



**Safe Drinking Water Act Assessment Program
Annual Report to the Massachusetts Legislature
For January – December 2022
29th Year of the Assessment Program**



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Introduction

Twenty-nine 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 Annual Report for calendar year 2022 provides an overview of the Assessment Program and the Advisory Committee and highlights MassDEP’s Drinking Water Program (DWP) activities. DWP implements transparency, environmental justice and diversity in its programs.

The Safe Drinking Water Act Assessment Program

The Safe Drinking Water Act Assessment is paid each year by the 6.5 million consumers of public water and is collected by the 1,595 Public Water Systems (PWS) in Massachusetts. The average cost to each consumer is 34 cents per year. For the Fiscal Year (FY) 2023 billing cycle, the Assessment Program is expected to generate revenue of approximately \$2.09 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. 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.

We are pleased to report that according to EPA statistics compiled for the fourth quarter of 2022, 95% of Community PWS met all applicable health-based standards and 90.3% of the population served by Community PWS received drinking water that meets all applicable health-based standards.

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) provide advice and recommendations on the DWP’s technical and compliance assistance and outreach programs to PWS and others; 4) produce an annual report to the Legislature; and 5) conduct public meetings to discuss their work. A list of Committee members is provided on page six. More information about the Committee is posted at <https://www.mass.gov/service-details/safe-drinking-water-act-assessment-advisory-committee-section-70-committee>.

The Advisory Committee supports the use of Assessment funds by the DWP and has recommended increased staffing levels to support programs to protect public health and PWS

with their essential work. *Additional staff for MassDEP, consistent with the Governor's proposed FY24 budget (H.1), would support the Per- and Polyfluoroalkyl Substances (PFAS) Program; Lead and Copper Rule Revisions; Cybersecurity; emerging contaminants; climate change; and more.* Source Water Protection, including local watershed and wellhead protection planning, is becoming even more urgent at PWS in order to address climate change impacts and reduce the need and cost of water treatment.

Information about these public health protection programs is posted at the following links.

Per- and Polyfluoroalkyl Substances (PFAS) Program - PFAS sampling results from PWS are available on the [Massachusetts EEA Data Portal](#). Search under the contaminant group "PFAS" or for the sum of the six compounds in the MCL, search under the chemical name "PFAS6".

Go to <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas> for more information about PFAS, including a story map that presents interactive maps, dashboards and photographs that describe the efforts by MassDEP and PWS to address PFAS contamination.

Lead and Copper Rule Revisions - <https://www.mass.gov/service-details/lead-and-copper-rule-revised-requirements>.

Cybersecurity Support for PWS - <https://www.mass.gov/info-details/public-drinking-water-system-operations#cybersecurity>.

Emerging Contaminants - <https://www.mass.gov/info-details/emerging-contaminants>.

Source Water Protection – new DWP no-cost self-guided training for PWS at <https://wateroperator.thinkific.com/courses/source-water-protection-in-massachusetts> (earn 0.5 training contact hour for operator certification).

MassDEP Drinking Water Program Highlight for 2022

Expanded Assistance Program for Lead in School and Early Education and Child Care Facility Drinking Water



Lead is a colorless and tasteless metal which can harm infants, children and pregnant women. There is no known safe level of lead in children’s blood and very low levels of lead have the potential to impact children’s health. Children can ingest lead if it gets into their drinking water through pipes, faucets, and other plumbing that contain it. The only way to know if there is lead in drinking water is to test it.

The MassDEP Expanded Assistance Program (EAP) for Lead in School and Early Education and Care Facilities Drinking Water is a voluntary assistance program for public and private schools and licensed childcares that offers technical assistance with lead in drinking water testing, support for remediation actions, and outreach and education surrounding issues of lead in drinking water. Through the assistance offered by EAP, MassDEP supports safe drinking water for children across the Commonwealth.

