# Annual Drinking Water Quality Report

Reporting Year 2024



Pease Tradeport Water System **PWS ID:** 1951020

# **OUR COMMITMENT: SAFE DRINKING WATER**

The City of Portsmouth Water Division is pleased to present their Annual Drinking Water Quality Report. This report summarizes the results of drinking water testing performed from January 1, 2024 to December 31, 2024 and is provided to keep customers informed about the quality of the water they rely on every day. It is being sent to every water customer served by the Pease Tradeport Water System.

Through 2024, the Pease Tradeport Water System has continued to meet all water quality standards as regulated by the US Environmental Protection Agency and the NH Department of Environmental Services.

## **Drinking Water Sources**

The mission of the Portsmouth Water Division is to provide the community with drinking water that meets all current federal and state drinking water regulations and standards. The Division is constantly monitoring and routinely testing the drinking water according to these requirements to ensure the quality of water delivered to local customers consistently meets all water quality standards. Potential contaminants and impacts from changing weather cause new challenges. City staff remain vigilant in meeting the goals of water treatment, source water protection, water efficiency, system improvements, fire service capability and community education, while continuing to serve the needs of all water users. Water Supply Updates are prepared and provided on the Water webpage at least quarterly, and more often when warranted. Water customers can access these reports at: <a href="https://portsnh.co/WaterSupplyUpdates">https://portsnh.co/WaterSupplyUpdates</a>.

Water supplied to the Pease Tradeport Water System customers comes primarily from three groundwater wells located on the Tradeport (Harrison Well, Smith Well, and Haven Well). The Portsmouth Water System (EPA PWS ID#: 1951010) supplies water to the Pease Tradeport Water System as needed. One percent of the water supplied to this area was from the Portsmouth Water System in 2024. Water from the Harrison Well, Smith Well, and Haven Well is pumped to the Grafton Road Drinking Water Treatment Facility (WTF) where it is treated through ion-exchange resin filters, and granular activated carbon (GAC) filters. This filtration process is designed to remove per- and polyfluoroalkyl substances (PFAS) that are present in these three groundwater sources. Sodium hypochlorite (bleach) for disinfection, fluoride as sodium fluoride (used to prevent tooth decay) and poly/ortho-phosphate (a sequestering agent to reduce oxidation of iron and manganese, and inhibit corrosion of distribution system pipes) are added before entering the distribution system.

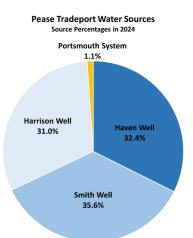
When additional supply is needed from the Portsmouth Water System, the water that is pumped from Portsmouth primarily consists of water from three groundwater wells: Portsmouth Well #1, Collins Well, and Greenland Well. Sodium hypochlorite and poly/ortho-phosphate are added to the water supplied by these wells. Fluoride as hydrofluorosilicic acid is also added at the Greenland Well. Occasionally, water from the City's sources in Madbury may contribute to the water pumped into Pease from the Portsmouth Water System. The Madbury sources include the Bellamy Reservoir and four groundwater wells located beside the Madbury Water Treatment Facility. For more information on the treatment processes that occur at this facility, see the Portsmouth Water System's Annual Drinking Water Quality Report located on the City's website: https://portsnh.co/Drinking-Water-Reports.



Pease Water Treatment Operators removing bags of spent ion-exchange resin to prepare for new media.



Pease Water Treatment Operators replacing cartridge filters.





## **PUBLIC ENGAGEMENT**

#### Safe Water Advisory Group (SWAG)



The Safe Water Advisory Group (SWAG) was created with the approval of City Council on October 5, 2020. Its mission is to review and communicate the latest science on the health and environmental effects of drinking water contaminants (with a heavy focus on PFAS), to monitor federal and state level legislative changes, and to anticipate policy changes that could impact the City of Portsmouth. The SWAG met four times in 2024 and discussed topics including PFAS regulations, extent, treatment, and testing programs; legislative items associated with drinking water, private well studies, lead and copper testing, water supply updates, and source water protection. Video recordings and minutes from SWAG meetings are posted on the City's YouTube channel: <u>https://portsnh.co/3Czl50F</u>.

