



**Safe Drinking Water Act Assessment Program**  
**Annual Report to the Massachusetts Legislature**  
**For January – December 2020**  
**27<sup>th</sup> Year of the Assessment Program**



Nagog Pond, Concord, MA  
Photograph by Alexandra C. Wahlstrom, Senior Environmental & Regulatory Coordinator  
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**Introduction**

Twenty-seven years ago, the Massachusetts Legislature established the Safe Drinking Water Act (SDWA) Assessment and a SDWA Assessment Advisory Committee to monitor the Massachusetts Department of Environmental Protection's (MassDEP) Assessment Program. Each year, the Advisory Committee is required to submit an update to the Legislature in the form of an Annual Report. The following is the Annual Report for calendar year 2020. The report provides an overview of the Assessment Program and the Advisory Committee and provides highlights of program activities.

**The Safe Drinking Water Act Assessment Program**

The Safe Drinking Water Act Assessment is paid each year by the 6.45 million consumers of public water and is collected by the 1,657 Public Water Systems (PWS) in Massachusetts. The average cost to each consumer 34 cents per year. For the Fiscal Year (FY) 2021 billing cycle, the Assessment Program is expected to generate revenue of approximately \$2.1 million.

The Assessment provides funds to MassDEP's Drinking Water Program (DWP) to maintain primacy for the federal SDWA. Primacy means that the SDWA is implemented by MassDEP, including all enforcement responsibilities, instead of by the federal government. By maintaining primacy, MassDEP ensures the safe production of drinking water at PWS while implementing state-specific programs that save consumers millions of dollars. For example, the Monitoring Waiver Program, which is just one of the many SDWA programs administered by the DWP, saved consumers \$4,712,914 in water quality monitoring costs for the 2017-2019 cycle. Today, the DWP is responsible for implementing over 50 SDWA programs. The Assessment is also used as a state match for federal funds for the Drinking Water State Revolving Fund Set Aside Program, which provides significant technical assistance and grants to PWS.

**The Safe Drinking Water Act Assessment Advisory Committee**

In 1993, as part of the Assessment Program, the Legislature formed a SDWA Assessment Advisory Committee to: 1) recommend an annual Assessment rate to MassDEP's Commissioner; 2) monitor the Assessment Program; 3) produce an annual report to the Legislature; and 4) conduct public meetings to discuss their work. The members of the Advisory Committee provide advice and recommendations on the DWP's technical and compliance assistance and outreach programs to PWS and others. A list of Committee members is provided on page four.

## **New Work to Support Public Water Systems during the Covid-19 Pandemic**

In 2020, at the beginning of the Covid-19 pandemic, MassDEP's Commissioner Martin Suuberg, in partnership with Massachusetts Water Works Association, began holding weekly (now monthly) Zoom conference calls with all PWS operators and interested parties to address the challenges of maintaining safe drinking water and regulatory compliance during the pandemic. Here is a link to MassDEP's webpage, where recordings of Commissioner Suuberg's calls with the operators are published at <https://www.mass.gov/lists/covid-19-information-for-drinking-water-and-wastewater-operators>. MassDEP will continue to provide Covid-19 pandemic support to PWS in 2021 and populate this webpage with relevant information.

Drinking Water Program staff, working remotely, remained in contact with PWS and operators and developed several documents and procedures to support PWS reporting and compliance requirements and safe, uninterrupted water supply operations, including the following.

- MassDEP COVID-19 FAQs for Public Water Suppliers
- Bacteria sampling at outside taps/spigots/hose bibs
- Bacteria sampling at hydrants using hydrant sampler
- Mitigating lead and copper levels in facilities after school closure due to COVID-19
- Emergency Certification of Public Water System Temporary Closure (Non-Operational Status) - For Non-Community (TNC/NTNC) public water suppliers
- Drinking water operator license extension guidance during the public-health emergency
- MassDEP building flushing information
- Addressing stagnant water in buildings (for building owners and managers)
- Developed grant program for small and disadvantaged PWS
- Completed sanitary surveys for 2020 utilizing new tools
- Developed a clearinghouse for all drinking water questions, additional remote technical assistance to ensure compliance with monitoring and reporting, annual statistical reporting
- Developed documentation for failure to comply with a requirement as a result of the COVID-19 emergency

We are pleased to report that according to EPA statistics compiled for the fourth quarter of 2020, 95.3% of Community PWS met all applicable health-based standards and 95% of the population served by Community PWS will receive drinking water that meets all applicable health based standards through approaches including effective treatment & source water protection.

