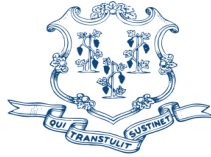


STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Manisha Juthani, MD
Commissioner



Ned Lamont
Governor
Susan Bysiewicz
Lt. Governor

Drinking Water Section

September 26, 2024

Ms. Andrea Traviglia
USEPA Region 1 – New England
5 Post Office Square
Mail Code OEP06-2
Boston, MA 02109-3912
Traviglia.Andrea@epa.gov

SUBJECT: 2024 Capacity Development Strategy Status Report

Dear Ms. Traviglia:

The Connecticut Department of Public Health's Drinking Water Section is pleased to submit the attached 2024 Capacity Development Strategy Status Report to USEPA Region 1. The report identifies capacity development accomplishments conducted during the period of July 1st, 2023, to June 30th, 2024, for new and existing public water systems in accordance with DPH's Capacity Development Strategy.

Capacity development initiatives are interwoven with all functional units within the Drinking Water Section to ensure the proper oversight and long-term sustainability of the State's public water systems and thereby protecting public health. This reporting period a significant amount of resources were focused on preparations for the new Lead and Copper Rule Revisions with the first due date for public water systems fast approaching. DPH has also worked hard to refill vacant positions as well as create new positions that will be pivotal in ensuring compliance and providing adequate support for the many programs within DWS that work together to build capacity for the state's public water systems.

If you have any questions, please contact Mandy Smith at (860) 936-1238 or Mandy.Smith@ct.gov.

Sincerely,

Lisa Michelle Morrissey, MPH
Deputy Commissioner
CT Department of Public Health

c: Rachel Nowek, PHSM, Environmental Health & Drinking Water Branch
Denise Springborg, USEPA Region 1



Phone: (860) 509-7333 • Fax: (860) 509-7359
Telecommunications Relay Service 7-1-1
410 Capitol Avenue, P.O. Box 340308, MS#12DWS
Hartford, Connecticut 06134-0308
www.ct.gov/dph/publicdrinkingwater

Affirmative Action/Equal Opportunity Employer



State of Connecticut
Department of Public Health Drinking Water Section

Capacity Development Strategy Status Report
For the Period of July 1st, 2023 – June 30th, 2024



September 26, 2024

Table of Contents

Executive Summary.....	4
Introduction	5
Capacity Development Activities for New Public Water Systems (PWS)	6
Table 1. List of New PWS: July 1 st 2021- June 30 th , 2024.....	8
Capacity Development Activities for Existing Public Water Systems	12
Table 2. Programmatic and Capacity Highlights during SFY24	13
Table 3. Lead and Copper Rule Revisions Training during SFY24	18
Capacity Development Strategy Review.....	24
Conclusion.....	25
Appendix A - Annual Capacity Development Reporting Criteria	26
Appendix B - Sanitary Survey Capacity Questionnaire - Online Form	30
Appendix C - DWSRF TMF Capacity Review Checklist	33
Appendix D - Small CWS Fiscal & Asset Management Plan Template.....	36
Appendix E - Public Act 21-121 Adopted from House Bill 6666 Re: Capacity Implementation Plan Requirement	46

Executive Summary

The Connecticut Department of Public Health (DPH) is the state primacy agency for implementing and enforcing the Federal Safe Drinking Water Act (SDWA). The 1996 SDWA Amendments requires that primacy states develop a Capacity Development Strategy (Strategy) that addresses the technical, managerial, and financial (TMF) needs of public water systems (PWS). Primacy states are required to provide annual state capacity development program reports to the U.S. Environmental Protection Agency (EPA). This report covers capacity development activities during July 1, 2023 through June 30, 2024. A copy of this report is sent annually to EPA Region 1 and is also available to the public on the DPH Drinking Water Section (DWS) website under the publications and reports quick link.

This report discusses how DPH works with new and existing PWS in accordance with the Strategy to create and maintain acceptable levels of TMF capacity. The goals of Connecticut's Capacity Development Strategy are to 1) ensure that CT PWS are consistently providing safe and adequate water by maintaining compliance with state and federal regulations; 2) track and prioritize PWS that are out of compliance, and provide assistance as needed; 3) systematically work to identify and eliminate factors that impair capacity development for PWS; 4) encourage the development and implementation of asset management plans for PWS to ensure long-term viability; and 5) continue stakeholder engagement and understanding of the strategy.

The DPH's Strategy identifies the creation of new PWS as a key component. DPH has regulations to incorporate capacity development elements into the Certificate of Public Convenience and Necessity (CPCN) process which governs the creation of new PWS. Integrating the CPCN process with DPH's work with the statewide Water Utility Coordinating Committee (WUCC) regional planning process provides an established process to prevent the proliferation of new PWS without first examining all service options and demonstrating adequate TMF capacity. This approach has proven to be successful in establishing new PWS with adequate capacity.

As the Primacy Agency and technical expert on the SDWA, DPH works closely with all its existing PWS to address issues through proactive prevention and hands-on technical assistance within the control points of the Strategy. Early detection of water quality problems, timely technical assistance and educational offerings for PWS owners and operators are critical aspects. DPH spent a large amount of resources during SFY24 working on training PWS owners, operators and key stakeholders on the Lead and Copper Rule Revisions (LCRR) and the PFAS rule, as well as making historic amounts of money available for PWS infrastructure projects through the drinking water state revolving fund.

This report will outline the major activities undertaken by the DPH DWS during this reporting period to implement the Strategy to create and maintain sustainable PWS that can reliably serve safe and adequate water to the public now and into the future.

Introduction

There are 3 types of public water systems that are regulated in the State of Connecticut:

Community Water Systems (CWS): Water systems that provide service to 25 or more residents at least 60 days per year. Systems can range widely in size from large municipal or privately owned systems to small rural neighborhoods that share a common water supply.

Non-Transient Non-Community (NTNC) Systems: Non-residential water systems that serve 25 or more of the same people at least 6 months out of the year that include schools, daycare centers, factories, and office buildings.

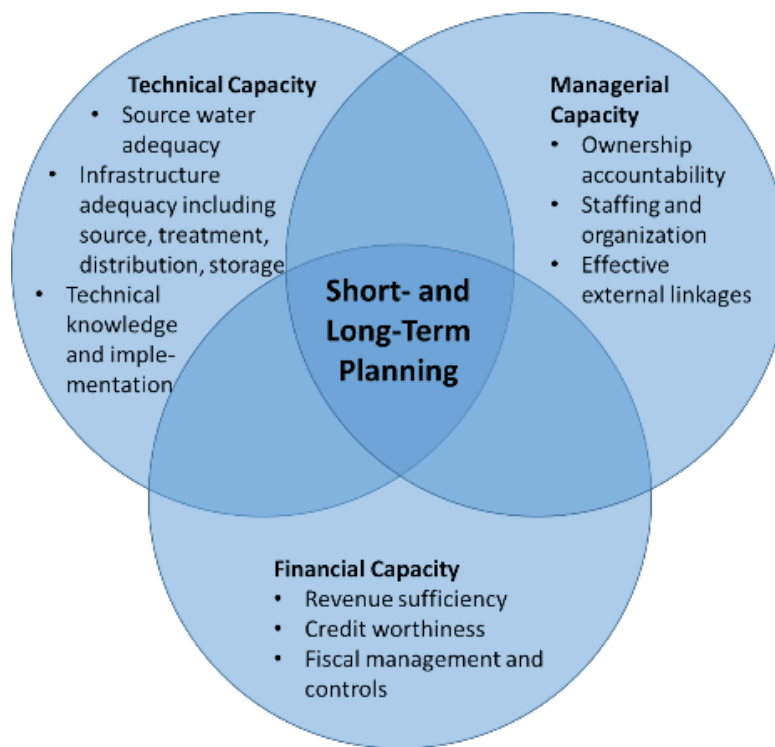
Transient Non-Community (TNC) Systems: Non-residential water systems that serve 25 or more people, but not necessarily the same people each day, for at least 60 days out of the year that include restaurants, parks, churches, campgrounds, and gas stations.

Connecticut's relatively small geographic footprint contains a large number of public water systems (PWS), as 488 community water systems (CWS) serve residential populations and 482 non-transient non-community (NTNC) systems, and 1,384 transient non-community (TNC) systems serve non-residential populations. The DPH, as a SDWA primacy agency, must implement a Capacity Development Strategy (Strategy) that addresses PWS technical, managerial, and financial (TMF) needs as described below and depicted on the following page:

Technical capacity refers to a PWS's ability to operate and maintain water system infrastructure and includes elements such as source water adequacy, infrastructure condition and the technical knowledge of its operators.

Managerial capacity refers to a PWS's ability to properly administer water system operations and includes elements such as organizational structure, asset management programs, capital improvement planning, operator training, record keeping, customer service and an understanding of regulatory responsibilities.

Financial capacity refers to a PWS's ability to properly manage system financial obligations while generating sufficient reserve funds to maintain infrastructure and includes elements such as rate structure, budget preparation, collection services and credit worthiness.



This Capacity Development report identifies accomplishments during the period of July 1st, 2023–June 30th, 2024, as well as provides information on the efficacy of DPH’s Capacity Development Strategy. The DPH Strategy was recently revised in 2022 and approved by EPA Region 1 on March 24, 2023. The Strategy revision evaluated the effectiveness of the first 20 years of implementation and refocused on the proactive protection of public health by attempting to identify and prevent PWS capacity weaknesses before formal enforcement actions are required. This report is formatted to include all the required annual reporting criteria which is included as Appendix A. This report will be used by EPA to help determine whether Connecticut’s Capacity Development Program meets the statutory requirements of the SDWA.

Capacity Development Activities for New Public Water Systems (PWS)

Authority

Connecticut is required by the federal SDWA Section 1420(a) to have the authority to implement a program that assesses the TMF capacity of all new CWS and NTNC systems. The primary mechanism in DPH’s Strategy to prevent the proliferation of new small PWS is the Certificate of Public Convenience and Necessity (CPCN) process. Pursuant to Connecticut General Statutes (CGS) Section 16-262m, all applicants must obtain a CPCN prior to construction of a new PWS. The CPCN regulatory review process requires that prospective new systems must first evaluate feasible interconnection with existing PWS. This is conducted through coordination with the Water Utility Coordinating Committees (WUCC).

Section 25-33i of the CGS states that no public water supply system may be approved within a public water supply management area after the Commissioner of Public Health has convened a WUCC unless: (1) an existing public water supply system is unable to provide water service or (2)

the committee recommends such approval. CPCN applications are routed through the respective WUCC region for review and potential action early in the CPCN process. The statutes and regulations are silent as to the specific procedures of WUCC approval, leaving it up to the individual WUCCs as to how to process, review, and act on an application, including when in the CPCN process the WUCC acts. The WUCCs, in practice, evaluate each submission and consider it against local and regional development and water supply availability to determine the best long-term viable water supply for the proposal.

If an interconnection is not feasible, the CPCN regulations establish minimum design standards for new water systems and require new systems to demonstrate acceptable levels of TMF capacity prior to the issuance of a CPCN. The CPCN regulatory review process is conducted by the DPH. When a designated Exclusive Service Area (ESA) provider exists, the CPCN process requires a designated ESA provider to own any new CWS system created in the approved service area (which is determined during the WUCC approval) pursuant to CGS 25-33g. For those community systems that are regulated by the Public Utilities Regulatory Authority (PURA) or when ownership is not being assigned to an ESA provider, PURA will conduct the financial capacity review of the proposed system. No new changes have been made to the authority during this reporting period.