Implementation and Funding

- The original Lead in School Drinking Water Assistance Program, launched in 2016, saw nearly 1,000 public schools and childcare facilities sampled between 2016 and 2019.
- In January 2020, the MassDEP launched the EAP program to build on the success of the original Assistance Program. EAP is supported by a nearly \$1.6 million grant from the Water Infrastructure Improvements for the Nation (WIIN) Act from the U.S. Environmental Protection Agency (USEPA). MassDEP also worked with the Clean Water Trust (CWT) to secure additional funding to expand EAP assistance to private schools.
- To implement the program, MassDEP partners with the University of Massachusetts – Amherst and the Massachusetts Water Resources Authority to provide technical assistance to public and private schools and childcare facilities to establish a lead in drinking water monitoring program.
- The technical assistance helps facilities develop a site-specific sampling plan, provides laboratory analysis of samples taken at fixtures used for drinking and cooking, assists with the identification of fixtures with lead concentrations over the laboratory analytical testing limit of 1 part per billion (ppb), and recommends options for remedial actions.

- Complementing the EAP program, in January 2020, CWT launched the School Water Improvement Grant (SWIG) program. SWIG covers the cost of purchasing and installing water bottle filling stations to address detections of lead in drinking water at eligible facilities. Through two rounds, SWIG has accepted 181 public schools and has awarded grants for the purchase and installation of 492 water bottle filling stations. MassDEP partnered with the CWT on their successful effort to receive nearly \$3 million in competitive EPA funding to expand the SWIG program to private schools and childcare facilities.

Testing to Date

- From March 2020 through January 2023, 89 schools and 379 childcare facilities were accepted into the program, of which 275 are located in communities with environmental justice (EJ) populations. Participation in the program was impacted by the pandemic.
- Information on the number of facilities that have tested and the results can be found on the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) Public Data Portal at <https://eeaonline.eea.state.ma.us/portal#!/search/leadandcopper>.
- In 2021, MassDEP created a pilot program to partner with eight public water systems (PWS) located in communities designated by the Massachusetts Department of Public Health (DPH) as having children with high risk of lead poisoning (from all sources) to offer testing ahead of upcoming requirements of the federal U.S. EPA Lead and Copper Rule Revisions. To date, participating PWS have identified 48 public schools and 16 childcare facilities for testing.
- Information on testing and program actions can be found in the EAP Story Map: [Expanded Assistance Program for Lead in Drinking Water in Schools and Childcare Facilities \(arcgis.com\)](#).

Remediation and Follow Up Actions

- After facilities receive their sampling results, they are encouraged to take appropriate remedial actions at any location with levels of lead above the laboratory testing limit and to communicate the results and short-term action plans to parents and staff.
- Depending on levels, remedial actions may include removing and replacing fixtures, using signage to indicate fixtures that are not intended to be used for drinking water, and implementing water line flushing programs. Facilities communicate this information to parents, staff and other stakeholders through emails, automated informational calls, letters, website postings, printed postings, newspaper articles, and meetings.
- The program received a donation of 500 Brita filter dispensers for family childcare facilities that complete the program. These are also used as incentives for family childcare providers to participate in EAP. To date, the program has distributed 185 water filters.
- Facilities are provided with a certificate of completion to display at their facility.

EAP Program Partners

- Host quarterly webinars for schools and childcare facilities to inform about the program, sampling protocols, SWIG, and encourage participation.
- Send monthly outreach emails to all schools and childcare facilities and sent postcard mailers to invite facilities to apply.
- Support multi-language outreach with translated materials and Spanish-language webinars.
- Focus outreach efforts on communities designated by DPH as having children with high risk of lead poisoning (from all sources) and EJ communities.

For more information about the EAP, go to <https://www.mass.gov/service-details/technical-assistance-for-lead-in-school-and-child-care-center-drinking-water>.

This important work to address lead in school drinking water continues in 2023.

Additional Support for Massachusetts PWS

Lead Service Line Planning Program

The Massachusetts Clean Water Trust is offering \$20 million in grants for activities assisting public water suppliers with completing planning projects for lead service line inventories and replacement programs. For more information, click here: [Lead Service Line Planning Program](#)

American Rescue Plan Act (ARPA)

To learn more about ARPA funding for Clean Water and Drinking Water projects, go to [American Rescue Plan Act Funding | Mass.gov](#).

Bipartisan Infrastructure Law (BIL)

To learn more about BIL funding for Massachusetts for water infrastructure improvements, go to <https://www.mass.gov/state-revolving-fund-srf-loan-program>.

