

Massachusetts Department of Environmental Protection
Safe Drinking Water Act Assessment Advisory Committee
Annual Report to the Massachusetts Legislature
January – December 2010

Massachusetts Public Water Systems
Utilities That Safeguard Your Health Every Day

Public water systems in Massachusetts are utilities that protect public health 24 hours a day. The 1,712 public water systems in the Commonwealth provide clean drinking water to 6.3 million people and safeguard the quality and quantity of drinking water for the future.

The Safe Drinking Water Act Assessment is an important source of funding that supports public water systems in Massachusetts. The Assessment is also used as a state match for federal funds for the Drinking Water State Revolving Fund. The Safe Drinking Water Act Assessment Advisory Committee endorses and supports the Massachusetts Department of Environmental Protection's use of Assessment funds.



Holden #2 Reservoir, Worcester DPW, Water Supply Division
Photo Credit: Kimberly Abraham

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TDD# 1-866-539-7622 or 1-617-574-6868
MassDEP Website: www.mass.gov/dep

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

17 Years of Supporting Implementation of the Federal Safe Drinking Water Act in Massachusetts

March 16, 2011

Konstantin Eliadi, Chair
Mass. Water Works Association
Director of Water & Sewer Operations
Worcester DPW

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

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

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

Anthony Marques
New England Water Works Association
Director, Hudson DPW

Wayne Southworth
MassDEP Designee
Director, Easton DPW

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

Neal Merritt
Rural Water Systems
Superintendent, Hanson Water Department

Richard Maccagnano
Non-Community Systems
Holliston Board of Health

Tom Philbin
Mass. Municipal Association

Appointment Pending
Non-profit Association Representing
Investor-owned Water Companies

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. Chapter 21A, section 18A. This legislation established the Assessment in 1993 to support primacy in Massachusetts to implement the federal Safe Drinking Water Act (SDWA).

The Assessment, which is paid by all users of public water, provides more than \$2.1 million a year to MassDEP to maintain primacy. Operating a public drinking water system is a complex and challenging job. Water suppliers protect public health 24 hours a day. The Assessment is an important source of funding that allows MassDEP to conduct compliance and technical assistance programs that support public water systems in Massachusetts.

Please contact me if you have any questions regarding the Annual Report to the Legislature for 2010. I can be reached at the City of Worcester, Water Operations Division, at 508-799-1486.

Sincerely,

Konstantin Eliadi, Chair

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

Annual Report to the Massachusetts Legislature - January 1 through December 31, 2010

Background

The Safe Drinking Water Act Assessment was initiated by the Legislature in 1993 to help the Massachusetts Department of Environmental Protection (MassDEP)'s Drinking Water Program maintain primacy to implement the federal Safe Drinking Water Act (SDWA). By maintaining primacy, MassDEP is able to offer specialized technical assistance and compliance programs that save public water systems and their customers millions of dollars.

The Assessment, paid for by users of public water, is \$8.50 per million gallons of water used each year. Public water systems include not only municipal water systems but restaurants, day care facilities, campgrounds and many other types of businesses that serve water, through a private source, to employees and customers. In 2010 the Assessment revenue totaled \$2.12 million.

The Safe Drinking Water Act Assessment Advisory Committee is responsible, through M.G.L. Chapter 21A, for recommending the Assessment rate to MassDEP's Commissioner each year; monitoring the Assessment Program; and submitting an Annual Report to the Legislature. The Committee is composed of eleven members including six public water suppliers. The members and their affiliations are listed on page four. Committee meetings are usually held quarterly and are open to the public.

The members would like to thank Jon Beekman for his 17 years on the Committee and wish him well in his retirement. Jon helped to get the Assessment off the ground in 1993 and has been a dedicated and active member since that time.

Highlights of Work at MassDEP Funded by the Assessment

As in other areas, the costs of operating a public water system continue to rise. The SDWA Assessment is an important piece of funding that supports public water systems. A complete list of activities funded fully or partly at MassDEP through Assessment funding is included at the end of this report. Highlights of that work include the following programs.

Unregistered Public Water Systems Initiative

Facilities that meet the definition of a public water system may include child care, restaurants, and camps that serve water from a well to employees and customers. Sometimes these facilities inadvertently or intentionally evade MassDEP's required registration and well siting process. They may have wells that are not located properly and/or are operating their systems in ways that jeopardize public health. Child care and camps are of special concern since young children are especially vulnerable to waterborne contaminants. Restaurants may be serving water and preparing food for their customers from unapproved wells.

MassDEP's regional staff identifies unregistered facilities, brings these public water systems into the regulatory universe, and provides educational outreach. Approximately 3,200 children in

child care facilities previously served by unregistered public water systems are now provided with water that meets state and federal standards. This Initiative directly protects public health by ensuring that consumers receive water that is safe and fit to drink.

