



Report to the General Assembly

Department of Public Health's Report on Fees

Public Act No. 16-2 (May Spec. Sess. 2016), Section 17

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State of Connecticut
Department of Public Health

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Fees

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I. EXECUTIVE SUMMARY

On June 2, 2016, Governor Malloy signed into law Public Act No. 16-2 (May Sp. Sess. 2016), An Act Concerning Adjusting the State Budget for Biennium Ending June 30, 2017 (“the Act”), which provides in section 17 for the Commissioner of Public Health (“the Commissioner”), in consultation with the Water Planning Council, to prepare a report concerning the expenditures necessary to ensure the continued administration of safe drinking water standards for public drinking water. Pursuant to the Act, the report is required to include, but not be limited to: (1) A projection of the costs of administering safe drinking water standards for public drinking water for the fiscal years ending June 30, 2018, to June 30, 2022, inclusive, (2) a projection of available state and federal funds to support the efforts of the Department of Public Health (“the Department”) to keep drinking water safe, and (3) recommendations regarding fees or other means of sustaining the Department’s efforts to keep public drinking water safe. Section 17 of the Act requires the Commissioner to submit the report to the joint standing committees of the General Assembly having cognizance of matters relating to appropriations and the budgets of state agencies, public health, and finance, revenue and bonding, and to the Secretary of the Office of Policy and Management not later than January 15, 2017.

In preparing the report required by the Act, the Department researched and sought information from a number of sources. The Department reviewed the history of its drinking water program, including both funding and staffing levels, as well as its current responsibilities and requirements under both federal and state law to keep public drinking water safe. In addition, the Department reviewed the Association of State Drinking Water Administrators’ (“ASDWA”) assessment of state drinking water program resource needs that ASDWA conducted with the U.S. Environmental Protection Agency (“EPA”) in 2013. That report recognized that states’ public drinking water program workloads have increased with the promulgation of additional drinking water regulations and statutory requirements and funding and staffing resources have declined. The Department also researched Connecticut statutes and regulations regarding fees, as well as fee programs in other states. Finally, the Department worked with CADMUS, ASDWA’s consulting firm, to determine Connecticut’s drinking water program resource needs. As a result of this report, it is clear to the Department that additional staff and funding sources are needed to support the efforts of the Department to keep public drinking water safe in Connecticut.

II. BACKGROUND INFORMATION

A. CONNECTICUT’S DRINKING WATER PROGRAM

The Department’s 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 SDWA, and state laws, some of which have been in existence since the early 1900’s. The DWS oversees and regulates over 2,500 public water systems, which use or rely upon approximately 4,400 high quality public drinking water sources and serve over 2.7 million residents in Connecticut. As part of its responsibility, the DWS inspects at least 600 public water systems annually, processes over 500,000 drinking water quality tests 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 the public water systems and the communities they serve, administers the Connecticut’s Drinking Water State Revolving Fund (“DWSRF”), enforces drinking water quality standards, oversees statewide water supply planning, and protects sources of public drinking water to assure safe drinking water to consumers of public water systems. The staff of the DWS is comprised of experienced 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 system, which are ultimately responsible for maintaining the high level of public health protection established under the SDWA. The implementation of additional and more complex drinking water standards requires individualized training for public water systems, technical assistance to water

system operators and compliance assurance. Meeting the associated technical challenges that go along with complex drinking water matters and to ensure that public health is protected requires Connecticut to have sufficient resources.

B. THE DEPARTMENT OF PUBLIC HEALTH'S RESPONSIBILITIES UNDER THE FEDERAL SAFE DRINKING WATER ACT

The Department has a number of responsibilities under the SDWA. EPA has delegated its primary enforcement authority, or primacy, for public water systems in Connecticut to the Department. In addition to its requirements to obtain and maintain primacy, the Department has other responsibilities and requirements under the SDWA. The following is a list of responsibilities that the Department has under the SDWA, including its primacy requirements:

1. Has regulations for contaminants regulated under the National Primary Drinking Water Regulations that are no less stringent than the regulations promulgated by EPA. Those regulations are: the Arsenic Rule, Consumer Confidence Report Rule, the Filter Backwash Recycling Rule, the Ground Water Rule, the Interim Enhanced Surface Water Rule, the Lead and Copper Rule and Lead and Copper Rule Minor Revisions, Long Term 1 Enhanced surface Water Treatment Rule, Long Term 2 Enhanced Surface Water Treatment Rule, the Public Notification Rule, the Revised Total Coliform Rule, the Stage 2 Disinfectants and Disinfection Byproducts Rule, the Standardized Monitoring Framework, promulgated in the Phase II Rule, the Surface Water Treatment Rule, Total Coliform Rule, and the Radionuclide Rule, the Small Systems Record Keeping Rules, and the Variances and Exemptions Rule. *See* Attachment 1;
2. Has adopted and been implementing procedures for the enforcement of the Department's regulations;
3. Maintains an inventory of public water systems in Connecticut;
4. Has a program to conduct sanitary surveys of all of the public water systems in Connecticut;
5. Has a program to ensure that new or modified systems will be capable of complying with Connecticut's primary drinking water regulations;
6. Has adequate enforcement authority to compel public water systems to comply with NPDWRs, including the authority to sue in court, right to enter and inspect water system facilities, authority to require systems to keep records and release them to the state, authority to require systems to notify the public of any public water system violation of Connecticut's requirements, and authority to assess civil or criminal penalties for violations of Connecticut's primary drinking water regulations and public notification requirements;
7. Has adequate recordkeeping and reporting requirements;
8. Has adequate variance and exemption requirements as stringent as EPA's;
9. Has an adequate plan to provide for safe drinking water in emergencies like a natural disaster;
10. Has a program for certifying water treatment plant, distribution system, and small water system operators, backflow prevention device testers, cross connection survey inspectors, including limited operators, conditional operators and certified operators in training;
11. Reviews engineering plans for water treatment plants, new water systems, and storage tanks;
12. Administers Connecticut's DWSRF program, which provides low interest loans to public water systems for planning, design and construction projects;
13. Administers a state grant program to provide grants to small water systems to support portions of the DWSRF projects;
14. Under its Performance Partnership Agreement ("PPA") with EPA, which describes how the Department will work with EPA to keep Connecticut's drinking water safe, carries out commitments made, including tracking the number of schools that meet all health-based drinking water standards, minimizing the risk to public health through source water protection, and ensuring all violations and significant deficiencies identified by the Department during a sanitary survey of a public water system are tracked in the Safe Drinking Water Information System ("SDWIS") and addressed by the public water system.

15. Has adopted authority to assess administrative penalties for violations of its approved primacy program;
16. Has a laboratory that will serve as Connecticut's "principal" lab that is certified by EPA; and
17. Has a program to certify laboratories that will analyze water samples required by the regulations.

C. THE DEPARTMENT OF PUBLIC HEALTH'S RESPONSIBILITIES UNDER THE CONNECTICUT STATUTES AND REGULATIONS

In addition to implementing and enforcing the National Primary Drinking Water Regulations, the Department is also responsible for implementing and enforcing Connecticut statutes and regulations. The following is a list of some of those statutes and regulations over which the Department has jurisdiction. This is not, however, an exhaustive list.

1. **Conn. Gen. Stat. § 25-32(b):** *Conn. Gen. Stat. § 25-32(b)* requires a water company to obtain a permit before it sells, leases, assigns or otherwise disposes of or changes the use of water company land.

For example, in 2013, the Department received 26 applications for water company land permits. It issued seven permits for the sale of water company land and 16 permits for changes of use. One of the changes of use permits issued was a consolidated permit for four separate projects. The Department found the remaining applications received in 2013 incomplete.

2. **Conn. Gen. Stat. § 25-32d(a):** *Conn. Gen. Stat. § 25-32d(a)* requires a water company that supplies water to one thousand or more persons or two hundred fifty or more consumers, as well as any other water company requested by the Commissioner, to submit a water supply plan to the Commissioner for review and approval. There are about 80 companies subject to the requirements of the statute. Water companies are also required under *Conn. Gen. Stat. § 25-32d(a)* to submit updates to such water supply plans not less than six years or more than nine years after the date of the most recently approved plan.

Comprehensive water supply plans are intended to ensure that larger community water systems have detailed sustainability plans and are able to meet present and future challenges. The water supply plans undergo thorough review and must be approved by the Department, the Department of Energy and Environmental Protection ("DEEP"), and PURA, where applicable. Since the water supply planning regulations were passed in 1985, each individual water company's water supply plan has been approved multiple times by the state agencies. To ensure that future updates of water supply plans are reviewed expeditiously, the Department developed worksheets to assist the water companies in understanding the regulations and generating system capacity values that are logical and reliable.

3. **Conn. Gen. Stat. § 25-33(b):** *Conn. Gen. Stat. § 25-33(b)* requires the Department to review and approve plans for a new additional source of water supply and for the construction or expansion of a system of water supply owned or used by a water company.

The Department's review of water companies' water and treatment works infrastructure projects ensures compliance with regulatory requirements and recognized drinking water industry standards. These projects include water treatment plant upgrades, water storage tanks, pump stations and transmission mains. Guidance manuals and recommended procedures are produced by the Department to assist water companies and consultants in preparing design plans and specifications that meet state and federal regulations as well as industry standards. The Department's engineers review and approve treatment proposed to correct exceedances of maximum contaminant and/or action levels, and to mitigate water

quality concerns related to aesthetics. To maintain consistency in the review and approval process, the Department developed the “Guidelines for the Design and Operation of Public Water System Treatment, Works, and Sources, January 1999” document. The purpose of the referenced guidance document is to provide review criteria to be utilized by the Department’s staff as the basis for approval of water supply projects. To meet the objective of protecting the public health, the guidance document was developed to ensure that drinking water facility construction and operations are in compliance with applicable Public Health Code regulations, the Connecticut General Statutes, and other applicable standards. The Department conducted 74 engineering reviews during the June 30, 2013 to July 1, 2014 period.

4. **Conn. Gen. Stat. § 25-33k(b):** *Conn. Gen. Stat. § 25-33k (b)* states: “No source of water supply shall be abandoned by a water company or other entity without a permit from the Commissioner of Public Health.” This provision requires the applicant to notify the chief elected official of any municipality and any local health department or district in which such source of supply is located and the Commissioner to take into account any comments received. The Department has received approximately 29 source abandonment permit applications since 2009 and has issued permits for 23 applications.
5. **Conn. Gen. Stat. § 25-43c(b):** *Conn. Gen. Stat. § 25-43c(b)* authorizes the Commissioner, upon application by a water company, to issue to the water company a permit authorizing recreational activities on the water company’s storage and distribution reservoirs or aquifer protection areas.

In calendar year 2013, there were 5 applications requesting recreation permits received and 5 permits issued.

6. **Conn. Gen. Stat. § 22a-358:** *Conn. Gen. Stat. § 22a-358* requires the Commissioner’s approval when a public water system with water reserves in excess of the amount it requires wants to sell such excess water to another public water system. The Commissioner may issue such approval only after an extensive investigation as to whether the applicant has clearly established that such abundant supplies are in existence and will continue to be in existence for ten years, and the purchasing community public water system being supplied such excess water has agreed to restrict water usage in the same manner as the applicant when necessary in accordance with the emergency contingency provisions of the applicant’s water supply plan. The Commissioner may issue such *Conn. Gen. Stat. § 22a-358* approvals for a period of up to ten years, after which the approvals may be renewed. Since 2012, the Commissioner has issued 25 approvals under *Conn. Gen. Stat. § 22a-358*.
7. **Conn. Gen. Stat. §§ 22a-477 through 22a-482, inclusive:** *Conn. Gen. Stat. §§ 22a-477 through 22a-482, inclusive*, is Connecticut’s DWSRF statutes that the Department administers. Under the DWSRF program, the Department provides funding assistance to eligible public water systems for the planning, design, and construction of water infrastructure improvement projects. The Department reviews projects, including engineering plans, determines based on such review which projects are eligible to receive money from the DWSRF, and enters into funding agreements and reimburses the public water systems for such projects.
8. **Regulations:** In addition to the statutory requirements set forth above, the Department has adopted extensive regulations that require approval from the Department before a water company may proceed with certain activities. Attachment 2 lists all of the instances in which a water company is required to obtain approval from the Department pursuant to Regulation of Connecticut State Agencies §19-13-B102. Regulation of Connecticut State Agencies §19-13-B102 is one of the Department’s regulations that is applicable to water companies and

public water systems, and the regulation that contains the minimum standards for drinking water and how a public water system is to achieve such.

There are other regulations that have an impact on the drinking water supply and require or authorize activity only upon the issuance of permission from the Commissioner. See, e.g. Regulations of Connecticut State Agencies (The Public Health Code) §§19-13- B32 (water shed sanitation), 19-13-B37 (cross connections), 19-13-B39 (Quality of water supplies), and 19-13-51a through 19-13-51m (well approvals).

Connecticut's drinking water laws are some of the strongest and most protective laws in the country. It is imperative that the Department have sustainable state and federal funding support to ensure it has the capacity to implement and enforce these laws in Connecticut, and prevent drinking water disasters in Connecticut, such as those listed below:

1. The waterborne outbreak in Milwaukee, Wisconsin in 1993 that sickened over 400,000 persons and killed over 100 persons.
2. The E.coli outbreak in Walkerton, Canada in 2000 that killed 7 people and sickened thousands.
3. The toxins found in water in Toledo, Ohio in 2014 that shut down the drinking water supply to over 500,000 persons.
4. The chemical spill in West Virginia in 2014 that led to a tap water ban to over 300,000 persons.
5. The ash spill in North Carolina in 2014 that impacted safe drinking water supply to many communities.
6. The toxic water spill into a river in Colorado in 2015 that affected drinking water supply to many communities.
7. The Legionella outbreak in New York in 2015 that sickened over 100 persons and killed 12 people.
8. The ongoing water quality crisis in Flint, Michigan that began in 2015 due to a change in the source of supply providing drinking water to Flint. The change in the drinking water source caused high levels of lead in the drinking water and a Legionella outbreak. As a result of high lead levels in the drinking water, the blood lead levels of many children were elevated.

III. ASSOCIATION OF STATE DRINKING WATER ADMINISTRATORS 2013 NATIONAL ASSESSMENT

In 2013, ASDWA, in collaboration with EPA, conducted its fifth national assessment of state drinking water program resource needs. Prior to the 2013 assessment, ASDWA conducted assessments in 1989, 1993, 1999 and 2001. The assessments conducted are based on models that estimated state agencies' workloads to implement the Public Water System Supervision ("PWSS") program. The PWSS program supports the Department's activities, including developing and maintaining state drinking water regulations; developing and maintaining an inventory of public water systems throughout the state; developing and maintaining a database to hold compliance information on public water systems; conducting sanitary surveys of public water systems; reviewing public water system plans and specifications; and providing technical assistance to managers and operators of public water systems. As demonstrated in the five assessments, the states' workloads have increased with the promulgation of additional drinking water regulations and statutory requirements, while resources have remained flat or even declined.

As a follow up to the 2013 assessment, the DWS worked in 2016 with ASDWA through their contractor CADMUS to update the Connecticut information. CADMUS' report regarding Connecticut's assessment ("CADMUS' 2016 Connecticut Need Assessment Report") is provided in Attachment 3 and illustrates the challenges that Connecticut's drinking water program faces pertaining to the gap in needs and resources. As noted in CADMUS' 2016 Connecticut Need Assessment Report, the DWS's workload

has increased with the promulgation of additional drinking water regulations and statutory requirements while funding and staffing resources have declined.