Control Points

DPH's Strategy lists the CPCN process as the primary mechanism to manage the TMF Capacity of new PWS. The following control points are components of the Strategy and are included as part of the CPCN process:

WUCC/ESA Review and Approval
Local Planning and Zoning Approval
Source Review and Approval
Operator Certification

Operator Certification
TMF Capacity Review
Cross Connection Program
System Construction Approval

The control points were modified slightly as part of the recent Strategy revision to include Local Planning and Zoning Approval. DWS continues to work to strengthen its ability to minimize the creation of new PWS, as well as streamline the process to make it easier for new PWS to understand and therefore comply. DPH recognizes that early identification of potential new systems is critical which requires coordination and involvement at the local community level. Local health departments use forms developed by DWS to screen development projects to determine if a CPCN may be required. As is shown in Figure 1 on the next page, all of the new PWS created through the CPCN process during the last three years are non-community systems. The WUCC and ESA process has worked well to encourage new developers to use smart planning concepts and interconnect with viable public water systems with access to demonstrated TMF capacity when feasible. Many times, extension of the public water system is cost-prohibitive due to current costs versus an on-site well for a single building. Future efforts will include developing a roadmap for municipalities to incorporate smart water planning concepts into revisions of their local plans of conservation and development. Planners, municipalities and developers understand the process better now that the WUCCs have been established statewide. Public education in this area will be ongoing.

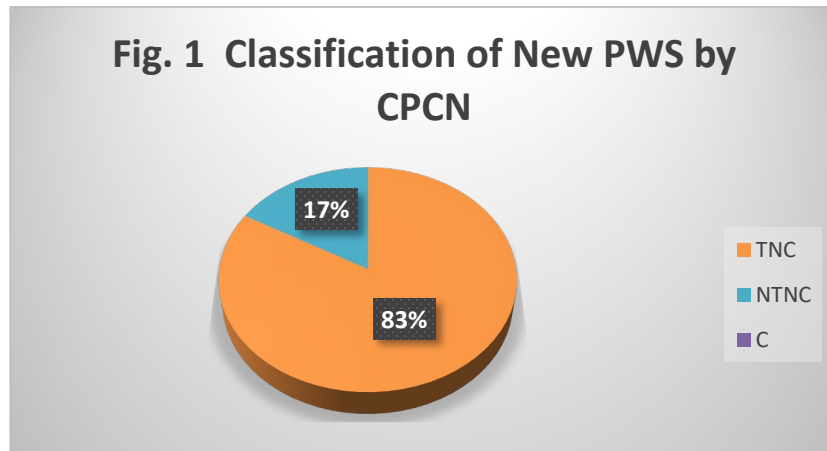


Table 1 below provides a list of all new PWS from the previous three fiscal years that are currently regulated by DPH. Twenty-four (24) new PWS highlighted in green were created through the CPCN process during the last three fiscal years which included a TMF Capacity review, as well as the other control points discussed previously, prior to the final approvals being granted. The remaining seventy-six (76) PWS were newly discovered systems which were existing and, in instances, had been operating for years. These PWS started being regulated by DPH primarily through referrals from local health departments, reactivation of inactive systems due to new ownership or expansion of business operations that increased system population over the thresholds. Each of the 76 discovered systems received the required regulatory compliance information upon their activation in the form of an individual “Public Water System Responsibilities Letter”.

Table 1. List of New PWS: July 1st 2021- June 30th, 2024

PWS ID	PWS NAME	PWS CLASS	ETT Score	Reason	Status
CT0121114	ABLE COIL AND ELECTRONICS	NTNC			
CT1609203	LOVE’S TRAVEL STOP & COUNTRY STORE	NTNC	2	M&R	Returned to compliance
CT1419133	WHITE BARN CHILDREN'S CENTER	NTNC			
CT1069023	ATLAS COMMONS	NTNC	15	M&R	Returned to compliance
CT0925024	DOLLAR GENERAL - NEW HARTFORD	NC			
CT0012014	DOLLAR GENERAL ANDOVER	NC			
CT1021124	BESTWAY FOOD & FUEL - NORTH STONINGTON	NC			
CT0081144	KRIZ FARM ICE CREAM	NC			
CT1259144	2 ROUTE 7 BAKERY	NC			
CT1299034	WORTHINGTON POND FARM	NC			
CT0310284	WEST CORNWALL DEVELOPMENT	NC			
CT0699244	BLACK POND BREWS	NC			
CT1099274	JOEY'S SEAFOOD	NC	1	M&R	Returned to compliance
CT0869174	DEER RUN STABLE, LLC (CITGO GAS STATION)	NC			
CT0787124	THE KIRBY MILL & WINERY	NC			

PWS ID	PWS NAME	PWS CLASS	ETT Score	Reason	Status
CT1021134	KINGDOM OF THE HAWK	NC			
CT0309164	RECREATION PARK- BATHROOM PAVILION	NC			
CT0719164	INDEPENDENCE VINEYARD	NC			
CT0499034	THE RED BREWSTER	NC			
CT1690314	WOODSTOCK VALLEY MARKETPLACE	NC			
CT1130224	DOLLAR GENERAL - PORTLAND	NC			
CT0429254	COBALT VETERINARY CLINIC	NC			
CT0321294	JENKINS DENTAL	NC			
CT1435144	SKYRIDGE TRAILS CAMPGROUND	NC			
CT1219141	GREEN VILLAGE II	C			
CT1190021	APPLE REHAB	C			
CT0975143	SMT CORPORATION	NTNC	1	M&R	Returned to compliance
CT0880053	980 RUBBER AVENUE	NTNC	3	M&R	Returned to compliance
CT0199113	LEARNING CLINIC - BROOKLYN BLDG	NTNC			
CT0199123	LEARNING CLINIC - APPLIED ARTS BLDG	NTNC			
CT1300472	GYRE9	NTNC	1	M&R	Working with PWS to resolve
CT0719113	PRIDES CORNER- JADERLOON/PROPAGATION	NTNC	2	M&R	Returned to compliance
CT1419124	EPIC ADVENTURES CHILDCARE	NTNC			
CT1429133	U.S. DEPARTMENT OF AGRICULTURE - TOLLAND	NTNC			
CT0791253	LITTLE PEOPLE'S PLAY PLACE	NTNC			
CT0070104	CCARC INC.	NTNC	5	M&R	Returned to compliance
CT1470084	TAMARACK LODGE & GLAMPING RESORT CT	NTNC	9	M&R	Returned to compliance
CT0080142	BETHANY COMMUNITY SCHOOL	NTNC			
CT0709123	255 ROUTE 80 - KILLINGWORTH	NTNC			
CT0321284	CASSIDY HILL VINEYARD	NC			
CT0920304	CAMP SEQUASSEN (SOUTH SHOWER - WELL #6)	NC			
CT0259054	MAPLE OAK FARM AND MARKET	NC	7	M&R, PN	Partially resolved. Still working with PWS
CT0840054	HAPPY SHACK	NC			
CT0179064	RT 6 PLAZA, LLC	NC	2	M&R, PN	Partially resolved. Still working with PWS
CT0261113	HONEYCONE CREAM COMPANY, LLC	NC			
CT0429244	ST. CLEMENTS MARINA	NC			
CT0260114	BRUSHMILL BY THE WATERFALL	NC			
CT0420134	COBALT GAS	NC			
CT0719144	GRAND LAKE SPA AND HOTEL	NC			
CT0878043	9 WATERTOWN ROAD	NC			

PWS ID	PWS NAME	PWS CLASS	ETT Score	Reason	Status
CT1010064	GREEN ACRES MART	NC			
CT0380244	HARD HAT RESTAURANT	NC			
CT0420562	20 EAST HIGH STREET	NC	1	M&R	Returned to compliance
CT1280144	TOWER RIDGE COUNTRY CLUB	NC			
CT1430964	TORRINGTON CITGO	NC			
CT0220134	PRUDENCE CRANDALL MUSEUM	NC			
CT0780334	POUR HOUSE	NC			
CT0581064	1130 VOLUNTOWN ROAD	NC			
CT0460184	SILVERMAN'S FARM - ANIMAL FARM WELL	NC	5	M&R, PN	Partially resolved. Still working with the PWS
CT1479024	144&166 MAIN STREET	NC	2	M&R, PN	Returned to compliance
CT1660494	MAHANS LAKEVIEW FINE CATERING LLC	NC			
CT0209334	TONN'S MARKETPLACE	NC			
CT1301164	CALVARY FELLOWSHIP SOUTHBURY	NC	2	M&R, PN	Partially resolved. Still working with the PWS
CT0429204	D'ELIANA	NC			
CT0709254	RUNNING BROOK FARMS	NC			
CT0121104	DOLLAR GENERAL - BOLTON	NC			
CT1059344	LONG RIVER LOCAL	NC			
CT0560104	GRANBY JEHOVAH'S WITNESSES	NC			
CT0420334	26 EAST HIGH STREET	NC			
CT0829094	RICH FARM ICE CREAM	NC			
CT0130074	LAKE ROAD PLAZA	NC	8	M&R	Returned to compliance
CT0565074	JULIEN'S FARM STORE	NC			
CT1140134	CITY BOY SUBS	NC	1	M&R	PWS closed- in process of inactivation
CT1200094	MINE HILL DISTILLERY & CRAFT CAFE	NC			
CT0859144	1565 MONROE TURNPIKE, LLC	NC			
CT1130214	MJS REALTY VENTURES, LLC	NC			
CT0990054	KIKIS GRAB AND GO KITCHEN	NC			
CT0850102	OUR LADY OF THE ROSARY CHAPEL	NC	7	M&R, TT	Returned to compliance
CT0090064	DANBURY ANIMAL HOSPITAL	NC			
CT1090054	DANO'S PROPERTIES, LLC	NC			
CT1219144	WICKED SOUTHERN COFFEE	NC	1	M&R	Returned to compliance
CT0870214	MORRIS GROCERY	NC			
CT0860604	CAMP OAKDALE TENNIS COURTS	NC			
CT0310014	CORNWALL MARKET	NC	1	M&R	Working with PWS to resolve
CT0341244	REBELLION KITCHEN AND BAR	NC			
CT0820204	RED FOX MARKETPLACE AND PANINI GRILL	NC			
CT1180154	CASA LU	NC			
CT0080064	BETHANY TOWN HALL	NC	6	M&R	Returned to compliance

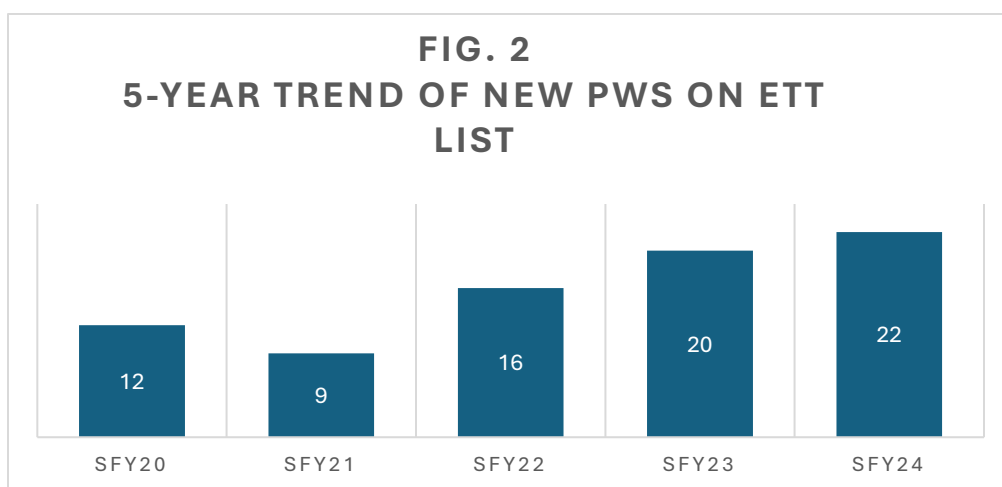
PWS ID	PWS NAME	PWS CLASS	ETT Score	Reason	Status
CT1699123	283 SCENIC ROUTE 169	NC			
CT0798074	DONUT TWIST LLC	NC			
CT0030254	CHAAR SAHIBZAADE REALTY LLC	NC			
CT0570194	BANKSVILLE COMMUNITY HOUSE	NC			
CT0055084	2 SCHOOL ST	NC			
CT0055094	BARKHAMSTED YOUTH BASEBALL LEAGUE	NC			
CT0700104	KILLINGWORTH CAFE # 249	NC			
CT0199133	TOWN OF BROOKLYN, PRINCE HILL PARK	NC			
CT0530354	MEYERS CRAZY HOLLOW CREAMERY	NC			
CT0180424	CONWEB MANUFACTURING CORP	NC			
CT0240174	DOLLAR GENERAL - CHAPLIN	NC			
CT0410354	381 TOWN STREET - EAST HADDAM	NC	6	M&R, TT	Currently working with PWS to resolve