Water Infrastructure Improvements for the Nation Act (WIIN) Grant Lead in Schools Allotment

An additional \$97,500 was awarded by U.S. EPA to Massachusetts to be used for engagement of target audiences in messaging development and connectivity planning with community organizations to identify opportunities for linking the Lead in Drinking Water Testing Assistance program to relevant community initiatives, material development and design and outreach, dissemination, and education. To learn more about WIIN funding, go to <https://www.mass.gov/info-details/water-infrastructure-improvements-for-the-nation-act-wiin->

act.

U.S. Environmental Protection Agency Direct Technical Assistance Portal

Using this [Water TA Request Form](#), communities can request no-cost direct water technical assistance from the U.S. EPA to evaluate their drinking water, wastewater, stormwater infrastructure, and water quality improvement needs.

Assessment Program Rate Structure for FY24

The Assessment Program rate structure for FY24 remains the same as for FY23. The bills for FY24 will be mailed to all PWS in December 2023.

- \$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
- Unmetered PWS serving 900 or more pay a rate based on an average water use

Members of the Safe Drinking Water Act Assessment Advisory Committee – 2022

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
- David Condrey, Vice Chair, *Non-profit Association Representing Investor-owned Water Companies*, National Association of Water Companies, 2011
- Elizabeth Ainsley Campbell, an *Environmental Agency*, Nashua River Watershed Association, 2002 (resigned in December 2022 – retired)
- Martha Morgan, an *Environmental Agency*, Nashua River Watershed Association, appointed in 2022
- 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 (resigned in 2021 - retired)
- Robert Prophett, *MassDEP Designee*, appointed in March 2022
- Ariela Lovett, *Massachusetts Municipal Association*, 2019 (resigned 2022)
- Josie Ahlberg, *Massachusetts Municipal Association*, appointed in September 2022
- 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, 2022**



Protect Public Health through Compliance Reviews

- Reviewing a new three-year (2023-2025) cycle of the Water Quality Monitoring Waiver Program.
 - Public Water Systems (PWS) submitting a waiver application (2020-2022): 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 (2020-2022).
- 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.
- Conducted 12 wellhead protection reviews and compliance updates for new sources.
- Reviewed 2 proposed easements for compliance with Zone I regulations.
- Reviewed 2 proposed conservation restrictions to protect hundreds of acres of land for drinking water supplies.
- Updated 2 wellhead protection documents to assist PWSs in protecting their wells.
- Reviewed more than 300 monitoring waiver applications for wellhead and surface water compliance criteria.
- Reviewed and ranked 8 Drinking Water Supply Protection Grant Program applications.
- Registered 15 new Public Water Systems (PWS).
- Registered 9 existing Public Water Systems (PWS) that were previously unregulated.
- Reviewed and/or approved 19 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 431 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 23 municipalities or PWS with wellhead protection issues.
- Field verified 19 watershed and/or tributary delineations for reservoirs and updated Geographic Information Systems (GIS) maps.
- Completed 66 hydrogeologic reviews for the MassDEP.
- Continued technical support of the bulk upload tool for laboratories to submit drinking water quality sampling results on-line. Provided easy to use macro enabled Word form template to assist small labs without LIMS in uploading bacteria data to eDEP.
- Provided compliance assistance for Statistical Reporting, Ground Water under the Influence, Consumer Confidence, Cross Connection, Certified Operator and Source Water Protection.
- Captured the 13th year of electronic Annual Statistical Reporting (e-ASR).
- Continued improving the e-ASR for the next reporting year.
- Provided over 400 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 2022.
- Reviewed 512 CCRs, provided Technical Assistance Reports and tracked CCR compliance.
- Posted sample schedules, Lead and Copper Approved Sampling Sites Plan, Certificates of Registration for all PWS, and water quality reports, i.e., 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 5 (UCMR5) 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. EPA.
- Gave Boards of Health one-on-one assistance with well drilling requirements.
- Assisted well drillers at two day New England Water Works Association 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 COVID-19 virtual meetings with Commissioner Suuberg.
- 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 28 excellence in compliance awards and 11 nominated awards during 2022 for calendar year 2021.
- 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 Training, Virtual
- Provided instructors for 7 NEWWA Backflow Tester and Cross Connection Survey classes.
- Provided 1 instructor for NEWWA Hydrogeology/Source Approval classes.
- Provided 1 instructor for the Mass. Health Officers' Association regional conferences.
- Provided technical assistance on CCCP to PWSs, 331 by e-mails and 96 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; ASDWA PFAS workgroup; 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, Lead and Copper Rule Revisions, 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.