

**Portsmouth Water & Fire District**

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PORTSMOUTH WATER AND FIRE DISTRICT

# 2024 CONSUMER CONFIDENCE REPORT

**Dear Customer:** Portsmouth Water and Fire District is pleased to present our 2024 Consumer Confidence Report (CCR) as required by the federal Safe Drinking Water Act (SDWA). This annual water quality report provides a snapshot of where your water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent. We strive to provide you with the safest and most reliable water supply available. The District's drinking water meets or exceeds all federal and state drinking water standards.

## About the Portsmouth Water and Fire District

The Portsmouth Water and Fire District is a quasi-municipal agency created by the RI General Assembly in 1952. The District is responsible for providing drinking water and water for fire protection for approximately ninety percent of Portsmouth on Aquidneck Island. The District is governed by a seven-member elected Administrative Board and holds an annual election of officers on the second Wednesday in June. Although the District is not affiliated legally or administratively with the Town of Portsmouth government, the District and Town work cooperatively to best serve their common constituents.

We encourage public interest and participation in our community's decisions affecting drinking water. Regularly scheduled Administrative Board meetings are held on the third Tuesday of every month at 7:00 PM, at the District's office at 1944 East Main Road and via Zoom. The public is welcome and encouraged to attend these meetings.

## Your Water Source

In 2024, the Portsmouth Water and Fire District purchased all of its water from the City of Newport. The majority of the water is treated at the Lawton Valley Water Treatment Plant in Portsmouth. On occasion, the water may be treated at Station One Water Treatment Plant in Newport. Newport Water draws its raw water supply from a system of nine surface water reservoirs: Lawton Valley Reservoir, Sisson Pond and St. Mary's Pond in Portsmouth; Nonquit Pond in Tiverton; Watson Reservoir in Little Compton; North and South Easton Ponds in Middletown and Newport; and Paradise Pond and Gardner Pond in Middletown. Both plants and all nine reservoirs are owned and operated by the City of Newport. The emergency supply from the Stone Bridge Fire District is treated at the Stone Bridge Water Treatment Plant in Tiverton, which draws surface water from Stafford Pond in Tiverton.

## Portsmouth's Distribution System

The District services all of Portsmouth, exclusive of Redwood Farms, Bay View, Raytheon, Melville Areas, and Prudence Island. The District's water system maintains 6,893 services and consists of over 133 miles of water main, 4 water storage tanks, 2 pumping stations, 1,758 valves and 607 hydrants.

The District does not own any water supplies, but instead purchases its regular water supply on a wholesale basis from the City of Newport and relies on the Stone Bridge Fire District in Tiverton for emergency water supply.

The Administrative Board's goal is to provide the customers of the District with an adequate supply of the best quality water available. Recent and current efforts to improve water quality and customer service include:

- Web Portal that allows customers to pay their water and tax bills on-line using ACH drafts and credit and debit cards. Go to [portsmouthwater.org](https://portsmouthwater.org) and click on the "PAY MY BILL" button.
- Development of a Geographic Information System (GIS) for water system mapping and data analysis.
- Asset Management System web application/server that integrates GIS for record keeping and real-time mobile work orders.
- A new pump station to replace the 55-year-old Union Street Pumping Station.
- Annual uni-directional water main flushing program based on hydraulic modeling and analysis.
- Annual leak detection of the entire water system.
- Looping of new and existing water main extensions whenever possible to avoid dead-ends.
- Rehabilitation of the Sakonnet River Pipeline which is the emergency connection to Stone Bridge Fire District.
- Implementation of a cross-connection control program. Go to <https://portsmouthwater.org/whats-a-cross-connection/> to learn more.
- Notifying customers of shut downs and emergencies via CodeRED. Go to <https://portsmouthwater.org/codered-emergency-notification-system/> to learn more and to sign up.

## Source Water Assessments

In 2003, the University of Rhode Island, in cooperation with the RI Department of Health (RIDOH) and other state and federal agencies, assessed the threats within the watersheds of Newport Water's water supply sources. The assessment found that the water sources on Aquidneck Island and in Little Compton and Tiverton are moderately susceptible to contamination. Monitoring and protection efforts are especially important to assure continued water quality. Newport Water updated the 2003 Assessment in 2010. The complete Source Water Assessment Report is available at our office.