IV. ASSESSMENT OF DWS’ CURRENT STAFFING LEVEL AND FUNDING RESOURCES

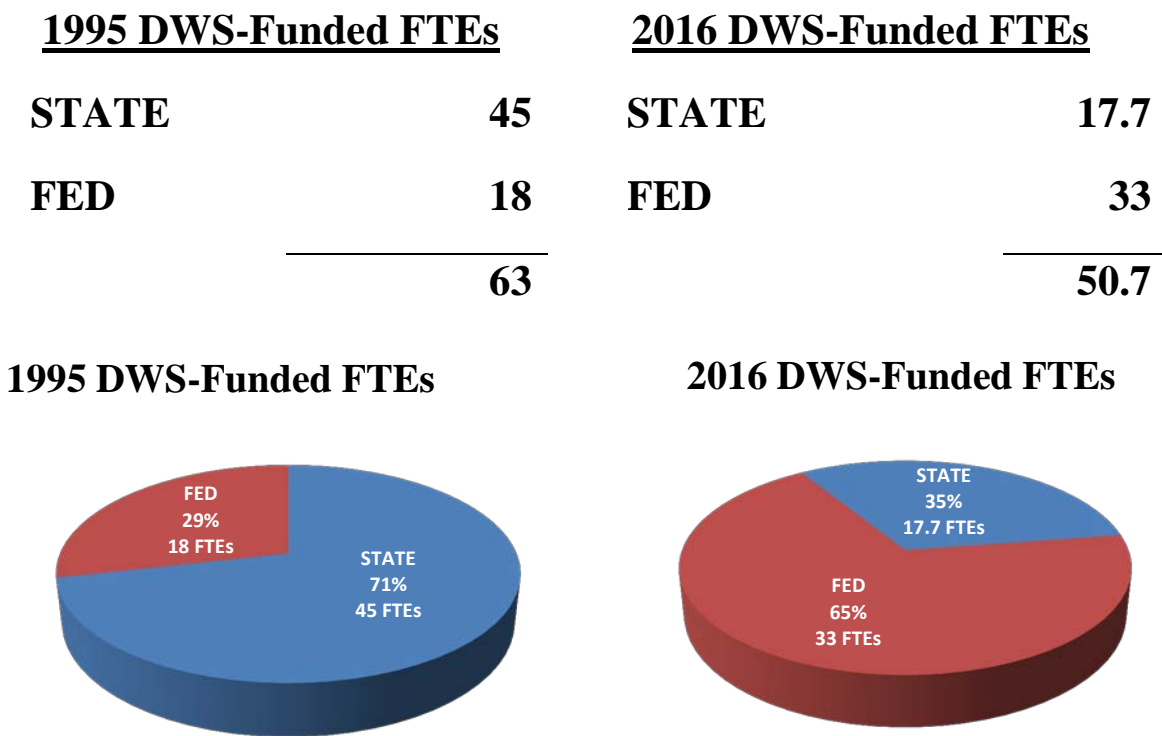
In its public drinking water program, the Department has an obligation to provide the level of service that is mandated by EPA to maintain and uphold its responsibilities under the SDWA, including its primacy requirements, and to oversee and enforce the various state laws and regulations that require purity and adequacy of Connecticut’s public drinking water systems and sources. Failure to adequately support a public drinking water program will jeopardize the DWS’s ability to provide the oversight, regulation and services necessary to ensure the continued administration of safe drinking water standards for public drinking water in Connecticut.

A. STAFFING

Throughout the years, staffing levels and funding proportions have changed considerably, as illustrated in Figure 1 below. In 1995, the DWS had 63 full-time employees (“FTEs”) with 71 percent of its employees funded using state funds. In 2016, however, the DWS had only 50.7 FTEs with only 35 percent of its employees funded using state funds. Over the last 20 years, the DWS has:

- lost 12.3 FTEs overall, resulting in a 20 percent reduction in DWS staff;
- lost state funding for 27.5 FTEs; and
- had an increase in workload of 160 percent due to the SDWA Amendments of 1996 and the subsequent addition of 16 new SDWA rules.

FIGURE 1. DWS FTE COMPARISON OVER TIME

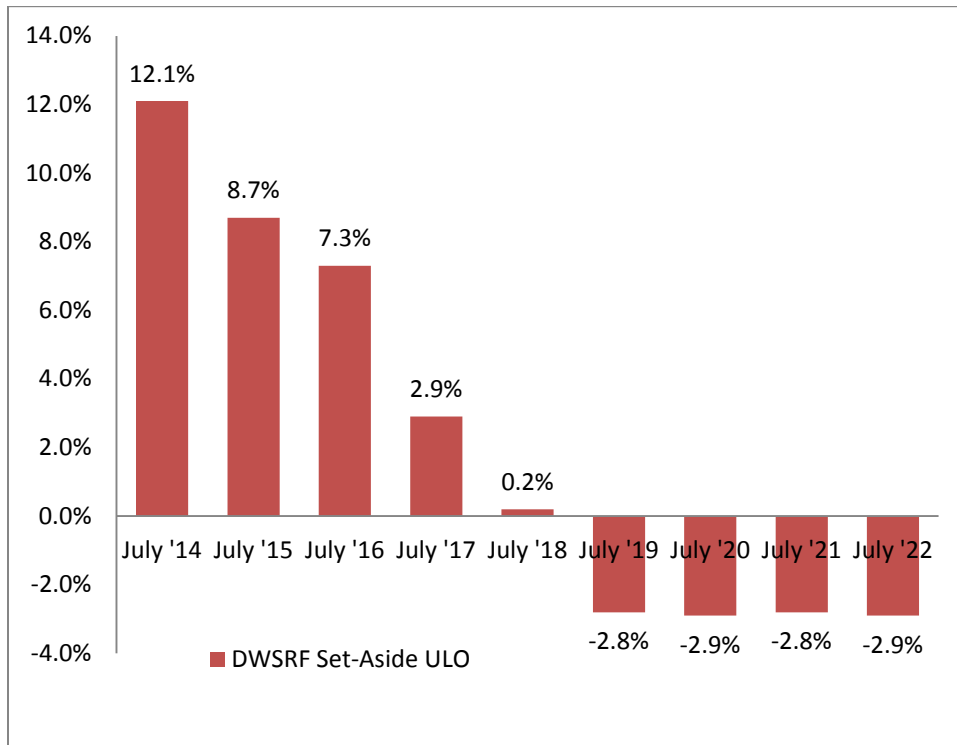


The DWS has taken 31 percent of its federal DWSRF capitalization grant, which is the maximum allowable set-aside amount, since the creation of this EPA-administered SDWA grant program in 1996. The Department has used this set-aside funding, which is split into four different set-aside accounts each having distinct spending criteria, primarily to support the salaries of DWS staff that work in or provide support to the Department's public drinking water program. The Department did not use these set-aside funds in the years in which DWS took them, which resulted in the creation of a significant set-aside carry-over fund balance. This carry-over fund continues to exist, however the Department has depleted it over the years to offset operating costs. Since 1996, the Department has relied on this set-aside funding to support needed and necessary public drinking water program staff. Over the past two decades, there has been a significant shift of staffing resources from state funds to federal funds to support the DWS with the utilization of federal set-aside carry-over funds.

In 2009, the EPA Headquarters in Washington, DC initiated an effort to reduce the amount of carry-over funding and Unliquidated Obligations ("ULO") within the DWSRF program. In March 2013, EPA started running monthly ULO status reports and distributing them to each EPA Region and the states indicating that a ULO reduction was imminent. Connecticut had the fifth highest ULO amount in the nation at that time. In 2014, Peter Grevatt, the EPA Headquarters' Director of the Office of Drinking Water and Groundwater ("ODWG"), officially notified the states' public drinking water programs that EPA will no longer allow non-lapsing carryover funds and ULOs. States must now fully expend DWSRF grant funds within two years of the award date. The memo from Mr. Grevatt, Director of ODWG, to the states regarding the limit on carry-over funds and ULOs is in Attachment 4. For more details regarding ULOs, please see the detailed discussion in Section V below.

Since 2012, the DWS has instituted a program to reduce its ULOs, in anticipation that EPA would impose ULO reduction requirements at some point in the near future. As a result of the DWS's ULO reduction program, the DWS's first of four set-aside accounts, the DWSRF 4 percent Administrative Set-aside, is projected to be depleted in March 2017. This depletion is illustrated in Figure 2 below. The DWS's ULOs will be fully depleted in state fiscal year 2018. Due to the loss of these ULOs and the ever increasing workload for the DWS, Connecticut must establish a funding mechanism to support both existing public drinking water program staff and additional staffing needs in order for the Department to meet its SDWA and state safe drinking water obligations.

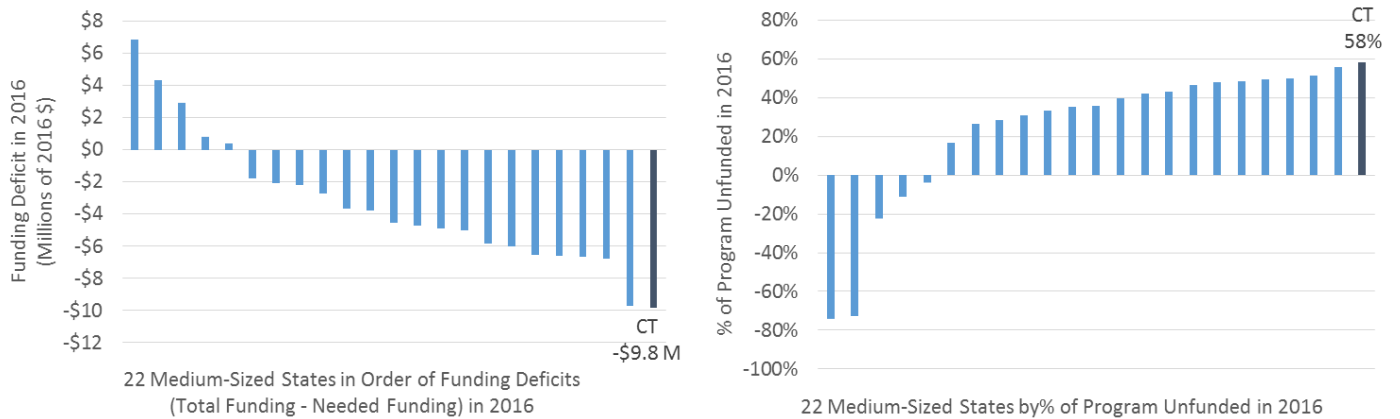
FIGURE 2. DWSRF Set-Aside Carryover Reduction



CADMUS’ 2016 Connecticut Need Assessment Report in Attachment 3 summarizes the intensive effort required of a states’ public drinking water program to ensure public health is proactively protected. National and state specific survey data supports Connecticut’s need for additional funding resources, as well as substantially more staff to support a comprehensive drinking water program that successfully implements all SDWA standards and requirements. Nationally, Connecticut has the largest resource needs and program funding deficit among other similarly-sized states.

According to CADMUS’ 2016 Connecticut Need Assessment Report, the DWS should have, at a minimum, a staffing level of 86 FTEs for a basic level public drinking water program. As stated above, in 2016, the Department only had 50.7 FTEs in its public drinking water program. With only 50.7 FTEs, 58 percent of Department’s resource needs to support a basic level public drinking water program will not be sufficiently funded. In order to meet the staffing level of 86 FTEs for a basic level public drinking water program, the Department requires \$ 9.8 million in additional funding (see Figure 3 below). Given the amount of work duties and requirements under state and federal safe public drinking water law, additional staffing resources and funding are needed in the Department’s public drinking water program in order to meet these significant current workload requirements.

FIGURE 3. Connecticut in Comparison to Similar Medium-Sized States



Furthermore, there are several EPA documents that independently state the critical importance of program staffing and alternative funding to support primacy state public drinking water programs. For example, in the November 2016 EPA Drinking Water Action Plan, the EPA indicates that federal funding alone has been insufficient for the states to develop and implement comprehensive public drinking water programs and additional funding beyond the current levels of federal support to primacy agencies is necessary to provide oversight of the SDWA.

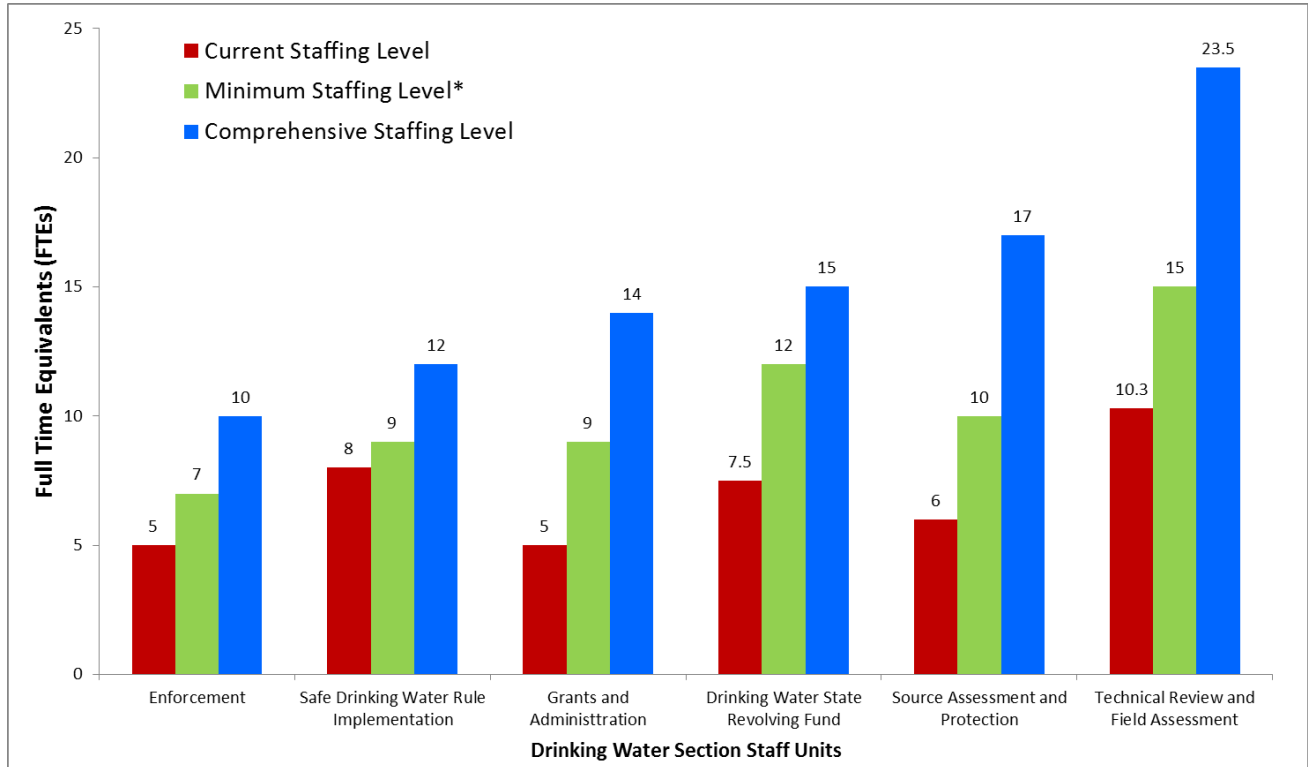
“There is a range of mechanisms available to states to provide adequate and consistent funding to primacy agencies, including dedicated funding supported by utility fees...”

- EPA Drinking Water Plan, November 2016

In addition, EPA has released similar statements in documents specific to Connecticut’s public drinking water program. Specifically, EPA required as a grant condition of the DWS’s 2016 DWSRF capitalization grant award notice the requirement that the Department have adequate personnel and resources to manage the DWSRF program. In addition, in the DWS’s 2013 DWSRF Program Evaluation Report received from Region 1 EPA, EPA, recognizing a decrease in the amount appropriated to states year after year and that Connecticut’s ULOs would no longer be available, encouraged Connecticut to consider alternative funding sources that could support DWSRF staff and other public drinking water activities. These documents can be found in Attachment 5, 6, and 7 respectfully.

