



Safe Drinking Water Primacy Assessment
Annual Report to the General Assembly
Public Act 19-117, Section 75

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BACKGROUND

The Department of Public Health's (DPH) Drinking Water Section (DWS) is responsible for ensuring the adequacy and purity of Connecticut's public drinking water on a statewide basis through the administration and enforcement of a number of federal laws, including the Safe Drinking Water Act (SDWA), and state statutes. The DWS oversees and regulates approximately 2,450 public water systems, which use or rely upon approximately 4,400 high quality public drinking water sources and serve over 2.9 million residents in Connecticut. As part of its responsibility to assure safe drinking water to consumers, the DWS inspects at least 600 public water systems and processes over 500,000 drinking water quality test results annually; oversees and regulates certified operators; reviews and approves engineering plans for water treatment plants, storage tanks and other public water system infrastructure; provides technical assistance to public water systems and the communities they serve; administers the Drinking Water State Revolving Fund (DWSRF); enforces drinking water quality standards; oversees statewide water supply planning; and protects sources of public drinking water. The DWS accomplishes these goals through the dedicated work of an experienced staff comprised of sanitary engineers, environmental analysts and health program personnel.

The DWS provides the critical link between the federal and state standards and requirements and the public water systems, which are ultimately responsible for maintaining the high level of public health protection established under the SDWA. As additional and more complex drinking water standards are promulgated, individualized training for public water systems, technical assistance to water system operators and compliance assurance activities are undertaken. The department's ability to meet the complex and critical challenges and requirements associated with administering the state's drinking water program to ensure public health protection requires sufficient resources.

In 2012, budgetary forecasts indicated that the DWS would experience a steady decline in available federal funding in the coming fiscal years. The need for replacement funding to maintain existing staffing levels beginning in state fiscal year (FY) 2018 was subsequently identified. In 2016, the DPH was required by the Legislature, pursuant to PA 16-2 (May Spec. Sess.), to prepare and publish a report concerning the expenditures necessary to ensure the continued administration of safe drinking water standards for public drinking water ([Report on Fees](#)). In the following year, the Legislature adjusted the DPH's appropriation to address projected DWS funding shortfalls and authorized the assessment of community and non-transient non-community public water systems, in an amount not to exceed \$2.5 million¹, to support the department's ability to maintain primacy

¹ The actual amount assessed was \$2.025 million. The DPH has collected 98.3% of this amount and continues to follow up with delinquent public water systems. The DWS will recommend additional collection efforts, undertaken by the Department of Administrative Services, for systems that do not pay after three documented attempts.

under the SDWA. This assessment authority was limited to FY 2019. The Legislature also required the DPH, in consultation with the Secretary of OPM and representatives of water companies, to develop a methodology for a safe drinking water primacy assessment upon community, transient, and non-transient non-community public water systems. In accordance with Section 677 of PA 17-2, the DPH consulted with OPM and the water industry to draft proposed legislation that, after modification, was included within PA 19-117.

The department is required, pursuant to Section 75 of PA 19-117, to report on the resources, activities, and costs that support the DPH's ability to maintain primacy under the SDWA in the previous fiscal year, the number of full-time equivalent positions that performed required functions to maintain primacy in the previous fiscal year, and quality improvement strategies the department has deployed to streamline operations to make efficient and effective use of staff and resources.

REPORTING REQUIREMENTS

Primacy is the responsibility to implement and enforce the SDWA. Core functions of the primacy program include:

- Operating an enforcement program to ensure the public water systems comply with all safe drinking water requirements;
- Maintaining an inventory of public water systems throughout the state;
- Compiling a database to contain compliance information on public water systems;
- Conducting sanitary surveys of public water systems;
- Reviewing and approving public water system plans and specifications;
- Providing technical assistance to managers and operators of public water systems;
- Enforcing public notification, ensuring that public water systems regularly inform their consumers about the quality of the water that they are providing;
- Certifying laboratories that test drinking water samples;
- Administering Connecticut's Drinking Water State Revolving Fund program, which provides low interest loans to public water systems for planning, design and construction projects;
- Administering an Operator Certification, Backflow Prevention and Cross-Connection Program;
- Public interaction with citizens, chief elected officials, school officials and local health directors, including addressing consumer complaints and water quality concerns;
- Education of all entities regarding new requirements; and
- Source water assessment and protection.

In FY 2019, the DPH employed 58.98 full-time staff to perform the required functions to maintain primacy. All staff directly or indirectly support critical core functions of Connecticut's drinking

water primacy program. The cost of maintaining primacy under the SDWA, reflecting state and federal funding, was \$8,751,819.

The DWS implemented several quality improvement strategies that contributed to streamlined operations and the efficient and effective use of staff and resources in FY 2019. These include:

Utilized Federal Technical Assistance Provider - The DWS Capacity Development Unit partnered with the Environmental Finance Center Network (EFCN) to present a series of three webinars aimed at developing technical, managerial and financial capacity for small community water systems. The webinar series was designed to prepare small public water systems in meeting new requirements set forth within PA 18-168. Topics covered include asset management, rate structures and rate setting, DWSRF funding program, unaccounted for water loss, hydropneumatic storage tank assessment, and regionalization/partnerships. Use of the federal technical assistance contractor enabled the DWS to utilize EFCN's expertise, at no cost to the state, to provide a series of trainings that directly relate to current initiatives. The webinars are available on both the EFCN and DPH websites.

