

Massachusetts Department of Environmental Protection
Safe Drinking Water Act Assessment Advisory Committee

Annual Report to the Massachusetts Legislature
January – December 2007



Belmont Reservoir pump house, Hinsdale, MA,
Photograph by Rebekah McDermott

Canoe River Aquifer, Mansfield, MA
Photograph by John Fresh



Quabbin Reservoir
Photograph by Eva Tor



Safe Drinking Water Act Assessment Advisory Committee
One Winter Street, Fifth Floor
Boston, Massachusetts 02108

April 7, 2008

Thomas Newton, Chair
Western Mass. Water Works Association
Superintendent, Easthampton Water Dept.

Jon Beekman
Associated Industries of Massachusetts
Director of Municipal Services
SEA Consultants, Inc.

Elizabeth Ainsley Campbell
Environmental Agency A
Executive Director
Nashua River Watershed Association

Konstantin Eliadi
Mass. Water Works Association
Director of Water Operations
Worcester DPW

Anthony Marques
New England Water Works Association
Director, Hudson DPW

Henry Papuga
National Association of Water Companies
Manager, Milford Water Company

Lawrence Stepenuck
Rural Water Systems
Rural Community Assistance Program

Wayne Southworth
MassDEP Designee
Director, Easton DPW

Leo Potter
Environmental Agency B
Canoe River Aquifer Advisory Committee
Superintendent, Foxborough Water Dept.

Richard Maccagnano
Non-Community Systems
Holliston Board of Health

David Baier
Mass. Municipal Association

To: the Honorable Chairs and Members of the
House and Senate Ways and Means Committees & the
Joint Committee on the Environment, Natural Resources and
Agriculture

On behalf of the Safe Drinking Water Act Assessment Advisory Committee, I am pleased to send you this Annual Report as required by M.G.L. Ch. 21A, s.18A. The legislature established the Assessment in 1993 to support primacy in Massachusetts to implement the federal Safe Drinking Water Act (SDWA).

The Assessment is currently set at \$8.50 per million gallons of water used by public water systems and provides over \$1.8 million to the Massachusetts Department of Environmental Protection annually to help support SDWA primacy. Water use and, therefore, Assessment revenue, has declined in recent years due to good water conservation efforts by public water systems and their customers. In addition, the installation of master meters by public water systems allows a more accurate measurement and reporting of water use.

The Annual Report describes how the Assessment was used to support the Massachusetts Department of Environmental Protection's Drinking Water Program during calendar year 2007 and offers a possible solution to the declining revenues. Unclaimed deposits from an expanded Massachusetts bottle bill, to include bottled water and other containers, could be used to offset declining Assessment revenues, support the work of watershed associations across the state and reduce the burden of municipalities to dispose of these containers. The committee asks the legislature to support this option.

Please contact me if you have any questions regarding the Annual Report to the Legislature for 2007. I can be reached at the Easthampton Water Department at 413-529-1422.

Sincerely,

Thomas Newton, Chair



MASSACHUSETTS DRINKING WATER PROGRAM
SAFE DRINKING WATER ACT ASSESSMENT ADVISORY COMMITTEE
One Winter Street, Fifth Floor
Boston, Massachusetts 02108

April 7, 2008

Annual Report for 2007

Introduction

In 1993 the Massachusetts legislature established the Safe Drinking Water Act (SDWA) Assessment (MGL Ch.21A, s.18A) to provide funding to help the Massachusetts Department of Environmental Protection (MassDEP) and public water systems meet increasing responsibilities under the federal SDWA. The legislation also included the formation of an Advisory Committee to help MassDEP implement the Assessment and to report annually to the legislature on the status of the Assessment Program.