The DWS conducted an internal assessment in which it evaluated the work responsibilities tasked to each of the DWS’s individual units. Assessment findings revealed that the DWS’s current staffing levels are substantially less than what is necessary to effectively and efficiently implement even a basic level public drinking water program statutorily required under the SDWA. Figure 4 shows the disparity between the current staffing level of each unit and what is needed to meet their regulatory responsibilities under a basic level and comprehensive public drinking water program. While the DWS has made every effort to streamline where possible, the onslaught of ongoing high priority matters, such as lead in drinking water and Connecticut’s drought situation, has resulted in DWS staff being stretched to capacity. If the gap is allowed to continue to widen and additional funding and staffing resource needs are not met, Connecticut’s population will be increasingly more vulnerable to the public health risks associated with drinking water contaminants and other constituents of concern.

FIGURE 4. DWS UNIT STAFFING LEVELS



*Minimum staffing level required to meet basic state and federal regulatory requirements.

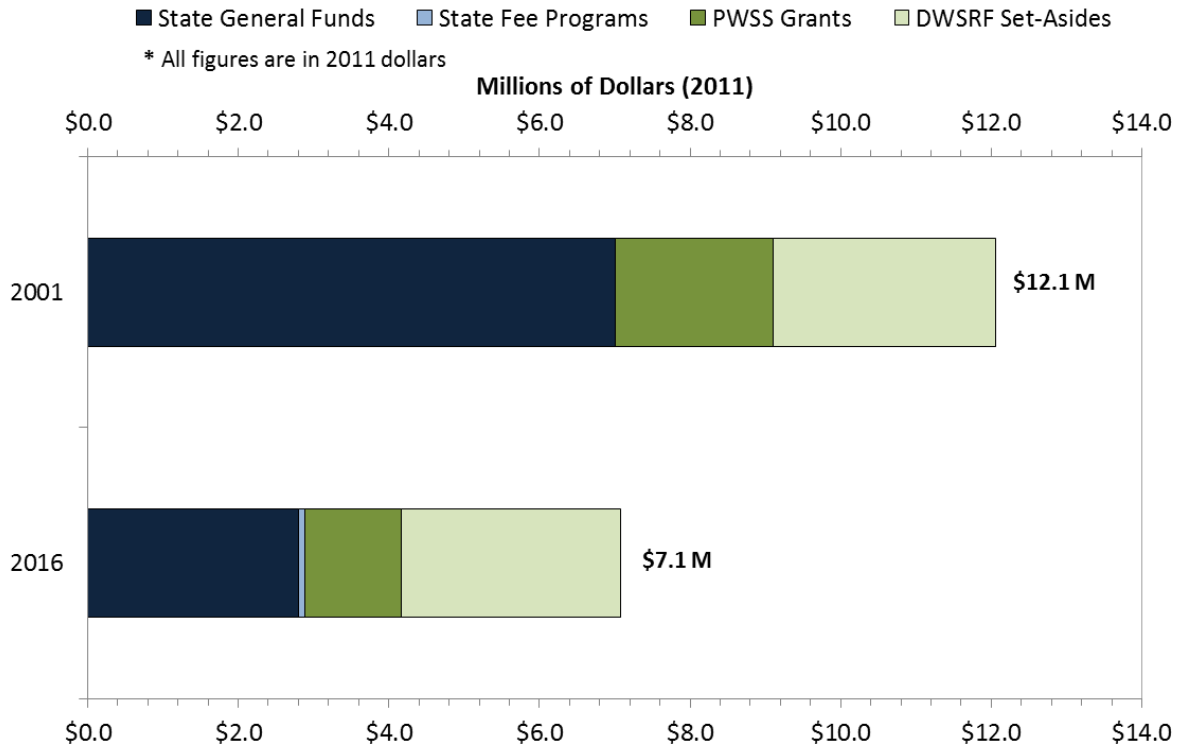
Without adequate resources, the Department will lose any ability to be proactive and recognize potential public health problems that concern public drinking water statewide. The proactive work that will be compromised or directly eliminated, or both, include:

- Monitoring trends in public drinking water quality and the effects on human health;
- Tracking public water systems to assure drought monitoring and heading off over-use of drinking water supplies;
- Working with public water systems to assure cyanotoxin tracking and addressing the new EPA health advisory concerning toxic blue-green algae in Connecticut’s 150 public drinking water reservoir systems;
- Working with public water systems and critical public health priority customers, such as hospitals and Veterans Administration facilities, regarding potential waterborne disease outbreak issues such as with Legionella;
- Working with public water systems to adjust to the new SDWA rules in order to remain in compliance with state and federal law;
- Working with public water systems to identify drinking water contamination threats prior to a contamination event;
- Working with public water systems concerning emergency response to severe weather events, such as hurricanes;
- Working to assure that public water companies in Connecticut utilize high quality sources of public drinking water;
- Working with public water systems to assure that Connecticut’s drinking water infrastructure meets and exceeds national water quality standards in order to assure purity of the state’s drinking water supply; and
- Working with Connecticut’s 330 small community public drinking water systems to address aging infrastructure and ownership issues.

B. FUNDING

Funding for Connecticut to implement its public drinking water program is comprised of three sources: state funds, federal PWSS grant funds, and the federal DWSRF capitalization grant funds. Figure 5 below illustrates the loss in funding resources for the Department’s public drinking water program over the last 15 years. State general funds have decreased significantly and directly correlate with the loss of the 27.5 state-funded FTEs mentioned previously.

FIGURE 5. AVAILABLE DRINKING WATER PROGRAM FUNDS OVER TIME BY TYPE



The current and future level of federal funding annually received by the Department is not sufficient to sustain the public drinking water program’s current staff and operating levels. Specifically, beginning in state fiscal year 2017, the DWS’s funding is projected to be insufficient to cover the cost of retaining current DWS employees. In recognition of the quickly diminishing DWSRF set-aside carry-over fund and ULOs, the Department has attempted to be proactive in resolving this impending shortfall in a variety of ways, including by participating in the Drinking Water Infrastructure Needs Survey Assessment (“DWINSA”).

Every four years, the EPA conducts a DWINSA, which is a national assessment of public water system infrastructure needs for a 20-year time period. The DWINSA is directly associated with the allocation of federal DWSRF capitalization grants to states. The DWS has participated in each of the five assessments conducted over the history of the DWRSF program and historically has always been defaulted as a 1 percent state. The DWS improved its position during the 2011 DWINSA resulting in a 20-year public water system infrastructure need of \$3.578 billion and an increased allocation percentage of 1.01 percent. Although it does not appear as much, a 0.01 percent increase is equivalent to approximately \$100,000 increase to the DWSRF program each year during the federal fiscal years 2014 to 2017 funding period. Retrospectively, Connecticut’s 2007 20-year capital improvement need was \$1.5811 billion. The DWS put forward a substantial effort for the 2015 DWINSA and are eagerly awaiting the results, due to be released by EPA in the Spring 2017 in its report to Congress.

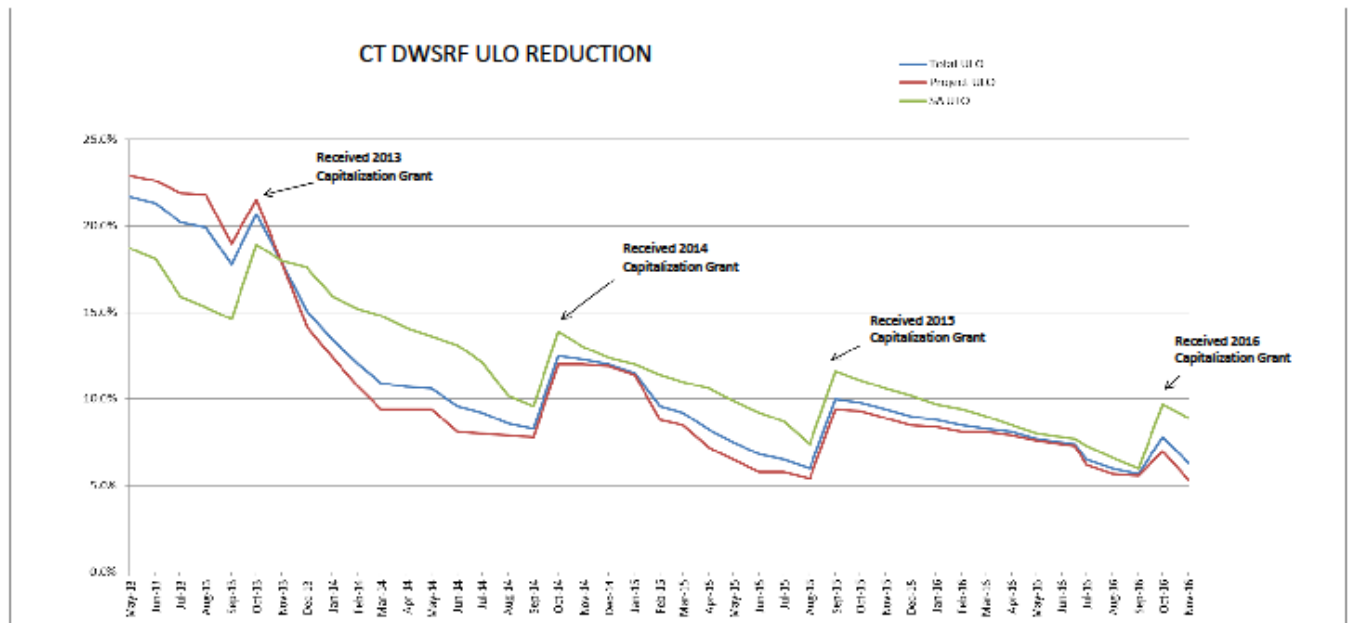
V. PROJECTION OF THE COSTS OF ADMINISTERING SAFE DRINKING WATER STANDARDS FOR PUBLIC DRINKING WATER FOR THE FISCAL YEARS ENDING JUNE 30, 2018, TO JUNE 30, 2022, INCLUSIVE

A. CURRENT FINANCIAL PROJECTIONS

The DWS has historically applied for and received all available federal DWSRF capitalization grant funds. In years past, this resulted in a large balance in both the DWSRF project and set-aside fund accounts, or ULOs. A ULO is the unexpended balance remaining from the amount of federal funds the EPA has obligated to the state in a financial funding agreement, such as the federal DWSRF capitalization grant agreement. The federal government has been looking at these ULOs since 2011 and has imposed various requirements for their expeditious use. Figure 6 shows the steady decline in the Department's DWSRF fund since March 2013, when the EPA started reporting on individual state's ULO reduction status.

As the DWS's operational expenses continued to exceed the annual federal DWSRF capitalization grant award and the DWS used its ULOs to cover the exceedances, the DWS recognized that the DWS's ULOs will soon be depleted. The ULOs have helped the DWS to defer the program expenses for many years, but will continue to diminish as costs rise and federal funds, including the federal DWSRF capitalization grant, likely decrease. It is imperative for the Department to obtain an alternative funding source prior to the onset of this impending shortfall.

FIGURE 6. HISTORICAL CT DWSRF ULO



The DWS’s current public drinking water program costs approximately \$10 million dollars annually to fund program staff and conduct activities required to implement the SDWA and uphold primacy. Table 1 details the DWS’s three funding sources and the estimated expenses for upcoming state fiscal years.

TABLE 1. ESTIMATED DWS OPERATING EXPENSES PER FY

Costs of Administering Safe Drinking Water Standards for Public Drinking Water for the Fiscal Years Ending June 30, 2018, to June 30, 2022				
	DWSRF Expenses	PWSS Expenses	STATE GENERAL FUND/ STATE MATCH Expenses	TOTAL FY EXPENSES
FY17	\$4,996,051.13	\$1,285,000.00	\$3,404,942.08	\$9,685,993.21
FY18	\$4,684,020.20	\$1,285,000.00	\$3,404,942.08	\$9,373,962.27
FY19	\$4,553,542.92	\$1,285,000.00	\$3,404,942.08	\$9,243,484.99
FY20	\$4,558,105.20	\$1,285,000.00	\$3,404,942.08	\$9,248,047.27
FY21	\$4,558,105.20	\$1,285,000.00	\$3,404,942.08	\$9,248,047.27
FY22	\$4,714,516.72	\$1,285,000.00	\$3,534,388.57	\$9,533,905.29

VI. PROJECTION OF AVAILABLE STATE AND FEDERAL FUNDS TO SUPPORT THE DEPARTMENT OF PUBLIC HEALTH'S EFFORTS TO KEEP DRINKING WATER SAFE

The projection of available state and federal funds to support the Department’s efforts to keep public drinking water safe shows that funds are insufficient to continue to uphold basic staffing levels that ensure enforcement of the SDWA. Table 2 shows the estimated available funds to support the DWS through state fiscal year 2022. The federal fund figures listed in Table 2 are, however, subject to change as a result of an increase or decrease in federal appropriations. Please note that the DWSRF funds listed do not include the funds used for DWSRF projects as those cannot be used for operating expenses.

TABLE 2. AVAILABLE FUNDS IN SUPPORT OF DWS PER FY

Available Funds to Support the Department's Efforts to Keep Drinking Water Safe for the Fiscal Years Ending June 30, 2018, to June 30, 2022				
	DWSRF Funds	PWSS Funds	STATE GENERAL FUND/ STATE MATCH Funds	TOTAL AVAILABLE FUNDS
FY17	\$6,623,013.76	\$1,285,000.00	\$3,404,942.08	\$11,312,955.84
FY18	\$4,309,425.70	\$1,285,000.00	\$3,404,942.08	\$8,999,367.77
FY19	\$2,726,740.23	\$1,285,000.00	\$3,404,942.08	\$7,416,682.31
FY20	\$2,611,130.00	\$1,285,000.00	\$3,404,942.08	\$7,301,072.08
FY21	\$2,611,130.00	\$1,285,000.00	\$3,404,942.08	\$7,301,072.08
FY22	\$2,611,130.00	\$1,285,000.00	\$3,534,388.57	\$7,430,518.57

The cost of administering the DWS’s current public drinking water program exceeds the current funding available starting state fiscal year 2018, as shown in Table 3 below. Thereafter, the average annual shortfall is approximately \$2 million. It is the intent of the Department to collect sufficient fees to sustain the Department’s public drinking water program.

TABLE 3. ESTIMATED ADDITIONAL FUNDING SUPPORT NEEDED FOR CURRENT PROGRAM

	TOTAL FY EXPENSES	TOTAL AVAILABLE FUNDS	CASH NEED
FY17	\$9,685,993.21	\$11,312,955.84	(\$71,333.07)
FY18	\$9,373,962.27	\$8,999,367.77	(\$451,733.34)
FY19	\$9,243,484.99	\$7,416,682.31	(\$1,826,802.68)
FY20	\$9,248,047.27	\$7,301,072.08	(\$1,946,975.20)
FY21	\$9,248,047.27	\$7,301,072.08	(\$1,946,975.20)
FY22	\$9,533,905.29	\$7,430,518.57	(\$2,103,386.72)

VII. RECOMMENDATIONS REGARDING FEES OR OTHER MEANS OF SUSTAINING SAID DEPARTMENT’S EFFORTS TO KEEP PUBLIC DRINKING WATER SAFE

A. HOW OTHER STATE AGENCIES CHARGE FEES OR SUPPORT THEIR PROGRAMS

Agencies in Connecticut and across the nation charge fees and collect assessments to support various programs, thus the Department’s fee proposal is not new. The following is a sample of some of the fees charged and assessments collected by state agencies in Connecticut:

1. ASSESSMENT TO SUPPORT PURA, OCC AND DEEP’S BUREAU OF ENERGY

The expenses of DEEP’s Bureau of Energy, the Office of Consumer Counsel (“OCC”), and the operations of PURA are paid for by assessments collected from certain public service companies.¹ Pursuant to *Conn. Gen. Stat.* § 16-49, each fiscal year, a public service company, if payment of an assessment by the company is required under this section, is required to pay to PURA the company’s share, based on the company’s intrastate gross revenues of the preceding year, of all expenses of DEEP’s Bureau of Energy, the OCC, and the operations of PURA for that fiscal year. A company’s assessment is calculated by multiplying the company’s percentage share of the total gross revenues of all companies by the total revenue appropriated to the DEEP’s Bureau of Energy, the OCC, and the operations of PURA.