M&R = Monitoring and Reporting Violation

PN = Public Notification Violation

TT= Treatment Technique Violation

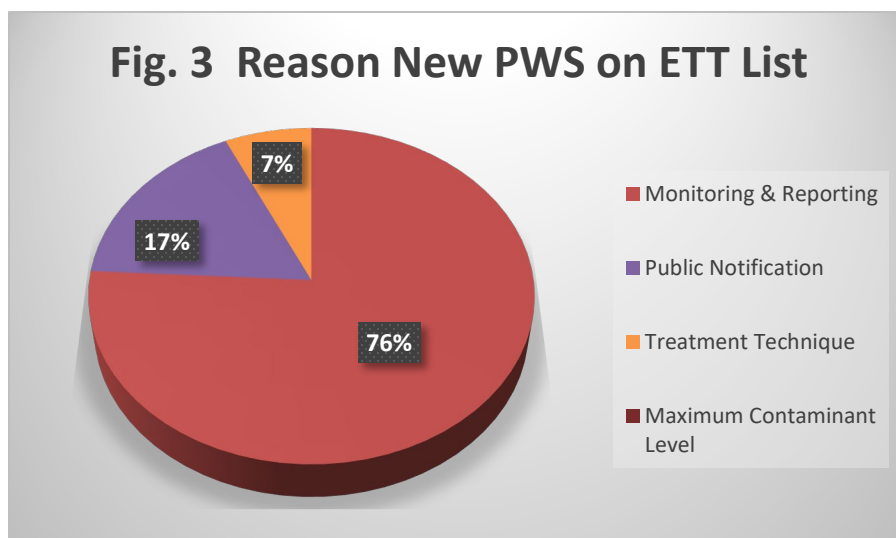
The DWS uses the EPA's Enforcement Targeting Tool (ETT) point-based system to identify compliance problems. Any PWS that scores eleven (11) or more points are prioritized for enforcement actions under the EPA's Enforcement Response Policy which also aligns with DPH's Strategy. One of the new PWS created through the CPCN process scored 15 points on the latest ETT list. As is indicated on Table 1, twenty-two of the new PWS created through the CPCN process (11.5%) are on the current EPA Enforcement Targeting Tool (ETT) list, primarily due to water quality monitoring & reporting (M&R) issues. This is compared to nineteen of the newly discovered PWS (25%) on the ETT list with scores ranging from 1-9 points.



The numbers of new PWS on the ETT list with any points increased for the third straight year as shown in Figure 2 above. This may be due to reduced staffing/staff retention issues that have been plaguing DWS since the SFY21 through SFY23 reporting periods and also due to less new systems being evaluated during the COVID-19 pandemic years. DWS remains committed to

replacing and training new staff, acknowledging that there is a large learning curve for new staff to handle regulatory compliance issues efficiently and independently. As of the date of this report, DPH has hired eight new technical staff within the DWS compliance section units to help work on this issue and others. Knowledgeable DWS staff is one of the most critical resources to help develop and maintain TMF capacity at new PWS.

An evaluation of what caused each PWS to have points assigned as part of the ETT strategy was also conducted as part of this report. As shown in Figure 3 below, the majority of the PWS with an ETT score can be primarily attributed to managerial issues such as water quality monitoring & reporting violations and public notification rule violations. DWS will continue to investigate new ways to clearly communicate the roles and responsibilities for new PWS related to monitoring (especially for transient non-community systems). Goals for the future to reduce the amount of managerial issues upon activation of new systems will be to modify the CPCN process to further elaborate on/incorporate sampling plans, contracting certified laboratories and other elements required for a successful water quality monitoring program as the majority of the new PWS ETT points stem from monitoring & reporting violations. For the newly discovered PWS, an idea to create a plain language new PWS guide would be helpful to include with the initial PWS responsibilities paperwork or even a follow up call to ensure these PWS get off on the right foot. The majority of new systems are Transient Non-Community PWS which are not required to have a certified operator in Connecticut. It is proven that a competent certified operator can be a valuable asset to a PWS and reduce the potential for violations.



Capacity Development Activities for Existing Public Water Systems

Authority

Connecticut is required by the federal SDWA Section 1420(c) to develop and implement a Capacity Development Strategy (Strategy) that addresses PWS TMF capacity needs to maintain viable water systems that can reliably provide safe and adequate water. DPH submitted the state's initial Strategy to the EPA Region 1 on August 4th, 2000, and drafted a revised Strategy which was submitted in December 2022. The revised Strategy was approved by EPA Region 1 on March 24, 2023. DPH also has been awarded primacy for the various SDWA federal rules which

guides the work conducted to ensure safe and adequate drinking water for the residents of CT public water systems.

Control Points

The following Strategy control points align with DPH Drinking Water Section organizational structure and are the primary criteria that DPH uses to identify and prioritize the PWS most in need of help to improve TMF capacity:

Source Water Protection
Water Quality and Compliance Data
Operator Certification Program
Distribution System and Cross Connection Protection
Sanitary Survey Program and TMF Capacity Review
DWSRF Capacity Review
PWS Water Supply Planning Data
Emerging Contaminants

Building capacity for PWS is interwoven with all the DWS and EHDW Branch level functional units, programs, tools and activities as is evidenced in the Strategy control points and complimentary activities. The associated accomplishments conducted during the reporting period are highlighted in Table 2 below and on the following pages. The Strategy strengthens the TMF capacity of PWS by identifying and correcting weaknesses early through close regulatory oversight, technical assistance and enforcement. This process typically helps to identify and correct the root causes of compliance problems before more serious problems develop with a goal of long term sustainability.

Table 2. Programmatic and Capacity Highlights during SFY24

Activity	Comment
Source Protection & Assessment	
Maintain High Quality Source List	Over 4,000 sources for use by PWS available; *Solicited updated information from water utilities in SFY23 but did not publish a new list.
Review PWS Watershed Survey Reports	31 Watershed surveys submitted annually for over 210 drinking water watersheds; violations issued and technical assistance provided as appropriate.
GIS Initiatives	Maintained GIS locational data for PWS facilities. Efforts to expand and better maintain published data.
Water Quality & Compliance Data	
Process WQ Data & Assess Compliance	420,679 individual water quality results processed and assessed for compliance with state & federal regs. 125 WQ sampling site plans reviewed and accepted. 134 SOC monitoring waivers requests reviewed and granted. 81 WQ monitoring reductions requests reviewed and approved.

Formal Enforcement Issued	1 Consent Order and 17 Administrative Orders Issued.
Operator Certification Program	
Certified Operator Course Approvals	75 courses consisting of 250 training contact hours approved by Op Cert staff
Certified Operator Notice of Violation	32 PWS returned to compliance for failure to meet operator requirements through technical assistance (no formal NOV required).
Remote Learning Courses	10 courses for 50 Training Contact Hours Approved
DPH Training Presentations	21 presentations attended by 978 certified operators
Sanitary Survey Program & TMF Capacity Review	
Conduct Sanitary Surveys at PWS	313 SS conducted during the reporting period. DWS did not hit its target for survey completion due to lack of staffing resources
Review new PWS Technical Projects	72 Projects reviewed, PFAS treatment design guidelines drafted
CWS SS Capacity Questionnaire	SS Capacity Questionnaires received and reviewed during routine sanitary surveys.
Fiscal & Asset Management Plan Statute	Continued to check compliance for small community water systems F&AM plan during routine SS during SFY24
Participation in AWOP Program	DWS staff attended two AWOP meeting in person and two remote meetings.
Distribution System & Cross Connection Program	
Customer Complaints referred to OCP Program for follow up	5 customer complaints handled through resolution
Annual Cross Connection Surveys	761 cross connection surveys tracked annually and conducted an in depth review of 107 surveys
PWS Water Supply Planning Data	
Water Supply Plan Reviews	3 plans received during SFY24. Working on review SOP
Water Supply Plan Regulatory Changes	Began internal planning meetings to revise the water supply plan regulations
Cybersecurity Planning for PWS	Worked to advise PWS of risks and free cybersecurity resources. Contributed to the statewide water sector cybersecurity strategy
Community PWS Acquisition/Takeover	1 voluntary acquisition in process
Drinking Water State Revolving Fund	
Drinking Water SRF Base Loan Program	Closed 18 loans totaling \$73.8M
DWSRF Small Loan Program	1 loan totaling \$99,999
DWSRF Disadvantaged Communities Loan Program	15 loans totaling \$69.9M
State Bond Funding	\$1.54M funding for 1 Lead Service Line Replacement Project (in addition to DWSRF subsidy and loan)
Emerging Contaminants Unit	
Monitored UCMR Results	Reviewed results from approximately 300 samples, provided outreach to one small system with a detection above the EPA Maximum Contaminant Levels
Emerging Contaminant technical assistance	Provided technical assistance on emerging contaminants to PWS, municipalities, or private residents across 14 towns, 13 PWS, 5 Public Health Districts and 2 schools.

Chloride Maximum Contaminant Level exceedance	Provided education and recommendations for best management practices to reduce chloride levels for 18 PWS with Chloride MCL exceedances.
Technical Assistance for PFAS and the EPA PFAS Rule	103 occurrences of providing guidance and technical assistance to PWS for PFAS issues through phone calls, virtual and in-person meetings and presentations
Environmental Laboratory Certification	
Drinking Water Laboratory Evaluations	12 in-state environmental laboratories evaluation of methods and procedures for labs that analyze drinking water samples were evaluated, and technical support was provided.
Certifications renewed	51 drinking water laboratory certifications were renewed
Labs approved for 533 analysis	Technical review and certification granted for 6 new laboratories for PFAS analysis by 533
Proficiency Tests	Approximately 175 Water Supply Proficiency studies were reviewed for acceptability

Identification of PWS in Need of Capacity Development Assistance

DPH uses all the information at its disposal to identify and prioritize existing PWS that need capacity development assistance. Some of the most typical means of identifying PWS in need are through 1) Water Quality and Compliance Data; 2) Sanitary Surveys/Capacity Assessment Tool Data 3) DWSRF Capacity Review; and 4) Other PWS data.

1) Water Quality Compliance Data: DWS identifies systems in need of capacity development assistance by the system's ability to meet their regulatory water quality requirements and report this compliance data to the DWS. DWS has created publicly available water quality monitoring and compliance schedules for each individual PWS that are compliant with applicable federal rules and state regulations as a capacity building tool. Incurring treatment technique violations, MCL violations, or even M&R violations tells DWS that a system may be in need of assistance. Paying close attention to this data and looking for trends early on attempts to avoid systems from being placed on the ETT list. Systems that are, or become placed on, the ETT list are given priority technical assistance consistent with Connecticut's existing Strategy.

2) Sanitary Survey/Capacity Assessment Tool (CAT) Data: Another mechanism used is the sanitary survey process and the resulting compliance determinations. During a sanitary survey the physical infrastructure of the water system as well as other elements including monitoring and reporting, operator certification, management and operations and security are assessed to determine if there are significant violations or deficiencies that could present long and/or short-term sustainability problems. Sanitary surveys are conducted at least every three (3) years for CWS and every five (5) years for Non-Community systems. The small system capacity assessment tool (CAT) has also been incorporated into the sanitary survey process. All CWS are required to complete a capacity questionnaire that will update the baseline CAT at the time of the survey (included as Appendix B). The CAT data has been an integral part of developing capacity through the WUCC process; keeping the data updated and relevant is key. PWS with multiple deficiencies identified through the survey process are prioritized for technical assistance. In 2024, additional

questions were added to the CAT to identify PWS in need of technical assistance in addressing emerging contaminants and prioritize potential eligibility for funding assistance to address emerging contaminant issues through the Bipartisan Infrastructure Law's Emerging Contaminants in Small or Disadvantaged Communities grant. As of the end of June 2024, sixty-one small PWS have been identified with two or more deficiencies and potentially qualifying for grant assistance.