## **Updates on PFAS State Maximum Contaminant Level & Lead in Schools**

### **Per- and polyfluoroalkyl substances (PFAS)**

On October 2, 2020, MassDEP published its PFAS public drinking water standard, called a Massachusetts Maximum Contamination Level (MMCL), of 20 nanograms per liter (ng/L) (or parts per trillion (ppt)) –for the sum of the concentrations of six specific PFAS. These PFAS are perfluorooctane sulfonic acid (PFOS); perfluorooctanoic acid (PFOA); perfluorohexane sulfonic

acid (PFHxS); perfluorononanoic acid (PFNA); perfluoroheptanoic acid (PFHpA); and perfluorodecanoic acid (PFDA). MassDEP abbreviates this set of six PFAS as “PFAS6.” This drinking water standard is set to be protective against adverse health effects for all people consuming the water and is more stringent than the current EPA Health Advisory of 70 ppt for PFOA and PFOS.

The Baker-Polito Administration secured \$28.4 million in two supplemental budgets in 2020 to support water infrastructure investment and PFAS testing. With this funding approved by the legislature, MassDEP developed the following programs to address PFAS.

- Providing free analyses of PFAS water samples at public water systems.
- Providing free sampling and analyses of PFAS water samples for homeowners with private wells in certain geographic areas.
- Providing 0% interest loans through the Clean Water Trust Drinking Water State Revolving Loan Fund for the installation of PFAS treatment.
- Providing trainings on online platforms about PFAS, the state regulation and new funding programs.
- Providing grants of up to \$200,000 to PWS to support the planning and design of PFAS treatment; 27 grants totaling nearly \$5 million in grants were awarded. \$2 million in grants was awarded to 10 PWS in 2020, and an additional \$3 million was awarded to 17 PWS in 2021.

More information on PFAS, including a new Story Map, is available at <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#pfas-detected-in-drinking-water-supplies-in-massachusetts->.

### **Lead in School Drinking Water Assistance**

In a continuing effort to ensure safe drinking water for children across the Commonwealth, the Baker-Polito Administration, Treasurer Deborah Goldberg, and the Massachusetts Clean Water Trust launched two programs to support lead testing and mitigation in schools and early education and care facilities across the Commonwealth with additional funding. MassDEP’s *Expanded Assistance Program for Free Sampling and Analysis at Schools and Early Education and Care Facilities* continues the Commonwealth’s nation-leading program offering free lead testing and technical assistance to eligible public schools and public and private group childcare facilities. Many schools and childcare facilities in 2020 were intermittently closed or operating under pandemic schedules that did not lend itself to lead sampling. However 114 facilities applied, 51 were accepted and 32 sampled. More information on this work is available at <https://www.mass.gov/assistance-program-for-lead-in-school-drinking-water>.

### **Assessment Program Rate Structure for FY22**

The Assessment Program rate structure for FY22 remains the same as for FY21. The bills for FY22 will be mailed to all PWS in December 2021.

- \$9.50 per million gallons of water used by PWS with meters;

- Minimum bill for metered PWS is \$50;
- Flat rate of \$50 for unmetered PWS serving up to 101;
- Flat rate of \$100 for unmetered PWS serving 101 through 200;
- Flat rate of \$250 for unmetered PWS serving 201 through 899; and
- Unmetered PWS serving 900 or more pay a rate based on an average water use.

The Advisory Committee supports the use of Assessment funds by the DWP and recommends higher staffing levels to improve upon programs to protect public health and support PWS with their essential work. For more information about the Assessment Program or the Committee's work, contact MassDEP's Drinking Water Program at [program.director-dwp@mass.gov](mailto:program.director-dwp@mass.gov) or 617-292-5770.