All payments received by PURA from the companies are remitted by PURA to the State Treasurer for deposit into the Consumer Counsel and Public Utility Control Fund established in *Conn. Gen. Stat.* § 16-48a. The Fund established in *Conn. Gen. Stat.* § 16-48a is required to be

¹ See *Conn. Gen. Stat.* § 16-49.

held by the State Treasurer separate and apart from all other moneys, funds and accounts. Amounts in the Consumer Counsel and Public Utility Control Fund may be expended only pursuant to appropriation by the General Assembly and the interest derived from the investment of the Consumer Counsel and Public Utility Control Fund is required to be credited to the Fund. Any balance remaining in the Consumer Counsel and Public Utility Control Fund at the end of any fiscal year is required to be carried forward in the Fund for the fiscal year next succeeding and used to reduce subsequent assessments.

2. DEEP'S FUNDS

a. Connecticut Siting Council and the Siting Council Fund

The Connecticut Siting Council, which is responsible for, *inter alia*, balancing the need for adequate and reliable public utility services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values and providing environmental standards for the location, design, construction, and operation of public utility facilities that are at least as stringent as federal environmental standards and that are sufficient to assure the welfare and protection of the people of Connecticut, is located within the DEEP for administrative purposes only.² Pursuant to *Conn. Gen. Stat.* §§ 16-50v and 22a-132a, the Connecticut Siting Council obtains all of its operating revenues not from the General Fund, but from fees and costs attributable to applications received and annual assessments charged to electric utilities, hazardous waste generators, and telecommunications providers in Connecticut. The Connecticut Siting Council deposits all payments received by the Council pursuant to *Conn. Gen. Stat.* §§ 16-50v and 22a-132a with the State Treasurer, who credits such payments to the Siting Council Fund established under *Conn. Gen. Stat.* § 16-50v.

b. DEEP's Fees

DEEP charges a number of fees for such things as permits, inspections and licenses. The fees collected by DEEP are deposited into the General Fund. The following is a discussion of some of the fees charged by DEEP.

i. Discharge Permits

Under *Conn. Gen. Stat.* § 22a-430, any person or municipality is prohibited from initiating, creating, originating or maintaining any discharge of water, substance or material into the waters of the state without a permit for such discharge issued by the Commissioner of DEEP. To obtain a permit, such person or municipality is required to submit an application on a form prescribed by the Commissioner of DEEP, along with the fee prescribed in § 22a-430-6 of the Regulations of Connecticut State Agencies. The permit issued under *Conn. Gen. Stat.* § 22a-430 is issued for a period not to exceed five years and may be renewed, which renewal is subject to a fee. Each person holding a permit to discharge into the waters of the state is also required to pay an annual fee, which is prescribed in § 22a-430-7 of the Regulations of Connecticut State Agencies.

ii. Hazardous Waste Facility Permits

In addition to the assessment discussed in subparagraph (2)(b) above, pursuant to § 22a-116-8 of the Regulations of Connecticut State Agencies, hazardous waste facilities

² *Conn. Gen. Stat.* § 16-50j(a).

are required to pay on July 1, annually, the probable cost to DEEP of proper oversight and monitoring for the hazardous waste facility, which requirement to pay is made condition of the facility's siting permit issued by the Commissioner of DEEP under § 22a-116-3 of the Regulations of Connecticut State Agencies.

iii. Water Diversion Permit

Pursuant to *Conn. Gen. Stat.* § 22a-368, DEEP requires all persons, which includes individuals, partnerships, associations, the state and federal government, and municipalities, to obtain a diversion permit whenever withdrawals of surface and ground water exceed 50,000 gallons in any 24-hour period and charges a fee for such withdrawal. For example, DEEP charges \$2,050 for withdrawals for consumptive use of more than 50,000 gallons per day (“gpd”) but less than 500,000 gpd in any 24-hour period, \$4,000 for withdrawals for consumptive use of more than 500,000 gpd but less than 2,000,000 gpd in any 24-hour period, and \$6,250 for withdrawals for consumptive use of more than 2,000,000 gpd in any 24-hour period.³ DEEP establishes a diversion permit's expiration date based on DEEP's consideration of existing uses and allocations of the water resources within the watershed and pertinent facts and circumstances particular to the proposed project.⁴ In addition to the fee due to DEEP when the application for a diversion permit is submitted, each person holding a diversion permit authorizing a consumptive use of water is required to pay to DEEP an annual fee of \$940.⁵

iv. Dam Inspection Fee

Pursuant to § 22a-409-2(e) of the Regulations of Connecticut State Agencies, DEEP charges \$3,000 for a regulatory inspection of a dam.

v. Permit to Operate a Hazardous Landfill or Incinerator

Pursuant to *Conn. Gen. Stat.* § 22a-454(d), DEEP charges \$45,250 for a permit to operate a hazardous landfill or incinerator.

vi. Annual Fee for Groundwater Monitoring of Hazardous Waste Facility

Pursuant to *Conn. Gen. Stat.* § 22a-454b, DEEP charges \$940 as an annual fee for groundwater monitoring of hazardous waste facility.

vii. Commercial Fishing Vessel Permit

Pursuant to *Conn. Gen. Stat.* § 26-142a, DEEP charges \$190 for a general commercial fishing license for residents of Connecticut.

³ *Conn. Gen. Stat.* § 22a-372(e).

⁴ *See Conn. Gen. Stat.* § 22a-373(a).

⁵ *Conn. Gen. Stat.* § 22a-379.

3. DEPARTMENT FEES

The Department charges a number of fees, of which the following are examples:

a. Inspection of a Swimming Pool: Pursuant to *Conn. Gen. Stat.* § 19a-36(c)(3), the Department charges \$200 for the initial inspection of a public swimming pool.

b. Review of Plans for a Public Swimming Pool: Pursuant to *Conn. Gen. Stat.* § 19a-36(c)(3), the Department charges \$750 to review plans for a public swimming pool.

c. Review of a Flow Plan for Subsurface Sewage Disposal: Pursuant to *Conn. Gen. Stat.* § 19a-36(b), the Department charges \$200 to review small flow plans and \$625 to review large flow plans for subsurface sewage disposal.

d. Approval of Plans for a Mausoleum or Vault: Pursuant to *Conn. Gen. Stat.* § 19a-310, the Department charges \$1,250 for the approval of plans for a mausoleum or vault.

e. Asbestos Abatement Inspection: Pursuant to *Conn. Gen. Stat.* § 19a-332a, the Department charges \$100 for an asbestos abatement re-inspection.

f. Funeral Services Inspection Certificate: Pursuant to *Conn. Gen. Stat.* § 20-222(a), the Department charges \$375 for an inspection certificate for a funeral service business for each place of business and \$190 for a renewal of such certificate, which renewal is required annually.

B. HOW OTHER STATES ARE SUSTAINING THEIR EFFORTS TO KEEP PUBLIC DRINKING WATER SAFE

Unlike Connecticut, many states have the authority to collect fees and service charges to conduct sanitary surveys, perform project reviews, and for DWSRF projects. The fees and service charges collected by these states provide support for their public drinking water programs. According to a 2016 national survey of state drinking water programs conducted by the ASDWA, of the 38 state programs that replied, 34 states (or 90 percent) have some type of fee-for-service or connection fee, or a combination of both. In addition, 24 of the 38 states that replied have the authority to charge fees for DWSRF applications.

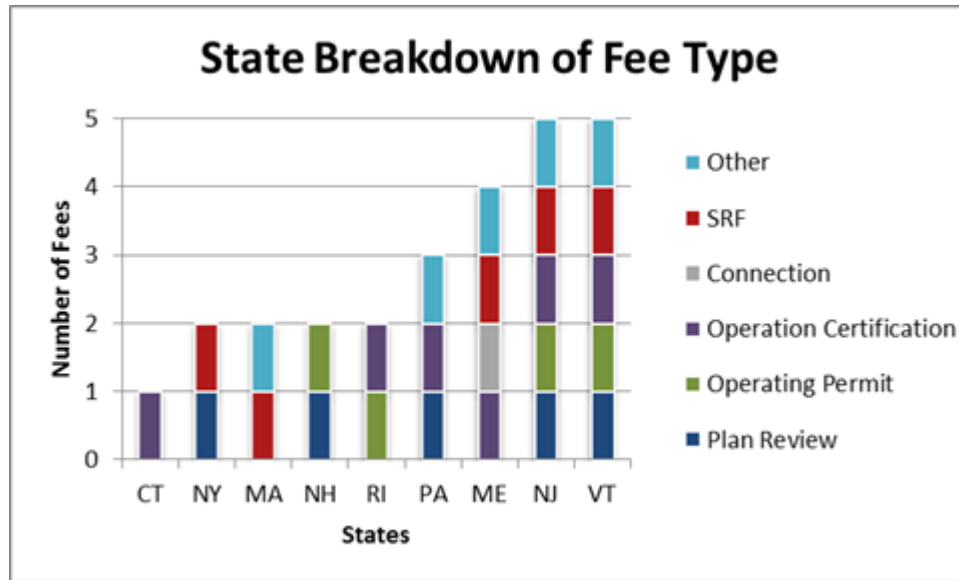
The following contains a discussion regarding the fees charged by states in the same region as Connecticut and fees charged by Missouri, Ohio, Rhode Island, and Washington, the states after which Connecticut is modeling its proposed legislation, which is discussed in Section VII.C of this Report.

1. FEES CHARGED IN MAINE, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, RHODE ISLAND, AND VERMONT

States charging fees for their drinking water services are very common nationally, as well as within New England and adjoining states. The states of Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont, which are states in the same region as Connecticut, have authority to charge fees and do charge fees of various types to assist in the administration of their public drinking water programs. These states charge for things such as plan reviews, operating permits, operator certification, number of connections served by a public water system, and DWSRF projects. Figure 7 shows a comparison of each of these states by type and number of fees collected.

In 2011, the DWS began collecting application fees for processing certified operator exam and renewal applications. The DWS collects approximately \$80,000 annually in application fees, which it uses to support the operator certification program’s operating costs. While these fees help defer a small amount of the DWS’s program costs, a fee program on a larger scale is necessary to offset what is needed to sustain even the current level of DWS operations.

FIGURE 7. BREAKDOWN OF FEES BY FEE TYPE



2. FEES CHARGED IN MISSOURI, OHIO, RHODE ISLAND, AND WASHINGTON

The Department is modeling its proposed legislation regarding fees after the fee programs in Missouri, Ohio, Rhode Island, and Washington. In Missouri, Ohio, Rhode Island, and Washington, state law authorizes the state to collect fees from public water systems operating in the state and to use the fees collected to support their public drinking water programs. The Department is modeling its proposed legislation after the state laws in these four states because the fees collected are based on water use by a public water system’s customers, are used to ensure that the drinking water in those states is in compliance with safe public drinking water requirements, including the SDWA, and to provide funding to the agencies responsible for regulating public water systems so that the agencies have the funding to ensure public water systems are providing safe and adequate drinking water to the public. The following is a discussion of the fees charged in each of those states:

a. Missouri

In Missouri, each customer of a public water system is required to pay annually to the public water system a fee, called the Public Drinking Water Primacy Fee, for each customer service connection.⁶ The fee is based on the number of customers served by the public water system, unless the customer has a large meter, in which case the fee is based on the size of the meter.⁷

The entire fee collected by the public water system, except for 2 percent, which is retained by the public water system to cover the cost of billing and collecting the fee, is

⁶ See Mo. Rev. Stat. § 640.100.5 (2016).

⁷ Id.

remitted to the Missouri Department of Natural Resources, the agency in Missouri that regulates public water systems.⁸ The fees remitted to the Missouri Department of Natural Resources are used to fund activities of the agency’s public drinking water program.

b. Ohio

In Ohio, a person is prohibited from operating a public water system, except for certain schools that are public water systems, without a license, which is required to be renewed annually.⁹ The Ohio Director of Environmental Protection, which is the entity that issues the licenses in Ohio, may deny a license or renewal of a license if the director finds that the public water system was not or will not be operated in substantial compliance with the statutes and regulations applicable to public water systems.¹⁰

The person applying for the license or license renewal is required to pay a fee to the Ohio Director of Environmental Protection, which is based on the number of service connections its public water system has.¹¹ The fees collected by the Ohio Director of Environmental Protection are deposited into Ohio’s Drinking Water Protection Fund, which is administered by the director and required to be used for, among other things, administration of the Safe Drinking Water Act, technical assistance to water companies in Ohio, and support of programs for the prevention of contamination of surface and ground water supplies in Ohio that are sources of drinking water.¹²

c. Rhode Island

In Rhode Island, no person may operate or maintain a public water system unless the public water system is licensed by the Director of the Rhode Island Department of Health.¹³ Upon receipt of an application, the Director of the Rhode Island Department of Health reviews the application and conducts an inspection of the public water system to determine if it meets the requirements for licensure.¹⁴ The Director of the Rhode Island Department of Health is required to grant a license, which is an annual license, to a public water system that meets the licensure requirements and upon submission of the license fee.¹⁵ The fee charged by the Director of the Rhode Island Department of Health is related to the costs incurred in operating the Rhode Island Department of Health’s public drinking water program.¹⁶

The Director of the Rhode Island Department of Health may deny a license if the director determines that the applicant has not demonstrated the ability to comply fully with the statutes and regulations applicable to public water systems.¹⁷ In addition, the director may suspend or revoke for cause, or for a violation of the regulations pertaining to public water systems.¹⁸ The Director of the Rhode Island Department of Health will renew a license if the public water system is in satisfactory compliance with the regulations and a renewal application and fee are timely submitted.¹⁹

⁸ Id.
⁹ See Ohio Rev. Code Ann. § 6109.21 (Banks-Baldwin 2016)
¹⁰ Id.
¹¹ Id. at 3745.11(M).
¹² Id. at 6109.30.
¹³ 46 R.I. Gen. Laws § 46-13-2.1
¹⁴ Id.
¹⁵ Code R.I. Reg. § 31-7-7:2.3
¹⁶ 46 R.I. Gen. Laws § 46-13-2.1
¹⁷ Id.
¹⁸ Id.
¹⁹ Id.

d. Washington

In Washington, public water systems are required to apply for an annual operating permit and pay a fee, which provides revenue to support administration of Washington's drinking water program.²⁰ The operating permit ensures that a water system provides safe and reliable drinking water to the public by serving as an enforcement tool and provides the compliance status and adequacy of the water system. The fee charged is a base fee plus a per connection fee or, for water systems with 95,001 or more service connections, a set fee.²¹ The amount charged is required to be sufficient to cover, but may not exceed, the costs to the Washington Department of Health for administering a program for safe and reliable drinking water.²²

C. THE DEPARTMENT OF PUBLIC HEALTH'S RECOMMENDATIONS REGARDING HOW TO SUSTAIN ITS EFFORTS IN KEEPING PUBLIC DRINKING WATER SAFE

1. FEES

During the 2017 legislative session, the Department is proposing legislation that will authorize the Department to collect fees for the purpose of funding a portion of the Department's public drinking water program. The fees collected will go into the General Fund.

a. LICENSE TO OPERATE

The Department plans to propose legislation to require all water companies, other than water companies owned by state agencies, to obtain a license to operate for each of the public water systems such water company owns, which is modeled after laws in Missouri, Ohio, Rhode Island, and Washington. Under the Department's proposed legislation, a water company is required to apply for a license to operate for each of its public water systems and to pay a fee. Such license is in effect for two years.