Electronic Filing of Annual Statistical Reports (eASR)

The Drinking Water Program is pleased to continue to offer a secure, electronic way for public water suppliers to submit their Annual Statistical Report through eDEP – MassDEP’s Online Filing System. The overall feedback from public water suppliers was positive for the first use of the eASR in 2010. MassDEP staff continues to improve the reporting and submittal process for 2011. Most of the information on the form will be prepopulated for each public water system, providing substantial savings of time, paper, and other resources. Additional features of eASR include the ability to share the eASR with multiple users, save electronic copies, utilize built in math calculations, and automatically receive a receipt upon submittal of the form.

Conclusion

The SDWA Assessment Advisory Committee asks State Legislators, municipal officials, and the public to support local public water systems and recognize them as important public utilities that safeguard the quality and quantity of drinking water for the future. For additional information about the Advisory Committee, please contact Konstantin Eliadi, Committee Chair, at the City of Worcester Water Operations Division at 508-799-1486 or eliadi@ci.worcester.ma.us.

Safe Drinking Water Act Assessment Advisory Committee Members – 2010

Name, Organization Represented, Affiliation, and Year of Appointment

Konstantin Eliadi, Chair, *Massachusetts Water Works Association*, Director of Water Operations, Worcester DPW, 2005
Elizabeth Ainsley Campbell, Vice Chair, *Environmental Agency*, Exec. Director, Nashua River Watershed Association, 2002
Thomas Newton, *Western Mass. Waterworks Association*, Superintendent, Easthampton Water Dept., 2001
Jon Beekman, *Associated Industries of Massachusetts*, Director of Municipal Services, SEA Consultants, Inc., 1993
Anthony Marques, *New England Water Works Association*, Director, Hudson DPW, 1994
Wayne Southworth, *MassDEP Designee*, Director, Easton DPW, 1993
Leo Potter, *Environmental Agency*, Canoe River Aquifer Advisory Committee & Sup’t. Foxborough Water Dept., 2005
Richard Maccagnano, *Non-Community Systems*, Holliston Board of Health, 2007
Neal Merritt, *Rural Water Systems*, Plymouth County Water Works Association & Hanson Water Department, 2008
David Baier, *Massachusetts Municipal Association*, 1993; Tom Philbin, attendee
Appointment Pending, *Non-profit Association Representing Investor-owned Water Companies*

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*, Superintendent, Buzzards Bay Water District
Jennifer Pederson, *Alternate for Mass. Water Works Association*, Executive Director, MWWA

Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS DIRECTLY SUPPORTED BY THE SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2010

- Saved public water systems (PWS) millions of dollars by maintaining Safe Drinking Water Act (SDWA) Primacy.
- MassDEP reviewed 1,137 water quality monitoring waiver applications and issued 260 volatile organic compound waivers, 856 synthetic organic compound waivers; 722 inorganic compound waivers; 325 arsenic waivers; and 846 perchlorate waivers. This work has saved PWS \$2.85 million for the current waiver period (2008-2010).
- Provided 650 instances of technical assistance on drinking water protection issues at reservoirs and river sources.
- Approved watershed protection plans for 5 reservoirs. Maintained incentives for developing plans.
- Continued to implement the Wellhead Protection Program which provides compliance and technical assistance.
- Approved municipal wellhead protection controls for 122 groundwater sources in 15 communities.
- Assisted 30 PWS with wellhead protection issues.
- Conducted Drinking Water Supply Protection Grant Program. Awarded \$981,807 to purchase land and conservation restrictions totaling 187 acres in water supply protection areas in 3 communities.
- Field verified 5 watershed delineations for reservoirs and updated GIS maps to reflect changes.
- Distributed fact sheets, guidance documents, and other technical assistance materials as requested.
- Continued to update web pages to improve access by PWS, public officials, community groups & residents.
- Continued improving the bulk upload tool for laboratories to submit drinking water quality results 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.
- Maintained electronic publishing and access for the quarterly *In the Main* newsletter.
- Published 3 issues of *In the Main* covering Source Water Protection; Operator Certification; Cross Connection Control; Consumer Confidence Reports (CCR); Aircraft Drinking Water; Dennis' New Treatment Plant; Guidelines Updates; Eye Wash & Safety Showers; Web Sites; Emergency Response; Electronic Annual Statistical Reporting; Fluoridation; Green Jobs; Staff Spotlights; Lead Service Lines; PWS Award Program; USGS Water Alert; Right to Know Law; Operator Exams; Conservation Restrictions; Total Coliform Rule; Chemical Checklists; Waivers for Chemical Feed Systems; Lead Free Fixtures; and Triggered Monitoring for Ground Water Rule.
- Maintained a free on-line template for systems to use in complying with Consumer Confidence Reporting.
- Notified new community water systems of CCR requirements for 2010.
- Mailed out CCR reminder postcards and provided CCRs for all (929) Transient Non-Community Systems.
- Reviewed 529 CCRs, provided Technical Assistance Reports and tracked CCR compliance.
- Provided materials for statewide Board of Health workshops as requested.
- Mailed out annual letter to Boards of Health to update members on drinking water issues and MassDEP work.
- Worked with the Office of the State Geologist and United States Geological Survey on topics of mutual interest.
- Issued 32 Drinking Water Compliance Awards during May 2010.
- Board of Certification of Operators of Drinking Water Supply Facilities approved 61 new training courses.
- Registered 28 new PWS that were previously unregulated.
- Reviewed and/or approved 14 new large capacity public water sources.
- Presented workshop to PWS that featured a tabletop exercise on preparing for a pandemic flu outbreak.
- Provided instructors for New England Water Works Association (NEWWA) Bedrock Well Courses; Innovative Source Development Course; fluoride training course.
- Performed 9 Cross Connection Control Program (CCCP) audits across MassDEP regions.
- Issued 241 Cross Connection Certificates.
- Provided instructor for 11 Backflow Tester and Cross Connection Survey classes.
- Provided CCCP technical assistance to 265 individuals/cities/towns.
- Reviewed and approved CCCP Plan Questionnaire for 10 non-community PWS.
- Reviewed and approved 3 new technologies for water vending machines.
- Provided technical assistance to school districts, K through 12 schools, early education and care facilities, Boards of Health and PWS on lead in drinking water. Worked with partners to prepare & distribute an updated informational letter & Checklist on Lead in Drinking Water to school districts (400), schools (3300+) & early education & care facilities (3500+). Reviewed 320 Lead in Drinking Water Maintenance Checklists and 200+ laboratory results from schools and early education & care facilities. Initiated discussions with EPA Region I and the Dept. of Early Education and Care (DEEC) to prepare and distribute a flier to home based child care facilities (7500+).
- Conducted two Emergency Response Training – Pandemic Flu Exercises for public water suppliers.
- Conducted training in the four regions on Guideline Changes; The Ground Water Rule; Emergency Response; Operator Certification Requirements; Lead and Copper Rule Revisions; Consumer Confidence Reporting.

Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS PARTLY/INDIRECTLY SUPPORTED BY THE SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2010

- Continued to offer free training programs for small system operators through an EPA grant.
- Continued the implementation of the Capacity Development Program which provides financial, managerial and technical assistance to small water suppliers.
- Reviewed the technical, financial, and managerial operations of 203 community & non-transient non-community and 140 transient non-community PWS. The Massachusetts Coalition for Small System Assistance provided 34 group training sessions; 78 site visits; and 17 mentoring sessions.
- Received EPA funding to conduct two statewide source water protection workshops for PWS focusing on land acquisition and conservation restrictions. 68 people participated and training contact hours (TCHs) were awarded.
- Conducted annual inspections at 6 public surface water systems that have waivers from filtration.
- Assisted surface water suppliers with developing protection plans and bylaws and obtaining log credit.
- Participated on the State Vegetation Management Panel; State Pesticide Board; NEWWA Source Water Advisory Group, Groundwater Advisory Committee, Groundwater Resource Initiative, Drinking Water Operators Certification Committee, and Board of Certification of Backflow Prevention & Cross Connection Control; 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; New England Interstate Water Pollution Control Commission Source Water Protection Work Group; Well Driller Certification Program Technical Advisory Committee; AWWA Fluoride Standards Committee. Participated on EPA work groups for Emergency Preparedness, Disinfection Byproducts Rule, Long Term 2 Enhanced Surface Water Treatment Rule, Data Sharing, Ground Water Rule, Public Notification, and Unregulated Contaminant Monitoring. Participation on these groups brings Massachusetts interests to the national level.
- Submitted the Annual Operator Certification Report to EPA.
- Adopted revised guidelines for the design, installation, operation and closure of open and closed loop geothermal wells and developed a new and shorter UIC registration application form for closed-loop geothermal wells.
- Presented revisions to geothermal well guidelines at the Annual New England Water Well Expo. Participated in workshops on geothermal heat pumps and groundwater protection.
- Participated in the Office of the 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 the Drinking Water Program.
- Continue to conduct water resources investigations of communities dependent on bedrock wells in I-495 belt.
- Completed a ground water model to begin evaluating the safe yield of the Plymouth-Carver Aquifer.
- Completed arsenic and uranium in bedrock aquifer investigation to assess correlations between contaminant concentrations and bedrock geology. Started assembling web-based outreach materials for private well owners.
- Presented the arsenic & uranium investigation at the 2010 Mass. Health Officers' Association conference.
- Issued policy on discharges from PWS pumping facilities -- implementing BMPs and registering as Class 5 wells.
- Conducted regular meetings with MWRA including scheduling compliance reviews of monthly reports.
- Fluoridation coordination with the Mass. DPH Office of Oral Health.
- Continued implementation work for 90 PWS under the Long Term 2 Enhanced Surface Water Treatment Rule.
- Provided speakers on water supply topics to local/regional events and for operator training courses through NEWWA.
- Continue to collaborate with Mass. Department of Public Health on the Lead Control Contamination Act.
- Posted two new chemical checklists and revisions to Chapters 8 and 9 of the Guidelines to MassDEP's web site.