### **Members of the Safe Drinking Water Act Assessment Advisory Committee – 2020**

The following list provides the name, organization represented, affiliation, and year of appointment for the members of the Safe Drinking Water Act Assessment Advisory Committee.

- Neal Merritt, Chair, *Rural Water Systems*, Plymouth County Water Works Association, 2008
- Elizabeth Ainsley Campbell, Vice Chair, an *Environmental Agency*, Nashua River Watershed Association, 2002
- David Condrey, a *Non-profit Association Representing Investor-owned Water Companies*, National Association of Water Companies, 2011
- Thomas Holder, a *New England Regional Water Works Association*, New England Water Works Association, 2013
- David Masciarelli, an *Environmental Agency*, Canoe River Aquifer Advisory Committee, 2013
- Blake Lukis, a *Massachusetts Statewide Water Works Non-Profit Association*, Massachusetts Water Works Association, 2015
- Sean Osborne, an *Organization Representing Industry*, OSD Environmental Services LLC, 2015
- Rebekah McDermott, a *Regional Water Works Assoc.*, Western Mass. Water Works Assoc., 2016
- Marcis Kempe, *MassDEP Designee*, 2017
- Ariela Lovett, *Massachusetts Municipal Association*, 2019
- James Starbard, an *Organization Representing Non-Community Water Suppliers*, Rural Community Assistance Program, 2019

#### **In addition, non-voting alternates for the Committee include:**

- Jennifer Pederson, Executive Director, Massachusetts Water Works Association
- Kirsten King, Executive Director, New England Water Works Association

**Massachusetts Department of Environmental Protection  
ACCOMPLISHMENTS SUPPORTED BY THE**

## SAFE DRINKING WATER ACT ASSESSMENT January 1 through December 31, 2020



### Protect Public Health through Compliance Reviews

- Reviewing a new three-year (2020-2023) cycle of the Water Quality Monitoring Waiver Program.
  - Public Water Systems (PWS) submitting a waiver application: 334 at 866 sources of drinking water. Monitoring waiver applications submitted by compound: Inorganics 785; Perchlorate 785; Synthetic organics 753; Volatile organics 675.
  - This program saved consumers \$4,712,914 in water quality monitoring costs for the last cycle (2017-2019).
- Approved watershed protection programs for 29 reservoirs with disinfection log credit.
- Approved watershed protection programs for 6 reservoirs with filtration waivers.
- Maintained incentives for developing local wellhead and surface water protection plans.
- Issued 76 wellhead protection reviews and compliance updates.
- Reviewed 2 proposed easements for compliance with Zone I regulations.
- Reviewed 4 proposed conservation restrictions to protect hundreds of acres of land for drinking water supplies.
- Reviewed more than 300 monitoring waiver applications for wellhead and surface water compliance criteria.
- Reviewed and ranked 7 Drinking Water Supply Protection Grant Program applications.
- Registered 6 new Public Water Systems (PWS).
- Registered 12 existing Public Water Systems (PWS) that were previously unregulated.
- Reviewed and/or approved 26 new large capacity public water sources.
- Reviewed and approved Cross Connection Control Plans for 2 non-community PWS.
- Issued 293 Cross Connection Surveyors/Testers Certificates.
- Reviewed and approved 6 new technologies for use with drinking water.
- Entered 4 permit applications into MassDEP's permit management system.
- Conducted 335 sanitary surveys which included technical and compliance assistance.
- Conducted inspections at 6 public surface water systems that have waivers from filtration.
- Held regular coordination meetings with the Massachusetts Water Resources Authority and the EPA - conducted compliance reviews, evaluated water quality reports and trends.
- Conducted regular meetings of the DWP Drinking Water Filtration/Treatment Committee.
- Conducted 23 Capacity Reviews for Drinking Water State Revolving Fund applicants.
- Reviewed 4 Water Supply Business Plans during the New Source Approval process.
- Assisted the Mass. Dept. of Public Health at water bottlers and ice makers' facilities.