The fee the Department proposes to charge for a license to operate a community public water system is based on the number of service connections the community public water system has. The fee the Department proposes to charge for a license to operate a non-community public water system is a flat fee. The water company may collect the fee charged for the license to operate from each of its consumers. However, the amount collected is required to be based on the amount of water consumed by a consumer.

b. DWSRF SERVICE CHARGE

The Department plans to propose legislation authorizing the Department to collect a one-time service charge from a DWSRF borrower for the receipt of a DWSRF loan. The service charge would be calculated similar to a "points" based loan fee schedule for a home mortgage where the service charge would be calculated as a percentage of the loan that the borrower receives. For example, the borrower may be charged 1 percent of the DWSRF loan amount or "1 point."

It is imperative that the service charges imposed on a borrower not result in making the DWSRF loan program less competitive than other construction loans. As such, the rate of amount of the service charge must be flexible to allow for adjustments based on economic

²⁰ Chapter 246- 294 RCW.

²¹ RCW 246-294-070.

²² RCW 70-119A-110.

factors that can vary from time to time, such as market interest rates. To ensure flexibility, the Commissioner, in consultation with the Secretary of the Office of Policy and Management, will annually, or as the Commissioner deems necessary, publish on the Department’s internet website the rate or amount of the service charge. The service charge would be collected from the borrower by the Office of the State Treasurer (“OTT”) at the time of the DWSRF loan closing, along with other existing closing costs, such as interest accrued as part of construction loan.

The Department researched other states DWSRF programs both regionally and nationally to determine the appropriateness of charging fees and the typical methods in which fees are imposed on borrowers. All other New England states (Maine, New Hampshire, Vermont, Massachusetts and Rhode Island) charge fees for DWSRF loans, as do New Jersey and New York. These fees include one or more administrative fees to support DWSRF project development and loan administration and management by the state. In six of these seven northeastern states, administrative fees are established as a percentage of the total project cost and paid in full by the borrower at the loan closing or financed as part of the loan. In all seven of these northeastern states, fees are also annually applied to the outstanding principal balance of the loan until maturity.

Nationally, DWSRF fees of a similar nature are implemented in 42 of the 50 states plus Puerto Rico based on data reported annually by each state to the EPA through the National Information Management System (“NIMS”). A summary of the national DWSRF fee data for all states plus Puerto Rico is provided in Attachment 8. Nationally, over \$570 million in fees have been collected since 1998, and the annual average fee collection from the states that charge fees is approximately \$864,000.

States that charge “up front” loan fees typically range from 1 to 3 percent of the loan amount and are commonly referred to as a “loan origination fee” or “administrative fee.” The fee is typically paid in full by the borrower during the loan closing. Some states allow the upfront fee to be financed as part of the loan. Based on the Department’s research, it believes that a single one-time fee imposed on borrowers at the loan closing and based on a percentage of the total loan amount would be the least complicated method of implementing fees.

The Department anticipates establishing modest fees capable of generating approximately \$200,000 to \$300,000 annually to help offset the costs associated with the Department’s administration of the DWSRF program. Since the DWSRF program is predominantly a revenue bond-based financing program, the amount of funding available each year is subject to legislative authorization as part of Connecticut’s capital budget process. In lean years, fees may need to be slightly increased to make up for a smaller amount of total loan authorization. In more robust years, fees may be slightly reduced to reflect the larger amount of loan authorization. In general, the Department anticipates loan fees would be set in the 0.5 percent to 1.5 percent range. The table below shows the fees that the Department would have generated in the past four state fiscal years with fees in this range.

TABLE 4. AMOUNT GENERATED FROM DWSRF FEES IF CHARGED IN PREVIOUS SFY

State Fiscal Year	Total Amount of Loans	0.5% Fee	1.0% Fee	1.5% Fee
2013	\$42,600,000	\$213,000	\$426,000	\$639,000
2014	\$28,000,000	\$140,000	\$280,000	\$420,000
2015	\$28,200,000	\$141,000	\$282,000	\$423,000
2016	\$25,100,000	\$125,500	\$251,000	\$376,500

2. CONTINUE TO STREAMLINE PROCESSES AND IMPLEMENT LEAN AND QUALITY ASSURANCE PROCESSES

It should be noted that the Department has also undertaken numerous efforts and projects to increase its efficiency and timeliness with respect to its operations. These efforts are ongoing and include the following:

a. Revised Regulations

The Department is currently in the process of drafting, reviewing and amending a number of regulations. One of the regulations that the Department is currently amending is the water company land permit regulations, which have been out of date for some time. These regulations, however, have to go through the regulation adoption process before they are effective and enforceable. The amended regulations, if approved, will shorten the process to obtain a permit and also bring the current regulations up to date.

b. Quality Improvement and LEAN Processes

Another example of the Department's efforts to increase efficiency involves the reviewing of certain programs or projects to ascertain if the program or project may be quality improved ("QI") or "leaned" as part of a LEAN process. For example, the Department has undertaken a QI review of its sanitary survey process of public water systems. Prior to the leaning of the sanitary survey process, the process involved many steps and many days before the Department issued a final sanitary survey report to a public water system after the on-sight sanitary survey and inspection. The Department committed a substantial amount of staff time to leaning the sanitary survey process, which resulted in a reduction in the number of steps from 86 to 68 and a reduction in the number of days within which to issue the survey findings from 59 to 33 days. This QI review process has had the beneficial effect of enhancing the consistency of the engineer surveyors, as well as shortening the time of the sanitary survey process to facilitate the rapid correction of violations to enhance public health.

The Department, with DEEP's assistance, has also undertaken a review of the DWSRF program and determined that the Department could also shorten this program through the LEAN process. The DWSRF program provides long-term low-interest loans to public water systems for the planning, design or construction of sustainable drinking water infrastructure projects. The DWSRF program is overseen by the DWS, but involves coordination and participation with several interagency and external agency partners who are responsible for different elements of the DWSRF program. Funding for the DWSRF program comes from both state and federal sources so there are significant regulatory requirements that must be satisfied before a loan can be executed. Using the LEAN process, in 2013 representatives from all partner agencies mapped out the steps and timelines involved in executing a DWSRF loan. These steps were evaluated to streamline efforts, identify areas where efficiencies can be improved and to eliminate waste and redundancy. The representatives categorized all DWSRF projects into fast and slow moving projects based on the environmental review requirement associated with different types of projects. The results of this effort showed that the time involved with executing a loan for a fast moving project could be improved by 52 percent by reducing the number of days it takes to execute a loan from 344 days to 166 days through the elimination of 38 steps. A similar analysis revealed the time involved with executing a slower moving project could be improved by 17 percent by reducing the number of days it takes to execute a loan from 344 days to 286 days by eliminating 17 steps. The implementation of these LEAN efforts began in April of 2014 with several tasks already completed and longer term tasks still underway.

IV. CONCLUSION

The Department has projected a funding deficit in 2017 for its Drinking Water Section. This deficit in federal grant funding is projected for calendar year 2017. Due to this deficit, the DWS will not be able to support 14 existing DWS employees that work on Safe Drinking Water federal and state laws, including the oversight of the state's 2,500 public water systems.

Further, as noted in this Report, the resources needs of the DWS go beyond the current staffing level of 45 positions. In accordance with the internal needs assessment, the DWS requires, at a minimum, a staffing level of 65 FTEs for a minimal level public drinking water program.

Given the emphasis placed on adequacy of state primacy program resources by EPA and the extensive workload of regulating safe drinking water in Connecticut, the DPH has developed a License to Operate funding mechanism to directly address the projected 2017 funding deficit and moreover build a sustainable program that will have the ability to meet regulatory requirements. This sustainable DPH DWS program would have 65 staff that would cover the seven distinct programmatic unit areas. These seven units make up the DWS that have the collective responsibility to keep public drinking water safe in Connecticut.

ATTACHMENT 1

U.S. Environmental Protection Agency's Quick Reference Guides for each of the National Primary Drinking Water Regulations

The following documents provide a simple and straightforward description of the rule and requirements. The documents include critical deadlines for drinking water systems and states and monitoring requirements.

Arsenic Rule Quick Reference Guide

- [Arsenic and clarifications to compliance and new source monitoring rules: a quick reference guide \(PDF\)](#)

Consumer Confidence Report Rule Quick Reference Guide

- [Consumer confidence report rule: a quick reference guide \(PDF\)](#)

Filter Backwash Recycling Rule Quick Reference Guide

- [Filter backwash recycling rule: a quick reference guide \(PDF\)](#)

Groundwater Rule Quick Reference Guides

- [Ground water rule: a quick reference guide \(PDF\)](#)
- [Ground water rule compliance monitoring \(PDF\)](#)
- [Ground water rule sample collection and transport \(PDF\)](#)
- [Ground water rule triggered and representative monitoring \(PDF\)](#)

Interim Enhanced Surface Water Rule Quick Reference Guide

- [Interim enhanced surface water rule: a quick reference guide \(PDF\)](#)

Lead and Copper Rule Quick Reference Guide

- [Lead and copper rule: a quick reference guide for schools and child care facilities that are regulated under the safe drinking water act \(PDF\)](#)
- [Lead and copper rule: a quick reference guide \(PDF\)](#)

LT1 Quick Reference Guide

- [Long term 1 enhanced surface water treatment rule: a quick reference guide \(PDF\)](#)

LT2 Quick Reference Guides

- [LT2: a quick reference guide for schedule 1 systems \(PDF\)](#)
- [LT2: a quick reference guide for schedule 2 systems \(PDF\)](#)
- [LT2: a quick reference guide for schedule 3 systems \(PDF\)](#)
- [LT2: a quick reference guide for schedule 4 systems \(PDF\)](#)

Public Notification Rule Quick Reference Guide

- [The public notification rule: a quick reference guide \(PDF\)](#)

Stage 2 Rule Quick Reference Guides

- [Stage 2 DBPR: a quick reference guide for schedule 1 systems \(PDF\)](#)
- [Stage 2 DBPR: a quick reference guide for schedule 2 systems \(PDF\)](#)
- [Stage 2 DBPR: a quick reference guide for schedule 3 systems \(PDF\)](#)
- [Stage 2 DBPR: a quick reference guide for schedule 4 systems \(PDF\)](#)
- [Comprehensive disinfectants and disinfection byproducts rules \(stage 1 and stage 2\) quick reference guide \(PDF\)](#)

Standardized Monitoring Framework Quick Reference Guide

- [Standardized monitoring framework \(PDF\)](#)

Surface Water Treatment Rule Quick Reference Guide

- [Comprehensive surface water treatment rules quick reference guide: systems using conventional or direct filtration \(PDF\)](#)
- [Comprehensive surface water treatment rules quick reference guide: systems using slow sand, diatomaceous earth, or alternative filtration \(PDF\)](#)
- [Comprehensive surface water treatment rules quick reference guide: unfiltered systems \(PDF\)](#)

Total Coliform Rule Quick Reference Guide

- [Total coliform rule: a quick reference guide \(PDF\)](#)
- [Revised total coliform rule \(RTCR\): a quick reference guide \(PDF\)](#)

Variances and Exemptions Quick Reference Guide

- [Variances and exemptions: a quick reference guide \(PDF\)](#)

Radionuclides Rule Quick Reference Guide

- [Radionuclides rule: a quick reference guide \(PDF\)](#)

Small Systems Record Keeping Rules Quick Reference Guide

- [Record keeping rules: a quick reference guide \(PDF\)](#)

ATTACHMENT 2

LIST OF THE DEPARTMENT'S REQUIRED PERMITS AND APPROVALS

KEY:

RCSA: Regulations of Connecticut State Agencies

Conn. Gen. Stat.: Connecticut General Statutes

	STATUTE OR REGULATION UNDER WHICH PERMIT OR APPROVAL IS ISSUED	SUBJECT MATTER OF PERMIT OR APPROVAL
1	<i>Conn. Gen. Stat.</i> § 22a-358	Sale of excess water
2	<i>Conn. Gen. Stat.</i> §§ 25-32(b), (c), (d) and (e)	Sale, lease, assignment of water company land.
3	<i>Conn. Gen. Stat.</i> § 25-32(f)	Change of use of water company land
4	<i>Conn. Gen. Stat.</i> § 25-32(p)	Lease of water company land
5	<i>Conn. Gen. Stat.</i> § 25-32(q)	Lease or change of use of water company land for telecommunication towers
6	<i>Conn. Gen. Stat.</i> § 25-32d(a)	Water supply plan
7	<i>Conn. Gen. Stat.</i> § 25-33(b)	New source of water supply and system expansion
8	<i>Conn. Gen. Stat.</i> § 25-33k(b)	Source of water supply abandonment
9	<i>Conn. Gen. Stat.</i> § 25-43c(b)	Recreational activities
10	<i>RCSA</i> § 19-13-B32(e)	Location of structures where excrement is allowed to accumulate on watershed
11	<i>RCSA</i> § 19-13-B32(i)	Storm water discharge at a distance less than distance required
12	<i>RCSA</i> § 19-13-B37	Cross connections of supplies
13	<i>RCSA</i> § 19-13-B51c	Interconnections
14	<i>RCSA</i> § 19-13-B51d(c)(1)	Well site approval
15	<i>RCSA</i> § 19-13-B51d(c)(3)	Arrangement other than easement or ownership for control of sanitary radius
16	<i>RCSA</i> § 19-13-B51f(a)	Construction materials for casing pipe
17	<i>RCSA</i> § 19-13-B51f(b)	Construction materials for dug wells
18	<i>RCSA</i> § 19-13-B51g	Approval of material of covering of dug wells
19	<i>RCSA</i> § 19-13-B51j	Other method by which hand pump may be mounted
20	<i>RCSA</i> § 19-13-B51f(b)	Well permit exception
21	<i>RCSA</i> § 19-13-B80	Addition of chemical substances into water supply
22	<i>RCSA</i> § 19-13-B102(d)	Infrastructure
23	<i>RCSA</i> § 19-13-B102(e)(7)(T)(ii)(V)(1)	New/revised source monitoring

		schedule for Cryptosporidium
24	<i>RCSA § 19-13-B102(e)(7)(T)(iii)</i>	New/revised source monitoring schedule for Cryptosporidium
25	<i>RCSA § 19-13-B102(e)(7)(T)(iii)(III)(1)</i>	Use of an alternate sampling date
26	<i>RCSA § 19-13-B102(j)(12)(C)(iii)</i>	If bin classification changes, request for approval of schedule of treatment level for Cryptosporidium
27	<i>RCSA § 19-13-B102(i)(1)(A)(iv)</i>	Alternate tier 1 notice delivery method
28	<i>RCSA § 19-13-B102(i)(2)(A)(iv)</i>	Alternate tier 2 notice delivery method
29	<i>RCSA § 19-13-B102(i)(3)(A)(iv)</i>	Alternate tier 3 notice delivery method
30	<i>RCSA § 19-13-B102(i)(5)(F)(ii)</i>	Approval of manner by which public notification is conducted
31	<i>RCSA § 19-13-B102(i)(6)(B)(iv)(II)</i>	Approval for electronic transmission of information (NTNC)
32	<i>RCSA § 19-13-B192(i)(6)(B)(vii)</i>	CWS requesting approval to use only the text specified in subparagraph (A)(i) of this subdivision in lieu of the text in subparagraph (A)(i) and (ii)
33	<i>RCSA § 19-13-B102(i)(6)(B)(viii)</i>	CWS serving < 3300 people request to limit aspects of 19-13-B102(i)(6)(B)(viii)(I) through 19-13-B102(i)(6)(viii)(III)
34	<i>RCSA § 19-13-B102(i)(6)(C)(iv)</i>	Deliver consumer notice that their tap was tested by delivery method other than mail
35	<i>RCSA § 19-13-B102(i)(10)(B)</i>	Providing consumer confidence reports in a manner other than mail or direct delivery
36	<i>RCSA § 19-13-B102(j)(13)(A)</i>	Request to receive treatment credits as listed in Table 13-A1
37	<i>RCSA § 19-13-B102(j)(13)(B)(i)</i>	Request to receive 0.5 log Crypto treatment credit for implementing a watershed control program
38	<i>RCSA § 19-13-B102(j)(13)(C)(i)</i>	0.5 log Cryptosporidium treatment credit for presedimentation basin
30	<i>RCSA § 19-13-B102(j)(13)(C)(ii)</i>	0.5 log Cryptosporidium treatment credit for two-stage lime softening
40	<i>RCSA § 19-13-B102(j)(13)(C)(iii)</i>	A Cryptosporidium treatment credit for bank filtration
41	<i>RCSA § 19-13-B102(j)(13)(D)(i)</i>	0.5 log Cryptosporidium treatment credit for combined filter performance
42	<i>RCSA § 19-13-B102(j)(13)(D)(ii)</i>	0.5 log Cryptosporidium treatment credit for individual filter performance
43	<i>RCSA § 19-13-B102(j)(13)(E)(i)</i>	Bag and Cartridge Filters --