Maintaining primacy for SDWA implementation has enabled MassDEP to develop customized state programs that have saved public water systems, and consumers, millions of dollars. The Assessment for fiscal year 2009, expected to total over \$1.8 million, will enable the funding of 14.3 staff positions at MassDEP. The Assessment, approximately 37 cents per person per year, is collected from all end users of public water through the public water system. The Assessment also provides a one to one match for the SDWA State Revolving Fund set-asides. Every Assessment dollar, therefore, doubles in value.

Concerns of the Committee

Between 1992 and 2005 water use and, therefore, Assessment revenue declined by almost eight percent (8%). This decline can be explained by the effect of metering and the efforts of water systems and customers to conserve water. The reduction in revenue has led the committee to explore other sources of funding to supplement the Assessment including requesting a small percentage of unclaimed deposits from an expanded bottle bill. The Assessment, which is currently set at \$8.50 per million gallons of water used, has a legislative cap of \$10 per million gallons.

Committee Priorities for 2007

The committee met six times during 2007 to conduct business and monitor the Assessment Program. The committee's meetings are posted with the Secretary of the Commonwealth and are open to the public. At their January meeting, members prioritized the following goals to pursue for 2007: review revenue needs and identify ways to raise additional revenue; look at public water system operator certification issues and costs of exams; and identify public water supplier training needs and priorities.

Over the course of several meetings in 2007 the committee met with MassDEP and Riverways Program staff and researched and discussed various legislation pending to expand the Massachusetts Bottle Bill to include bottled water and juice containers. The committee has long supported the expansion of the bottle bill as a way to help public water suppliers, who have historically protected the environment, and to control increasing costs and other issues faced by cities and towns related to litter and rubbish removal and disposal.

The committee voted to propose the following amendment to House Bill 792 – An Act to Reinstate the Clean Environment Fund.

(d) Not less than ten (10) percent of amounts deposited annually in the Fund shall be used by the Department of Environmental Protection Drinking Water Program for administration and implementation of the federal Safe Drinking Water Act. These amounts shall be used to reduce or supplement the Safe Drinking Water Assessment Fee paid annually to the Department by public water systems pursuant to Section 18A of Chapter 21A of the General Laws. Use of these funds by the Department shall be consistent with the requirements of Section 18A of Chapter 21A of the General Laws with oversight by the Advisory Committee established by that statute.

The committee also voted to send representatives to testify about the proposed amendment to the October 22, 2007 legislative hearing conducted by the Joint Committee on the Environment, Natural Resources and Agriculture.

At their March 2007 meeting, the committee met with representatives from the Board of Certification of Operators of Drinking Water Supply Facilities. Topics discussed included ways to lower exam fees, schedule exams, and provide even more professionalism in the public water system community.

The committee invited the presidents of the Massachusetts Water Works Association and the Western Massachusetts, Barnstable County, and Plymouth County Water Works Associations to their August 2007 meeting to hear MassDEP's Director of Legislative and Budgetary Affairs present potential revenue figures for fiscal year 2009 based on the current Assessment rate and water use reported by public water systems for 2006. The committee voted to recommend to MassDEP's Commissioner that the Assessment rate for metered systems remain the same for fiscal year 2009 with the exception of the minimum bill which they recommended increasing from \$10.00 to \$20.00. The minimum bill had been set at \$10.00 since the Assessment Program began in 1993. The committee believes that the increase is justified due to the increased technical assistance needs of small systems. MassDEP's Commissioner agreed with the committee's recommendations and set the rates for fiscal year 2009 on August 22, 2007.

During November 2007, the committee met with the Manager of MassDEP Drinking Water Program's Water Quality Assurance Section to review work completed with Assessment funds during 2007.

Highlights of Work Funded by the Assessment at MassDEP

In 2007 MassDEP's Drinking Water Program staff conducted technical assistance, outreach and training to public water suppliers and others. Examples of this work included training related to emergency response; the Lead in Schools Program; the updated Guidelines and Policies for Public Water Systems; the Stage 2 Disinfectants and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule.