3) DWSRF Program Capacity Review: All PWS that apply for DWSRF funding must demonstrate adequate TMF capacity in order to obtain a loan. Reviews of financial qualification are conducted by the OTT and, if the PWS is a privately owned rate-regulated utility, by PURA. Technical and managerial reviews are performed by DWS and documented in the "DWSRF TMF Capacity Review Checklist" (included as Appendix C) for funding recipients. Any financial issues that are identified must be addressed before a PWS is qualified to receive a loan. Any technical or managerial violations that are identified must be addressed either prior to receiving a loan or as part of the project that receives a loan. Since 2011, the DWSRF Program has placed additional incentives for PWS to enhance TMF capacity through asset management (AM) planning. PWS with existing AM plans are provided additional priority points in the priority ranking system to increase project(s) ranking on the DWSRF Project Priority Lists. Additionally, the DWSRF Program provided incentives beginning in SFY19 for small PWS to implement AM plans by offering subsidization towards project(s) if systems had existing AM plans or would undertake AM planning as part of the project. Any PWS which is found to not have sufficient capacity will be referred for technical assistance.

4) Other PWS data: PWS capacity needs can also be realized through many different types of interactions that provide data to DWS. DWS may identify capacity issues by assessing a range of information points, including: the lack of a certified operator or operators with large amounts of violations cited at the systems they operate, water service interruptions resulting in frequent outages or bulk water hauling, failure to comply with orders, recurring water quality issues, cross-connection issues, and customer complaints. DWS prioritizes systems displaying low capacity in the aforementioned ways for technical assistance and/or formal enforcement actions. In Connecticut, PWS serving 250 or more connections or 1,000 people or more are required to prepare and update water supply plans. The plans incorporate, asset inventories, capital improvement schedules, drought triggers, available water and safe yield, unaccounted for water, emergency plans and much more. Additionally, changes to the transfer of water company land (WCL) permit process have been implemented at the request of the capacity development workgroup to incorporate a review of the fiscal and asset management plan during the WCL review process. This will enable the transfer of institutional knowledge from owning and operating a water system to new owners as part of the property transfer process.

Capacity Development Approach for PWS in Need

DWS continued to use concepts and tools identified within the Strategy to help PWS of all classifications increase their technical, managerial and financial capacity in order to remain sustainable and capable of delivering a safe and adequate supply of water to customers now and into the future. To assist PWS in achieving compliance and provide access to important information, DWS uses its website, frequent circular letters and online water quality monitoring

and compliance schedules to provide a broad range of information to PWS. These actions continue to be some of the primary mechanisms to develop capacity for Non-Community (NTNC and TNC) PWS. Further, DWS has maintained its monthly webinar series with PWS, environmental laboratories, certified operators and other stakeholders, which are an effective mechanism to conduct important and time-sensitive outreach.

DWS has learned over the years that the approach to develop TMF capacity must be different for small CWS versus the largest CWS, however there is a commonality: education. For smaller CWS, getting the PWS owners and managers engaged and interested in learning about their systems and responsibilities is the first hurdle. DWS continued its work trying to update website and standard forms/applications to create more easily understood processes. For large CWS, DWS strives to provide educational opportunities at local conferences and through topic specific webinars. Additionally, DWS initiated internal discussions of a new water supply plan review process for CT's large CWS which may turn into an update of the water supply plan regulations. Emphasis on topics such as electronic submission, regionalization/ partnerships, cybersecurity, emerging contaminants, climate change resiliency and drought triggers, minimum streamflow requirements and asset management should be incorporated to help large CWS adequately prepare for tomorrow's challenges.

DWS has struggled to balance adequate staffing resources with the increase in regulations (and funding) and the resulting workload. Increased funding from the Bipartisan Infrastructure Law (BIL) has enabled DWS to attract and train new staff which will continue into next year. During SFY24, 18 positions were established and recruitments were completed.

In addition to the programmatic highlights, DWS realizes the value of partnerships and training opportunities to build increased capacity for PWS. During SFY 2024, much focus and resources were spent in these areas. Some of the partnerships DWS worked on included partnerships stemming from various initiative committees, task forces and workgroups like WUCCs, State Water Plan, cybersecurity with the Department of Homeland Security, Interagency Drought Workgroup, emerging contaminants like PFAS, and federal technical assistance providers like CT Rural Water and Wastewater Association (CT RWWA). The following are summaries of capacity development work conducted during SFY24 on many important initiatives.

Fiscal and Asset Management Plan Requirement: As required by AWIA of 2018, more emphasis has been placed on asset management. DPH was ahead of the curve with respect to asset management for PWS with the requirements outlined in CGS Section 19a-37e which required all small community water systems to prepare a fiscal and asset management plan by January 1, 2021. DPH developed a fiscal and asset management plan template with instructions, a guidance document, an appendix to be included for CWS who also want to apply for a DWSRF loan, a completed example plan and a training webinar. The template is included as Appendix D and was formatted to include all information that is needed to meet the statute.

Originally, 291 small CWS were required to create this plan by the end of the 2020 calendar year, but the current number of small CWS in 2024 is down to 279. This is due to small system consolidations or interconnections. DPH utilized an intern this reporting period to take a comprehensive inventory of the submitted F&AM plans. While a large percentage of small CWS certified that they completed the plan, only 27% provided copies of the plans as part of the

subsequent sanitary survey. DWS will work during the next reporting period to develop a strategy to ensure higher compliance for this important initiative. Upon review of the plans in house, generally speaking the asset portion of the plan is more complete than the financial portion. This may be due to lack of charging separate fees for water, poor recordkeeping, certified operator or person preparing plan does not have access to financial information, or reluctance to share private financial information. Despite the reason, getting PWS to understand the money required (full cost pricing) to run a community water utility as well as account for depreciation and proactive reinvestment will be a challenge DWS will continue to work on.

Capacity Implementation Plan Requirement: To further impress upon CWS the need to implement the findings of the Fiscal and Asset Management Plan, DWS was able to pass another statutory requirement during the 2021 legislative session (language included as Appendix E) aimed at demonstrating that these small CWS have adequate technical, managerial and financial capacity and shall implement the fiscal and asset management plan. The initial capacity implementation plan is required to be completed by all small CWS by July 1, 2025 and updated annually. There are 11 required items including financial capacity information, water production and consumption, capital improvement schedule for five- and twenty-year periods, ownership and management information and description of various maps, plans and programs required to be maintained by the small CWS. Due to resource issues, no forward movement was made to prepare PWS in meeting this new requirement during SFY24, but work has already begun to address this on the heels of the F&AM plan analysis conducted.

Lead and Copper Rule Revisions: During SFY24, DWS spent a significant amount of resources on developing TMF capacity for community and NTNC PWS with respect to the October 2024 compliance date for the Lead and Copper Rule Revisions (LCRR). DWS staff created state-specific documents such as the Service Line Material Inventory template (excel spreadsheet) and a LCRR frequently asked questions and answers document. Staff also drafted templates for future work tasks such as known and potential service lines containing lead notification, LSL inventory complete and LSL inventory incomplete letters during the reporting period. A total of 23 individual training sessions for PWS owners, operators and consultants were conducted by DWS staff as well as by our partners at the CT Rural Water and Wastewater Association and RCAP. A summary of these training opportunities during the reporting period is presented in Table 3 below.

Table 3. Lead and Copper Rule Revisions Training during SFY24

Date	Training Type	Training/Topic	Presenter	Comment
10/26/23	In Person	CWWA/CTAWWA Fall Annual Conference Final LCRR Requirements	DPH	PWS Owners/Managers primary audience
10/27/23	In Person	LCRR initial material inventory requirements and template	DPH	
11/1/23	In Person	LCRR initial material inventory requirements and template	DPH	
11/16/23	Remote	Major Changes in the Lead and Copper Rule (CT)	RCAP	

Date	Training Type	Training/Topic	Presenter	Comment
3/5/24	In Person	CTAWWA ATCAVE Final LCRR Requirements Overview	DPH	
3/14/24	Remote	Final LCRR requirements & classification of service lines	DPH	
3/26/24	Remote	Train the Trainer session on Final LCRR requirements for CTRWWA & RCAP	DPH	
4/2/24	In Person	LCRR Workshop on inventory template and service line scenarios	DPH	
4/15/24	Remote	Final LCRR requirements and classification of service lines	DPH	
4/24/24	In Person	LCRR Inventory Presentation at the CTRWWA training event	DPH & CTRWWA	Two sessions, AM & PM
5/14/24	Remote	Final LCRR requirements and classification of service lines	DPH	
5/15/24	In Person	LCRR Inventory Workshop	CTRWWA	Two sessions, AM & PM
5/23/24	In Person	LCRR Inventory Workshop	CTRWWA	Two sessions, AM & PM
5/24/24	In Person	LCRR Workshop on inventory template and service line scenarios	DPH	
6/5/24	Remote	Final LCRR requirements and classification of service lines	DPH	
6/12/24	In Person	LCRR Inventory Workshop	CTRWWA	Two sessions, AM & PM
6/19/24	In Person	LCRR Inventory Workshop	CTRWWA	Two sessions, AM & PM
6/28/24	In Person	LCRR Workshop on inventory template and service line scenarios	DPH	

CTRWWA also met with more than a dozen small PWS to assist them 1:1 with their service line material inventories and will continue that work into SFY25. In CT, there are approximately 1,000 community and NTNC PWS that will be required to submit their initial service line material inventory in October 2024. DWS staff have also been trained on how to properly review materials inventories and sampling site plans in anticipation of the upcoming deadline.

DWSRF Program: The DWSRF continues to be an attractive financing option for drinking water infrastructure projects that provide essential public health protection and help achieve long term infrastructure sustainability. The demand for DWSRF loans remains strong with the low interest rates and significant funding from the Bipartisan Infrastructure Law (BIL). During SFY24 the DWSRF executed the highest total amount of loan agreements in any one year since its inception.

The DWSRF program continues to look for ways to strengthen the capacity of loan recipients, particularly small systems. Since 2014, the DWSRF has subsidized loans to small systems that have developed asset management plans or agree to develop these plans as part of their loan project. The incentive to develop these plans to receive a subsidized loan has increased the recognition of asset management planning as an important and essential tool for small systems. These plans provide the foundation for small systems to implement essential utility management concepts including capital improvement planning, rate structure, annual budget preparation and

reinforce the importance of capital reserve funds. A Disadvantaged Community Assistance Program (DCAP) was also created within the DWSRF during SFY20 and an additional 35% of DPH's annual capitalization grant was made available for DWSRF projects located in disadvantaged communities. During SFY24 more than \$22.9 million was provided as subsidy in project funding agreements, which was approximately 31% of all funding provided. The BIL funding has significantly increased the amount of subsidy available for DCAP projects and will continue to do so over the next several years.