		Request for Crypto treatment credit of up to 2 log and up to 2.5 log
44	<i>RCSA § 19-13-B102(j)(13)(E)(ii)</i>	Cryptosporidium treatment credit for membrane filtration
45	<i>RCSA § 19-13-B102(j)(13)(E)(iii)</i>	0.5 log treatment credit for second stage filtration
46	<i>RCSA § 19-13-B102(j)(13)(E)(iv)</i>	2.5 log Crypto treatment credit for slow sand filtration as secondary filter
47	<i>RCSA § 19-13-B102(j)(13)(F)(ii)(I)</i>	Request for approval to receive the corresponding Cryptosporidium treatment credit listed in Table 13-F1 (Chlorine dioxide)
48	<i>RCSA § 19-13-B102(j)(13)(F)(ii)(II)</i>	Request for approval to receive the corresponding Cryptosporidium treatment credit listed in Table 13-F2 (Ozone)
49	<i>RCSA § 19-13-B102(j)(13)(F)(iii)</i>	Requesting approval for Cryptosporidium, Giardia lamblia and virus treatment credits (UV)
50	<i>RCSA § 19-13-B102(e)(7)(E)(iv)(III)(1)</i>	Request approval of corrective actions of significant deficiency
51	<i>RCSA § 19-13-B102(e)(7)(E)(iv)(III)(3)</i>	Request approval of corrective actions of violation
52	<i>RCSA § 19-13-B102(e)(7)(T)(vii)(IV)(4)</i>	Approval of protocol for calculating log removal of viruses
53	<i>RCSA § 19-13-B102(e)(11)(C)(vii)(III)(2)(A)</i>	Request to limit scope of evaluation
54	<i>RCSA § 19-13-B102(h)(10)(B)</i>	Approval of ground water system's completion of corrective action
55	<i>RCSA § 19-13-B102(j)(9)(B)(ii)</i>	Approval of proposed source water treatment of copper and lead
56	<i>RCSA § 19-13-B102(j)(12)(A)(v)(I)</i>	Approval of bin classification
57	<i>RCSA § 19-13-B102(j)(13)(B)(i)(II)</i>	Approval of watershed control program
58	<i>RCSA § 19-13-B102(j)(13)(B)(i)(III)(1)</i>	Changes to watershed control program
59	<i>RCSA § 19-13-B102(j)(13)(B)(i)(III)(2)</i>	Approval of person to conduct watershed sanitation survey

60	<i>RCSA § 19-13-B102(j)(13)(B)(ii)(I)</i>	Alternative source/intake or timing or level of withdrawal management
61	<i>RCSA § 19-13-B102(j)(13)(B)(i)(III)(3)</i>	Approval to withhold certain parts of an approved watershed control plan, annual status reports, and watershed sanitary survey reports
62	<i>RCSA § 19-13-B102(j)(13)(C)(i)(III)(2)</i>	Requesting approval of performance criteria
63	<i>RCSA § 19-13-B102(j)(13)(C)(iii)(V)</i>	Approval of corrective action for exceedance of NTU while bank filtration process is in operation
64	<i>RCSA § 19-13-B102(j)(13)(C)(iii)(VII)(1)</i>	Bank filtration study protocol approval
65	<i>RCSA § 19-13-B102(j)(13)(D)(ii)(III)</i>	Request for waiver from subclause (I) and (II) of section 19-13-B102(j)(13)(D)(ii)
66	<i>RCSA § 19-13-B102(j)(13)(E)(i)(I)</i>	Approval of challenge testing results prior to January 5th, 2006
67	<i>RCSA § 19-13-B102(j)(13)(F)(iii)(III)</i>	Ultraviolet reactor monitoring -- request for protocol approval
68	<i>RCSA § 19-13-B102(j)(14)(A)(iii)</i>	Requesting approval of the corrective action that the ground water system will take to address the fecal indicator-positive sample
69	<i>RCSA § 19-13-B102(j)(B)(ii)(I)</i>	If groundwater system fails to maintain minimum RDC, apply to department requesting to determine if system is providing at least 4-log removal
70	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(I)(1)</i>	Approval of the location at which the ground water system will monitor the RDC and CT value(Ground water systems serving more than 3,300 people)
71	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(I)(2)</i>	Approval of the location at which the ground water system will monitor the RDC and CT value(Ground water systems serving less than 3,300 people)
72	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(II)</i>	Request approval of the ground water system's monitoring and compliance requirements for membrane filtration
73	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(III)(2)</i>	Approval request for alternative treatment technique (compliance)
74	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(III)(1)</i>	Approval request for alternative treatment technique (monitoring)
75	<i>RCSA § 19-13-B102(j)(14)(B)(iii)(III)</i>	Approval request for alternative treatment technique
76	<i>RCSA § 19-13-B102(j)(14)(C)(i)</i>	Discontinuing 4 log treatment

77	<i>RCSA § 19-13-B102(e)(7)(C)(xi)</i>	Waiver from monitoring for dioxin
78	<i>RCSA § 19-13-B102(e)(7)(C)(xii)</i>	Waiver from monitoring for endothall
79	<i>RCSA § 19-13-B102(e)(7)(C)(xiii)</i>	Waiver from monitoring for pesticides, herbicides and PCBs
80	<i>RCSA § 19-13-B102(e)(7)(C)(xiv)</i>	Waiver from monitoring for organic chemicals (VOCs)
81	<i>RCSA § 19-13-B102(e)(7)(T)(ii)(III)(1)</i>	Monitoring exemption from Cryptosporidium (at 5.5 log treatment)
82	<i>RCSA § 19-13-B102(e)(8)(C)(ii)</i>	CWS or NTNC reduced monitoring(number of sites)
83	<i>RCSA § 19-13-B102(e)(8)(C)(iv)(II)</i>	Reduced monitoring frequency of lead and copper (Any CWS or NTNC)
84	<i>RCSA § 19-13-B102(e)(8)(C)(iv)(III)</i>	Reduced monitoring frequency of lead and copper (A small or medium CWS or NTNC)
85	<i>RCSA § 19-13-B102(h)(9)(A)(iv)</i>	Request to not report source water monitoring results
86	<i>RCSA § 19-13-B102(j)(13)(E)(ii)(III)(6)</i>	Conduct less frequent direct integrity testing of membrane
87	<i>RCSA § 19-13-B102(j)(14)(B)(i)(I)</i>	Ground water system is not subject to source water monitoring (existing)
88	<i>RCSA § 19-13-B102(j)(14)(B)(ii)(I)</i>	Ground water system is not subject to source water monitoring (new)
89	<i>RCSA § 19-13-B102(j)(13)(E)(ii)(III)(6)</i>	Conduct less frequent direct integrity testing of membrane
90	<i>RCSA § 19-13-B102(j)(13)(E)(ii)(IV)(1)</i>	Request to use alternative parameter for continuous indirect integrity monitoring
91	<i>RCSA § 19-13-B102(n)(4)</i>	Approval of a system of observation wells to monitor an unconsolidated or unconfined aquifer
92	<i>RCSA § 19-13-B102(e)(7)(T)(ii)(III)(2)</i>	Monitor exemption from Cryptosporidium sampling
93	<i>RCSA § 19-13-B102(e)(7)(T)(iv)(I)</i>	New/revised sampling locations
94	<i>RCSA § 19-13-B102(e)(7)(T)(iv)(II)</i>	Collect source water samples post-chemical treatment
95	<i>RCSA § 19-13-B102(e)(7)(T)(iv)(VI)</i>	Request of approval of sampling locations
96	<i>RCSA § 19-13-B102(e)(7)(T)(viii)(II)(1)</i>	Alternate temperature sample location (post disinfection)

97	<i>RCSA § 19-13-B102(e)(7)(T)(viii)(II)(2)</i>	Alternate pH sample location (post disinfection)
98	<i>RCSA § 19-13-B102(e)(12)(C)(ii)(II)</i>	Sampling a representative ground water source
99	<i>RCSA § 19-13-B102(e)(12)(C)(v)(I)</i> <i>RCSA § 19-13-B102(e)(12)(C)(v)(II)</i>	Request to determine if TC+ is due to distribution system deficiency and cause of the hit
100	<i>RCSA § 19-13-B102(e)(12)(C)(v)(III)</i>	Request to determine if MCL violation of TC+ is due to previously-documented distribution system deficiency
101	<i>RCSA § 19-13-B102(e)(12)(F)(i)</i>	Invalidation of fecal indicator-positive ground water source sample
102	<i>RCSA § 19-13-B102(e)(12)(G)</i>	Change of sampling location (after treatment)
103	<i>RCSA § 19-13-B102(h)(9)(B)(ii)</i>	Request to not report sampling schedules
104	<i>RCSA § 19-13-B102(h)(10)(C)</i>	For ground water systems; approval that TC+ was collected at a time that had a condition that caused TC+
105	<i>RCSA § 19-13-B102(e)(11)(C)(i)(III)(3)</i>	Request additional time for compliance of MCL of <i>Cryptosporidium</i>
106	<i>RCSA § 19-13-B102(e)(12)(C)(ii)(I)</i>	Ground water source sample time extension of 24-hour limit (total coliform)
107	<i>RCSA § 19-13-B102(e)(12)(C)(iii)</i>	Ground water source sample time extension of 24-hour limit (fecal indicator)
108	<i>RCSA § 19-13-B102(e)(12)(F)(ii)</i>	If sample is invalidated (fecal indicator), request for second sample time extension
109	<i>RCSA § 19-13-B102(i)(6)(B)(ii)</i>	Extension of public education regarding lead action levels from taps
110	<i>RCSA § 19-13-B102(i)(6)(B)(v)</i>	NTNC extension of implementation deadline request (in accordance with <i>RCSA</i> section 19-13-B102(i)(6)(B)(iv))
111	<i>RCSA § 19-13-B102(j)(12)(C)(ii)(II)</i>	Extension of compliance deadline for <i>Cryptosporidium</i> treatment (For systems serving < 10,000 people)
112	<i>RCSA § 19-13-B102(e)(7)(E)(iv)(IV)(2)</i>	Modify corrective action plan for a violation
113	<i>RCSA § 19-13-B102(e)(7)(T)(vii)</i>	Significant change in disinfection process
114	<i>RCSA § 19-13-B102(e)(11)(C)(vii)(III)(2)(A)</i>	Request to limit scope of evaluation
115	<i>RCSA § 19-13-B102(j)(4)(D)</i>	Alternative filtration technology

116	<i>RCSA § 19-13-B102(j)(7)(B)(iii)(III)</i>	Change in new source or long-term change in treatment for corrosion control
117	<i>RCSA § 19-13-B102(j)(8)(H)</i>	Request of modification of department's optimal corrosion control treatment
118	<i>RCSA § 19-13-B102(j)(9)(B)(vi)</i>	Request of modification of department's source water quality control treatment or source water corrosion control treatment (regarding lead and copper)
119	<i>RCSA § 19-13-B102(j)(13)(E)(i)(X)</i>	Use of a modified filter
120	<i>RCSA § 19-13-B102(j)(13)(E)(ii)(II)(8)</i>	Use of a modified membrane
121	<i>RCSA § 19-13-B102(j)(14)(A)(iv)(II)(1)</i>	Approval of modifications to action plan
122	<i>RCSA § 19-13-B102(i)(6)(A)(i)</i>	Approval of all written public education materials
123	<i>RCSA § 19-13-B102(i)(6)(B)(ii)(III)</i>	Approval to mail public education information to consumers
124	<i>RCSA § 19-13-B102(i)(6)(B)(ii)(VI)</i>	Approval of educational content and activities selected
125	<i>RCSA § 19-13-B102(i)(6)(B)(iii)(IV)</i>	Approval of schedule for repeating educational tasks
126	<i>RCSA § 19-13-B102(g)</i>	Approval of operating tests
127	<i>RCSA § 19-13-B102(e)(7)(D)(i)</i>	Approval of sample siting plan
128	<i>RCSA § 19-13-B102(f)(1)</i>	Approval for special provisions for less than 25 psi
129	<i>RCSA § 19-13-B102(k)</i>	Approval of variances & exemptions to B102(e)(6)(B)
130	<i>RCSA § 19-13-B102(s)</i>	Approval of a program to reduce the unaccounted for water
131	<i>RCSA § 19-13-B102(t)</i>	Approval of applications, plans & waivers

ATTACHMENT 3

ASDWA's Connecticut Specific Resource and Needs Report Submitted to DWS from ASDWA through Lori Walker, Cadmus November 2016

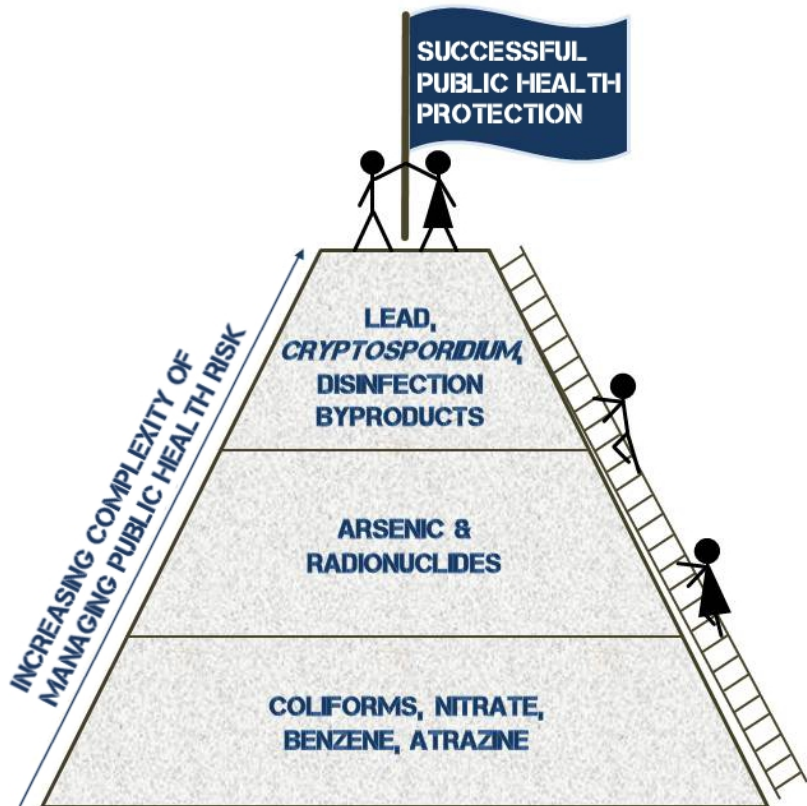
The Safe Drinking Water Act for Public Health Protection

Under the Safe Drinking Water Act (“SDWA”), the U.S. Environmental Protection Agency (“EPA”) establishes safety standards designed to ensure that consumers served by public water systems across the country receive high quality drinking water.²³ In addition to public health protection benefits, achieving the goals of the SDWA provides economic benefits. Proactively avoiding incidents such as waterborne disease outbreaks can prevent loss of life and reduce considerable health care costs. Businesses also require high quality water to meet strict standards associated with their operations or manufacturing processes.