## Concerning Lead in Our Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Portsmouth Water and Fire District is responsible for providing high quality drinking water, but cannot control the variety of materials used in its customer's plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap until the water gets as cool as it can and then flush it for another 15 seconds before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your tap water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Although there is no lead in the water supplied by the District, lead can enter tap water through corrosion of household plumbing materials. Homes built before 1986 are more likely to have fixtures and solder containing lead. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water.

As part of EPA's lead and Copper rule revision, every public supplier must take inventory of all water service lines in their distribution system primarily to identify any lead service lines. To view the District's service line inventory or to report your service line material go to [https://portsmouthwater.org/lsl\\_inventory/](https://portsmouthwater.org/lsl_inventory/) and follow the directions.



## Additional Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems;
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The district can help you obtain a certified lead test for your tap water for \$35. Please call 683-2090 for more information.

## Concerning Total Trihalomethanes (TTHMs) in Our Water

The EPA sets standards for controlling the levels of disinfection byproducts (DBPs) in drinking water, one of which is TTHMs.

Many water systems disinfect their water with chlorine in order to inactivate pathogens that cause disease. The public health benefits of chlorine disinfection practices are significant and well-recognized. While disinfectants are effective in controlling many harmful microorganisms, they react with organic and inorganic matter in the water to form DBPs, some of which pose health risks at certain levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Consequently, one of the most complex questions facing water supply professionals is how to reduce risks from disinfectants and DBPs while providing increased protection against microbial contaminants.

## Newport Water System Special Monitoring – Metals and Synthetic Organic Compounds

As part of Newport Water's ongoing monitoring programs, they have continued testing sites for metals and synthetic organic compounds once per quarter in 2024. The sample sites include: Station 1 total plant effluent, Lawton Valley clearwell tank effluent, and Lawton Valley tank effluent. This represents the water produced at both water plants, after treatment, to the distribution system. Eleven metals and thirty-six organic compounds were analyzed. The table presents only contaminants that were detected.

Station 1 TPE Metals	Unit	MCL	Detected Level	Range	Major Source
Barium	ppm	2	0.007	0.006 - 0.007	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Lawton Valley Clearwell Metals	Unit	MCL	Detected Level	Range	Major Source
Barium	ppm	2	0.009	0.003 - 0.009	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Lawton Valley Tank Effluent Metals	Unit	MCL	Detected Level	Range	Major Source
Barium	ppm	2	0.009	0.003 - 0.009	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

## Questions

The Portsmouth Water and Fire District prepared this report. We'll be happy to answer any questions about the District and our drinking water quality. Please contact Jessica Lynch, General Manager and Chief Engineer (401-683-2090) or [info@portsmouthwater.org](mailto:info@portsmouthwater.org).



Some water customers of the Newport Water Department and the Naval Station Newport water system, particularly in the Redwood Farms, Bay View and Melville areas, in addition to properties in the District with private wells, may receive this consumer notice, even though they are not customers of the District. This overcoverage is unavoidable in our effort to ensure that all potential water users within the District receive this legal notice through a Postal Customer mailing.



## How Do I Read The Water Quality Tables?

It's easy! Our water is regularly tested to assure that it is safe and healthy. The column marked Detected Level shows the highest test results during the year. The column marked Major Sources in Drinking Water shows where substances usually originate. Footnotes explain important details. Abbreviations and definitions of key terms are shown below:

## Abbreviations and Definitions used in the Water Quality Tables

<b>AL</b>	<b>Action Level:</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>MCL</b>	<b>Maximum Contaminant Level:</b> The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<b>MCLG</b>	<b>Maximum Contaminant Level Goal:</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
<b>MFL</b>	<b>Million Fibers per Liter.</b>
<b>MRDL</b>	<b>Maximum Residual Disinfectant Level:</b> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
<b>MRDLG</b>	<b>Maximum Residual Disinfectant Level Goal:</b> The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
<b>Mrem</b>	<b>Millirems:</b> a measure of radiation absorbed by the body.
<b>N/A</b>	<b>Not Applicable.</b>
<b>ND</b>	<b>Not Detectable:</b> Not detectable at testing limits.
<b>NTU</b>	<b>Nephelometric Turbidity Units:</b> a measure of very small particulate matter in drinking water.
<b>pCi/l</b>	<b>Picocuries per liter:</b> a measure of radioactivity.
<b>ppb</b>	<b>parts per billion,</b> or micrograms per liter (µg/l).
<b>ppm</b>	<b>parts per million,</b> or milligrams per liter (mg/l).
<b>ppt</b>	<b>parts per trillion,</b> or nanograms per liter (nanograms/l).
<b>RAA</b>	<b>Running Annual Average.</b>
<b>TT</b>	<b>Treatment Technique:</b> A required process intended to reduce the level of a contaminant in drinking water.

DETECTED CONTAMINANTS	YEAR TESTED	UNIT	MCL / MRDL	MCLG / MRDLG	DETECTED LEVEL (FOR COMPLIANCE)	DETECTED RANGE	MAJOR SOURCES IN DRINKING WATER	VIOLATION
<b>Microbiological Contaminants</b>			<b>MCL</b>	<b>MCLG</b>				
Total Coliform Bacteria (1)	2024	% of Positive Samples per Month	TT	N/A	2.27%	N/A	Naturally present in the environment.	NO
Total Organic Carbon (2)	2024	Removal Ratio	TT	N/A	1.26	0.73 - 1.54	Naturally present in the environment.	NO
Turbidity (2)(3)	2024	NTU	TT = 1.0 Lowest monthly % of samples meeting limit	N/A	0.28 100% < 0.3	N/A	Soil runoff.	NO
<b>Disinfection Byproducts</b>			<b>MCL</b>	<b>MCLG</b>				
Chlorite (2)	2024	ppm	1.0	0.8	0.370	<0.012 - 0.410	By-product of drinking water chlorination.	NO
Haloacetic Acids (HAA5s)	2024	ppb	60	N/A	29.0	7.20 - 32.1		NO
Total Trihalomethanes (TTHMs) (4)	2024	ppb	80	N/A	75.3	29.2 - 114.0		NO
<b>Disinfectants</b>			<b>MRDL</b>	<b>MRDLG</b>				
Chlorine	2024	ppm	4	4	1.25	0.60 - 2.16	Water additive used to control microbes.	NO
Chlorine Dioxide (2)	2024	ppb	800	800	710	10 - 710		NO
<b>Inorganic Contaminants</b>			<b>MCL</b>	<b>MCLG</b>				
Arsenic (5)	2024	ppb	10	0	0.001	ND - 0.001	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste.	NO
Barium (6)	2024	ppm	2	2	0.009	0.006 - 0.009	Erosion of natural deposits; discharge of drilling wastes.	NO
Copper (7)	2024	ppm	AL = 1.3	1.3	0.044	N/A	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	NO
Fluoride (2) (8)	2024	ppm	4	4	0.93	0.03 - 0.93	Water additive, promotes strong teeth.	NO
Lead (9)	2024	ppb	AL = 15	0	4.8	ND - 164	Corrosion of household plumbing systems; erosion of natural deposits.	NO
Nitrate (5)	2024	ppm	10	10	1.93	0.07 - 1.93	Runoff from fertilizer use; leaching from septic tanks, sewerage; erosion of natural deposits.	NO
Asbestos	2020	MFL	70	70	<0.062	N/A	Decay of asbestos cement in water mains; erosion of natural deposits	NO
<b>Synthetic Organic Contaminants</b>			<b>MCL</b>	<b>MCLG</b>				
Simazine	2024	ppb	4	4	0.20	ND - 0.20	Runoff from herbicide use; runoff from manufacturing sites.	NO
<b>Unregulated Contaminant Monitoring (10)</b>			<b>MCL</b>	<b>MCLG</b>				
Chlorate (2)	2024	ppb	N/A	N/A	340	22-340	By-product of drinking water chlorination	N/A
Sodium	2024	ppm	N/A	N/A	34.3	29.1 - 30.9	Erosion of natural deposits; road-salt runoff; contained in water treatment chemicals.	N/A
Manganese (2)	2024	ppm	N/A	N/A	0.110	ND - 0.110	Naturally occurring; road runoff; contained in water treatment chemicals; EPA regulations require us to monitor this contaminant while EPA considers setting a limit on it.	NO
PFBS (5)	2024	ppt	N/A	N/A	2.49	2.10 - 2.49	Industrial / manufacturing byproduct. Fire training / fire response sites.	N/A
PFBS (2)	2024	ppt	N/A	N/A	2.04	1.85 - 2.04		N/A
PFHxA (5)	2024	ppt	N/A	N/A	4.25	2.40 - 4.25		N/A
PFHxA (2)	2024	ppt	N/A	N/A	3.74	2.53 - 3.74		N/A