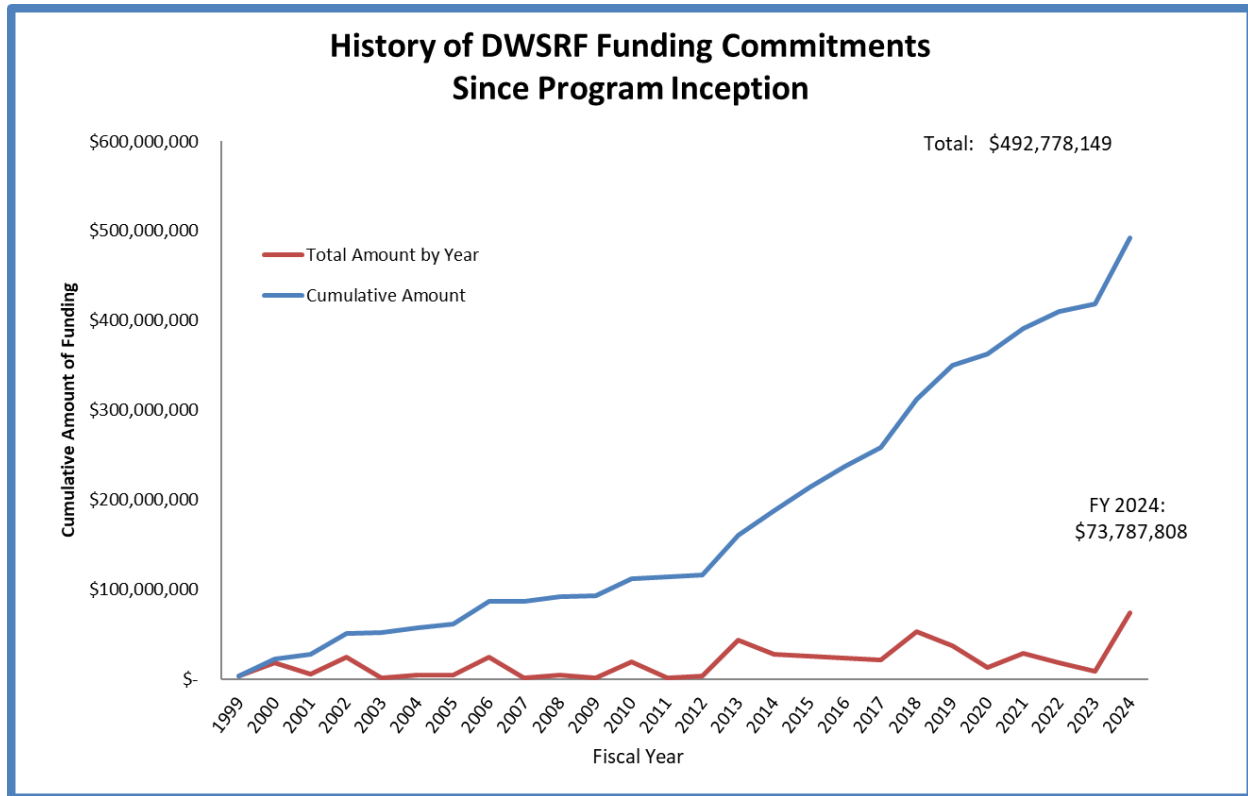


Fig.4 Historical Funding of the DWSRF Program

DWSRF Small System Programs: DWS created an Emergency Power Generator Program during SFY12 and a Small Loan Program during SFY19. These programs streamline the procurement procedures for non-construction projects costing less than \$100,000 to make it easier for small PWS with qualifying projects to proceed through the DWSRF process. This program is only available for the purchase and installation of generators for emergency back-up power, new equipment, or the replacement of equipment installed for an existing facility that does not involve the construction, alteration or repair (including painting or decorating) of that facility.

During SFY24, one SLP loan was executed totaling \$99,999 for optimal corrosion control treatment and entry point consolidation. Overall, the DWSRF executed 5 funding agreements for small water systems, including one under the SLP, totaling approximately \$20 million.



Fig. 5 Future site of new water storage tank for Winsted Water Works. This tank will improve flows in the system and provide adequate disinfection contact time. The project was funded by the DWSRF. Winsted is a small and disadvantaged public water system.

State Grant Funding for DWSRF Projects and PWS: State grant funding under the Public Water System Improvement Program (PWSIP) contained in CGS 22a-483f provides grants-in-aid, in the form of loan principal forgiveness for DWSRF projects. A project which is eligible for any subsidy from the DWSRF must execute a loan for the remaining amount of principal in order to receive the grants-in-aid. Eligibility criteria for these grant funds are identified in the DWSRF's annual Intended Use Plan to reflect the top drinking water infrastructure priorities for the State of Connecticut. Since SFY23 the priority has been to utilize these funds for lead service line replacements. The State Bond Commission approved \$24 million in grant funding to support this program during SFY23 and the CT legislature authorized \$50 million in bond funds for this program in each of SFY's 2024 and 2025. In SFY 2024, the DWSRF provided a state grant-in-aid from the PWSIP, along with other DWSRF funding, to the City of New London for the first system-wide lead service line replacement project in CT. DWS is also working with the DPH Contracts and Grants Management Section to move contracts forward for two non-DWSRF bond- funded projects for two small community water system upgrade projects (\$1M to Carefree Homeowners Association and \$3M to Southeastern Connecticut Water Authority).

Operator Certification Work: To validate the competency of CT Certified Operator applicants more thoroughly, DWS changed to using the ABC Standardized Examinations, which were more recently validated through an updated job task analysis. Operator exams are now administered at remote computer-based test sites, which increases availability to certification applicants. DPH processed 67 initial certification examination results from the newly designated computer-based administrator. The DWS operator certification staff also participated in 17 stakeholder/utility board meetings that provide guidance for administration of the Operator Certification Program, assessed PWS Operator designations of record and made 161 modifications to Safe Drinking Water Information System database.

Cybersecurity Initiatives: At the request of Governor Lamont, DPH conducted an initial survey of cybersecurity practices and gaps for Connecticut's 33 largest PWS (those serving greater than 3,300 people). Based on the results of the survey, DPH consulted with the CT Division of Emergency Management and Homeland Security (DEMHS) to prepare a *Cybersecurity Action Plan for Public Water Systems*. The action plan was transmitted by Governor Lamont to the White House in June 2024. Throughout the reporting period, DPH worked with cybersecurity advisors at the Cybersecurity and Infrastructure Security Agency (CISA) to refer PWS for voluntary, free cybersecurity and physical security assessments; these assessments are currently ongoing. Sanitary survey reports were revised to expand and update the baseline cybersecurity recommendations, while cybersecurity was added as a scoring element to the DWSRF Intended Use Plan for the first time. Additionally, the new Emerging Contaminants in Small or Disadvantaged Communities Grant (SDC) includes cybersecurity audits/contracts as an eligible grant funded project. Communications and outreach to PWS included a cybersecurity segment included in monthly webinars, a survey of large PWS conducted by DPH, a survey of all community water systems conducted by DEMHS, DPH circular letters, and direct phone calls to PWS administrators. These communications were used to inform PWS of potential threats, collect baseline information on PWS preparedness, and to share information on available training opportunities and free cybersecurity assessments.

Area Wide Optimization Program Participation: DWS continued its participation in the EPA-sponsored Area Wide Optimization Program (AWOP) which provides tools and approaches for drinking water systems to meet water quality optimization goals. The primary goal is to maximize public health protection through optimization of existing water treatment and distribution facilities (i.e., without major capital improvements) to achieve higher levels of compliance through optimization. During SFY24, DWS staff participated in two in person and two remote Region 3/National AWOP meetings to continue this important work.

Federal Technical Assistance Provider Partnerships: DWS renewed its partnership with federal technical assistance contractors, Connecticut Rural Water and Wastewater Association (CTRWWA), Resources for Communities and People (RCAP) and the Water Technical Assistance (Water TA) program. During this reporting period, their technical assistance specialists provided direct technical assistance to several small community PWS on lead and copper rule, asset planning, leak detection and PWS regulatory compliance. CT RWWA has played a significant role in assisting Connecticut's PWS in preparing for the new requirements of the LCRR as noted above.

Emerging Contaminants Work Highlights: The Emerging Contaminants Unit (ECU) continued important work to directly address non-regulated contaminants of growing concern in both public drinking water and private wells. This group deals with contaminants like per- and polyfluoroalkyl substances (PFAS), Chloride, Dieldrin, Manganese, 1-4 Dioxane, Harmful Algal Blooms and the associated Cyanotoxins, lithium and others. The ECU staff has continuously presented a segment of the Monthly Drinking Water Webinar Series for Public Water Systems, Certified Water Operators and Environmental Laboratories devoted to emerging contaminants.

PFAS - EPA promulgated the National Primary Drinking Water Rule for PFAS on June 25, 2024. The ECU is providing direct outreach and technical assistance to public water systems that voluntarily test for PFAS. DPH provides monthly updates on the specifics of the rule to PWS through the DWS monthly webinar series currently focusing on initial monitoring requirements.

Staff from the DWS and EHS continue to work with colleagues at the Department of Energy and Environmental Protection to implement the recommendations in the CT Interagency PFAS Task Force, PFAS Action Plan. Several recommendations in the Final PFAS Action Plan support public water system capacity including: support measures that provide financial assistance to public water systems for infrastructure improvements, including treatment and/or interconnections to nearby public water systems; and continue to provide technical assistance, education, and outreach to local health departments and other officials through publications and in-person and web-based training



Fig. 6 Providing the Public with Agency PFAS Information

In 2023, the DPH received the first two allotments of the Emerging Contaminants in Small or Disadvantaged Communities Grant (EC-SDC). This grant is specifically targeted toward communities in need of technical and financial assistance to address emerging contaminants with a focus on PFAS. Funding from this grant is being targeted for tools to increase PWS capacity

including certified operator training, co-funding for DWSRF projects that meet the eligibility criteria, including planning and design support and cybersecurity resources.

Legionella – The Drinking Water Section (DWS) continued to work with the DPH Agency Legionella Response Team aimed at evaluating legionella defined cases and assist involved facilities in understanding the environmental assessment needed to address and curb the presence of legionella in water ready for consumption. The DWS representatives on the Agency Legionella Response Team facilitate communications between the public water systems and the healthcare facilities they serve to assure measures are taking on both sides to minimize legionella growth and minimize the proliferation of legionella growth. DWS staff provided drinking water subject matter expertise on approximately 10 legionella related public health investigations during SFY24.

Lithium – Four public water systems in Connecticut have detected lithium in their drinking water through testing being conducted under EPA’s Fifth Unregulated Contaminant Monitoring Rule. The DWS provided direct outreach and public health messaging to those four PWS and developed an informational webpage on lithium for the public to get additional information.

Environmental Laboratory Certification Program (ELCP) Highlights: The Environmental Laboratory Certification Program (ELCP) under the Environmental Health and Drinking Water Branch re-established in 2019 registers and approves all in-state and out of state environmental laboratories that perform work in Connecticut. This includes private, municipal and industrial non-commercial labs. The mission is to promote the benchmark by which accurate, precise and legally defensible analytical data is reported by the environmental laboratory industry for use in compliance and in accordance with federal and state law. Currently ELCP offers environmental laboratory certification in 1593 analytes/methods, including the addition of certification for PFAS methods 533 and 537.1. Public water systems are required to submit data for compliance with the regulations from a state-certified environmental laboratory. ELCP currently certifies 105 drinking water laboratories between in-state and out of state.

Capacity Development Strategy Review

The preparation of this Annual Capacity Development Report for EPA serves as a review on the implementation of the existing systems strategy during the previous year. Capacity development implementation is continuous and much of the work is incorporated into DPH’s routine work tasks. DWS reviews PWS capacity needs during weekly Compliance Section meetings, monthly and annual meetings with TA providers and development and evaluation of PWS and Certified Operator training materials and classes. Shifting of priorities are made as needed to ensure no acute issues are unattended. There have been no formal modifications to the Strategy since it was recently updated in 2022.

Conclusion

The DWS continued to implement the Strategy to meet the needs of Connecticut's PWS during SFY24. When a new PWS is created using the Strategy combined with existing laws, it is more likely to remain viable. Additional work is needed to educate newly discovered PWS to establish and maintain acceptable levels of TMF capacity. For existing systems, it is demonstrated that capacity development is intrinsic to all of the DWS functional units, and routine interactions with PWS is the primary mechanism used to develop and maintain TMF capacity. This is extremely important with all the new regulations PWS are facing as part of the SDWA and a variety of emerging contaminants and technological threats. The DPH DWS will continue to effectively apply resources to remain supportive of sustainable systems and will advocate for the elimination of systems unable to maintain acceptable levels of capacity utilizing the takeover process and/or assistance from the WUCCs. In accordance with the Strategy, as issues present themselves, DWS works internally and with external partners to address issues. Capacity needs and possible solutions for small CWS ownership and operations for the future has also become a focus of the WUCCs which has transitioned to the implementation of the Coordinated Plans. The DWS effectively regulated and protected public health at four hundred eighty eight (488) CWSs, four hundred eighty-two (482) NTNC systems, and one thousand three hundred eighty-four (1,384) TNC systems during the reporting period. The implementation of capacity development is proven and will remain consistent with Connecticut's current EPA-approved Strategy.