The 2024 Portsmouth City Council voted to renew the SWAG for another 2 years. The public is invited to attend meetings and encouraged to be involved with the community and informed of all aspects of the City's water supply.

## Pease Restoration Advisory Board (RAB)

The Pease Restoration Advisory Board (RAB) is a stakeholder group that meets on a quarterly basis to discuss environmental restoration efforts surrounding the former Pease Air Force Base. The board was established in April 2016 to provide community members an open forum to talk with the Air Force and regulatory agencies about these restoration activities following the discovery of elevated PFAS levels in local groundwaters. With input from the U.S. Environmental Protection Agency and New Hampshire Department of Environmental Services,

the Pease RAB was reestablished upon completion of the Pease Tradeport Water Treatment Facility due in part to evolving regulations and continued public concern over the perand polyfluoroalkyl compounds.

The Pease RAB consists of 14 board members (including eight local volunteer



community members and six appointed members representing the Air Force), regulatory agencies, the Pease Development Authority and the City of Portsmouth Water Division staff.

Information about past and upcoming meetings can be accessed here: <a href="https://www.afcec.af.mil/Home/BRAC/Pease-Archives/">https://www.afcec.af.mil/Home/BRAC/Pease-Archives/</a>

## ADVANCEMENT

#### Upgrades to Water Treatment Facility for PFAS Treatment

The Pease Tradeport Water Treatment Facility began operations in 2021. The completion of this facility marks the culmination of a seven-year response to the presence of PFAS contaminants that were found in the three Pease drinking water supply wells in May 2014. Historical use of firefighting foam at the former Pease Air Force Base containing PFAS compounds caused this contamination. Subsequently, a treatment plant designed to remove PFAS compounds was constructed through an agreement between the Air Force and the City of Portsmouth. This agreement provided the City with funds to reimburse the cost of construction of the final treatment system for all three wells, including a dual filtration system consisting of resin and granular activated-carbon filters. The construction of the new Pease Water Treatment Facility followed extensive research, pilot testing and design of a system to treat the contamination.

The new treatment processes were started and tested in April 2021 with water from the Harrison Well and Smith Well. After confirming the system was operating as designed, water from the Haven Well was introduced and treated through the facility. The treatment facility became fully operational in August 2021. Water samples are collected to test for PFAS monthly and the operations of the filtration process are carefully monitored to ensure the media is performing as expected. The facility continues to remove PFAS compounds that reside in the groundwater supply wells, and treatment operators continue to monitor the effectiveness of the ion exchange media to prepare for scheduled replacement.



Delivery of regenerated granular activated carbon (GAC) media.

A recent changeout of resin media occurred in April, 2024. The original gel-based resin was replaced by Calgon's "Cal Res 2301" in six of twelve filtration vessels to maintain optimal removal of PFAS compounds. Granular activated carbon (GAC) media, serving as a final 'polish' of water treatment after the ion exchange filtration process, was reactivated in March 2024. Reactivation is a method of thermally processing the activated carbon to destroy the adsorbed components contained on its surface.



Resin vessels at the Grafton Road Water Treatment Facility.