### Save Money for Consumers with Compliance Assistance

- Supported technical assistance to K-12 schools, early education and care facilities, Boards of Health, Plumbing Inspectors, PWS and the public on lead and copper in drinking water.
- Continued to implement the Wellhead Protection Program to provide compliance and technical assistance. Assisted 46 municipalities or PWS with wellhead protection issues.
- Field verified 16 watershed and/or tributary delineations for reservoirs and updated Geographic Information Systems (GIS) maps.
- Completed 68 hydrogeologic reviews for the MassDEP.
- Continued technical support of the bulk upload tool for laboratories to submit drinking water quality sampling results on-line.
- Initiated an enhancement of the bulk upload tool for laboratories that includes PFAS reporting, expected to be release in Jan 2021.
- Provided compliance assistance for Statistical Reporting, Ground Water under the Influence, Consumer Confidence, Cross Connection, Certified Operator and Source Water Protection.
- Captured the 10<sup>th</sup> year of electronic Annual Statistical Reporting (e-ASR).
- Continued improving the e-ASR for the next reporting year.
- Provided over 425 instances of Source Water Protection technical assistance.
- Continued sending biweekly Program Director emails to PWS with regulatory reminders, trainings, etc., and separate emails with timely info about the Lead & Copper Rule, Lead in School Drinking Water, Per- and polyfluoroalkyl substances (PFAS) and grant opportunities.
- Maintained an on-line template for PWS to use for Consumer Confidence Report (CCR) compliance, updated support materials and emailed CCR reminder e-postcards.
- Notified new community water systems of CCR requirements for 2020.
- Reviewed 514 CCRs, provided Technical Assistance Reports and tracked CCR compliance.
- Posted sample schedules and Certificates of Registration for all PWS and CCRs for Transient, Non-Community (TNC) and Non-Transient, Non-Community (NTNC) PWS.
- Provided compliance assistance to PWS for the Unregulated Contaminant Monitoring Rule.
- 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 PWS.
- Reviewed the technical, financial, and managerial operations of 167 community and non-transient non-community and 82 transient non-community PWS.
- Reviewed Underground Injection Control (UIC) registration applications.
- Assisted Boards of Health on private well matters.
- Responded to requests from PWS regarding the Unregulated Contaminant Monitoring Rule 4 (UCMR4) Program and the Inorganics Program and provided compliance assistance.
- Helped PWS write watershed protection plans & local water supply bylaws.
- Submitted the Annual Operator Certification Report to the U.S. Environmental Protection Agency (EPA).
- Gave 3 Boards of Health one-on-one assistance with well drilling requirements.
- Assisted well drillers at the 2-day New England Water Works Association (NEWWA) Exposition.
- The implementation work for 90 PWS under the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule has been completed for all schedules (1-4).
- Identified 628 technical, financial, and managerial deficiencies during sanitary surveys.