Appendix A - Annual Capacity Development Reporting Criteria

Attachment
Reporting Criteria for Annual
State Capacity Development Program Implementation Reports

It is EPA's intent that the reporting criteria should in no way hinder the inclusion of additional information or data, such as programmatic highlights and challenges. Reporting of additional information is encouraged so that EPA may have a detailed understanding of State implementation efforts. Further explanation has been provided to assist in developing responses to each question.

I. State Capacity Development Program Annual Reporting Criteria

A. New Systems Program Annual Reporting Criteria

The following questions ask States how they are ensuring that all new community water systems and new nontransient noncommunity water systems demonstrate technical, managerial, and financial (TMF) capacity with respect to each national primary drinking water regulation in effect or likely to be in effect on the date of commencement of operations. (The definition of a new system can be found on page 16 of the *Guidance on Implementing the Capacity Development Provisions of the Safe Drinking Water Act Amendments of 1996* (EPA 816-R-98-006)).

1. *Has the State's legal authority (statutes/regulations) to implement the New Systems Program changed within the previous reporting year? If so, please explain and identify how this has affected or impacted the implementation of the New Systems Program (additional documentation, such as an Attorney General (AG) statement or a statement from a delegated department attorney, may be required.) If not, no additional information on legal authority is necessary.*

Explanation: This information will help identify whether States have maintained the necessary authority to implement the new systems program. Information provided may include programmatic changes or approaches as well as statute and/or regulation modifications, which can affect the implementation of the new systems program. Since some changes (such as statutory changes) could affect the legal authority, a statement from a State AG or delegated department attorney may be required. States should check with their EPA Regional Coordinator to determine if a new AG statement is required.

2. *Have there been any modifications to the State's control points? If so, describe the modifications and any impacts these modifications have had on implementation of the New Systems program. If not, no additional information on control points is necessary.*

Explanation: Each State's New Systems Program identified a set of Control Points, which is an integrated feature of a State's program. A control point identifies a place where the Primacy Agency (or other unit of government) can

Attachment
Reporting Criteria for Annual
State Capacity Development Program Implementation Reports

exercise its authority to ensure the demonstration of new system capacity. States should provide a discussion or a list that explains the modification(s) of control points for new systems, followed by an explanation of how and why the modification(s) have been identified. The explanation should include how the modification(s) is projected to affect the new systems program.

3. *List new systems (PWSID & Name) in the State within the past three years, and indicate whether those systems have been on any of the annual Significant Non-Compliers (SNC) lists (as generated annually by EPA's Office of Enforcement and Compliance Assurance).*

Explanation: The intent of compiling compliance data is to identify whether there are noncompliance patterns during the first three years of a new system's operation. States may refer to other forms of violations data in addition to the SNC lists. For instance, compliance tracking has been identified by 41 States as an indicator, or a component of an indicator, in implementing the new systems program. States may elect not to provide this new system data to EPA. In this case, EPA Regional Coordinators will utilize the SDWIS/FED database to gather the information. EPA Regional Coordinators will verify this information with States for accuracy. An examination of any trends (e.g., sanitary survey results, capacity assessments, etc.) may also trigger States to revisit program implementation.

B. Existing System Strategy

The following questions will ask States to demonstrate how they are implementing strategies to assist public water systems (PWS) in acquiring and maintaining TMF capacity.

1. *In referencing the State's approved existing systems strategy, which programs, tools, and/or activities were used, and how did each assist existing PWS's in acquiring and maintaining TMF capacity? Discuss the target audience these activities have been directed towards.*

Explanation: States should describe the broad range of programs and activities employed in their approved strategies, and discuss what role those programs and activities played in building or maintaining capacity of various types of systems. The response could include a brief explanation of how each activity is used in program implementation.

2. *Based on the existing system strategy, how has the State continued to identify systems in need of capacity development assistance?*

Attachment
Reporting Criteria for Annual
State Capacity Development Program Implementation Reports

Explanation: This question refers to the method(s) prescribed within State strategies for identifying, selecting or prioritizing PWS's in need of assistance. States should describe the method(s) used and the frequency at which this process may have been performed (annually, semi-annually, continuously, or as otherwise identified within the strategies).

3. *During the reporting period, if statewide PWS capacity concerns or capacity development needs (TMF) have been identified, what was the State's approach in offering and/or providing assistance?*

Explanation: States should describe the method(s) that have been utilized to identify system capacity concerns, and how such situations have been addressed. For example: If statewide reviews of sanitary surveys yielded common trends, or if they have identified a need for a specific type of operator training, discuss what actions have been performed to address these issues. Discussion of this process from planning to execution should answer the following:

- What method was used to identify this need?
- How has the need been addressed?

4. *If the State performed a review of implementation of the existing systems strategy during the previous year, discuss the review and how findings have been or may be addressed.*

Explanation: This information is not intended to address program efficacy (effectiveness), but whether a review of implementation has been performed. If no review was conducted, no further information on this question is necessary.

5. *Did the State make any modifications to the existing system strategy? If so, describe.*

Explanation: A response to this question may include program modification, wording, or approach. States should identify the reasons for the modification(s), how these modifications were identified, and how they will affect the implementation and future goals of the program.

II. Reporting Period and Submittal Dates

The annual implementation reporting period must consistently reflect either the previous State or Federal fiscal year. The report must be submitted to the appropriate EPA Regional Office within 90 days of the end of the reporting period.

Appendix B - Sanitary Survey Capacity Questionnaire - Online Form



State of Connecticut Department of Public Health **Drinking Water Section** **Sanitary Survey Capacity Questionnaire**



Your PWS is due for a routine sanitary survey this calendar year. As a regulated PWS, you have regulatory responsibilities* associated with the survey. Completing the brief questionnaire below will fulfill several of these requirements and should only take a few minutes. Your answers will also enable DWS to provide better technical assistance to your PWS based on your individual needs. Please email the completed survey to DPHCapacity@ct.gov **within 30 days of receipt**. Any questions can also be emailed to that address. You will be contacted by a DPH Engineer to schedule a sanitary survey of your PWS this year.

PWS Name: PWS ID:

Please list the correct current owner/legal contact for this PWS. The Legal Contact is the system owner or person(s) who is authorized to bind and act on behalf of the owner of that system.

Name	<input type="text"/>	Address	<input type="text"/>
Title	<input type="text"/>	City, State, Zip	<input type="text"/>
Signature	<input type="text"/>	Daytime Phone	<input type="text"/>
Email	<input type="text"/>	Emergency Phone	<input type="text"/>

Technical Capacity Questions		Yes	No	Comment
T1	a) Has your system had instances where demand exceeded your supply (e.g. low pressure or no pressure)?	<input type="text"/>	<input type="text"/>	<input type="text"/>
	b) Has your well(s) pumping rate decreased or system demand increased in the last 5 years?	<input type="text"/>	<input type="text"/>	<input type="text"/>
	c) Does your PWS regularly read meters and promptly addresses leaks?	<input type="text"/>	<input type="text"/>	<input type="text"/>
T2	Does your PWS own or control the sanitary radius** for each groundwater source of supply?	<input type="text"/>	<input type="text"/>	If no, please explain: <input type="text"/>
T3	a) System has emergency power capability for all critical facilities?	<input type="text"/>	<input type="text"/>	If no, please explain: <input type="text"/>
T4	System has an up to date DPH-approved Sampling Site Plan? (Sampling Point Inventory with Location Map)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Managerial Capacity Questions		Yes	No	Comment
M1	a) Does your PWS have a Certified Operator?	<input type="text"/>	<input type="text"/>	<input type="text"/>
	b) Does your PWS ownership meet routinely with the certified operator to review water system operations and needs?	<input type="text"/>	<input type="text"/>	Please elaborate: <input type="text"/>
M2	Does your PWS have by-laws, resolutions, or ordinances and are reviewed at least biennially	<input type="text"/>	<input type="text"/>	<input type="text"/>
M3	Individuals deemed in direct responsible charge are clearly defined and legally empowered in by-laws or by ordinances to act on behalf of the system?	<input type="text"/>	<input type="text"/>	<input type="text"/>

Managerial Capacity Questions Cont'd		Yes	No	Comment
M4	Does your PWS have an up-to-date map showing all water system facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
M5	a) Does your PWS track and have a program to reduce unaccounted for water loss?	<input type="checkbox"/>	<input type="checkbox"/>	
	b) Does your PWS have metered service connections?	<input type="checkbox"/>	<input type="checkbox"/>	
	c) Does your PWS conduct leak detection surveys?	<input type="checkbox"/>	<input type="checkbox"/>	Frequency: <input type="text"/>
M6	Is there a process to address water emergencies 24 hours a day for the PWS?	<input type="checkbox"/>	<input type="checkbox"/>	Please elaborate: <input type="text"/>
M7	Does your PWS maintain water system records per applicable record retention schedules?	<input type="checkbox"/>	<input type="checkbox"/>	

Financial Capacity Questions		Yes	No	Comment
F1	Does your PWS calculate the annual costs of operating and maintaining the system, including depreciation, reserve funds for capital improvements, and other expenses?	<input type="checkbox"/>	<input type="checkbox"/>	
F2	a) Do you bill customers for water? If yes, please explain the method for billing customers.	<input type="checkbox"/>	<input type="checkbox"/>	Briefly explain: <input type="text"/>
	b) Does the customer billing cover all annual costs including depreciation, future expenses and infrastructure replacement?	<input type="checkbox"/>	<input type="checkbox"/>	
F3	Does your PWS have rules, regulations, and/or by-laws that cover billing and address delinquent payments?	<input type="checkbox"/>	<input type="checkbox"/>	
F4	Does your PWS have a Fiscal and Asset Management (F&AM) plan? (for PWS serving >1,000 these may be separate plans)	<input type="checkbox"/>	<input type="checkbox"/>	
F5	Has your PWS set up a reserve fund for emergency costs or if not, does the PWS have the legal authority to levy special assessments on customers for unexpected large expenses?	<input type="checkbox"/>	<input type="checkbox"/>	
F6	Does your PWS have fiscal controls to ensure monies are collected and spent appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	Briefly explain: <input type="text"/>
F7	Does your PWS have an insurance policy that covers the water system assets and/or board liability?	<input type="checkbox"/>	<input type="checkbox"/>	Please elaborate: <input type="text"/>

* Your responses to this survey are part of this public water system's regulatory and statutory requirements, specifically RCSA Section 19-13-B102(l), (o), (p), (r), (s) and (w) and CGS 19a-37e

** Sanitary Radius Requirements for Groundwater Sources of Supply

Well pump Withdrawal Rate in gpm:	<10	10-50	>50
Sanitary Radius	75'	150'	200'

Reset Form

Appendix C - DWSRF TMF Capacity Review Checklist

State of Connecticut, Department of Public Health
Drinking Water Section, Drinking Water State Revolving Fund (DWSRF)
Technical Managerial Financial Capacity Review Checklist

Clear Form (temporary)

Applicant PWS Name: _____ **PWSID:** _____
Project Name: _____
DWSRF Project Number: _____ **Pop Served by PWS:** _____

DWSRF funding assistance requires the applicant to have adequate technical, managerial, and financial capacity in order to be eligible to receive funding. The Office of the State Treasurer (OTT) reviews the financial capacity of each borrower (item #12). This form documents the Technical and Managerial Capacity review by the Drinking Water Section.

The technical, managerial, and financial capacity review is considered complete when all applicable items have been reviewed. Add comments as necessary.