# **2024 WATER QUALITY RESULTS**

CONTAMINANT (UNIT OF MEASUREMENT)		IN COMPLIANCE	VIOLATION (Y/N)	LEVEL MEASURED	RANGE	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
	Total Coliform Bacteria	$\checkmark$	N	<b>NO</b> total coliform bacteria was detected in the 120 distribution system samples that were collected and analyzed in 2024.				Naturally present in the environment	
DISINFECTION BYPRODUCTS	Haloacetic Acids (ppb)	$\checkmark$	N	Highest Level Measured: 2	<1 - 2	N/A	60	Byproduct of drinking water disinfection	
	Total Trihalomethanes (ppb) (Bromodichloro-methane, Bromoform, Dibromomethane, Chloroform)	$\checkmark$	N	Highest Level Measured: 19	1 - 19	N/A	80	Byproduct of drinking water disinfection	
) COPPER	Lead (ppb)	$\checkmark$	N	90th Percentile = 0	0 sites above AL (25 sites sampled)	15	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits	
LEAD AND COPPER	Copper (ppm)	$\checkmark$	N	90th Percentile = 0.42	0 sites above AL (25 sites sampled)	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
	<b>Barium (ppb)</b> 2021 - 2024 data	$\checkmark$	N	Highest Level Measured: 11 Avg Source Level: 10	10 - 11	2000	2000	Geological; oil/gas drilling, painting, industrial waste	
VTS	<b>Chromium (ppb)</b> 2021 - 2024 data	$\checkmark$	N	Highest Level Measured: 1 Avg Source Level: <1	<1 - 1	100	100	Discharge from steel and pulp mills; erosion of natural deposits	
NTAMINAN	<b>Nickel (ppb)</b> 2021 - 2024 data	$\checkmark$	N	Highest Level Measured: 2 Avg Source Level: <1	<1 - 2	10	10	Geological; electroplating, battery production, ceramics	
NORGANIC CONTAMINANTS	Chlorine (ppm)	$\checkmark$	N	Highest Level Measured: 1.2 Avg System Level: 0.91	0.44 - 1.2	MRDLG = 4	MRDL = 4	Water additive used to control microbes	
ONI	Fluoride (ppm)	$\checkmark$	N	Highest Level Measured: 0.8 Avg Source Level: 0.6	0.1 - 0.8	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
	Nitrate (ppm)	$\checkmark$	N	Highest Level Measured: 0.9 Avg Source Level: 0.9	0.9	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
PFAS	Per- and Polyfluoroalkyl Substances (PFAS)	$\checkmark$	N	See PFAS section		Discharge fro treatment, re leachate fror	om industrial esiduals from n landfills and	al processes, wastewater m firefighting foam, runoff / and septic systems	

#### **DEFINITIONS OF TERMS**

- AL (Action Level) Concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL (Maximum Contaminant Level) 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.
- MCLG (Maximum Contaminant Level Goal) 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.
- MRDL (Maximum Residual Disinfectant Level) 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.
- MRDLG (Maximum Residual Disinfectant Level Goal) 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.
- N/A (not applicable) Sampling was not completed by regulation or was not required.

- ND (Non-Detect) Indicates that the substance was not found by laboratory analysis.
- ppm (parts per million) One part substance per million parts water (or milligrams per liter).
- ppb (parts per billion One part substance per billion parts water (or micro-grams per liter).
- ppt (parts per trillion) One part substance per trillion parts water (or nanograms per liter).
- TT (Treatment Technique) Required process intended to reduce the level of a contaminant in drinking water.
- LRAA (Locational Running Annual Average) Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

## **2024 WATER QUALITY RESULTS**

## Per- and Polyfluoroalkyl Substances (PFAS)

On September 30, 2019 the NHDES established limits on the concentrations of four per- and polyfluoroalkyl substances (PFAS) in drinking water. The NHDES maximum contaminant level (MCL) for drinking water and groundwater is 15 parts per trillion (ppt) for perfluorooctane-sulfonic acid (PFOS), 12 ppt for perfluorooctanoic acid (PFOA), 11 ppt for Perfluorononanoic Acid (PFNA), and 18 ppt for Perfluorohexane sulfonic acid (PFHXS). These limits are based on an annual rolling average of the sample results. In April 2024, the US EPA finalized regulations that limit acceptable concentrations of six PFAS compounds in drinking water. The Pease Tradeport Water System remains in compliance with the NHDES PFAS limits and is actively taking steps to assure compliance with new EPA standards.

Over the past ten years, the Harrison Well and Smith Well in the Pease Tradeport Water System, and Portsmouth Well #1 and Collins Well in the Portsmouth Water System, have been routinely monitored for PFAS by the Air Force. Since reactivation, the Haven Well has been sampled and tested on a monthly basis. The City of Portsmouth samples all of the Portsmouth System water supply sources quarterly. Sample results from 2024 are summarized in the PFAS table below. All monitoring data is available online: <a href="mailto:cityofportsmouth.com/publicworks/water/pease-tradeport-water-system">cityofportsmouth.com/</a> publicworks/water/pease-tradeport-water-system.