The Drinking Water Program works with other MassDEP programs as well as other state agencies to promote drinking water awareness. The Departments of Fire Services, Conservation and Recreation, and Agricultural Resources are examples of agencies that prioritize drinking water protection in their day-to-day work.

The Assessment continues to fund the water quality monitoring waiver program and the filtration waiver program. These state programs have saved water systems and their customers millions of dollars in monitoring and treatment costs while providing local protection of surface and ground water supplies. The Assessment funds Drinking Water Week and the annual awards program that recognizes exemplary water systems. A full summary of accomplishments is attached to this report.

Conclusion

The committee endorses and supports MassDEP's use of Assessment funds to implement the federal Safe Drinking Water Act. This work helps public water systems supply good quality drinking water, protect public health and contribute to better water quality overall in the Commonwealth. For additional information about the SDWA Assessment Advisory Committee, please contact Thomas Newton, Chair, at 413-529-1422.

Safe Drinking Water Act Assessment Advisory Committee Members -- 2007

Name, Organization Represented, Affiliation, and Year of Appointment

Thomas Newton, Chair, *Western MA Waterworks Association*, Superintendent, Easthampton Water Dept., 2001
Jon Beekman, *Associated Industries of Massachusetts*, Director of Municipal Services, SEA Consultants, Inc., 1993
Elizabeth Ainsley Campbell, *Environmental Agency A*, Executive Director, Nashua River Watershed Association, 2002
Anthony Marques, *New England Water Works Association*, Director, Hudson DPW, 1994
Henry Papuga, *National Association of Water Companies*; Manager, Milford Water Company, 1998
Lawrence Stepenuck, *Rural Water Systems*, Regional Manager, Rural Community Assistance Program (RCAP), 1993
Wayne Southworth, *MassDEP Designee*, Director, Easton DPW, 1993
Konstantin Eliadi, *Mass. Water Works Association*, Director of Water Operations, Worcester DPW, 2005
Leo Potter, *Environmental Agency B*, Canoe River Aquifer Advisory Committee & Sup't. Foxborough Water Dept., 2005
Richard Maccagnano, *Non-Community Systems*, Holliston Board of Health, 2007
David Baier, *Mass. Municipal Association*, 1993

Alternates

Ray Raposa, *Alternate for New England Water Works Association*, Executive Director, NEWWA
Joseph Slattery, *Alternate for Western Mass. Water Works Association*, Southampton Water Department
Barry Woods, *Alternate for Rural Water Systems*, RCAP Solutions, Inc.
Jennifer Pederson, *Alternate for Mass. Water Works Association*, Executive Director, MWVA (appointed 2007)
Carol Harris, *Alternate for Mass. Water Works Association*, Executive Director, MWVA (resigned 2007)

**MASSDEP ACCOMPLISHMENTS DIRECTLY SUPPORTED BY THE
SAFE DRINKING WATER ACT ASSESSMENT
Highlights Between January 1, 2007 and December 31, 2007**

