# Center for Drinking Water Quality 2024 Annual Report







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#### Message from the Chief of Drinking Water Quality

I am pleased to present the 2024 Annual Report of the Center for Drinking Water Quality on behalf of the Rhode Island Department of Health (RIDOH).<sup>1</sup> I wish to acknowledge the contributions of our many partners who share our mission to safeguard drinking water in Rhode Island. Highlighted in this message are a few of our focus areas from 2024, in addition to the numerous responsibilities our dedicated staff take on every day to protect and promote public health, as detailed in this report.

In 2024, we applied for and received the third year of the *Bipartisan Infrastructure Law* (BIL)/*Infrastructure Investment and Jobs Act* (IIJA) funding from the Environmental Protection Agency (EPA), in partnership with the Rhode Island Infrastructure Bank (RIIB). In early 2024, we held a process mapping workshop with our State Revolving Fund (SRF) consultant, with the goal of clarifying, streamlining, and improving our SRF documents and processes. Throughout 2024, we worked toward this goal while diligently continuing the day-to-day work to review and approve projects and pay disbursement requests. We continue to devote our resources to the crucial mission of investing in water infrastructure, including lead service line replacements and addressing per- and polyfluoroalkyl substances (PFAS), especially in disadvantaged communities. RIDOH will continue to apply for this funding each year it is available and encourage public water systems to submit their applications to get placed on the Drinking Water State Revolving Fund Project Priority List.

Lead contamination of drinking water remained a top priority in 2024. A majority of public water systems met the compliance date of October 16, 2024, to submit their initial service line inventories to RIDOH and make them publicly available as required by the federal *Lead and Copper Rule Revisions* (LCRR) and the *Rhode Island Lead Poisoning Prevention Act* (LPPA). In addition, RIDOH published an online dashboard of service line material by address. Also in October 2024, EPA promulgated the *Lead and Copper Rule Improvements* (LCRI), which includes updated requirements for lead service line replacements, compliance tap sampling, action levels, and prioritizing historically underserved communities, with a compliance date of 2027. RIDOH continues to contract with a vendor to provide technical assistance to water systems on updating their service line inventories and other requirements of the LCRI and LPPA. In 2024, RIDOH also continued the program for lead testing in schools and child care centers in partnership with the University of Rhode Island (URI).

Attention to PFAS contamination of drinking water also continued in 2024. RIDOH published PFAS regulations in September 2024, as required by the 2022 *Rhode Island PFAS in Drinking Water, Groundwater, and Surface Waters Act* (RI PFAS Act). These regulations codify the RI PFAS Act's interim maximum contaminant level (MCL) of 20 parts per trillion (ppt) for the sum of 6 PFAS as a final MCL and establish additional requirements such as monitoring, issuing public notice, and returning to compliance. RIDOH worked with the exceeding water systems on their plans, consent agreements, and funding options. RIDOH partnered with RIIB to apply for the BIL/IIJA's Emerging Contaminants in Small or Disadvantaged Communities grant, which will be used to provide grants to water systems for PFAS treatment, consolidation with other water systems, and manganese treatment, and will also enable the Rhode Island Department of Environmental Management (RIDEM) to test private wells for PFAS and implement a free private well treatment program.

<sup>&</sup>lt;sup>1</sup> This Annual Report fulfills a number of RIDOH's reporting obligations with respect to its drinking water program, including: the statutory requirement to report annually to the Administrator of the Environmental Protection Agency on violations of national primary drinking water regulations by public water systems in the State (42 U.S.C. § 300g-3); the statutory requirement to report annually to the Rhode Island General Assembly regarding the sanitary laws (R.I. Gen. Laws § 23-1-9); and the statutory requirement to report annually to the Governor of Rhode Island on the status of private well contamination in the State (R.I. Gen. Laws § 23-1-5.5).

Additional notable highlights from 2024 include: a significant update to RIDOH's webpages; an upgrade of Drinking Water Watch to Drinking Water Viewer, a more modern and user-friendly website for public water system information; preparation for drafting the new Consumer Confidence Report (CCR) regulations; the facilitation of an emergency preparedness and response information session; and a re-establishment of the traveling roundtables for in-person updates, discussion, and feedback on new regulations and processes.

RIDOH welcomes your comments and suggestions, and I encourage you to contact the Center for Drinking Water Quality at 401-222-6867 or <a href="mailto:DOH.RIDWQ@health.ri.gov">DOH.RIDWQ@health.ri.gov</a>, or visit us online at <a href="https://health.ri.gov/water/about/yourwater/">https://health.ri.gov/water/about/yourwater/</a>.

Sincerely,

Amy B. Parmenter
Chief Administrator
Center for Drinking Water Quality
Division of Environmental Health
Rhode Island Department of Health

#### **Financials**

Since 1976, the EPA has received an annual Congressional appropriation under Section 1443(a) of the Safe Drinking Water Act (SDWA) to assist states, territories, and tribes in carrying out their Public Water System Supervision programs. Each year, RIDOH receives a grant to develop, implement, and enforce the requirements of the SDWA and to ensure that water systems comply with National Primary Drinking Water Regulations. Since 1996, when the SDWA was amended to create the State Drinking Water Revolving Fund (DWSRF), RIDOH has received additional federal funding in the form of set-asides from the loan fund capitalization grant to assure safe drinking water. In 2022, the Bipartisan Infrastructure Law (BIL)/Infrastructure Investment and Jobs Act (IIJA) funding was incorporated into the DWSRF and is expected for 5 years. The BIL/IIJA also included funding for the Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) grant program for 5 years. The Water Infrastructure Improvements for the Nation Act (WIIN) grant included funding for lead testing and remediation in schools and child care facilities, which started in late 2023.

In addition, RIDOH receives licensing fees for aquatic venues and bottled water that are applied as an investment back into Rhode Island's licensed aquatic venues and bottled water vendors through a Restricted Receipt account.

In 2024, RIDOH invested \$7,558,258 in state and federal funds in Rhode Island's public water systems, aquatic venues, and bottled water vendors.

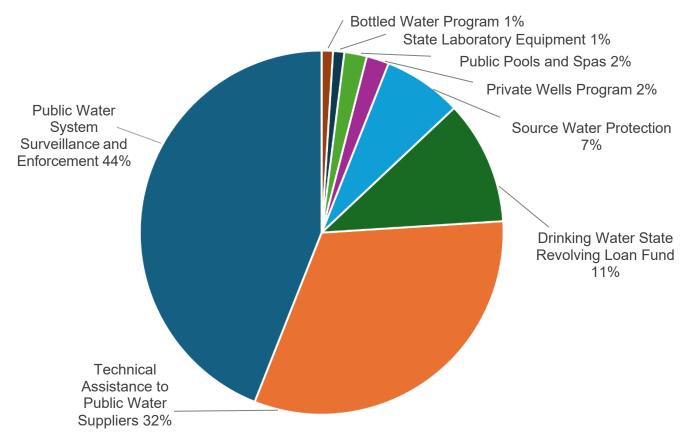
#### 2024 Annual Funds

Federal Funds Excluding EC- SDC and WIIN Grants	\$6,095,984
State Funds	\$393,155
Restricted Receipts	\$190,968
Total Budget:	\$6,680,107

#### **Other Grant Funds**

EC-SDC Grant	\$377,710
WIIN Grant	\$500,441

## Distribution of Federal Funds, State Funds, and Restricted Receipts (Excluding EC-SDC and WIIN Grants)



#### **Oversight**

In Rhode Island, RIDOH is the agency responsible for carrying out the Public Water System Supervision (PWSS) program. Key activities include:

- Developing and maintaining state drinking water regulations;
- Developing and maintaining an inventory of public water systems throughout the state;
- Developing and maintaining a database to keep compliance information on public water systems;
- Conducting sanitary surveys, conformance inspections, and compliance inspections;
- Supporting technical, managerial, and financial capacity of public water systems;
- Reviewing public water system plans and specifications;
- Providing technical assistance to managers and operators of public water systems;
- Ensuring that public water systems regularly inform consumers about the quality of the water that they are providing;
- Certifying water operators and providing them training;
- Certifying laboratories that can perform the analysis of drinking water used to determine compliance with the regulations;
- Supporting source water protection, emergency response, and planning;
- Carrying out an enforcement program to ensure that public water systems comply with the State's requirements; and
- Partnering with the Rhode Island Infrastructure Bank to administer the Drinking Water State Revolving Fund Program for drinking water infrastructure projects.

#### **Public Drinking Water**

The mission of the Public Drinking Water Program is to protect and promote the health and safety of Rhode Islanders by ensuring the quality of the state's public drinking water supplies for use by Rhode Island households, businesses, hospitals, nursing homes, schools, restaurants, industry, and firefighting and emergency response services. RIDOH's Center for Drinking Water Quality works diligently and maintains an excellent record of meeting this high-priority public health responsibility.