Developed New Tracking Module - The DWS developed a module in its Compliance Assistance Database to input, respond and track all incidents and violations that are of immediate public health concern and required to be reported to the DPH. The final module has helped to eliminate inconsistencies in collecting relevant information, streamlined internal processes by linking databases, improved response times to minimize public exposure to a health risk, enhanced communications with stakeholders, and increased efficiency in tracking and resolving incidents.

Revised Public Water System Screening Form Process - The DWS has developed a revised public water system screening form process. The new process requires the form to be submitted when a potential development may result in the creation of a new public water system. The form captures information about conversions or expansions of existing (non-public) water systems and allows for review of current public water system classification and systems that are currently operating, but not being regulated. In order to ensure the accuracy of the information being submitted, the DWS verifies the data with local officials and property owners. A series of meetings were held with stakeholders to solicit feedback and the DWS subsequently developed a set of revisions to the form, which include local health director sign-off prior to submission to DPH. The revised form is currently awaiting approval; when approved it is expected to reduce the amount of time that it takes DWS staff to conduct their review and make a determination.

Streamlined After Hours Team Coverage Process - The DWS streamlined its 24/7 coverage process and trained staff in coverage responsibilities and procedures. The After Hours Team interacts with the DWS Section Chief, DPH Duty Officer, local health departments, the Office of

Early Childhood, public water systems, certified operators, the DPH Food Protection Program, and the DPH Facility Licensing and Investigations Section. Further, the After Hours coverage team has upgraded its ability to communicate remotely through improved information technology. The ability to access all DWS data, files and databases, including the Incident Response module in the Compliance Assistance Database, improves communication and promotes efficiency.

Revised Incident Report Form - The DWS revised the form it uses internally to document and notify necessary stakeholders during a public drinking water incident. A module in the Compliance Assistance Database was developed to input, respond to and track all incidents and violations that are of immediate public health concern and required to be reported to DPH. The module has helped eliminate inconsistencies in the collection of relevant information, streamlined internal processes by linking databases, improved response time to minimize public exposure to a health risk, enhanced communications with stakeholders, and increased efficiency in tracking and resolving incidents.

Data Portal Development - The DWS has begun developing an online data entry portal for public water systems to report their surface water and groundwater capacities. Currently, the capacities are reported in a digital file and the data is then manually entered into a database. The number of forms being submitted is significant enough to warrant the development of the data portal. In conjunction with the National Integrated Drought Information System (associated with NOAA), a North East Region data portal is also being developed. Its use will allow public water systems to electronically monitor their surface water capacities to determine possible drought conditions and adjust drought response triggers and actions.

Implemented SWIFT Software - The DWS has worked with Global Environmental Consulting, Inc. to implement SWIFT software, which allows sanitary surveys to be completed electronically. Field staff utilize the software on a tablet while conducting the sanitary survey to ensure all aspects of the required survey elements are addressed. This technology has allowed the DWS to improve turnaround time with respect to producing a final report and sharing violations quickly and efficiently.

Implementation of Sanitary Survey LEAN Event - The DPH reduced the average time from the date of a sanitary survey to the date of the issuance of the survey report by approximately 70%. The DWS conducted a LEAN event to identify and streamline the sanitary survey process. This, along with staff utilizing SWIFT software to conduct electronic sanitary surveys, as well as a new streamlined integrated question set to improve the time involved with identification and correction of unsanitary system conditions, has led to significant process improvement. With this survey process and technology, DWS engineers identify and address unsanitary conditions and public

health code violations quicker and more effectively, therefore reducing the potential of water system contamination and protecting consumers.

Streamlined Drinking Water Supply Planning and Completed Water Utility Coordinating Committee (WUCC) Statewide Plans - The DWS and stakeholders from public water utilities, local health departments, environmental groups, local governments and other state agencies worked together with Milone & MacBroom, Inc. to prepare three regional WUCC plans and one combined statewide plan. This effort has and will continue to streamline drinking water supply planning in Connecticut. The DWS intends to begin implementation of the reported recommendations during FY 2020.

Streamlined Enforcement Process for Lead and E-Coli - The DWS has removed unnecessary steps in the enforcement process for lead and e-coli violations. Public water systems that receive a violation for either lead or e-coli will also receive an order that ensures accountability and a pathway towards compliance.

Streamlined Process for Water Supply Plan Review - The DWS has developed a streamlined process for reviewing water supply plans to ensure they are reviewed quickly and thoroughly. The DWS intends to develop a team that will be trained on the new process and begin such reviews during FY 2020.

AWOP Implementation - Continued participation in the EPA sponsored Area Wide Optimization Program (AWOP) helps build DWS staff technical expertise, in order to better assist large community water systems with regulatory compliance issues. This year, AWOP training focused on disinfection by-products and data integrity concepts that have been used during all subpart H sanitary surveys.

Consumer Complaint Application Development - The DWS developed a streamlined process by which consumer complaints are handled, which included the creation and implementation of a Consumer Complaint Application within our Compliance Assistance Database. This application allows staff to efficiently create, modify and track consumer complaints.

Freedom of Information Act (FOIA) Request Tracking - The DWS has developed a standardized FOIA tracking process within the Compliance Assistance Database. The application allows for each request to be logged and tracked to ensure timely reviews and responses in accordance with FOIA laws.