- Continued to save public water suppliers millions of dollars by maintaining Safe Drinking Water Act (SDWA) Primacy.
- MassDEP reviewed 1,715 waiver applications and issued 175 volatile organic chemical waivers, 689 synthetic organic chemical waivers, and 440 inorganic chemical waivers for the current waiver period (2005-2007).
- Provided assistance with over 500 surface water protection issues.
- Approved municipal wellhead protection controls for 51 large groundwater sources.
- Assisted 47 public water systems with wellhead protection issues and approved 10 wellhead protection plans.
- Conducted Drinking Water Supply Protection Grant Program – awarded \$2.8 million to purchase land and conservation restrictions totaling 390 acres in water supply protection areas in eight communities.
- Distributed manuals, fact sheets and newsletters as requested.
- Continued to update web pages to improve access by public water systems.
- Continued improving the bulk upload tool that enables laboratories to submit drinking water quality results to MassDEP on-line.
- Continued to conduct compliance assistance activities for Statistical Reporting, Ground Water Under the Influence, Consumer Confidence Reporting, Cross Connection, and Certified Operator requirements.
- Worked with local, state and federal officials on security issues and training.
- Maintained electronic publishing and access for the quarterly *In the Main* newsletter.
- Published three regular and one special TNC issue of *In the Main*, covering topics such as: maintaining compliance; eDEP; training money; water conservation; cross connections; boil orders; changes/upgrades to systems; license renewals; source water protection; emergency response; fluoride; monitoring waivers; emerging contaminants; LT2 and Stage 2 DBPR; grants; Drinking Water Day; infrastructure and capitol needs; a/c pipe; sub-metering; water main leaks; and Groundwater Rule.
- Maintained a free on-line template for systems to use in complying with Consumer Confidence Reporting (CCR).
- Notified new community water systems of Consumer Confidence Report (CCR) requirements for 2007.
- Mailed out CCR reminder postcards and provided CCRs for all (946) Transient Non-Community Systems (TNCs).
- Reviewed 523 CCRs, provided Technical Assistance Reports on them and tracked CCR compliance.
- Provided materials for statewide Board of Health workshops as requested.
- Participated in Executive Office of Energy & Environmental Affairs' Water Budget and Resource Damages Projects.
- Worked with State Geologist and United States Geological Survey on topics of mutual interest.
- Prepared media advisories for statewide media outlets on a variety of public interest activities including Drinking Water Week and the Drought Management Task Force.
- Issued 45 Drinking Water compliance awards during 2007 Drinking Water Week.
- Approved 74 new Operator Certification training programs for training contact hour credit.
- Registered 47 new systems that were previously unregulated.
- Provided instructors for New England Water Works Association (NEWWA) Bedrock Well Courses.
- Completed 12 CCC
- Planned and implemented three CCCP Annual Workshops and issued 198 Cross Connection Certificates.
- Provided CCCP technical assistance to 217 individuals/cities/towns.
- Provided outreach & technical assistance to over 2,500 schools & over 3,000 preschool/child care facilities on lead in drinking water; received & reviewed over 1,900 Lead in Drinking Water Maintenance Checklists and over 200 laboratory results from schools; provided assistance to Multi-Agency Task for Schools to develop a Facility Managers workbook and Dept. of Education's Green School Initiative. Processed 153 BRP WS-06 (A-B-C-D-E) applications for registration and/or closure of Class V wells.
- Issued ten-year renewals of 850 Water Management Act Registration Statements. Approximately 380 of the renewed statements were issued to cranberry registrants. The remaining 470 statements, issued to public water suppliers, agricultural, golf courses, industrial and other users, included various conservation and/or demand management requirements to improve water efficiency in the Commonwealth.
- Developed questionnaire for public water systems regarding the use of mercury containing equipment and developed a Best Management Practices (BMP) document for the reduction and/or elimination of mercury risks.
- Provided instructors for NEWWA Innovative Source Development course.
- Completed Fall Training Program that consisted of overview of changes to guidelines, update on Water Management Program, current DWP program issues, and proposed regulations. A total of 256 water suppliers, consultants, and water organizations participated and were eligible to receive five training contact hours.

**MASSDEP ACCOMPLISHMENTS PARTLY OR INDIRECTLY SUPPORTED BY THE
SAFE DRINKING WATER ACT ASSESSMENT
Highlights Between January 1, 2007 and December 31, 2007**