#### Rhode Island Water Systems and Customer Counts, 2024

Public Water System Type	System Count
Community Systems	89
Non-Transient, Non-Community Systems	80
Transient, Non-Community Systems	297
Total	466
Public Water System Source Water	System Count
Systems using surface water	29
Systems using groundwater	437
Total	466 <sup>2</sup>
Public Water System Source Water	Customer Count
Surface Water Systems	905,396 <sup>1</sup>
Groundwater Systems	251,937 <sup>1</sup>
Total	1,157,333 <sup>1</sup>
Active Non-Operational Systems	System Count
	22

<sup>1</sup> Includes all populations (transient, residential, and workplace).

<sup>&</sup>lt;sup>2</sup> Some water systems use both groundwater and surface water (purchased and non-purchased).

#### **Private Drinking Water**

In Rhode Island, an estimated 120,000 people rely on private water systems for drinking water. In 2024, the Private Wells Program responded to more than 1,000 inquiries regarding well water quality. These inquires came from residents, realtors, lenders, and other State agencies.

The Private Wells Program conducted ongoing private well workshops for residents, realtors, and regulators. These were moved to hybrid in-person and online platforms as a result of the success in conducting them remotely throughout the COVID-19 pandemic. The Private Wells Program also conducted sessions of the program's online Private Well Water Sampling seminar, which was developed with the Rural Community Assistance Partnership (RCAP) and can be taken to fulfill the training requirement for the RIDOH Private Water System Sampler license. In addition, the program also developed new educational materials and resources for residents, including water quality analysis interpretation tools, source water protection measures that private well owners can perform themselves, and information on PFAS-related topics.

The Private Wells Program also continues work on the Well Completion Report data integrity project, which started in 2020 and aims to create a complete electronic repository for all Well Completion Reports submitted to the Center for Drinking Water Quality since the reports were first required in 1972. Town and year files were audited for organizational accuracy, and the reports were scanned and indexed by location. The project also included creating and importing the indices into an ArcGIS-ready database.

The Program is currently exploring potential data entry assistance opportunities for digitizing other well data on the reports, such as depth and stratigraphy.

The Private Wells Program also continued its work with both local and interstate community partners, assisting other agencies and educational institutions with data, resources, and other collaborative projects.

### **Licensed Aquatic Venues**

In 2024, RIDOH licensed 402 aquatic venues. Indoor pools are licensed to operate year-round. Seasonal pools are licensed to operate from June 1 to September 30. Annually, RIDOH or the aquatic venue licensee collects and analyzes water quality samples for bacteria, free residual chlorine, combined chlorine, and potential of hydrogen (pH) levels. Compliance data are available in Appendix F.

Swimming Pools		Therapy Pools (Hot Tubs)		Float tanks
Yearly	Seasonal	Yearly	Seasonal	
143	178	65	6	10



#### **Bottled Water**

The United States Food and Drug Administration (FDA) regulates bottled water as a food product. Under the federal *Food, Drug, and Cosmetic Act,* manufacturers are responsible for producing safe, unadulterated, and truthfully labeled products. The FDA has established regulations for bottled water including identity standards that define bottled water as, "water that is intended for human consumption and that is sealed in bottles or other containers with no added ingredients except that it may optionally contain safe and suitable antimicrobial agents."

Bottled water may be well water, municipal water from public water systems, mineral water, purified water, sparkling water, or spring water. The requirements for obtaining a bottling permit are submission and approval of analytical data for the water source and product, label approval, satisfactory inspection reports, and approval of the permit application.

As of December 31, 2024, 1 licensed in-state water bottler and 169 licensed out-of-state water bottlers were selling bottled water in Rhode Island.

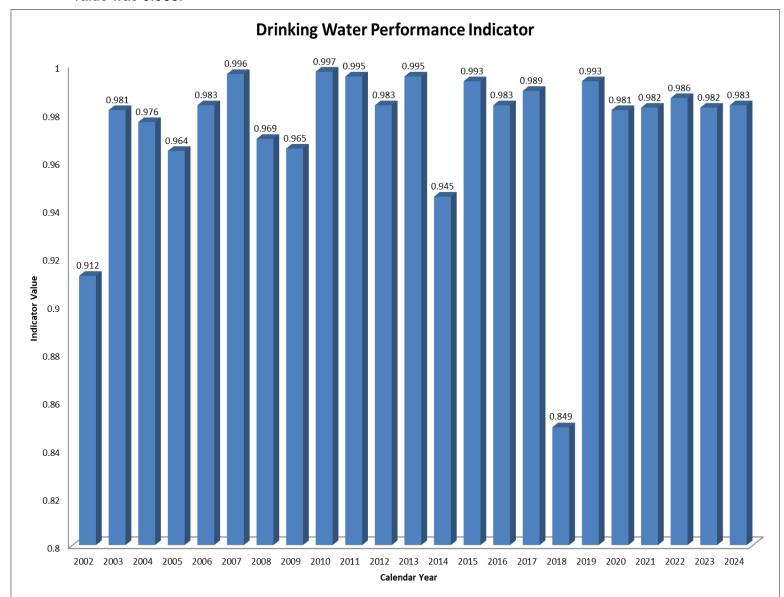


#### **Impact and Performance**

The performance of the state's public drinking water systems for 2024 is based on compliance with multiple water quality requirements specified in the *Safe Drinking Water Act* and is evaluated and compared to data from previous years. The outcome of the analysis is an overall performance indicator based on a composite of three metrics:

- Number of days each water system is in compliance with all MCLs and treatment technique requirements;
- Number of customers each water system serves; and
- Number of days the water system operates.

A performance indicator value of 1.0 indicates that all public water systems (PWS) were in compliance with MCL and treatment technique requirements for the entire year (note that the performance indicator value can be significantly influenced by water systems with large populations). Much of the decrease in the 2018 indicator value was due to the impact of 1 maximum contaminant level violation at a water system with a very large population for a contaminant that is monitored approximately every 90 days. Without this violation, the performance indicator value was 0.943. The 2024 indicator value was 0.983.



Indicator Value =  $\Sigma$  (PWS Population Served) x (Days in Compliance with MCLs and Treatment Technique Requirements)  $\Sigma$  (PWS Population Served) x (Total Days in Operation)

#### **Capacity Development Tools and Assistance**

Rhode Island's public drinking water systems face a wide array of challenges in meeting the public health protection standards to ensure safe drinking water for community members, residents, and visitors.

RIDOH maintains a capacity development strategy aimed at developing the financial, managerial, and technical capacities of small public water systems that serve fewer than 10,000 people. The mission of the capacity development program is to identify methods for assisting water utilities in achieving sustainable operations over time and promoting asset management.

To accomplish this mission, RIDOH maintains various contracts with industry professionals and organizations to provide wide-ranging services to the owners and operators of public water systems. These services and training initiatives are included in RIDOH's work plan and are funded through the DWSRF.

Services provided during the reporting period included:

Vendor	Service	Outcomes
Global Environmental Consulting (GEC)	Consumer confidence reports for systems serving 10,000 or fewer	89 reports completed
Northeast Water Solutions, Inc.	Facilities Improvement Plans for Community (C), nonprofit Non- Transient Non-Community (NTNC), and nonprofit Transient Non-Community (TNC) systems serving 10,000 or fewer	12 systems received services
Northeast Water Solutions, Inc.	Engineering services for C, nonprofit NTNC, and nonprofit TNC systems serving 10,000 or fewer	9 systems received services
New England Water Works Association	Free operator training opportunities	696 training contact hours delivered

RIDOH also maintains a cooperative agreement with University of Rhode Island (URI) Cooperative Extension. Under this agreement, URI provides:

- Technical assistance and outreach to municipal officials, water suppliers, and private drinking water well users on assessment results and local protection measures.
- Outreach to professionals who play a role in public water supply protection; and
- Resources to build audience capacity to adopt source water protection measures.

#### **Operator Certification**

Ensuring a competent workforce is a key element in the protection of public health and the provision of safe drinking water. Individuals who operate public water supply treatment and distribution systems must be certified and licensed by RIDOH. Once licensed, operators adhere to continuing education and experience requirements prior to license renewal or upgrade.

There are approximately 750 licenses for treatment and distribution operators issued in the State, and some individuals hold multiple licenses and certifications. The total number of licenses includes licenses that were within 180 days of expiring for part of the reporting period. During that time the licensee can continue to operate a public water system if they are under the supervision of an appropriately certified operator. There are 89 community and 80 non-transient, non-community public water systems that are required to comply with the State's operator certification rules and regulations. The State has classified these systems for distribution and/or treatment.

Training initiatives are included in RIDOH's work plan and are funded through the DWSRF. RIDOH provides extensive opportunities for training and exam preparation through contracts with industry assistance providers.

In 2024, NEWWA conducted 10 training sessions and granted a total of 696 contact hours. These training sessions were scheduled in fall 2023 for delivery in winter/spring 2024. The program selected topics to address compliance issues, violation trends, and small PWS compliance including:

- Asset Management to Ensure Stable & Sustainable Water Utility Operations;
- Solving Drinking Water Operator Exam Word Problems;
- Disinfection and Distribution System Water Quality; and
- Evaluating Chemical Treatment Options for Drinking Water.