			PORTSMOUTH WATER SUPPLIED TO PEASE SYSTEM			PEASE TRADEPORT TREATED WELL WATER
PER- AND POLYFLUOROALKYL SUBSTANCE (concentrations* reported in ng/L or ppt)		NHDES MAXIMUM CONTAMINANT LEVEL (MCL)		COLLINS WELL	GREENLAND WELL	SUPPLIED AFTER GAC TREATMENT
# of samples in 2024			12	12	4	12
% of water supplied in 2024				1.1%	98.9%	
	18	Average	5	2	<2	ND
Perfluorohexane-sulfonic acid (PFHxS)		Range	3 - 8	<2 - 3	ND - 2	ND
	11	Average	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)		Range	ND	ND	ND	ND
Perfluorooctane-sulfonic acid (PFOS)	15	Average	5	4	3	ND
Perhuorooctarie-suitoriic acid (PPOS)		Range	4 - 6	3 - 6	3 - 4	ND
Perfluorooctanoic acid (PFOA)	12	Average	6	3	5	ND
		Range	4 - 9	<2 - 5	4 - 5	ND
Perfluorobutane-sulfonic acid (PFBS)	not	Average	5	9	2	ND
	regulated	Range	3 - 6	6 - 14	2	ND
Perfluorobutanoic acid (PFBA)	not	Average	3	3	2	9
	regulated	Range	ND - 5	ND - 5	ND - 2	2 - 22
Perfouoroheptanoic acid (PFHpA)	not regulated	Average	3	ND	2	ND
		Range	2 - 6	ND	ND - 3	ND
Perfluorohexanoic acid (PFHxA)	not regulated	Average	5	<2	4	ND
		Range	3 - 9	<2 - 3	3 - 6	ND
Perfluoropentanoic acid (PFPeA)	not	Average	6	<2	5	3
	regulated	Range	4 - 13	ND - 3	3 - 6	ND - 12

TABLE ABBREVIATIONS & NOTES:

Due to laboratory analytical method limitations, low concentrations reported for these chemicals are considered estimates unless the amount measured is above 2 ng/L (ppt).

Averages are calculated using zero for samples that were less than detection, per NHDES guidance.

**ND** (none detected): Indicates that the substance was not found by laboratory analysis.

#### PFAS analyzed but not detected in the

samples: 6:2 Fluorotelomer sulfonate (6:2 FTS); 8:2 Fluorotelomer sulfonate (8:2 FTS); Perfluorohexanesulfonic acid (4:2 FTS); Perfluorodecanoic acid (PFDA); Perfluorododecanoic acid (PFDoA); Perfluoroheptanesulfonic acid (PFHpS); Perfluoroundecanoic acid (PFUnA); Perfluoro-3-Methoxypropanoic Acid (PFMPA); Perfluoro-4-Methoxybutanoic Acid (PFMBA); Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA); Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA); Perfluoropentanesulfonic Acid (PFPeS); 2.3.3.3-Tetrafluoro-2-[1.1.2.2.3.3.3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA); 4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA); 9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9CI-PF3ONS); and 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11CI-PE3OUdS)

For more information about PFAS health effects: <u>www.atsdr.cdc.gov/</u> sites/pease/index.html

## **Source Water Assessment**

Wellhead protection at Pease Tradeport is a community effort. The purpose of wellhead protection is to safeguard the health of consumers by preventing the contamination of groundwater sources supplying their drinking water. Together, we aim to identify and mitigate potential sources of contamination thereby minimizing the risk of pollutants infiltrating the groundwater. For more information on source water protection please visit: <u>https://www.des.nh.gov/climate-andsustainability/conservation-mitigation-and-restoration/source-waterprotection</u>.

NHDES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess

the vulnerability of each of the State's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources and a summary of available protection options. The results of the assessment have been updated and are provided in the table above. Risk factors, such as proximity of highways and proximity of known contamination, are ranked and summarized in the summary of susceptibility ratings section in terms of the number of factors per risk category.