Protecting our nation’s drinking water requires intensive effort on a daily basis by public water system operators, with support from state staff and technical assistance providers. The task grows increasingly challenging in the face of emerging contaminants and other threats, such as water security risks and sustainability or resilience efforts that must be instituted in the face of climate change.

The EPA and states implement regulations that protect consumers from these threats. These regulations establish either public health standards for allowable levels of contaminants in drinking water or treatment approaches to remove contamination and protect source water. The figure at right illustrates some of the types of contaminants or other constituents of concern in drinking water that states

and public water systems manage and the increasing workload required to protect public health. More than just workload volume increases as new contaminants are regulated. Surveillance and solutions



²³ Significant portions of the text in this write-up were previously released in the December 2013 report by ASDWA, “Insufficient Resources for State Drinking Water Programs Threaten Public Health: an Analysis of State Drinking Water Programs’ Resources and Needs.”

for problems at the top of the pyramid, such as lead and *Cryptosporidium*, are more complicated and highly technical, demanding greater state involvement by very technical staff and more skilled public water system operators.

The 1993 *Cryptosporidium* outbreak in Milwaukee, Wisconsin killed 104 people and sickened 403,000 prompting promulgation of new requirements to specifically monitor for *Cryptosporidium* in the 1996 Amendments to the SDWA. In 2014, when the Elk River in West Virginia was contaminated by a spill of 4-Methylcyclohexanemethanol (“MCHM”) from an industrial site,

300,000 customers in nine counties were instructed not to use the water to drink, cook, bathe, or wash, leading to school and business closures. More than 700 people reported symptoms of nausea and rashes to the state Poison Control Center, including 14 hospitalizations. Vulnerabilities to such an incident may have been caught in a source water protection assessment; unfortunately the state or water utilities hadn’t conducted one for this water supply. The recent lead crisis in Flint, Michigan poisoned up to 12,000 children, despite requirements under the Lead and Copper Rule that have been in place since 1993 requiring systems to evaluate for corrosion potential. These last two incidents highlight that implementation of the SDWA is ineffective unless there are adequate staff and resources to implement them.

Risks from lead and Cryptosporidium were well-documented in the 1996 SDWA Amendments: problems like the lead contamination in Flint, MI or the Cryptosporidium outbreak in Milwaukee, WI are partly due to inadequate resources for strong state oversight.

Unlike most environmental programs, the drinking water program builds in prevention and technical assistance to help public water systems remain in or return to compliance. When problems arise, tracking and addressing situations for public water systems with violations of drinking water standards, or ones that are nearing a threshold that could cause problems, requires significant state resources. Assistance for a public water system with recurring compliance problems requires, on average, twice as many hours of staff time as a public water system that has no compliance problems, and some noncompliant systems can require ten times as much work as compliant systems.

Other activities that are not required by the SDWA are essential as part of a comprehensive drinking water protection program in Connecticut. Examples of these activities include:

- Overseeing the approval process for treatment and pilot studies to help public water systems make decisions about treatment choices. While not explicitly required by federal regulation, careful siting and engineering of wells, treatment plants, and other infrastructure are critical state functions that ensure safe delivery of drinking water.

- Requiring additional monitoring for contaminants not regulated by EPA. Examples of these contaminants found in New England drinking water supplies include Methyl-Tertiary-Butyl-Ether (“MTBE”), an automotive fuel additive that has been found in some ground water sources; perchlorate, which is found in the solid propellant for rockets, missiles and fireworks; perfluorooctanoic acid (PFOA), and perfluorooctanesulfonic acid (PFOS), historically used to create materials highly resistant to stains, water, oil, or grease and used in products such as carpets, clothing, fabrics for furniture, and paper packaging for food and also used for firefighting at airports and some factories. EPA has set a health advisory level for some of these contaminants and is studying whether the public health risks warrant promulgation of a national drinking water standard, but in the meantime, states must address valid citizen concerns with their own research, technical solutions, and helpful outreach materials.

- Enforcing state laws that set limits for drinking water constituents that are not the subject of EPA regulations. When EPA’s decision to regulate lags behind a state’s timeline to address a problem, some states promulgate their own health standard. For instance, Connecticut established an Action Level for the gasoline additive MTBE and provides bottled water or treatment systems for private wells that exceed it. The drinking water program also implements protection programs or policies to address local concerns (e.g., such as presence of cyanotoxins from harmful algal blooms.)

- Developing water resources to ensure that public water systems will have adequate water supplies for their customers both now and in the future. This work extends beyond forecasting routine demand. States also help water supplies with drought management planning and evaluation of water security threats and emergency events. Connecticut has invested in this area after feeling the effects of two storms in 2011, Tropical Storm Sandy and an early snowstorm (see text box on the following page). States practice demand management approaches (such as water conservation and water rate pricing structures) and supply-oriented ideas (such as use of recycled water for non-potable water needs, desalination, and emergency connections with neighboring utilities with more capacity.)

All of these efforts impact the states’ abilities to continue to manage the day-to-day demands of their drinking water programs, which are already constrained by limited staff resources. In the case of major disruptive events, states may have to significantly re-prioritize their workload (e.g., reduce on-site inspections or technical assistance), as they did, for example, in the aftermath of Hurricane Katrina and Tropical Storm Irene, in order to cover the time or monetary costs associated with disaster events.

Connecticut: Assessing Emergency Preparedness



Connecticut was heavily affected by two storms in 2011—Tropical Storm Irene in August and an early snowstorm in October. Both storms caused lengthy power outages that impacted large areas of the state and caused many water systems to lose water pressure, making them susceptible to contamination. Numerous water systems issued boil water advisories that lasted many days.

- Tropical Storm Irene: 137 small water systems (serving 16,624 customers) issued boil water advisories to their consumers for an average of five to six days.
- Early Snowstorm: 121 small water systems (serving 20,212 customers) issued boil water advisories to their consumers.



Post-storm evaluations determined that many small water systems were ill-prepared for an extended period without power and lacked adequate technical, managerial and financial capabilities to handle the crisis. Large water systems faced other challenges. Most large water systems were able to sustain access to their water supplies and maintain water pressure, but some water systems were forced to run generators for large pump stations and treatment plants for more than seven days. Water systems found it difficult to communicate with local and state emergency managers (who are not part of the state drinking water program) about the urgent need to restore street power to areas where water system components, such as water treatment plants, were located.



The devastation of the two storms prompted the Connecticut Department of Public Health to develop an emergency preparedness strategy to ensure that a safe and adequate water supply is reliably available for the 2.7 million Connecticut residents served by community public water systems. In the future, these systems will have emergency power capacity and will be better trained and equipped to maintain water quality in emergencies, avoiding the need for lengthy boil water advisories and preventing increased risks to public health.

NATIONAL CRISIS IN FUNDING FOR STATE DRINKING WATER PROGRAMS

A 2011 analysis of state drinking water programs by the Association of State Drinking Water Administrators (“ASDWA”) and the EPA showed that the resources for state drinking water programs had sharply declined leaving a substantial deficit between needs and available resources. This deficit limits states’ ability to implement the SDWA and protect public health.

Between 2001 and 2011, workloads increased but states saw a 26 percent decrease in available resources for their programs. Inflation and a 25 percent increase in the average cost for a full-time equivalent (“FTE”) staff position exacerbated the impact of flat or declining state program budgets. The current economic climate has not improved, and state programs continue to experience challenges with implementation of the SDWA.

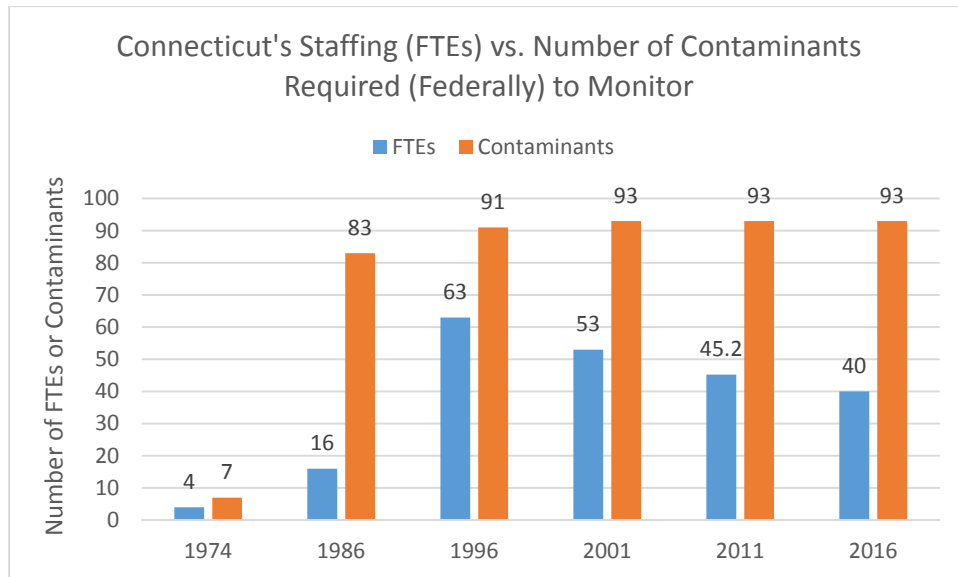
2011 ASDWA/EPA Resource

The 2011 ASDWA/EPA analysis of resources needed by state drinking water programs was very detailed and comprehensive. It modeled 112 key activities performed by state staff to implement the SDWA, including program administration and IT, capacity development, operator certification, rule implementation for the national primary drinking water regulations, and enforcement. Ten states, including Connecticut, ground-truthed the model and piloted its calculations to determine whether it calculated resources correctly. A list of all activities is included as Attachment 1.

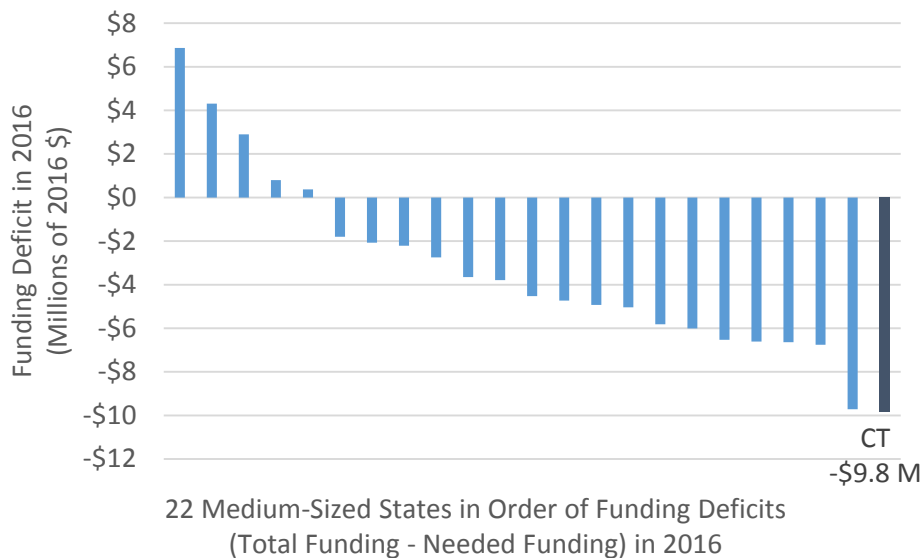
Since the 1996 Amendments to the SDWA, drinking water program requirements have become more complex and funding has further diminished. State drinking water programs have been forced to rely more heavily on EPA’s Drinking Water State Revolving Fund (“DWSRF”) capitalization grant to fund operations, effectively limiting the availability of future loans for infrastructure improvements. While states have worked diligently to prioritize their activities and resources to be as cost-effective as possible in implementing the SDWA, the resource gap ultimately leads to greater public health risk. States must make tough choices about how to use their limited resources, which result in fewer inspections and site visits to public water systems; less protection of drinking water source waters; less assistance to public water systems; and less ability to prevent situations that can compromise public health, including planning for sustainability and resiliency or responding to emergency events.

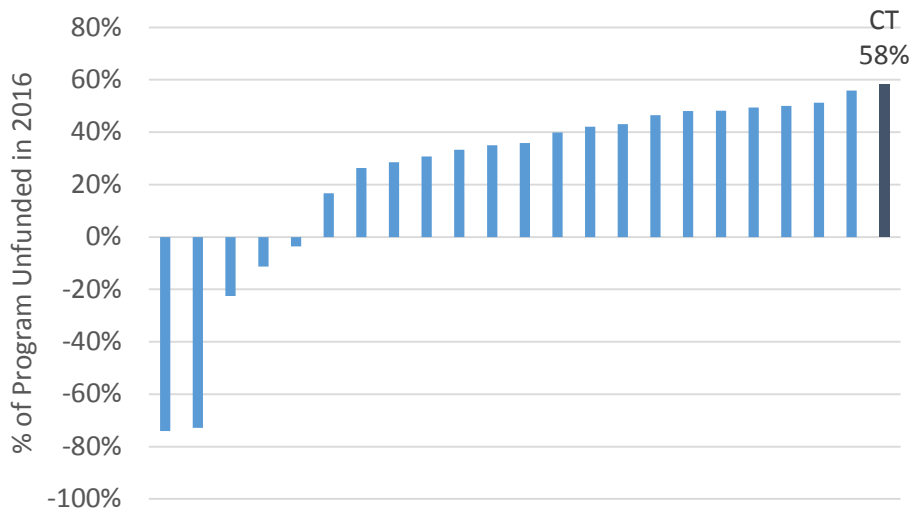
CONNECTICUT’S CRITICAL RESOURCE DEFICIT

Over the past 20 years, Connecticut is one of 27 states that has experienced a substantial decline in their ability to meet their drinking water resource needs, according to research by ASDWA and EPA. From a peak of 63 FTEs in 1996, the Connecticut safe drinking water program staffing decreased to 53 FTEs in 2011 and is currently staffed by 40 FTEs, or a total decrease of 36 percent in staffing levels since 1996. Staffing resources in Connecticut’s drinking water program have steadily declined over the past 20 years, meanwhile contaminants federally required to be monitored by the SDWA have increased.



The result of this long-running decline in resources means that as of 2016 Connecticut ranks 22nd out of 22 among similar-sized states with the highest deficit between resource needs and program funding. As the graphic shows, only 4 states have adequate resources for their programs. While many states face challenges, Connecticut faces the biggest gap measured by dollars and cannot fund 58 percent of its program activities.





22 Medium-Sized States by % of Program Unfunded in 2016

Lack of resources forces Connecticut to set priorities and search for efficiencies—which is valuable—but also creates risks or vulnerabilities because the state cannot accomplish some important and necessary tasks. For instance, sanitary surveys are one of the most important preventative activities and involve state staff inspection of a water system to identify any sanitary defects or significant deficiencies in complying with SDWA regulations. With adequate resources, a state emphasizes preparation before conducting a sanitary survey, coordinates closely with compliance and enforcement staff about any problems, and then promptly shares information back to these key staff. A visit also may identify the need for engineering involvement, or capacity development to improve technical, managerial, or financial capacity for the water system. Once identified, well-funded programs usually revisit the water system to confirm that problems have been addressed. Connecticut can only minimally provide these services, and experiences long delays in writing reports and sharing information among staff. The delay may affect the water system’s efforts to address any problems and leave customers exposed to drinking water supplies from public water systems with undetected or detected and uncorrected significant deficiencies in SWDA regulations.

Connecticut’s program needs have been well-documented since 1989 and show a widening gap between the program’s resources and the staff needed to accomplish its safe drinking water mission. Only an infusion of new funding can reduce vulnerability that places Connecticut’s citizens at risk.