RIDOH does not directly reimburse operators for expenses related to training and exams. These learning opportunities are free of charge and open to all operators while targeting those from small PWS.

In 2024, the Center for Drinking Water Quality worked with the Rhode Island Office of the Postsecondary Commissioner's Workforce Development in conjunction with the Rhode Island Department of Labor and Training to offer a 10-week preparation class for drinking water operators. This 10-week course aims to provide a foundation for professionals working in water treatment, water distribution and water quality. Following the 10 weeks, a RIDOH proctor administers the treatment and distribution exams for the class. Curriculum topics include:

- Water Treatment Process;
- Water Operator Math (treatment and distribution);
- Aeration, Coagulation, Flocculation;
- Sedimentation Basins, Clarifiers;
- Iron and Manganese, Filtration;
- Security, Compliance, Ethics and Administrative;
- Corrosion Control, Scaling, Lime Softening;
- Water Quality: Disinfection, Fluoridation, Chlorination;
- Water Storage and Water Services;
- Water Quality Testing;
- Water Main Install and Rehab;
- Pumps: Centrifugal Pumps, Vertical Turbine, Submersible, Deep-well;
- Hydrants: Proper Operation, Hydrant Design; and
- Meters: Meter Types and Operating Principles; Meter Sizing and Installation.

## **Drinking Water Operators by License Type, 2024**

Distribution License Type	License Count
DO (Distribution Operator) Class 1-Full	139
DO Class 1-Grandfathered	11
DO Class 1-Operator in Training	30
DO Class 2-Full	66
DO Class 2-Grandfathered	0
DO Class 2-Operator in Training	3
DO Class 3-Full	94
DO Class 3-Grandfathered	0
DO Class 3-Operator in Training	5
DO Class 4-Full	55
DO Class VSS-Full	26
DO Class VSS-Grandfathered	10
DO Class VSS-Operator in Training	2
DO Provisional	0
Total	441

Treatment License Type	License Count
TO (Treatment Operator) Class 1-Full	95
TO Class 1-Grandfathered	3
TO Class 1-Operator in Training	12
TO Class 2-Full	74
TO Class 2-Grandfathered	3
TO Class 2-Operator in Training	1
TO Class 3-Full	71
TO Class 3-Grandfathered	0
TO Class 3-Operator in Training	10
TO Class 4-Full	32
TO Class VSS-Full	7
TO Class VSS-Grandfathered	0
TO Class VSS-Operator in Training	1
TO Provisional	0
Total	309

#### **Drinking Water State Revolving Loan Program**

The *Safe Drinking Water Act* (SDWA) amendments of 1996 authorized the creation of a DWSRF program. This fund helps public water systems finance the costs of infrastructure needed to achieve or maintain compliance with the requirements and public health objectives of the SDWA.

In conjunction with the Rhode Island Infrastructure Bank, RIDOH's Center for Drinking Water Quality operates the DWSRF program with funds supplied by an annual EPA grant. RIDOH is responsible for the compilation of a priority list for current, ongoing, and proposed projects; engineering and environmental review of proposed projects; oversight of construction; assuring all grantees and sub-grantees follow DWSRF requirements; and review and approval of contractor payment requests. Completion of capacity development and maintenance of operator certification are key eligibility requirements for the DWSRF and are reviewed during the application process.

In 2024, RIDOH approved, and the Rhode Island Infrastructure Bank funded 7 new loans totaling \$73,225,000.

#### 2024 Rhode Island Infrastructure Bank Loan Projects

#### Woonsocket \$5,000,000 for installation of new water meters in configuration with an advanced metering infrastructure system that will alert the system to Woonsocket water use and alarm conditions. The system will \$525,000 for replacement of existing lead and galvanized use radio frequencies in order to transfer data to steel private service lines to accomplish the service line a cloud-based system for billing and replacement in their entirety from the water main management. Any lead service lines identified corporation stop into each residence within the will be simultaneously and completely replaced distribution system service area. on both the public and private portions of the lead service lines. Woonsocket North Burrillville **Cumberland East Providence** Smithfield Central \$3,100,000 for purchase and / Falls Lincoln installations of new water Smithfield Glocester meters and interface units North Pawtucket Providence which will be either radio Johnston Providence **Providence Water** East 🛦 frequency or cellular \$26,300,000 for the replacement of ovidence Foster Scituate endpoints. In addition, the lead service lines within the continuation of the City's Cranston Barrington Warren Providence Water distribution cleaning and lining program system service area. Replacement of West Warwid will take place. Warwick both the public and private portions Coventry ristol During the cleaning and lining of the lead service line will be project known or newly East simultaneous and complete. discovered lead service lines West Greenwich Greenwich Tiverton will be replaced in their Portsmouth. entirety. Exeter North Kinastown Little Middletown Compto Richmond Hopkinton Newport South Kinastown Narragansett Charlestown Westerly East Providence \$23,000,000 for cleaning Bristol County of approximately 60,000 ft Kent County of existing water main Newport County while replacing Providence County approximately four miles Washington County of aged water main with New Shoreham new ductile iron piping, as **Town of Richmond** well as valves and \$300,000 for installation of a 4-log hydrants within the project chlorination system within the area. Any lead service lines that are identified existing well #1 pump house and the and replaced during the installation of a remote chlorine project, will result in monitoring station. Additional work **Pawtucket** simultaneous and \$15,000,000 for the replacement and includes buried conduit to allow for complete replacement of upgrade of the existing water meters chlorination of backup well #2. both the public and private throughout the area serviced by the

Pawtucket Water Supply Board service

area.

portions of the lead

service lines.

#### **Engineering Review**

The engineering approval process is designed to help ensure safety, sustainability, and resilience in drinking water infrastructure and sources around the state. Water systems must demonstrate that a project has met the regulatory requirements and engineering standards for public water facilities in their applications before projects may proceed. RIDOH inspections are conducted during and after construction.

#### There are four sections of the Engineering Review Program:

#### **Drinking Water Source Approval**

This process requires applicants to submit plans and supporting documentation showing that the location of a proposed new source is protected from potential contamination.

#### **Drinking Water Facilities Plan Review and Approval**

This process includes technical and engineering review of infrastructure projects under the PWSS program in accordance with the SDWA. Infrastructure review is required for wells, pumping, storage, and treatment, both new and rehabilitative.

#### **Drinking Water State Revolving Loan Fund Plan Approval**

Projects submitted for funding through the DWSRF program must comply with specific requirements of the funding program, including state and federal statutes and federal executive orders. RIDOH engineers and engineering contractors review the technical aspects of the project and ensure compliance with DWSRF requirements. In addition, the engineers inspect the projects during construction to ensure that all federal and state requirements are met.

#### Plan Review, Approval, and Inspections for Licensed Aquatic Venues

RIDOH ensures that licensed swimming pools and spas are constructed and operated in a safe and sanitary manner. Technical and engineering reviews are conducted for all new public pools and spas and for any alterations to existing pools and spas. Additionally, inspections of filtering systems, water quality, and other sanitary and safety concerns are performed by RIDOH and through a self-inspection and self-monitoring program.

Engineering Projects 2024	Received <sup>1</sup>	Approved <sup>2</sup>	Completed <sup>3</sup>
Non-DWSRF	16	15	3
DWSRF	6	5	4
In-Kind Replacement Forms	34	31	n/a

<sup>&</sup>lt;sup>1</sup>The number of engineering applications received during 2024.

<sup>&</sup>lt;sup>2</sup> The number of engineering applications that received preliminary approval in 2024. Some of these may be applications received in 2023 that were carried over into 2024.

<sup>&</sup>lt;sup>3</sup>The number of applications that received final approval in 2024, meaning that the construction of the project was completed. Some of these applications received preliminary approval in previous years but construction of the project was not completed until 2024.

#### **Inspections and Site Visits**

All aspects of a public water system (water source, treatment facility, storage, pump stations, operations, and maintenance) require periodic inspection to help ensure that the water system continuously supplies safe drinking water to the public.

In 2024, RIDOH staff conducted 120 sanitary survey inspections. The inspection team coordinated with the Center for Drinking Water's compliance program and engineering team to ensure that all identified deficiencies were corrected or are under a corrective action plan. RIDOH staff also performed inspections at the request of water systems as part of the State's capacity development program.

In addition, RIDOH staff performed 5 conformance inspections of new construction and significant improvements to water system infrastructure, as well as 22 Level 2 Assessments in response to requirements of the *Revised Total Coliform Rule*.