-
1. Current Overall Capacity Assessment Tool (CAT) Score: Date run:
Managerial Score Technical Score Financial Score
2. Is this PWS under any formal enforcement action by DPH? ☐ Yes ☐ No
3. Is this PWS listed on the current Enforcement Targeting Tool (ETT) list? ☐ Yes ☐ No
If yes, how many points: Date of List:
4. Is PWS in compliance with Certified Operator requirements? ☐ Yes ☐ No
5. Does this PWS have any unresolved deficiencies from the most recent sanitary survey inspection?
☐ Yes ☐ No
If yes, is the PWS actively working towards resolving the deficiencies?
(i.e. has TRFA accepted their proposed resolution?) ☐ Yes ☐ No
6. Has this PWS completed its Sanitary Survey Capacity Questionnaire? ☐ Yes ☐ No
If submitted with DWSRF FAA-Part I, give to Cap. Dev. Unit for CAD input
7. Does this PWS have a current Water Supply Plan (WSP)? ☐ Yes ☐ No ☐ N/A
If so, is the project(s) submitted for DWSRF supported by the WSP? ☐ Yes ☐ No
If so, and the WSP is >5 years old, is project(s) on current Capital Improvement Plan? ☐ Yes ☐ No
8. Does this PWS have an Asset Management plan? ☐ Yes ☐ No
9. Does this PWS have a Fiscal Management plan? ☐ Yes ☐ No
10. If a Small PWS serving <1,000, do they have a Fiscal and Asset Management Plan? ☐ Yes ☐ No ☐ N/A
Has this plan(s) been reviewed? ☐ Yes ☐ No
Which, if any, have been found acceptable? ☐ AM ☐ FM
(If the AM plan is acceptable for small PWS, this PWS is eligible for federal subsidy)
11. Has DWSRF staff met with TRFA/survey staff to discuss overall system? ☐ Yes ☐ No
Are there any Technical or Managerial Capacity issues? ☐ Yes ☐ No
Are there any water system issues? ☐ Yes ☐ No
Are there other needs which should/must be prioritized over the proposed DWSRF project(s)? ☐ Yes ☐ No
12. Has OTT conducted the financial viability review of the applicant? ☐ Yes ☐ No
If yes, was it found to be acceptable? ☐ Yes ☐ No

State of Connecticut, Department of Public Health
Drinking Water Section, Drinking Water State Revolving Fund (DWSRF)
Technical Managerial Financial Capacity Review Checklist

Does this PWS need assistance with Technical capacity? ☐ Yes ☐ No
Does this PWS need assistance with Managerial capacity? ☐ Yes ☐ No
Does this PWS need assistance with Financial capacity? ☐ Yes ☐ No

Assistance provided/Actions taken:

--

Summary of Capacity Review

Item	Reviewed Y/N or N/A	Technical Managerial & Financial Capacity Items	Acceptable Y/N or N/A
1		Compliance Assessment Tool Scorecard	
2		DPH Formal enforcement action	
3		ETT list (Enforcement Targeting Tool)	
4		Certified Operator Requirements	
5		Deficiencies from most recent sanitary survey	
6		Sanitary Survey Capacity Questionnaire	
7		Water Supply Plan / Capital Improvement Plan (if applicable)	
8		Asset Management Plan (if PWS has one)	
9		Fiscal Management Plan (if PWS has one)	
10		Fiscal and Asset Management Plan (small <1,000 pop only)	
11		Met with TRFA/Survey Staff	
12		OTT Financial Viability Review	

Does this PWS have sufficient Technical Capacity for a DWSRF loan? ☐ Yes ☐ No
Does this PWS have sufficient Managerial Capacity for a DWSRF loan? ☐ Yes ☐ No
Does this PWS have sufficient Financial Capacity for a DWSRF loan? ☐ Yes ☐ No

All applicable items MUST be determined to be Acceptable for applicant to be eligible for DWSRF funding.

Attached: Capacity Assessment Tool CAD report

Comments:

--

(Signature of DWS Staff)

(print name)

(Date)

Date Technical, Managerial & Financial Capacity Review Completed:

--

Appendix D - Small CWS Fiscal & Asset Management Plan Template

Connecticut Department of Public Health Drinking Water Section

Fiscal and Asset Management Plan for Community Public Water Systems (PWS) Serving less than 1,000 Residents

This plan was created as a tool for use by Small Community PWS to assist PWS in meeting the new statutory requirement of Connecticut General Statutes (CGS) §19a-37e; and help provide safe and adequate drinking water to its customers now and into the future. Small community water systems serving less than 1,000 people are often run by volunteer home or condominium association boards, property management companies or by a sole owner of a complex. These groups may not have a background in the water industry and/or be familiar with all regulations pertaining to the ownership and operation of Community PWS. Owning and maintaining a PWS is a large responsibility and all customers of Community PWS deserve access to safe and adequate water regardless of the type of PWS ownership.

Fiscal and Asset Management is a **fundamental component of PWS ownership and a comprehensive Fiscal and Asset Management Plan (F&AM) is essential for the long-term success of any PWS**. Hopefully, PWS will find this template useful as a tool to assist PWS in organizing and assessing their water system finances and assets. It is anticipated that Small Community PWS can populate this template themselves based on their records and in working with their certified operator. The physical condition of the water system and financial decisions the system makes can have a direct impact on your customers' health as well as impact other factors such as property values. In addition to providing safe and reliable water, PWS that maintain a comprehensive F&AM Plan can boost PWS efficiency, save PWS staff time, improve customer service, tackle increasing costs of infrastructure and support budget discussions with facts to make informed decisions. Fiscal and Asset Management Plans will be required for all small Community PWS by **January 1, 2021**. While this template was designed for small Community PWS, this template may also be used by larger Community PWS and/or Non-Community PWS at their discretion. Further, if PWS wish to expand upon this template, there are many asset management services available to continue their asset management journey.

Date Plan Created	
Signature of PWS Owner/Legal Contact	
Printed Name PWS Owner/Legal Contact	

SECTION 1: PWS GENERAL INFORMATION

Public Water System Name: _____ PWSID: _____ Town Served: _____

Type of Ownership: (check appropriate box)
☐ Private Owner
☐ Homeowners Association / Condominium Association
☐ Other (specify): _____
☐ Municipality / Water Authority
☐ Incorporated, Investor-Owned

Public Water System Description

Source Type: (Check all that apply)
☐ Ground Water
☐ Surface Water
☐ Surface Water (Purchased)
☐ Ground Water (Purchased)

Number of Service Connections:		Total Population Served:	
Number of Metered Service Connections:		Interconnections (list, if applicable):	
Number of Lead Service Lines:			

Contact Information

Contact Type	Name	Phone	Email	Current Address
Owner				
Manager				
Financial Contact				
Chief Certified Operator				
Sampler				
Head Maintenance Personnel				

Fiscal and Asset Management Team

Name	Responsibility

Water System Schematic & Distribution System Map

Use this space to draw a detailed schematic of the water system including as many of the system assets as possible; an existing copy may be attached in lieu of a drawing. Additionally, an up-to-date distribution system map should be attached to the plan to show all distribution system assets.

SECTION 2. ASSET MANAGEMENT INFORMATION

Asset Inventory Worksheet

Asset Component	Asset ID	Size, Length, Diameter and / or Capacity, and Location (Where necessary, list each individual component separately)	Year Constructed or Installed	Estimated Life Expectancy (Yrs)	Condition (1-5) ¹	Estimated Remaining / Adjusted Service Life ² (Yrs)	Probability of Failure (1-5) ³	System Impact (1-5) ⁴	Risk Score (1-25) ⁵
Well									
Well Pump									
Source Meter									
Well/Pump House									
Atmospheric Tank									
Booster Pumps									
Bladder Tank									
Hydropneumatic Tank ⁶									
Distribution Pipe and all in-line valves and boxes									
Treatment System									

Asset Component	Asset ID	Size, Length, Diameter and / or Capacity, and Location (Where necessary, list each individual component separately)	Year Constructed or Installed	Estimated Life Expectancy (Yrs)	Condition (1-5) ¹	Estimated Remaining / Adjusted Service Life ² (Yrs)	Probability of Failure (1-5) ³	System Impact (1-5) ⁴	Risk Score (1-25) ⁵
Hydrants and Blow-offs									
Back-up Generator									
Customer Meters									
Electrical Service									
Telemetry/SCADA or other Remote Monitoring System									
Other									

1	Score	Condition	Description	3	Score	Probability of Failure	4	Score	System Impact	Description
	1	Excellent	New or relatively new condition. Asset has required little to no preventative or corrective maintenance.		1	Highly Unlikely		1	Insignificant	Can continue normal operations of the water system without this asset.
	2	Good	Acceptable condition. It still functions and requires minor preventative or corrective maintenance.		2	Unlikely		2	Minor	Redundant systems in place; loss of the asset has a minor impact on the ability of the system to operate.
	3	Fair	Deterioration of the asset can be seen. It needs preventative or corrective maintenance frequently to be able to function.		3	Likely		3	Moderate	Some redundancy in place; loss of the asset has a moderate impact on the ability of the system to operate.
	4	Poor	Failure of the asset is likely and will need to be replaced in the next few years.		4	Very Likely		4	Major	Greatly reduced capacity (major impact) to operate water system without this asset.
	5	Very Poor	Failure has occurred or is going to occur. Major maintenance is required, or replacement needs to occur.		5	Imminent		5	Catastrophic	Cannot operate water system without this asset.

² **Remaining / Adjusted Service Life:** Remaining or adjusted service life will be the difference between the current year and the year an asset was installed /constructed. This value may change depending on specific asset maintenance practices and current asset condition rating.

³ **Risk Score** is a number which is the result of Probability of Failure Score multiplied by System Impact Score.

⁴ Attach the Hydropneumatic Tank Fiscal and Asset Assessment Form that was completed for each active hydropneumatic tank, if applicable.

Water System Operation and Maintenance (O&M) Plan

A Water System Operation and Maintenance Plan is a written procedure explaining how a public water system is to be operated on a day-to-day basis to ensure public health, safety and compliance with applicable regulations. It also describes maintenance practices and frequency to assure that the physical components of the water system are maintained in such a way to maximize the useful life of the assets.

Copies of these procedures should be kept with this Fiscal and Asset Management form for reference purposes. If your utility already has a written water system operation and maintenance plan that is routinely updated, please attach the latest version of this plan to this document. If not, please outline the current operation and maintenance practices for each category in the spaces provided below:

Day-to-Day Operations		
Task	Frequency	Description
Record instantaneous and totalizing meter readings for all sources of supply		
Check and record water levels in storage tanks		
Inspect pumps, motors and controls		
Check chemical solution tanks and record amounts used; replenish tanks		
Conduct field operating tests for treatment parameters (pH, Cl ₂ and PO ₄ residual)		
Check instrumentation for proper signal input/output		
Complete security check of pumphouse		
Inspect heater/dehumidifier operation		
Read customer meters		

Routine Maintenance		
Task	Frequency	Description
Exercise Valves		
Implement flushing program		
Insect tank hatches, vents, pipes		
Inspect and lubricate pumps		
Calibrate chemical feed pumps and/or treatment instrumentation		
Inspect and conduct repairs to water system facilities – wellheads, pump house, etc., as needed		
Inspect and clean chemical feed lines and solution tanks		

Water Quality Monitoring	
Sampling Schedule	Attach copy of DWS Water Quality Monitoring & Compliance Schedule
Sample Locations	Attach copy of DWS- Approved Sampling Site Plan with sampling point map
Certified Laboratory: Name and Contact Information	
WQ Sampler: Name and Contact Information	

Capital Improvements

Input the assets with the top ten highest Risk Scores from the Asset Inventory Worksheet on pages 5 and 6, starting with the highest score first. Fill out the columns in the table in accordance with the instructions in order to develop a Capital Improvement Project List and Budget.

Risk Score	Asset ID	Asset	Description of Action Required to Improve Asset	Years Until Action Required	Approx. Total Cost of Required Action: Replacement, Rehabilitation, Repair	Reserves Required Each Year (Total Cost ÷ # of Years)
Totals:						

Capital Improvement Funding:

For the actions you've listed on the table above, where is the funding for these projects included in your budget? Is the money included in the capital reserve? Is it included in your Operation & Maintenance budget? Please explain.