## Support Public Water Suppliers with Technical Assistance and Training

- Provided weekly, biweekly and monthly COVID-19 virtual meetings with Commissioner Suuberg.
- Provided virtual training on the new MA PFAS regulation.
- Distributed fact sheets, guidance documents, and other technical assistance materials.
- Continued to improve web pages for access by PWS, town officials, the public and others.
- Provided materials for statewide Board of Health workshops as requested.
- Prepared biennial mailing to all Boards of Health to support their role in protecting drinking water and to update them on drinking water issues.
- Delivered Drinking Water Program presentations to regional water works organizations.
- Worked with the Office of the State Geologist and United States Geological Survey (USGS) on geological studies relative to ground water.
- Presented 91 excellence in compliance awards, 9 nominated awards and one award to an individual operator during 2020 for calendar year 2019.
- The Board of Certification of Operators of Drinking Water Supply Facilities approved 75 training courses. It should be noted that due to COVID19 the Board of Certification has approved on-line training. This is a short list of new topics.
  - Water Supply - COVID19
  - Water Resources Sustainability
  - Regulatory Update and Risk & Resiliency Assessment
  - Iron & Manganese, Treatment Facilities O&M, ERP Updates
  - PFAS in Drinking Water and the New Regulations
  - Information Technology & Asset Management
  - Pandemic Table Top- Virtual
- Provided instructors for 5 NEWWA Backflow Tester and Cross Connection Survey classes.
- Provided 1 instructor for 2 NEWWA Hydrogeology/Source Approval classes.
- Provided 1 instructor for the Mass. Health Officers' Association regional conferences.
- Provided technical assistance on CCCP to PWSs, 327 by e-mails and 72 by phone.
- Maintained online training videos for PWS at <https://goo.gl/Xhw4br>.
- Maintained a Drinking Water Program Training Calendar with information on courses and conferences from MassDEP and other sources. PWS and others can download the calendar and receive automatic updates.
- Provided expertise to MassDEP's Bureau of Waste Site Cleanup and Title 5 and Groundwater Discharge programs for consistency with Drinking Water Program regulations.
- Provided expertise to the USGS Climate Response Network.
- Collaborated with the USGS to measure monthly water level readings throughout the state.
- Provided speakers and operator training on Mass. drinking water topics at local and regional water works events and for the Massachusetts Rural Water Association.
- Continued to collaborate with the Mass. Department of Public Health (DPH) on the Lead Contamination Control Act, fluoridation and other topics.
- Provided help with writing capital improvement plans to 125 PWS during sanitary surveys.



- Updated records and added new wells totaling 3,500 entries in the Well Driller database.
- Provided technical assistance and instructors to the New England Interstate Water Pollution Control Commission's (NEIWPCC) Soil Evaluator Course.
- Continued to provide expertise to the National Science Foundation Drinking Water Technology Review Section.



### **Participate on Committees that Bring Massachusetts Interests to State, Regional and National Levels**

MassDEP staff participated in meetings and events of the following committees, organizations, and other state, regional and national entities: 495/MetroWest Partnership, NEIWPCC Emerging Contaminants Workgroup, NEIWPCC Chloride Contamination Joint Workgroup, New England WARN, Massachusetts Water Works Association, Massachusetts Municipal Association, Conservation Law Foundation, New England Communications Collaborative; Association of State Drinking Water Administrators; State Vegetation Management Panel; State Pesticide Board; Office of the State Geologist State Map Advisory Committee; NEWWA Source Water Advisory Group, Groundwater Advisory Committee, Groundwater Resource Initiative, Drinking Water Operators Certification Committee, Board of Certification of Backflow Prevention & Cross Connection Control, Management & Finance; Multi-Agency Task Force on Schools; National Drinking Water Advisory Council Small Systems Implementation Work Group; MassDEP Laboratory Advisory Committee; NEIWPCC Source Water Protection Work Group; Ground Water Protection Council's Source Water Protection Work Group; Well Driller Certification Program Technical Advisory Committee; American Water Works Association Fluoride Standards Committee. Participated on EPA work groups for Emergency Preparedness, Data Management/SDWIS Modernization, Lead and Copper Rule, PFAS, and the Ground Water Rule.



### **Provide Support to Safe Drinking Water Act Advisory Committees**

MassDEP staff schedule, support and participate in meetings of the Safe Drinking Water Act Advisory Committee (SDWAAC) and the Safe Drinking Water Act Assessment (Section 70) Advisory Committee.

The SDWAAC meets quarterly and provides knowledge and advice to the DWP about Safe Drinking Water Act topics and priorities. Members include PWS, water works associations, laboratories and public health agencies and organizations.

The Section 70 Committee holds quarterly public meetings per MGL Chapter 21A, section 18A to monitor and provide advice to DWP on the Massachusetts Safe Drinking Water Act Assessment Program and to submit an Annual Report to the Massachusetts legislature. See <https://www.mass.gov/service-details/safe-drinking-water-act-assessment-advisory-committee-section-70-committee> for public meeting dates and agendas, Annual Report to the Legislature and a list of Committee members.