2024 Sanitary Survey Inspections			
System Type	Population Served	Inspections	
Community Water System	187,532	32	
NTNC Water System	6,698	14	
TNC Water System	11,344	74	
TOTAL	205,574	120	



#### **Emergency Planning and Security**

Water systems can face emergency situations caused by a variety of events, from impacts due to significant weather to supply chain interruptions. Emergency planning for water systems includes evolving fields like cybersecurity preparedness and climate change resiliency. Developing proactive policies can improve the conservation of resources, reduce repair expenses, minimize interruption of service, and enhance consumer confidence in drinking water utilities.

#### Program activities included:

- Dissemination of EPA, Cybersecurity Infrastructure Security Agency, and Water Information Sharing and Analysis Center planning tools to the water systems, including the Vulnerability Self-Assessment Tool, the Water Health and Economic Analysis Tool, and the Incident Action Checklists to assist drinking water and wastewater facilities of all sizes in enhancing their security and resiliency;
- Development of Emergency Drinking Water Source Plan;
- Participation in the Statewide Water Resources Board's Drought Steering Committee;
- Participation in the Statewide Critical Infrastructure and Key Resources (CIKR) Advisory Group;
- Use of the email marketing service Mailchimp to keep public water systems informed of imminent or ongoing emergencies;
- Development and implementation of an emergency generator program;
- Training for Center for Drinking Water Quality staff in EPA, Federal Emergency Management Agency (FEMA), and Occupational Safety and Health Administration (OSHA) practices for emergency preparedness and response;
- Development of emergency response planning templates, guidance, and certification forms;
- Requiring the completion and certification of Emergency Response Plans for all public water systems; and
- Maintenance and curation of information for the Emergency Information for Public Water Systems website.

In 2024, the Center for Drinking Water Quality continued providing public water systems with guidance in response to cybersecurity incidents and on navigating supply chain impacts. Information was promptly compiled and forwarded to public water systems as it became available to our office.

In 2025-2026, the Center for Drinking Water Quality will continue working on proactive approaches to help public water systems prepare for cybersecurity challenges, climate resiliency, and emergencies. Guidance documents are also posted to the <a href="Emergency Information for Public Water Systems webpage">Emergency Information for Public Water Systems webpage</a> (health.ri.gov/PWSprepare).

#### **Drinking Water Webpages**

RIDOH maintains a series of webpages for drinking water professionals and consumers in Rhode Island. The webpages listed below represent a hub of information that is available around the clock. Webpages are updated regularly with annual reports, new and revised guidance and forms, project progress tracking information, emergency preparedness news, and upcoming training opportunities for the water sector, including drinking water operator trainings for license renewal credit.

#### **Public Water Systems**

#### **Drinking Water Rules and Compliance**

Public Water System Compliance with the Revised Total Coliform Rule health.ri.gov/water/about/revisedtotalcoliformrule

Assessments to Find and Fix Causes of Microbial Contamination in a Public Water System <a href="health.ri.gov/water/about/assessments">health.ri.gov/water/about/assessments</a>

Public Water System Compliance with Revised Lead and Copper Rule and Lead Poisoning Prevention Act <a href="https://example.com/health.ri.gov/water/about/revisedleadcopperrule">https://example.com/health.ri.gov/water/about/revisedleadcopperrule</a>

Certified Drinking Water Testing Labs <a href="health.ri.gov/find/labs/drinkingwater">health.ri.gov/find/labs/drinkingwater</a>

#### Licensing

Public Water System Licensing <a href="health.ri.gov/PWSlicensing">health.ri.gov/PWSlicensing</a>
Drinking Water Operator Licensing <a href="health.ri.gov/wateroperator">health.ri.gov/wateroperator</a>

#### **Program Pages**

Emergency Information for Public Water Systems <a href="health.ri.gov/PWSprepare">health.ri.gov/PWSprepare</a>
Public Drinking Water Program <a href="health.ri.gov/programs/detail.php?pgm\_id=158">health.ri.gov/programs/detail.php?pgm\_id=158</a>
Drinking Water State Revolving Loan Fund Program <a href="health.ri.gov/DWSRF">health.ri.gov/DWSRF</a>
Engineering Review and Application Status of Drinking Water Projects
<a href="health.ri.gov/water/about/engineeringreview/">health.ri.gov/water/about/engineeringreview/</a>

#### **Public Drinking Water Consumers**

About Your Water Quality health.ri.gov/water/about/yourwater

Public Water Emergency Information for Consumers <a href="health.ri.gov/water/for/consumersduringemergency">health.ri.gov/water/for/consumersduringemergency</a>

Public Drinking Water Program <a href="health.ri.gov/drinking-water-quality/public-drinking-water-program">health.ri.gov/drinking-water-program</a>

PFAS Contamination of Water <a href="health.ri.gov/water/about/pfas">health.ri.gov/water/about/pfas</a> | <a href="health.ri.gov/data/pfas">health.ri.gov/data/pfas</a>

Lead Contamination of Water <a href="health.ri.gov/water/about/lead">health.ri.gov/water/about/lead</a>

Testing School and Child Care Drinking Water for Lead health.ri.gov/data/schools/water

#### **Private Well Owners**

Private Wells health.ri.gov/private-wells

Certified Drinking Water Testing Labs health.ri.gov/find/labs/drinkingwater

#### **Aquatic Venues**

Licensed Swimming Pools Program <a href="health.ri.gov/pools">health.ri.gov/pools</a>
Aquatic Venues Licensing and Renewal <a href="health.ri.gov/licensing-aquatic-venues">health.ri.gov/licensing-aquatic-venues</a>
Operating Licensed Aquatic Venues <a href="health.ri.gov/water/about/operatingaquaticvenues">health.ri.gov/water/about/operatingaquaticvenues</a>

#### Water Quality Monitoring

Our nation's waters are monitored by local, state, and federal agencies, universities, dischargers, and volunteers. Water quality data are used to describe the physical aspects of the water, identify trends or emerging problems, evaluate pollution control efforts, and help respond to emergencies.

#### **Maximum Contaminant Levels**

Under the SDWA, the EPA sets maximum legal limits on the levels of certain contaminants in drinking water. The legal limits for these contaminants, known as Maximum Contaminant Levels (MCLs), are set at levels that protect the public's health and that are reasonably achievable with available technology. The EPA also sets treatment requirements, water-testing schedules, and sampling methods that all water systems are required to follow. RIDOH is responsible for ensuring that water systems in Rhode Island comply with EPA requirements.

#### **Contaminant Rules**

RIDOH regulates more than 90 contaminants in 6 contaminant groups: disinfectants, disinfection byproducts, inorganic chemicals, microorganisms, organic chemicals, and radionuclides. Drinking Water Standards and Advisory Tables summarizing all contaminants and their respective MCLs are maintained on <a href="mailto:the EPA's website">the EPA's website</a> (epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations).

A system's type, size, and water source determine which contaminants they must monitor. More than 60 of the regulated contaminants are in 2 of the contaminant groups: inorganic contaminants (IOCs) and organic contaminants (volatile organic contaminants, or VOCs, and synthetic organic contaminants, or SOCs).

#### **Arsenic**

Arsenic is a toxic element that naturally occurs in soil, rocks, and minerals. It is unevenly distributed and enters drinking water supplies from natural deposits in the earth and from agricultural and industrial practices.

#### **Groundwater Rule (GWR)**

Most of the state's water systems use groundwater sources to supply customers. The GWR aims to reduce disease incidence associated with microorganisms in drinking water. The *Rule* establishes a risk-based approach and targets groundwater systems that are at risk of fecal contamination. These vulnerable groundwater systems work to take corrective action to reduce potential illness from exposure to microbial pathogens. This rule applies to all systems that use groundwater as a source of drinking water.

#### **Disinfectants and Disinfection Byproducts**

Water that comes from a lake, river, reservoir, or groundwater aquifer must be disinfected to kill harmful bacteria. However, water suppliers are challenged to balance the risks associated with harmful bacteria against the risks associated with disinfection byproducts. In 2024, 55 water systems were required to comply with the *Disinfection Byproducts Rule* (DBPR) either because they added a disinfectant to the water or purchased and distributed water that had been treated with a disinfectant by the seller. The most recent changes to the DBPR require that compliance is based on MCL results at individual sample locations instead of calculating one average value of all distribution system sample results for all water systems subject to the DBPR.

#### Lead and Copper Rule

The Lead and Copper Rule is intended to minimize lead and copper in water provided by Community and NTNC water systems. Most lead and copper contamination comes from pipes or solder that break down and mix with water. To treat water that contains lead or copper, the water must be collected from faucets that are inside homes and businesses. If the water is extremely corrosive or contains very fine lead particles, this triggers requirements for treatment, public education, and, if applicable, lead service

line replacement.

#### Radionuclides

Most drinking water sources have low levels of naturally occurring radioactive contaminants; however, man-made nuclear materials can also contaminate drinking water sources. All Community water systems are required to monitor for radionuclides.

#### Surface Water Treatment Rule

The Surface Water Treatment Rule establishes filtration and disinfection treatment requirements for any public water system supplied by surface water sources or groundwater sources under the influence of surface water. In Rhode Island, 8 water systems are covered by these rules that are designed to reduce or eliminate harmful bacteria. These water systems include filtration and disinfection as part of their treatment processes. An additional 25 water systems purchase filtered and treated water to sell to consumers. These systems are required to maintain a chlorine residual throughout their distribution system.