\*The data presented in this table is from the most recent testing done in accordance with regulations. Test results are from the Portsmouth Water and Fire District's distribution system unless otherwise noted by the footnotes.

**Water Quality Table Footnotes**

- (1) In 2024, the District collected 556 samples that were tested for Total Coliform Bacteria. All samples were negative except for one sample that tested positive for Total Coliform Bacteria. Three repeat samples within 48-hours at the positive test site and at test sites upstream and downstream were negative.
- (2) Measured after treatment at the Newport Water Department Lawton Valley Treatment Plant.
- (3) Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.
- (4) Detected level is Stage 2 DBPR highest locational running annual average. *Some people who drink water containing TTHM's in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.*

- (5) Measured in the Newport Water Department raw water reservoirs prior to treatment.
- (6) Measured in the Newport Water Department raw water supply and entry points to the distribution system.
- (7) The detected level indicates the 90th percentile value of the 33 samples obtained at 33 high-risk homes. None of the samples exceeded the Action Level.
- (8) Fluoride is added to the water to help prevent tooth decay in children.
- (9) The detected level indicates the 90th percentile value of the 33 samples obtained at 33 high-risk homes (one home was resampled). One of the 33 samples exceeded the Action Level.
- (10) Unregulated contaminants are those that do not yet have a primary drinking water standard set by the US EPA. The purpose of monitoring for these contaminants is to help the US EPA develop regulatory decisions for these contaminants.

**2024 PFAS/PFOA Source Water Data**

As part of Newport Water Division's ongoing source water monitoring program they continue to sample all of the surface body reservoirs for PFAS compounds. Below is a summary of detections in the source water.

Source Water RIDOH Regulated PFAS/PFOA Monitoring	Period	Unit	Detected Level	Range	Major Sources
PFHpA	2024	parts per trillion	3.08	ND - 3.08	Industrial / manufacturing byproduct. Fire training / fire response sites.
PFHxS	2024	parts per trillion	2.34	ND - 2.34	
PFOA	2024	parts per trillion	6.01	ND - 6.01	
PFNA	2024	parts per trillion	2.46	ND - 2.46	
PFOS	2024	parts per trillion	14.6	ND - 14.6	
PFDA	2024	parts per trillion	ND	ND	

**2024 RIDOH PFAS/PFOA Finished Water Data**

The Rhode Island "PFAS in Drinking Water, Groundwater, and Surface Water Act of 2022" required the Newport Water Division to monitor our finished water for PFAS compounds quarterly. Six PFAS/PFOA compounds were specifically targeted by the legislation setting an interim Maximum Contaminant Level (MCL) of 20 Parts Per Trillion (PPT) either individually or combined. Below is a summary of the detections in the finished water from both treatment plants.

Finished Water RIDOH Regulated PFAS/PFOA Monitoring	Period	Unit	MCL	Detected Level	Range	Major Sources	Violation
PFHpA	2024	parts per trillion	20 ppt	2.03	ND - 2.03	Industrial / manufacturing byproduct. Fire training / fire response sites.	NO
PFHxS	2024	parts per trillion	20 ppt	1.37	ND - 1.37		NO
PFOA	2024	parts per trillion	20 ppt	3.05	0.85 - 3.05		NO
PFNA	2024	parts per trillion	20 ppt	ND	ND		NO
PFOS	2024	parts per trillion	20 ppt	1.43	ND - 1.43		NO
PFDA	2024	parts per trillion	20 ppt	ND	ND		NO