Explain how the system is or will be developing/managing a reserve fund for water system capital improvements. Be sure to include how the reserve fund will be generated and used and how often funds are/will be added to the account.

SECTION 3. FISCAL MANAGEMENT INFORMATION

Fiscal Information – Answer the questions and complete the tables below. If a line item is not applicable you can leave it blank.

Water Rates: (complete all rows that apply)

Flat Fee	Y / N	Current Rate		Frequency of Billing:	Monthly		Quarterly		Other (Specify):	
Metered Usage	Y / N	Current Rate	Base Rate Volume Charge	Frequency of Billing:	Monthly		Quarterly		Other (Specify):	
Other	Y / N	Current Rate		Frequency of Billing:	Monthly		Quarterly		Other (Specify):	

Average Residential Annual Water Bill _____ Average Commercial Annual Water Bill _____ Are water rates combined with any other rates/fees? (If yes, list) _____

When was the last time the water rates were reviewed? _____

When was the last time the water rates were changed? If so, how were they changed? _____

Types of Accounts Maintained by the Water System (check all that apply):

Operating Account _____ Reserve Account _____ Emergency Account _____ Other (list) _____

PWS Revenue (complete or attach PWS budget)		Actual Last Year	Budget Current Year	Projected Next Year	Comments
Total Water Usage Revenue:					
Other Fees and Service Charges (late fees, new connection fee, etc.):					
Special Assessments:					
Secured Funding (e.g. loan):					
Interest:					
Amount transferred from Reserve Fund:					
Amount transferred from Emergency Fund:					
Other:					
TOTAL REVENUE:		\$	\$	\$	

PWS Operating Expenses		Actual Last Year	Budget Current Year	Projected Next Year	Comments
Expenses					
Maintenance:					
Certified Operator:					
Utilities (power, telephone, internet, etc.):					
Salaries and Benefits:					
Equipment Cost:					
Water Quality Sampling & Testing:					
Water Treatment (Chemicals, etc.):					
Capital Improvement Project:					
Rent or Mortgage:					
Insurance:					
Professional Services (property management, legal, accounting, engineering, etc.):					
Training Costs:					
Billing costs:					
Fees (state PWS fee, etc.):					
Security:					
Debt payments:					
Taxes:					
Amount transferred to Reserve Fund:					
Amount transferred to Emergency Fund:					
Other:					
TOTAL EXPENSES:		\$	\$	\$	
Net Income/Loss:					
Total Revenue:		\$	\$	\$	
Total Expenses:		\$	\$	\$	
Net Income/loss:		\$	\$	\$	

Overall Account Balances	Actual Last Year	Budget Current Year	Projected Next Year	Comments
Operating Account Balance (cash on hand, etc.)				
Opening balance:				
Annual income/loss:				
Ending balance:				
Approx. number of months of operating monies on-hand:				
Emergency Fund Account Balance				
Opening balance:				
Annual inflow/outflow:				
Ending balance:				
Reserve Fund Account Balance				
Opening balance:				
Annual inflow/outflow:				
Ending balance:				
Required Reserves				
Total Annual Required Reserves:				
Opening Reserve Fund Balance:				
Annual inflow/outflow:				
Required Reserves Ending Balance:				
Additional Reserves Needed:				
Debt Balance(s)				
Opening Balance:				
Annual Outflow (Payments):				
Ending Balance:				

Fiscal Management Review

How often are the water system revenues and expenses reviewed? By whom and how are they reviewed?

If the water system revenues were insufficient to meet expenses, what steps is the PWS using to rectify the situation including reserving funds for anticipated capital improvements and other reserve purposes such as emergencies and debt expenses?

What fiscal controls are in place to ensure that monies are collected and spent appropriately, and the financial needs of the system are met? Who is responsible for collecting water bill/fees from customers?

How many customer accounts were unpaid or delinquent during the year? How are these unpaid or delinquent accounts resolved?

SECTION 4. UNACCOUNTED FOR WATER LOSS INFORMATION

"Unaccounted for Water Loss" means water that the small community water system supplies to its distribution system, but never reaches its consumers. Types of unaccounted for water loss can be leaks, main breaks, flushing, tank cleaning, etc. The vast majority of water systems have unaccounted for water loss. It should be noted that unaccounted for water for the purpose of this exercise encompasses both Real Water Loss such as leaks, main breaks, etc. and PWS approved, but Unbilled Water Loss such as water main flushing, treatment backwashing or make up water, firefighting, etc.

Determination of PWS Unaccounted for Water Loss (UWL)

Do you have Unaccounted for Water Loss? YES _____ NO _____ (zero water loss is rare to non-existent)

If No, How do you know? _____

If yes, What is the total annual amount of unaccounted for water loss for your PWS? (use either Option A or Option B below to determine this amount)

Option A: PWS that meters both supply production and distribution consumption

Use the table below to organize your meter reading data and complete the calculation to determine the amount of unaccounted for water loss.

Month	Total Production (Gallons)	Total Distribution (Gallons)	Unaccounted for Water Loss (Real Water Loss & Unbilled Water Loss) (Gallons)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Annual Totals			
Calculation	Total Production (minus) -	Total Distribution (equals) =	Unaccounted For Water Loss

Option B: PWS that do not include distribution meters must estimate the total amount of unaccounted for water loss

Unaccounted for water loss can be estimated by calculating the total amount of water produced (and/or purchased) and examining water usage trends and applying established estimates on the amount of water used. This option is only for systems that do not utilize distribution meters. Per RCSA Section 19-13-B102(n) public water systems are required to conduct weekly meter readings for each source of supply. Weekly water produced should be tabulated from the meter readings and compiled in order to determine long-term trends. According to record retention requirements, PWS should maintain these records for ten years.

Populate the total amount of water produced (as calculated by adding up all of your source meters weekly readings) for each week of the year in the table below.

Weekly Readings	Year:		Year:		Year:	
	Meter Readings (Gallons)	Est. Daily Production (Gal Produced/Week ÷ # of Days = Gallons/Day)	Meter Readings (Gallons)	Est. Daily Production (Gal Produced/Week ÷ # of Days = Gallons/Day)	Meter Readings (Gallons)	Est. Daily Production (Gal Produced/Week ÷ # of Days = Gallons/Day)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
Annual Totals						

Use the tabulated production readings above to determine trends and/or look for anomalies such as exceedingly high water usage, etc. Also, by calculating the estimated daily and/or customer usage, you will be able to more easily see trends. To estimate daily usage, divide the total gallons produced each week by the number of days between readings. To estimate customer usage, take the total gallons produced each week and divide by the number of customers or by the number of service connections. Try to identify the cause for anomalies such as annual flushing programs, water main breaks or service line leaks, etc. Then estimate the amount of unaccounted for water by comparing the anomalies to the typical water production averages. Space is available for 3 years' worth of water production readings in order to compare trends which are more easily seen over a longer period of time.

Causes for Unaccounted for Water Loss

Check "Yes" or "No" for each category and provide an adequate description for each item checked "Yes"

Yes	No	Category	Description (Size and Number of Occurrences per Year)	Estimated/Actual Volume
		Water main breaks (Real)		
		Distribution system leaks (Real)		
		Water main flushing (Unbilled)		
		Treatment system backwash/process (Unbilled)		
		Fire Protection (Unbilled)		
		Distribution Bleeder (Unbilled)		
		Other:		
Total Estimated Unaccounted for Water Loss Volume (gallons):				
Volume Water Produced in Year (gallons):				
Estimated Percentage of UWL = $UWL \div \text{Total Volume Produced in Year}$:				

Measures Being Taken to Reduce the Amount of Unaccounted for Water Loss

Check "Yes" or "No" for each category and provide an adequate description for each item checked "Yes"

Yes	No	Category	How Often	Description
		Conduct Leak Detection Survey		
		Water Main Replacement Program		
		Conduct Routine Water Audits		
		Meter Replacement/Calibration Program		
		Trend Meter Reading Data		
		Midnight - 4 am Meter Read		
		Other:		

SECTION 5. Annual Update Record Complete as necessary each year when plan is updated.

Date of update:		Signature of PWS Owner/Legal Contact	
Brief description of update (items considered, changes made, etc.):			
Date of update:		Signature of PWS Owner/Legal Contact	
Brief description of update (items considered, changes made, etc.):			
Date of update:		Signature of PWS Owner/Legal Contact	
Brief description of update (items considered, changes made, etc.):			
Date of update:		Signature of PWS Owner/Legal Contact	
Brief description of update (items considered, changes made, etc.):			
Date of update:		Signature of PWS Owner/Legal Contact	
Brief description of update (items considered, changes made, etc.):			

**Appendix E - Public Act 21-121 Adopted from House Bill 6666 Re:
Capacity Implementation Plan Requirement**

Public Act 21-121 adopted from House Bill 6666

Sec. 85. (NEW) (*Effective October 1, 2021*) (a) As used in this section:

- (1) "Consumer" has the same meaning as provided in section 25-32a of the general statutes;
- (2) "Owner" means the person or entity that owns or controls the small community water system; and
- (3) "Small community water system" has the same meaning as provided in section 19a-37e of the general statutes.

(b) Not later than January 1, 2025, each owner of a small community water system shall complete a small community water system capacity implementation plan on a form prescribed by the Department of Public Health demonstrating that such owner has the managerial, technical and financial capacity to continue to own and operate such system and shall implement such plan. Following the completion of the initial small community water system capacity implementation plan, each small community water system shall update such small community water system capacity implementation plan annually and make such small community water system capacity implementation plan available to the department upon request. Such plan shall include:

- (1) A description of the small community water system, including the number of consumers and persons served and sources of drinking water;
- (2) Ownership and management information, including the type of ownership structure and the current names, addresses and telephone numbers of the owners, certified operators and emergency contact persons for the small community water system;
- (3) Service area maps;
- (4) Facilities maps, including the location of and specific information regarding sources, storage facilities, treatment facilities, pressure zones, booster pumps, hydrants, distribution lines, valves and sampling points;
- (5) A description of such system's cross-connection control program;
- (6) A description of such system's source water protection program;
- (7) A copy of such system's emergency response plan required pursuant to section 19-13-B102 of the regulations of Connecticut state agencies;
- (8) A capital improvement program, including the schedule that identifies all capital improvements scheduled for a five-year planning period and capital improvements or major projects scheduled for a twenty-year planning period;
- (9) Water production and consumption information;

(10) Information regarding public water systems that are nearby, including the distance from the small community water system and type of public water system, if any. Such information shall be based on the coordinated water system plan approved by the Commissioner of Public Health pursuant to section 25-33h of the general statutes for the water utility coordinating committee in which such small community water system is located; and

(11) Financial capacity information, including:

(A) An evaluation of the small community water system's fiscal and assessment management plan prepared pursuant to section 19a-37e of the general statutes;

(B) A summary of the income and expenses for the five years preceding the date of submission of the plan;

(C) A five-year balanced operation budget;

(D) Water rate structure and fees charged, including information regarding how such rates and fees are updated and whether such rates and fees are sufficient to maintain cash flow stability and to fund the capital improvement program, as well as any emergency improvements; and

(E) An evaluation that has considered the affordability of water rates.

(c) On or before July 1, 2025, and annually thereafter, the small community water system shall provide a summary of its small community water system capacity plan in the small community water system's consumer confidence report required by section 19-13-B102 of the regulations of Connecticut state agencies.

(d) The provisions of this section shall not apply to a small community water system that is (1) regulated by the Public Utilities Regulatory Authority, (2) subject to the requirements set forth in section 25-32d of the general statutes, or (3) a state agency.

(e) The provisions of this section shall be deemed to relate to the purity and adequacy of water supplies for the purposes of the imposition of a penalty under section 25-32e of the general statutes.

f) The commissioner may adopt regulations, in accordance with the provisions of chapter 54 of the general statutes, to carry out the provisions of this section.