#### **Total Coliform**

There are a variety of bacteria, parasites, and viruses that can make people sick if they are present in drinking water. Instead of testing for each different kind of bacteria, water systems test for coliform bacteria. The detection of coliform bacteria indicates that disease-causing contaminants may be in the water.

#### Algal Toxin Rule

Active as of May 2019, the *Algal Toxin Rule* applies to all public water systems that have a surface water source. Algal toxins can be created when colonies of naturally occurring bacteria (also known as blue-green algae) in a lake or reservoir become dangerous and start producing compounds that affect the liver and brain. The standard monitoring period for the rule is May through October. Systems are required to check their surface water sources daily for signs of a harmful algal bloom (HAB), sample any HABs to identify and count bacteria, and test their raw and finished water for algal toxins when certain risk criteria is met. Public water systems must also submit plans that detail their treatment options and emergency response plans in the event of a HAB or toxin detection. As of 2024, this rule applies to 8 public water systems.

Rhode Island is currently one of the few states that have successfully established public drinking water algal toxin regulations, and the *Algal Toxin Rule* program at the Center for Drinking Water Quality also maintains close collaborative partnerships with the RIDOH Beaches program as well as the RIDEM Cyanobacteria program.

#### **Water Quality Sampling**

Water quality sampling and testing ensures the quality of the state's drinking water and that each water system is in compliance with monitoring requirements. RIDOH's State Health Laboratories continue to assist water systems with required water quality testing.

In 2024, the State Health Laboratories analyzed 4,247 water samples. The Center for Drinking Water Quality evaluated 23,476 analytical results from the State Health Laboratories and other state-certified labs.

In support of the Center for Drinking Water Quality, the State Health Laboratories:

- Tested drinking water for bacteria, organic and inorganic contaminants, minerals, and trace metals to determine safety and compliance with the Safe Drinking Water Act;
- Tested potability of water from private wells;
- Analyzed water samples in support of special pollution-monitoring programs;
- Maintained analytical instruments to detect and measure the concentration of a variety of pesticides and VOC and SOC pollutants in drinking water;
- Performed continuous quality improvement of testing processes;
- Operated the analytical laboratory certifications program; and
- Maintained a list of laboratories that are certified for the analysis of drinking water, non-potable water, and environmental lead.

#### Compliance

The complete 2024 Compliance Table summary, as required by the *Safe Drinking Water Act* amendments of 1996, can be found in Appendix E. In 2024, a total of 430 violations of the *Safe Drinking Water Act* and Public Drinking Water Regulations [216-RIRC-50-01-1] were reported in the state's public water systems. Of these 430 violations, 40 were water quality violations, 282 were monitoring and reporting violations, 59 were treatment technique violations, and 49 were notification violations. A summary of the violations is presented in Appendices B, C, and D. Please note that this report, including the data in Appendices B-E, only includes violations for which a notice of violation has been issued. It does not include violations that may have occurred in calendar year 2024 which are currently under investigation by RIDOH and for which a notice of violation has not yet been issued. Please also note that some of the violations identified in this report may be under appeal.

#### **Quality Violations**

Quality violations occur when the monitoring results for a particular contaminant exceed the maximum allowable standard within a specific time period. Public water systems must monitor for more than 90 contaminants including inorganic compounds, VOCs, SOCs, radionuclides, and pathogens.

In 2024, 7 public water systems exceeded a maximum allowable amount of a contaminant for a total of 40 violations. Of those 40 violations, 4 were bacteriological violations, 11 for inorganic contaminants, 20 were radiological, and 5 were for disinfection by-products (total trihalomethanes).

#### **Monitoring and Reporting Violations**

Monitoring and reporting violations occur when a water system fails to perform the required monitoring for a contaminant in a specified time period and/or fails to report the results or required actions on time. In 2024, a total of 282 monitoring and reporting violations occurred.

#### Lead and Copper Rule (LCR) Violations

Three public water systems exceeded the lead action level in 2024. Five public water systems exceeded the copper action level in 2024. Thirty public water systems received a total of 42 lead and copper rule violations in 2024. Of these violations, 18 were failure to properly collect, analyze, or report LCR monitoring samples; 7 were for failure to report water quality parameters on time; 14 were failure to report lead results to consumers within 30 days of receiving results from laboratory; and 3 were for failure to submit a corrosion control proposal by the due date.

#### **Public Notification (PN) Violations**

Public Notification violations occur when a water system does not notify customers of a violation within the required time period. In 2024, 32 public water systems failed to perform Public Notification as required.

#### **Consumer Confidence Report Violations**

Consumer Confidence Report (CCR) violations occur whenever a Community public water system does not provide a CCR to their customers and/or does not submit a CCR Certification Form to RIDOH by the required deadline. In 2024, 6 Community public water systems did not provide a CCR or a CCR Certification Form by the required deadline.

#### **Treatment Technique Violations**

Treatment technique violations occur when a public water system does not comply with the required treatment, does not correct a significant deficient/sanitary defect in the required timeframe, does not complete a Level 1 or Level 2 Assessment by the required deadline, or does not complete State-approved seasonal start-up procedures before providing water to customers. In 2024, 33 public water systems were issued a total of 59 treatment technique violations.

#### **Appendix A: Compliance Table Definitions**

**Filtered systems**: Surface water systems that have installed filtration treatment.

**Inorganic contaminants**: Non-carbon-based compounds, such as metals, nitrates, and asbestos, naturally occur in some water and can also get into water through farming, chemical manufacturing, and other human activities. The EPA has established MCLs for 15 inorganic contaminants.

**Lead and Copper Rule (LCR)**: Established national limits on lead and copper in drinking water; states report violations of the *Lead and Copper Rule* in the following categories:

- <u>Initial lead and copper tap monitoring and reporting</u>: Water system did not meet initial lead and copper testing requirements or failed to report the results of those tests to the State.
- Follow-up or routine lead and copper tap monitoring and reporting: Water system did not meet follow-up or routine lead and copper tap-testing requirements or failed to report the results of those tests to the State.
- <u>Water Quality Parameters (WQP)</u>: Water system did not collect or report water quality parameter samples properly.
- OCCT/SOWT RECOM/STUDY: Water system did not properly complete or submit an Optimal Corrosion Control Treatment (OCCT) or Source Water Treatment (SOWT) recommendation or study for a lead and/or copper exceedance.
- <u>Treatment installation</u>: Water system did not install optimal corrosion-control treatment system or source-water treatment system to reduce lead and copper levels in water at the tap.
- <u>Public education/Lead Consumer Notice</u>: Water system did not provide required public
  education about reducing or avoiding lead intake from water or notification of lead results to
  individuals served by taps used for *Lead and Copper Rule* tap monitoring or did not adequately
  report either to the State.

**Maximum Contaminant Level (MCL)**: Highest amount of a contaminant that the EPA allows in drinking water while ensuring no short-term or long-term health risk; quantified as milligrams per liter (parts per million) unless otherwise specified.

**Monitoring**: EPA-specified water-testing methods and schedules for testing frequency, which water systems are required to follow (for purposes of this report, a major monitoring violation occurs when at least 90% of the required samples were not taken or results were not reported during the specified period).

**Organic Contaminants**: Carbon-based compounds, such as industrial solvents and pesticides, that generally get into water through runoff from cropland or discharge from factories; the EPA has set MCLs for 54 organic contaminants.

**Radionuclides**: Radioactive particles occurring in water naturally or from human activity; the EPA has MCLs for five types of radionuclides: radium-226, radium-228, gross alpha, uranium, and beta particle/photon radioactivity; violations are reported in the following categories:

- <u>Gross alpha</u>: Alpha radiation higher than MCL of 15 picocuries/liter (pCi/L); includes radium-226 but excludes radon and uranium.
- <u>Combined radium-226 and radium-228</u>: Combined radiation from two radium isotopes higher than MCL of 5 pCi/L.
- Uranium: Combined uranium higher than MCL of 30 micrograms per liter (µg/L).
- <u>Gross beta</u>: Beta particle and photon radioactivity from man-made radionuclides higher than four millirems/year.

**Reporting Interval**: January 1, 2024 - December 31, 2024; includes violations in previous years which did not return to compliance until 2023 or later, or have not yet returned to compliance.

**Safe Drinking Water Information System (SDWIS) Code**: Specific numeric code assigned to each violation type or contaminant; two-digit code for violation type; four-digit code for contaminant.

**State Compliance (SC)**: Compliance requirement regulated by the state but not regulated under the Safe Drinking Water Act. Usually failure to correct minor deficiencies or failure to submit license renewal application.

State Level (SL): MCL for a contaminant regulated by the state but not regulated under the SDWA.