- Continued to offer free training programs for small system operators through EPA Grant.
- Continued the implementation of the Capacity Development Program, which concentrates on providing financial, managerial and technical assistance to small water suppliers.
- During the reporting period, MassDEP staff reviewed the technical, financial, and managerial operations of 279 community and non-transient non-community, as well as 53 transient non-community public water systems. Through contracting with the Massachusetts Coalition for Small System Assistance, the following services were provided: 12 group-training sessions; 110 site visits; and 8 mentoring sessions.
- Conducted annual inspections at the ten public surface water systems that have waivers from filtration.
- Assisted surface water suppliers with developing protection plans and bylaws and obtaining log credit.
- Coordinated with the Mass. Interlocal Insurance Association to award insurance discount to towns with protection plans.
- Participated on the State Vegetation Management Panel; State Pesticide Board; New England Water Works Association (NEWWA) Source Water Advisory Group; Multi-Agency Task Force on Schools; National Drinking Water Advisory Council Small Systems Implementation Work Group; MassDEP Laboratories Advisory Committee; Mass. Water Works Association (MWWA) Technical Advisory Committee; NEWWA Groundwater Advisory Committee; NEWWA Groundwater Resource Initiative; New England Interstate Water Pollution Control (NEIWPCC) Groundwater & Underground Injection Control (UIC) Managers' work groups.
- Participated on EPA work groups for Emergency Preparedness, Surface Water Treatment Rule, Disinfection Byproducts Rule, Data Sharing, Ground Water Rule, Public Notification, Unregulated Contaminant Monitoring. Participation on these committees places MA interests in consideration at the national level.
- Participated in establishing guidelines and uniformity in cross connection programs throughout New England as a member of the NEWWA Board of Certification of Backflow Prevention and Cross Connection Control.
- Staff served on the NEWWA Drinking Water Operators Certification Committee, which provides a forum for discussion of operator certification issues for all of the New England states.
- The annual operator certification report was submitted to EPA and received EPA approval.
- Coordinated with the Massachusetts Plumbing Board regarding cross connection responsibilities of public water systems and requirements of the UIC Program. Commented on relevant Plumbing Board regulations and revisions.
- Conducted 148 Underground Injection Control inspections and issued 178 notices of noncompliance (NON). Returned 146 unauthorized Class V wells to compliance and assisted 102 locations into voluntary compliance.
- Provided technical assistance about the UIC Program to MassDEP staff conducting multi-media inspections.
- Participated in workshops on Geothermal (ground source) Heat Pumps regarding groundwater protection and the UIC Program.
- The Drinking Water Program issued: 576 Notices of Noncompliance, 38 Unilateral Orders, 43 non-penalty Administrative Consent Orders, 19 Administrative Consent Orders with penalties, 6 Penalty Assessments and 1 Joint Federal Administrative Order.
- Issued 11 Water Management Act Permits and 10 Permit Amendments and completed 23 Five-year Reviews.
- Participated in the Office of State Geologist State Mapping Advisory Committee.
- Provided comments on MassDEP Bureau of Waste Site Cleanup, Title 5, Stormwater Policy and Groundwater Discharge Program regulations & policy development for consistency with Drinking Water Program.
- Developed guidance for systems subject to MassDEP Best Effort Requirement for wellhead protection.
- Continue to conduct water resources investigations of communities dependent on bedrock wells in I-495 belt.
- Developed a ground water model to begin evaluating the safe yield of the Plymouth-Carver Aquifer.
- Reviewed and commented on Mass. Highway Dept. GEIR and spill incidence guidance.
- Provided technical assistance to local Boards of Health in revising private well regulations.
- Provided technical support to the Wastewater Management Program on ground source heat pump permitting.
- Updated the Guidelines & Policies for Public Water Systems.
- Completed extensive revisions to Chapter 5 (Water Treatment) of the 2001 Guidelines.
- Regularly scheduled coordination meetings with MWRA. MWRA work also involved water quality monitoring and reporting, permit reviews and approvals, and other related work.
- Fluoridation coordination with Mass. DPH Office of Oral Health.
- Developed proposed regulations to revise 310 CMR 4.00 to provide classification to the new technology approval categories, add a separate category and lower fee for TNC source approvals under 10,000 gpd and add three fee categories to the water supply pilot studies approval for a more equitable distribution of program costs.