State Program Activities

Minimum Base Program Activities	Comprehensive Program Activities	Excluded Activities in 2016	Divided Evenly Among Previous Three Categories
Engineering plan review (non contaminant-specific)	Source water assessment	Radon Rule	Administration and supervision not included in the overhead rates in Step 3 (FTEs)
Sanitary surveys	Emergency Response	Respond to questions on non-PWSs	Administrative support staff (FTEs)
Lab certification/Review Lab Capacity	Counter Terrorism	Oversight of bottled water	
Consumer Confidence Report Rule	Special Projects		
Public Notification Rule	Additives (e.g., fluoride)		
Operator certification	Non-SDWA monitoring (e.g., MTBE)		
Training	Special projects (e.g., necessary monitoring, data entry and mgmt.)		
DWSRF management	Analytical costs for compliance sampling (\$)		
Capacity development	Operation permits		
Enforcement	Administration of fee programs		
Total Coliform Rule	Public outreach coordinator(s)		
SWTR, IESWTR, FBRR, LT1ESWTR, and LT2ESWTR	Backflow prevention / Cross-cxn. control		
1979 TTHM Rule and Stage 1 and Stage 2 Disinfectant/Disinfection Byproducts Rules	Operator courses (training classes)		
Ground Water Rule	Other (please detail below)		
Phase II/V, Arsenic, and UCMR	Travel costs		
Lead and Copper Rule and LCR Minor Revisions			

ATTACHMENT 4

[EPA Headquarters' Director, Peter Grevatt, of the Office of Drinking Water and Groundwater Memo Regarding EPA Drinking Water State Revolving Fund \(DWSRF\) Unliquidated Obligations \(ULO\) Reduction Strategy, April 2014](#)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 14 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Drinking Water State Revolving Fund (DWSRF) Unliquidated Obligations (ULO) Reduction Strategy

FROM: Peter Grevatt, Director
Office of Ground Water and Drinking Water

TO: Water Division Directors
Regions I-X

This memorandum presents a national strategy to reduce unliquidated obligations (ULO) under the Drinking Water State Revolving Fund (DWSRF). DWSRF ULO are unspent funds from grants provided to states by the Environmental Protection Agency to assist drinking water systems in financing needed infrastructure improvements. States may also use a portion of their DWSRF grant funds as set asides for other important public health protection purposes including helping water systems, particularly small systems, strengthen their technical, managerial and financial capacity; implementing state Public Water System Supervision (PWSS) programs; and providing support for source water protection. The DWSRF ULO reduction strategy is directed to the timely expenditure of federal funds for these activities and supports our broader collective goal of maximizing the use of all DWSRF resources to advance investment in the reliable delivery of safe drinking water to the American people.

The strategy focuses on two key objectives: 1) liquidation of past years' grant funds and 2) maintenance of lower levels of ULO in future years. These objectives are framed within the expectation that states will work towards operating their DWSRFs to have ULO at the lowest practical level while recognizing the varying institutional and financial circumstances of each state. The objectives are accompanied by a set of practices to assist states and to encourage them to operate the best infrastructure financing programs they are able within their respective institutional frameworks. These objectives and practices are described in further detail below. The strategy's overall approach is further reinforced by the "best practices" identified by both the Council of Infrastructure Financing Authorities (CIFA) and the Association of State Drinking Water Administrators (ASDWA).

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ATTACHMENT 5

[EPA Drinking Water Action Plan, November 2016](#)



Drinking Water Action Plan



Office of Water

November 2016

ATTACHMENT 6

Excerpt from Connecticut DPH's 2016 DWSRF Capitalization Grant Award dated 9/7/2016:

Programmatic Condition Drinking Water SRF Program

17. Adequate Staffing

The Recipient agrees to maintain sufficient staffing levels for the purposes of ensuring the administrative and managerial capability to operate the DWSRF program. Program staff must engage in an appropriate level of participation at national and regional meetings. As specified in approved work plans, the recipient's staff and managers will be expected to utilize grant funds to attend meetings, conferences and other industry-related gatherings, in the Region and elsewhere if needed, to maintain the appropriate contacts and knowledge to continue to address current drinking water related issues, including the DWSRF program. The Recipient must include documentation in each grant application which demonstrates it has adequate personnel and resources to manage the DWSRF program.

ATTACHMENT 7

Excerpt from 2013 DWSRF Program Evaluation Report dated 7/23/2014

d. Unliquidated Obligations

It should be noted that identifying and meeting staff needs will be critical to future success in maintaining low ULO. Adequate project staff will be necessary to oversee the increase in infrastructure projects funded and carry out set-aside activities. The vast majority of staff in the DWSRF program are currently funded through the DWSRF set-asides. EPA recognizes that if the amount appropriated to the DWSRF program continues to decrease from year to year, the amount available for states to administer the DWSRF program and support other drinking water activities (which is based on a percentage of the total capitalization grant) will also decrease.

EPA encourages the state to consider alternative funding sources that could support DWSRF staff and other drinking water activities, particularly those funded under the administration, program management and local assistance set-asides.

ATTACHMENT 8

State	DWSRF Fees				
	Does the State charge fees for DWSF Loans?	First Year Charging Fees	Total Fee Income (thru 6/30/16 in millions)	# Years charging fees	Ave. Fee Income/Year
AK	Yes	2001	5.63	15	\$375,333
AL	Yes	2000	18.75	16	\$1,171,875
AR	Yes	2000	16.67	16	\$1,041,875
AZ	Yes	1999	59.05	17	\$3,473,529
CA	No	N/A	0	0	\$0
CO	Yes	1998	39.2	18	\$2,177,778
CT	No	N/A	0	0	\$0
DE	Yes	2001	13.21	15	\$880,667
FL	Yes	2000	14.25	16	\$890,625
GA	Yes	2001	5.42	15	\$361,333
HI	Yes	2001	21.46	15	\$1,430,667
IA	Yes	2000	16.25	16	\$1,015,625
ID	Yes	2012	1.87	4	\$467,500
IL	Yes	1999	50.32	17	\$2,960,000
IN	Yes	2004	0.13	12	\$10,833
KS	Yes	1998	13.28	18	\$737,778
KY	Yes	2002	3.26	14	\$232,857
LA	Yes	2000	6.31	16	\$394,375
MA	Yes	2002	12.49	14	\$892,143
MD	Yes	1999	5.23	17	\$307,647
ME	Yes	1999	4.23	17	\$248,824
MI	No	N/A	0	0	\$0
MN	Yes	1999	7.37	17	\$433,529
MO	Yes	2000	11.63	16	\$726,875
MS	Yes	1998	10.95	18	\$608,333
MT	Yes	1999	19.43	17	\$1,142,941
NC	Yes	1999	12.25	17	\$720,588
ND	Yes	2000	9.15	16	\$571,875
NE	Yes	1999	11.7	17	\$688,235
NH	Yes	2000	13.49	16	\$843,125
NJ	Yes	2014	3.74	2	\$1,870,000
NM	Yes	2000	2.68	16	\$167,500
NV	No	N/A	0	0	\$0
NY	Yes	1997	46.22	19	\$2,432,632
OH	Yes	1999	13.36	17	\$785,882
OK	Yes	1998	18.86	18	\$1,047,778
OR	No	N/A	0	0	\$0
PA	No	N/A	0	0	\$0
PR	No	N/A	0	0	\$0
RI	Yes	2000	8.86	16	\$553,750
SC	Yes	1998	2.79	18	\$155,000
SD	Yes	1999	12	17	\$705,882
TN	No	N/A	0	0	\$0
TX	Yes	2000	28.45	16	\$1,778,125
UT	Yes	2000	9.19	16	\$574,375
VA	Yes	2005	1.29	11	\$117,273
VT	Yes	2004	4.41	12	\$367,500
WA	Yes	1999	9.28	17	\$545,882
WI	No	N/A	0	0	\$0
WV	Yes	2000	4.73	16	\$295,625
WY	Yes	1999	1.88	17	\$110,588

ATTACHMENT 9

BACKGROUND INFORMATION REGARDING FEES CHARGED IN MODELED STATES

MISSOURI

There are operator certification fees as follows: the exam fees is \$45, retaking the exam is a \$20 fee, reciprocity fee is \$65, Certificate renewal fee is \$45, a late fee of \$10 a month and up to \$20 is charged.

The annual connection fee amount is based on number of service connections and meter size, but is paid by the customers of the community water systems rather than the water system due to a state constitutional restriction on assessing fees of public entities. Fee amount for 1" meter ranges from \$3.24 to \$1.08 annually based on system size. 1 to 1,000 connections is \$3.24 per connection; 1,001 to 4,000 connections is \$3.00 per connection; 4,001 to 7,000 connections is \$2.76 per connection; 7,001 to 10,000 connections is \$2.40 per connection; 10,001 to 20,000 connections is \$2.16 per connection; 20,001 to 35,000 connections is \$1.92 per connection; 35,001 to 50,000 connections is \$1.56 per connection; 50,001 to 100,000 connections is \$1.32 per connection; More than 100,000 connections is \$1.08 per connection. Fee amount for meters greater than 1" but less than or equal to 2" is \$7.44. Meters greater than 2" but less than or equal to 4" is \$41.16. Meters greater than 4" is \$82.44. Customers served by multiple connections: fee is based on the above rates for each connection, but no single facility shall pay a total of more than \$500 annually.

The SRF loan program has an annual fee of 0.5% on the outstanding loan balance.

They also have lab certification fees. Organic chemicals are \$2700 every three years. Inorganic chemicals cost \$1500 every three years. The lab audit fee is \$2500.

Lab services are as follows: Transient non-community system (any size) is \$100. Surface water users (any size) except TNC's is \$500 All consecutive systems and systems that use groundwater except transient non-community water systems: the fee is based on number of connections. Connections less than 4100 are \$200; Connections 4100 to 7599 is \$300; Connections 7600 or more is \$500.

In 2014, the MO legislature authorized the Safe Drinking Water Commission to make adjustments to the fee amounts (versus the need for legislative renewal every 5 years). Prior to 2014 this fee structure needed to be renewed every 5 years by the Missouri Legislature. In 2014 the legislature authorized the Missouri Safe Drinking Water Commission to make adjustments to the fee structure, as long as a public participation process was followed, and the legislature was granted the ability to review the proposed fee structure before it went into effect. This new process sunsets in 2024.

OHIO

Ohio has a \$150.00 plan review fee, plus 35/100 of a percent of the estimated project cost, not to exceed \$20,000. 50% of the collected penalties go to the Drinking Water Program and its use. The tables below show the annual license to operate fee for different public water systems, and different sizes. Ohio also has operator certification fees. There is a \$45 exam application fee, plus different Class Operator fees: Class A Operator is \$35, Class I Operator is \$60, Class II Operator is \$75, Class III Operator is \$85, and Class IV Operator is \$100. The certificate must be renewed every two years, with a higher cost as the operator class goes up: Class A renewal is \$25, Class I renewal is \$35, Class II is \$45, Class III renewal is \$55, and Class IV is \$65. The SRF loan program has two fees, a 1% loan origination fee to the Ohio Environmental Protection Agency and a 0.35% origination fee to the Ohio Water Development Authority. Ohio has lab certification fees that are due every three years as shown in the table below.

Annual License to Operate Fee	
Community PWS	
Number of Service Connections	Fee Amount(flat fee or per connection)
Not more than 49	\$112
50 to 99	\$176
100 to 2,499	\$1.92 per
2,500 to 4,999	\$1.48 per
5,000 to 7,499	\$1.42 per
7,500 to 9,999	\$1.34 per
10,000 to 14,999	\$1.16 per
15,000 to 24,999	\$1.10 per
25,000 to 49,999	\$1.04 per
50,000 to 99,999	\$0.92 per
100,000 to 149,999	\$0.86 per
150,000 to 199,999	\$0.80 per
200,000 or more	\$0.76 per

Annual License to Operate Fee	
TNC	
Number of wells or sources	Fee amount
1	\$112
2	\$112
3	\$176
4	\$278
5	\$568
Surface Water Source	\$792

Annual License to Operate Fee	
NTNC	
Number of Service Connections	Fee Amount (flat fee)
Fewer than 150	\$112
150 to 299	\$176
300 to 749	\$384
750 to 1,499	\$628
1,500 to 2,999	\$1,268
3,000 to 7,499	\$2,816
7,500 to 14,999	\$5,510
15,000 to 22,499	\$9,048
22,500 to 29,999	\$12,430
30,000 or more	\$16,820

Test Type	Fee Amount (once every three years)
MMO-MUG	\$2,000
MF	\$2,100
MMO-MUG AND MF	\$2,550
Organic Chemical	\$5,400
Trace Metals	\$5,400
Standard Chemistry	\$2,800
Limited Chemistry	\$1,550

RHODE ISLAND

Rhode Island has operating permit fees that vary for different types of water systems, as well as the different sizes:

For a TNC public water system, it costs \$200 for an operating permit, the permit for NTNC PWS costs \$330, and the Community PWS costs \$1.50 per connection for the operating permit. There is a minimum of \$330 and max of \$32,500 for the community water system.

Rhode Island charges for the ABC exam for the operator certification, but the money goes to the Association of Boards of Certification.

WASHINGTON

Plan Review: All costs depend on the system size.

1. Water system plan (New and Updated) \$491 - \$5,484.
2. Minor water system plan alteration \$115 - \$1,349.
3. All types of filtration or other complex treatment processes \$710-\$2,922.
4. Chemical addition only, such as ion exchange, hypochlorination, or fluoridation, \$205 - \$994.
5. Complete water system (an additional fee is assessed for review of treatment facility, if any), \$491 - \$2,061.
6. System modifications requiring a detailed evaluation to determine whether the system, as modified, will comply with regulations, \$348 - \$1,626.
7. New source only (an additional fee shall is assessed for review of treatment facility, if any), \$382 - \$1,172.
8. One or more of the following submitted as a package and not requiring a detailed evaluation as determined by the department: Water line installation, booster pump station, modifications to source pumping, piping-valving, controls or storage reservoir (an additional fee is assessed for review of treatment facility, if any), \$241 - \$1,027.
9. Well-site evaluation and approval including the site inspection and hydrogeologic information review, \$309 - \$710

Sanitary Survey: The fee depends on the number of service connections as shown in the table below.

Sanitary Survey Fees	
Number of Connections	Flat Fee
<100	\$510
100-999	\$918
1,000- 9,999	\$1,836
10,000 or more	\$102/ hour

Operating Permit: They have an annual fee of a \$100 base fee, plus an additional per connection fee:

Additional Connection Fee	
Number of Connections	Fee
<15	\$1.30/ connection
15 - 99	\$1.25/ connection
100 - 499	\$1.20/ connection
500 - 999	\$1.15/ connection
1,000 - 9,999	\$1.10/ connection
10,000 - 95,000	\$1.05/ connection
More than 95,000	\$100,000

Operator Certification Fees: Washington has several operator certification fees, starting with application fees. They charged an \$87 application fee for WTPO (Water Treatment Plant Operator), WDM (Water Distribution Manager) and WDS (Water Distribution Specialist). There is a \$51 application fee for CCS (Cross Connection Specialist), BAT (Backflow Assembly Tester), and BTO (Basic Treatment Operator). There is a \$42 for renewal fee. There is also a fee for the system certification, depending on the number of service connections: fewer than 601 connections is 132, between 601 and 6,000 connections is \$403, a \$536 fee for systems with between 6,001 and 20,000 connections, and an \$809 fee for systems with greater than 20,000 connections.

Special Services: They charge \$102/ hour for special services.

SRF Loan Program: They have a 1% loan fee.

ATTACHMENT 10

[ASDWA's "Insufficient Resources for State Drinking Water Programs Threaten Public Health. An Analysis of State Drinking Water Program's Resources and Needs", December 2013](#)