**State Monitoring (SM) or State Reporting (SR)**: Monitoring or reporting requirement for a contaminant regulated by the state but not regulated under the SDWA.

**Surface Water Treatment Rule (SWTR)**: Establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water; violations are reported in four categories:

- Monitoring, routine/repeat (filtered systems): Water system does not perform required tests or does not report the results of those tests.
- <u>Treatment techniques (filtered systems)</u>: Water system does not properly treat its water.
- Monitoring, routine/repeat (unfiltered systems): Water system does not perform required water tests or does not report the results of those tests.
- Failure to filter (unfiltered systems): Water system does not properly treat its water.

**Total Coliform Rule (TCR)**: Effective until October 31, 2018; established regulations for microbiological contaminants in drinking water that can cause short-term health problems; violations were reported in two categories:

- Non-acute MCL violation: Water system detected total coliform in its water at a frequency or level that exceeds the standard.
- Routine/repeat monitoring or reporting: Water system did not perform the required monitoring and/or reporting.

**Revised Total Coliform Rule (RTCR)**: Effective April 1, 2016; established regulations for microbiological contaminants in drinking water that can cause short-term health problems; acute MCL violation refers to confirmed E. Coli not total coliform; presence of total coliform results in assessment; established additional requirements for seasonal water systems.

**Treatment Techniques**: EPA-required water treatment process (instead of an MCL) for contaminants that laboratories cannot adequately measure; also, failure to correct a significant deficiency discovered during a sanitary survey, failure to correct a sanitary defect discovered during an assessment, failure to perform a Level 1 or Level 2 Assessment, or failure to adequately perform seasonal start-up procedures.

**Unfiltered Systems**: Water systems that do not need to filter water before disinfecting it because the source is very clean.

**Violation**: Failure to meet any state or federal drinking water regulation.

## **Appendix B: Community Water Systems Violations**

Quality Violations	4
Central Beach Fire District (Nitrate)	1
Narragansett Water Dept-North End (Trihalomethanes [TTHM])	4
Rockland Oaks (Beryllium, Combined Radium, Gross Alpha)	30
Veolia Water Wakefield Rhode Island Inc. (TTHM)	1
Total	36
Monitoring and Reporting Violations	
Abbey Lane Community Assn., Inc. (Cyanide, LCR, State Reporting)	3
Bethel Village Water Assn (Asbestos, Combined Uranium, E. Coli, IOC, LCR, Nitrate, Nitrite, PFAS, SOC, State Reporting, VOC)	13
Bristol County Water Authority (DBPR)	1
Castle Rock Condominiums (LCR)	1
Central Beach Fire District (Combined Uranium, VOC)	2
Chimera Inc. (VOC)	1
CNE - Hopkins Hill Road Entry Point (DBPR)	1
CNE - New London Turnpike Entry Point (DBPR)	3
Dowling Village (DBPR, SWTR)	4
Echo Lake Water District (LCR, PFAS, State Reporting)	4
Exeter Job Corps Center (DBPR, LCR)	3
Foster Senior Housing Inc. (E. Coli, LCR, RTCR)	4
Hebert Health Center (DBPR, LCR)	4
Hillsdale Housing Cooperative, Inc. (SOC)	1
Jamestown Water Department (DBPR)	3
Jemp 1 LLC (LCR)	1
Kingston Center (State Reporting)	1
Kingston Water District (IOC, SOC)	2
Ladd Center Water System (DBPR)	1
Laurel Crest Glocester Housing Authority (LCR)	1
Lindhbrook Water Company (Combined Radium, E. Coli, LCR, Nitrate, RTCR, State Reporting)	11
Maplehill Mobile Home Park (DBPR)	1
Nasonville Water District (LCR, SOC)	2
Newport-City of (DBPR)	3
Providence-City of (DBPR, SWTR)	2
Prudence Island Water District (SOC, VOC)	2
Quonochontaug East Beach Water Association (SOC)	2
Richmond Ridge Development (LCR)	1
Richmond, Town of (LCR)	1
Rockland Oaks (Combined Radium, Combined Uranium, E. Coli, Gross Alpha)	8
Rockville Mill Hopkinton, LLC (State Reporting)	1
Shady Harbor Fire District (State Reporting)	1
Slatersville Public Supply (LCR)	1
South Kingstown-South Shore (DBPR)	1
South Trail Commerce (SOC)	1
Stone Bridge Fire District (DBPR, SWTR)	22
Sunset Cove Properties LLC (LCR)	1

Tavian at Daint Water Truct (LCD)	1					
Touisset Point Water Trust (LCR)	1					
Veolia Water Wakefield Rhode Island INC (DBPR)	1					
Warwick-City of (State Reporting)						
Warwick-Potowomut (LCR, State Reporting)	2					
Westerly Water Department (VOC)	1					
Total	121					
Public Notification Violations						
Bethel Village Water Assn. (PN)	3					
Dawn Hill Home Rehab and Healthcare, The (CCR)	1					
Foster Senior Housing Inc. (PN)	1					
Ladd Center Water System (PN)	1					
Pine Acres ALR (CCR)	1					
Richmond Ridge Development (CCR)	1					
Richmond, Town of (PN)	1					
Rockland Oaks (PN)	3					
Saugatucket Springs (CCR)	1					
Shadow Woods at Deer Brook (CCR)	1					
South Trail Commerce (CCR)	1					
Stone Bridge Fire District (PN)	1					
Total	16					
Treatment Technique						
Bethel Village Water Assn. (State Compliance)	2					
Echo Lake Water District (State Compliance)	2					
Hebert Health Center (GWR)	1					
Kingston Center (LCR, State Compliance)	3					
Lindhbrook Water Company (GWR, LCR, State Compliance)	4					
Shady Harbor Fire District (State Compliance)	2					
South Trail Commerce (RTCR)	2					
Stone Bridge Fire District (DBPR)	1					
Sunset Cove Properties LLC (State Compliance)	2					
Warwick-City of (State Compliance)	2					
Warwick-Potowomut (State Compliance)	2					
Total	23					
PWS Licensing						
(none)	0					
Total	196					

## **Appendix C: Non-Transient Non-Community Water Systems Violations**

Quality Violations	
(none)	0
Total	0
Monitoring and Reporting Violations	
Beadery Industrial, The (LCR)	1
Beadery Warehouse, The (LCR)	<del>.</del> 1
Bruin Plastics Company, Inc. (State Reporting)	<u>·</u> 1
Chariho Regional Middle School (E. Coli)	<u>·</u> 1
Charlestown Police Station (SOC)	 1
Chopmist Hill Community Center (State Reporting)	1
Coventry National Guard (PFAS)	1
Crandall House-Sr. Citizens (PFAS, State Reporting)	2
Dean Warehouse Services (SOC)	
Early Learning Centers of RI Saunderstown (IOC, LCR, Nitrite, RTCR, SOC)	5
Foster Town Hall (LCR)	1
Glocester Senior Center, Memorial Park (LCR)	1
Hopkinton Industrial Park, LLC (SOC)	1
Mildred E Lineham School (LCR)	1
Nach Realty Trust (State Reporting)	3
North Smithfield Air National Guard Syst (State Reporting)	1
North Smithfield Elementary School (SOC)	1
Pinewood Park School (LCR)	1
Quonset Business Park (Nitrate, SOC, State Reporting)	4
R.I. State Police Headquarters - New (LCR, State Reporting)	3
Sakonnet Early Learning Center, Inc. (LCR, State Reporting)	3
Scituate High School & Middle School (SOC)	1
Scituate Village Plaza (State Reporting)	1
Tiverton Four Corners (Chromium)	1
Trinity Lutheran Pre-School (LCR)	1
Wawaloam School (LCR)	1
West Glocester Elementary School (PFAS)	2
West Greenwich Town Hall (LCR)	1
Wood River Health Services (RTCR)	1
Wrights Farm Corp. (VOC)	1
Total	45
Public Notification Violations	
Captain Isaac Paine School (PN)	1
Lakeview Charlestown Early Lrning Ctr. (PN)	1
Meadowbrook Waldorf School (PN)	1
North Smithfield Jr_Sr High School (PN)	1
R.I. State Police Headquarters - New (PN)	1
Total	5
Treatment Technique	
Bruin Plastics Company, Inc. (State Compliance)	2
Chopmist Hill Community Center (State Compliance)	2

Crandall House-Sr. Citizens (State Compliance)	2
Greene School - Building 1, The (RTCR)	1
Nach Realty Trust (State Compliance)	3
North Smithfield Air National Guard Syst (State Compliance)	2
Quonset Business Park (LCR)	1
R.I. State Police Headquarters -New (State Compliance)	2
Sakonnet Early Learning Center, Inc. (State Compliance)	2
Scituate Village Plaza (State Compliance)	2
Total	19
PWS Licensing	
(none)	0
Total	69

