Copper Action Level Outreach

The capacity assistance “bucket list” invariably includes around 10 percent of systems exceeding either the lead or the copper action level, or both. Recalcitrant systems generally exhibit underlying managerial and financial problems for which the capacity program has been called upon to assist. For this reporting period, systems in this category that required significant outreach via site visits, meetings, letters, and repeated phone and email correspondence included:

- Alton, Merrymeeting MHP – still in violation / refused state funding assistance. Possible return to compliance Dec 2009
- Litchfield, Olson MHP – to be resolved by Dec 2009 via interconnection with Town water using ARRA / DWSRF funding.
- Stewartstown, West Stewartstown water system – returned to compliance June 2009
- Surry Village Water – treatment installed in 2008 yet still in violation, compliance schedule pending.
- Warren, South Main Street – currently under Administrative Order by Consent for return to compliance by early 2010.

4. STATEWIDE CAPACITY CONCERNS OR NEEDS IDENTIFIED THIS PERIOD

The need for additional DES staff to provide direct assistance, training and oversight of the state’s capacity development program was identified in FY07. A new Small Systems Ombudsman joined the Bureau in January 2008 (FY08) to fulfill this need. The Ombudsman’s focus is on providing managerial and funding assistance to very small systems, working directly with water system board members, operators and small system contractors. This direct assistance has reduced the need to subcontract these services, and provides better accountability of the

outreach provided. Accordingly, no TA subcontracts were issued in FY09. However, specialized contract services such as leak detection, water and energy audits are being considered for FY10.

5. STATEWIDE REVIEW OF IMPLEMENTATION PROGRESS

Quarterly review of the capacity program implementation progress is performed by a number of measures reported through the statewide Measures Tracking and Reporting System (MTRS). Current quarterly tracking measures are:

- Number of TA site visits by DWGB staff
- Number of new systems added to the active capacity development list
- Number of systems retired from the capacity development program
- Number of visits to Small System Help Center / Capacity Assurance webpage
- Number of historical significant non-compliance systems (as reported by EPA)

Annual review of the program progress is provided via our annual reports to EPA, and triennial reports to the Governor.

6. MODIFICATIONS TO THE EXISTING SYSTEMS CAPACITY DEVELOPMENT STRATEGY

The existing systems strategy for the following reporting period is proposed to be augmented by addition of the following new tracking measures:

- Percent of health-based violations to water systems serving fewer than 250 persons (number per quarter, violation and water system types)
- Percent of monitoring and reporting violations to water systems serving fewer than 250 persons per quarter and water system types
- Annual funding grants and loans awarded to systems serving fewer than 500 persons.