## **Appendix D: Transient Non-Community Water Systems Violations**

Quality Violations							
Colaluca Family Campground (E. Coli)	1						
Michaels Shell Station (E. Coli)	2						
W. Alton Jones Campus - Environmental Ed (E. Coli)	 1						
Total	4						
Monitoring and Reporting Violations	1						
Andrews Realty, Inc. Dba Richmond Plaza (RTCR)	1						
Barn Restaurant - Active Non-Operational (Nitrate, Nitrite)	2						
Block Island Airport Operations (RTCR)	 1						
Bowdish Lake Camping Area, Brown 1 & 2 (E. Coli, RTCR)							
Buck Hill Family Campground (RTCR)	2 1						
Cadys Tavern (Nitrate)	1						
Camp Hoffman (E. Coli, RTCR)	2						
Champlins Marina & Resorts, Inc. (E. Coli, RTCR)	2						
Chapmans Food and Drink (RTCR)	1						
Charlestown Commons (RTCR)	<u>·</u> 1						
Clark Memorial Library (RTCR)	<u>·</u> 1						
Colaluca Family Campground (RTCR)	<u>'</u> 1						
Cold Brook Cafe (E. Coli, Nitrate, RTCR)	3						
Commons Lunch, Inc. (E. Coli, Nitrite)	2						
Confreda Greenhouses & Farms, LLC (Nitrate, RTCR)	2						
Country Chowder Shack (Nitrate, Nitrite)	3						
Cumberland Farms Store #1262 Charlestown (RTCR)	1						
DJ Realty Inc. (Nitrate)	<u>·</u> 1						
Dunkin Donuts Richmond 342433 (E. Coli, RTCR)	2						
Exeter Town Hall (RTCR)	 1						
Famous Pizza (VOC)	1						
Foster Country Club Inc. (Nitrate)	1						
Foster Xtra Mart (Nitrate, VOC)	2						
Frontier Camper Park Inc. (E. Coli)	1						
Glad Tidings Community Church (E. Coli)	1						
Glocester Motor Inn (Nitrate, Nitrite, RTCR)	5						
Granite Farm Restaurant (Nitrate, Nitrite, RTCR)	4						
Grays Ice Cream (E. Coli)	1						
Harmony Corner Store (RTCR)	1						
Harmony Marketplace, LLC (Nitrate)	1						
Highview Inn (Nitrate, Nitrite)	2						
Homestead Exeter Inc. DBA Homestead Rest (Nitrate, RTCR)	2						
Knight Farm LLC (Nitrate, RTCR)	2						
Long Cove Marina & Campground (RTCR)	1						
Luckys (Nitrate, RTCR)	3						
Midville Golf Course (Nitrite, RTCR)	3						
Monahan's Clam Shack (RTCR)	1						
Mr. Zs By the Lake LLC (Nitrate)	3						
Murphys Mobil, Inc. (Nitrate)	1						

Newport Boys & Girls Club Camp - Well (Nitrate)	1							
Nordic, The (Nitrite, RTCR)	2							
North Smithfield Fly Fishing Club (Nitrite, RTCR)	2							
Nutz on Nooseneck (Nitrate)								
Oak Embers Campground (E. Coli, Nitrate, Nitrite)								
Oakleaf Campground (RTCR)								
Ohm Ganesh DBA Country Farms (Nitrate)	1							
P. A. Simmons Mercantile - Active Non-Operational (RTCR)								
R.L. Flounders - Active Non-Operational (Nitrate)	1							
Rippys Liquor & Marketplace (Nitrite)	1							
Round Meadows Campground (RTCR)	1							
Rustic Tri-View Drive In Theatre-Snack B (RTCR)	1							
Sayles Hill Rod & Gun Club (Nitrate)	1							
Scituate LDS Church (Nitrate, Nitrite)	2							
Seaview Motor Court (E. Coli, Nitrate, Nitrite)	4							
Shelter Cove Marina, LLC (E. Coli)	2							
Shoreline Plaza (E. Coli, RTCR)	3							
Slatersville Medical Complex (State Reporting)	1							
Smithfield Sportsmans Club, Inc. (Nitrate, Nitrite, RTCR)	3							
Spring House Hotel -Island Entertainment (RTCR)	1							
St. Eugenes Church (Nitrate)	1							
Stone House Motor Inn (E. Coli)	1							
TDS Realty Holdings - Active Non-Operational (RTCR)								
Town Pizza of Exeter, Inc. (VOC)								
Walkers Roadside Stand-Bakery (Nitrite)								
Wawaloam RV LLC DBA Wawaloam Campground (E. Coli, RTCR)	2							
West Greenwich Condo Assoc. (E. Coli)	1							
Whispering Pines Campground (Nitrate)	1							
Windswept Inn, The (Nitrite, RTCR)	2							
Wood River Golf LLC (Nitrite)	1							
Woon Congregation of Jehovahs Witnesses (RTCR)	1							
Total	116							
Public Notification Violations								
Classic Motor Lodge, Inc. (PN)	1							
Cold Brook Cafe (PN)	1							
Confreda Greenhouses & Farms, LLC (PN)	3							
Country Chowder Shack (PN)	3							
Frontier Camper Park Inc. (PN)	3							
Glocester Motor Inn. (PN)	5							
Granite Farm Restaurant (PN)	3							
Michaels Shell Station (PN)	1							
Oak Embers Campground (PN)	1							
Partners Auto Auction RI (PN)	1							
Rippys Liquor & Marketplace (PN)	1							
Rustic Tri-View Drive In Theatre-Snack B (PN)	1							
Seaconnet Point Farm (PN)	1							
Shelter Cove Marina, LLC (PN)	1							

TDS Realty Holdings - Active Non-Operational (PN)	2
Total	28
Treatment Technique	
Cadys Tavern (RTCR)	1
Champlins Marina & Resorts, Inc. (GWR)	1
Famous Pizza (State Compliance)	4
Frontier Camper Park Inc. (RTCR)	1
Ideal Pizza (State Compliance)	2
Luckys (RTCR)	1
Partners Auto Auction RI (RTCR)	1
Seaconnet Point Farm (RTCR)	1
Slatersville Medical Complex (State Compliance)	1
Stonehouse Resort, Inc. (GWR)	2
Westwood YMCA (RTCR)	1
YMCA Camp Fuller (GWR)	1
Total	17
PWS Licensing	
(none)	0
Total	165

## Appendix E: Compliance Table (January 1, 2024 – December 31, 2024)

			МС	Ls	Treatment Techniques		Monitoring/Reporting	
SDWIS Codes		MCL <sup>1</sup> (mg/l)	Number of violations	Number of PWSs with violations	Number of violations	Number of PWSs with violations	Number of violations	Number of PWSs with violations
Organic	Contaminants							
2981	1,1,1- Trichloroethane	0.2	0	0			9	9
2977	1,1- Dichloroethylene	0.007	0	0			9	9
2985	1,1,2- Dichloroethylene	0.005	0	0			9	9
2378	1,2,4- Trichlorobenzene	0.07	0	0			9	9
2931	1,2-Dibromo-3- chloropropane (DBCP)	0.0002	0	0			9	8
2980	1,2- Dichloroethane	0.005	0	0			9	9
2983	1,2- Dichloropropane	0.005	0	0			9	9
2063	2,3,7,8-TCDD (Dioxin)	3x10-8	0	0			0	0
2110	2,4,5-TP	0.05	0	0			9	8
2105	2,4-D	0.07	0	0			9	8
2051	Alachlor (LASSO)	0.002	0	0			10	9
2050	Atrazine	0.003	0	0			10	9
2990	Benzene	0.005	0	0			9	9
2306 2046	Benzo[a]pyrene Carbofuran	0.0002	0	0			10 12	11
2982	Carbon tetrachloride	0.005	0	0			9	9
2959	Chlordane	0.002	0	0			10	9
2380	cis-1,2- Dichloroethylene	0.07	0	0			9	9
2031	Dalapon	0.2	0	0			9	8
2035	Di(2- ethylhexyl)adipat e	0.4	0	0			10	9
2039	Di(2- ethylhexyl)phthal ate	0.006	0	0			11	10
2964	Dichloromethane	0.005	0	0			9	9

2041	Dinoseb	0.007	0	0			9	8
2032	Diquat	0.02	0	0			0	0
2033	Endothall	0.1	0	0			0	0
2005	Endrin	0.002	0	0			9	8
2992	Ethylbenzene	0.7	0	0			9	9
2946	Ethylene dibromide	0.00005	0	0			9	8
2034	Glyphosate	0.7	0	0			0	0
2065	Heptachlor	0.0004	0	0			10	9
2067	Heptachlor epoxide	0.0002	0	0			10	9
2274	Hexachlorobenze ne	0.001	0	0			10	9
2042	Hexachlorocyclo- pentadiene	0.05	0	0			10	9
2010	Lindane	0.0002	0	0			10	9
2015	Methoxychlor	0.04	0	0			10	9
2989	Monochlorobenz ene	0.1	0	0			9	9
2968	o- Dichlorobenzene	0.6	0	0			9	9
2969	para- Dichlorobenzene	0.075	0	0			9	9
2383	Total polychlorinated biphenyls (PCB's)	0.0005	0	0			0	0
2326	Pentachlorophen ol	0.001	0	0			9	8
2987	Tetrachloroethyle ne	0.005	0	0			9	9
2984	Trichloroethylene	0.005	0	0			9	9
2996	Styrene	0.1	0	0			9	9
2991	Toluene	1	0	0			9	9
2979	trans-1,2- Dichloroethylene	0.1	0	0			9	9
2955	Xylenes (total)	10	0	0			9	9
2020	Toxaphene	0.003	0	0			10	9
2036	Oxamyl (Vydate)	0.2	0	0			12	11
2040	Picloram	0.5	0	0			9	8
2037	Simazine	0.004	0	0			10	9
2976	Vinyl chloride	0.002	0	0			9	9
		Subtotals	0	0	0	0	<b>24</b> <sub>2</sub>	214
Stage 2	Stage 2 Disinfection Byproducts Rule							
1009	Chlorite	1	0	0			3	2
1011	Bromate	0.01	0	0			0	0
1006	Chloramines	4	0	0			0	0
1008	Chlorine Dioxide	0.8	0	0			0	0
999	Chlorine	4	0	0			7	7
1927	Total Alkalinity		0	0			4	2

				•				
2950	Total Trihalomethanes	0.08	5	2			14	9
2456	Total Haloacetic Acids	0.06	0	0			13	8
2920	Total Organic Carbon Removal Ratio				0	0	5	3
0400	Stage 1				1	1		
SR	State Reporting (MORs)						1	1
SR	State Reporting (Sample Data)						0	0
		Subtotals	5	2	1	1	<b>30</b> <sub>2</sub>	144
Inorgan	ic Contaminants							
1074	Antimony	0.006	0	0			3	3
1005	Arsenic	0.01	0	0			3	3
	Asbestos (>10	7 million	-	-				
1094	micrometers)	fibers/L	0	0			1	1
1010	Barium	2	0	0			3	3
1075	Beryllium	0.004	10	1			3	3
1015	Cadmium	0.005	0	0			3	3
1020	Chromium	0.1	0	0			1	1
1024	Cyanide (as free cyanide)	0.2	0	0			1	1
1025	Fluoride	4	0	0			0	0
1035	Mercury	0.002	0	0			3	3
1040	Nitrate	10 (as N)	1	1			35	31
1041	Nitrite	1 (as N)	0	0			19	19
1045	Selenium	0.05	0	0			3	3
SM	Sodium						0	0
1085	Thallium	0.002	0	0			3	3
1038	Total nitrate and nitrite	10 (as N)	0	0			0	0
		Subtotals	11	2	0	0	<b>60</b> <sub>2</sub>	434
Radionu	ıclides							
4000	Gross alpha particle activity	15 pCi/l	8	1			3	1
4010	Combined Radium 226/228	5 pCi/l	12	1			3	2
4006	Combined uranium	30 μg/l	0	0			4	3
4101	Gross beta	4 mrem/yr.	0	0			0	0
		Subtotals	20	14	0	0	10	44
Revised	Total Coliform Ru	le						
1A	Acute ( <i>E. Coli</i> ) MCL	Presence 3	4	3				

		1					1
2A	Level 1 Assessment missing or incomplete			2	2		
2B	Level 2 Assessment missing or incomplete			2	2		
2C	Corrective/Exped ited Actions			4	3		
2D	Seasonal Startup Procedures			1	1		
3A/3B	Major or minor routine/additional routine					35	28
3C	Monitor extra coliform after turbidity exceedance (unfiltered SW)					0	0
3D	Lab/Analytical Method Error					0	0
4A	Reporting, Assessment Forms					0	0
4B	Reporting, Sample Results					11	11
4C	Reporting, Seasonal Startup Procedures Certification					2	2
4D	Notification to State w/in 24 hrs. of E. Coli result					0	0
4E	Notification to State w/in 24 hrs. of E. Coli MCL					0	0
4F	Notification to State w/in 24 hrs. of Assessment or Corrective Action Violation					0	0
5A	Sample Siting Plan Errors					0	0
5B	Recordkeeping					0	0
sc	State Compliance (failed to conduct LV1A in 10 days)			0	0	-	

	State Departing							
SR	State Reporting (failed to electronically						1	1
OIX	upload the data						'	•
	by the due date)							
		Subtotal	4	3	9	84	49	414
Ground	water Rule							
5	State notification of treatment failure						0	0
28	Sanitary Survey Coop Failure				0	0		
19	Assessment monitoring of well						8	7
31	Failure to monitor treatment						0	0
34	Triggered monitoring of well						15	15
41	Failure maintain microbial treatment				3	2		
45	Failure address significant deficiency				3	3		
73	Failure notify other water system of E. Coli result(s)						0	0
sc	State-compliance (failure to correct deficiency)				10	5		
SR	State-reporting (Failure to report correction of deficiency)						2	2
		Subtotal	0	0	16	104	25	234
	Water Treatment F	Rule						
09	Recordkeeping						4	3
36	Monitoring & Reporting SWTR						0	0
38	Monitoring & Reporting IESWTR						2	1
40 - 45	Treatment techniques				0	0		
32	Monitoring, routine/repeat (Source, LT2)						0	0

SR	State-reporting (failure report CT parameters)						10	1
		Subtotal	0	0	0	0	162	34
Lead an	Lead and Copper Rule							
51	Initial lead and copper tap M/R						0	0
52,56	Follow-up or routine lead and copper tap M/R						18	17
53	Water Quality Parameters						7	4
57	OCCT/SOWT RECOM/STUDY				3	3		
58, 63	Treatment Installation				0	0		
65, 66	Public education, Lead Consumer Notice				0	0	14	12
SR	State Reporting (priority results)						0	0
		Subtotal	0	0	3	3	39	294
Consum	ner Confidence Rep	orts (CCR)		ı				
71	CCR failure to report (major)						6	6
72	CCR inadequate content or reporting (minor)						0	0
Public N	lotice Rule							
75	Public Notification						40	23
76	Public Notification for state-only violation						3	3
		Subtotal	0	0	0	0	49	324
State Vi	olations (Miscellan	eous)						
sc	State-compliance (LCRI)				30	15	0	0
SR	State-reporting (CCC, LCRI, PFAS, Misc.)						25	19
SM	State-monitoring (PFAS)						4	4
		Subtotal	0	0	30	15	29	204
	Totals		40	74	59	334	331	1544

- <sup>1</sup> Values are in milligrams per liter (mg/l), unless otherwise specified.
- <sup>2</sup> Monitoring violations for Volatile Organic Chemicals, Synthetic Organic Chemicals, Inorganic Chemicals, Disinfection Byproducts, and Long Term 2 Enhanced Surface Water Treatment Rule (LT2) are issued as a single violation for the suite of contaminants, not as violations for each of the regulated contaminants.
- <sup>3</sup> The coliform MCL is based on presence or absence of total coliforms in a sample, rather than coliform density. For total coliforms: if a public water system collects at least 40 samples per month, the MCL is exceeded when more than 5% of samples collected during the month are total coliform positive; if a public water system collects fewer than 40 samples per month, the MCL is exceeded if more than one sample is total coliform positive. For E. coli, the MCL is exceeded when a single E. coli positive sample is confirmed by a consecutive total coliform positive or E. coli positive sample.
- <sup>4</sup> The subtotal and total number of public water systems with violations is not necessarily the sum of the number of public water systems within each rule category. This is because each PWS might have more than one violation within each rule category.

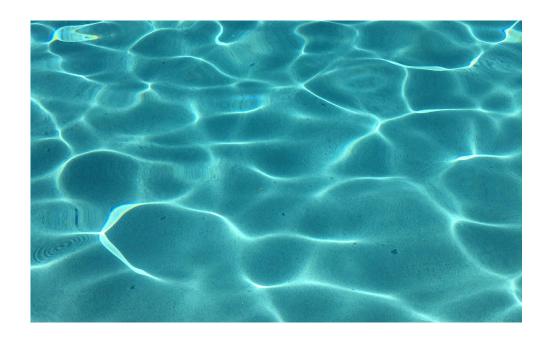
## **Appendix F: Compliance Data for Licensed Aquatic Venues**

Figure 1: 2024: Total, Water Quality Samples (Bacteria, Free Residual Chlorine, Combined Chlorine, and pH level), Swimming Pools and Therapy Pools, collected by Licensees.

Swimming Pools		Therapy Pools		Float Tanks
Indoor	Outdoor	Indoor	Outdoor	
196	351	30	18	12

Figure 2: 2024 Swimming and Therapy Pools Violations, By Violation Type

Water Quality Violations						
	Swimming Pools		Therapy Pools			
Indoor	Outdoor	Indoor	Outdoor			
0	0	0	0			



#### Staff Acknowledgments

This list reflects staff names and titles/roles as of December 31, 2024.

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**VACANT** Executive Assistant