LTS	SYSTEM	SOURCE INFORMATION	SUMMARY OF SUSCEPTIBILITY RATINGS		
RESUI	PORTSMOUTH		HIGH	MEDIUM	LOW
ENTE		Greenland Well - GPW 003	2	3	7
SSMI		Portsmouth Well - GPW 004	5	2	5
ASSE	Ы	Collins Well - GPW 010	3	2	7
VTER.					
CE WA	PEASE	Smith Well - GPW 001	4	2	6
SOURCE WATER ASSESSMENT RESULTS		Harrison Well - GPW 009	4	1	7
S		Haven Well - GPW 002	5	0	7

# WHAT'S IN YOUR DRINKING WATER AND WHAT'S NOT

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons (e.g., 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. The US 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 at 800-426-4791.

## Lead and Copper

The Portsmouth Water Division takes the responsibility of protecting the public's health very seriously. The Division supplies data to make informed decisions about health and drinking water. Lead is not present in the water when it leaves City treatment and well facilities, or in the water mains that run below the streets. However, lead can be present in old service line connections that tie homes to the water system or plumbing inside homes and businesses. Because of this historical issue, the United States Environmental Protection Agency (USEPA) published a Lead and Copper Rule Improvement requirement that all water suppliers complete an inventory of all water service lines and their material makeup, which was submitted on October 16, 2024. Water Division staff continue to visually inspect water service lines where they enter residential and commercial buildings to determine the material type and request the help of their customers to schedule these inspections. More information about this inventory effort can be found at: portsnh.co/servicelineinventory.

Lead was a common material used in plumbing until the 1980s. It is a powerful toxin that is harmful to human health. Elevated levels of lead can cause serious health problems. Pregnant women, infants and young children are especially vulnerable because even low levels of lead in the blood of children can result in behavior and learning problems, lower IQ and hyperactivity, slowed growth, hearing problems, and anemia. Adults who drink water with lead concentrations over 15 parts per billion (ppb) for many years could develop kidney problems or high blood pressure.

Due to the age of many homes in Portsmouth and surrounding towns, and the associated potential for leaded plumbing components, the Division encourages customers to have their water tested by a certified laboratory, especially if there are children under six or pregnant women in the household. The City adjusts the water chemistry at the treatment facility and well facilities according to its Corrosion Control Program, to reduce the potential for lead in households to dissolve into the water and end up at the tap. But if lead is present in a plumbing system, and is in contact with water, some risk remains. Information about the Corrosion Control Program can be found on the City's website. Old, galvanized service lines are still in service at some locations in Portsmouth, even though their service life is typically only between 20 and 40 years. This type of pipe, besides being at high risk of failing and causing water quality issues, has the potential to contain lead because lead pipe "jumpers" or "goosenecks" were historically used to make these connections to galvanized service lines. The Portsmouth Water Division strongly advises anyone who has a galvanized service line, to replace it with copper as soon as possible and to inform Water Division personnel if/when they do.

In 2024, 25 homes and businesses served by the Pease Tradeport Water System were sampled for lead and copper. Of these, 24 of the samples had no-detection of lead above the laboratory method detection limit (<1-ppb), and only one sample had a lead concentration of 2.6-ppb. No samples exceeded the 15-ppb action level.

Homeowners can minimize the potential for lead exposure from water that has been sitting in the pipes by flushing the tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking or cooking. Anyone concerned about possible lead in their water should consider having their 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 at 800-426-4791 and at US EPA Basic Information about Lead in Drinking Water: https://portsnh.co/3QvbZ8z. Additional information is available from NHDES by calling 603-271-2516 and online: https://portsnh. co/4hg83UX. A list of water testing laboratories is available on the City's website: https://portsnh.co/418VjJV.

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## he Pease Tradeport Water System is currently in compliance with the lead and copper rule.

## **Fluoridation**

Your public water supply is fluoridated. According to the CDC, if your child under the age of six months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis.

Consult your child's health care provider for more information. Dental fluorosis, in moderate or severe forms, may result in brown staining and/or pitting of the permanent teeth before they erupt from the gums. Concerns for dental fluorosis arise when fluoride levels are greater than 2 mg/L.



PEASE

# WATER QUALITY MONITORING

## **POSSIBLE CONTAMINANTS IN DRINKING WATER SOURCES**

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

Microbial contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural livestock operations, or wildlife;

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the EPA imposes regulations limiting the amounts of certain contaminants in the water provided by public water systems. FDA regulations also limit the contaminants allowed in bottled water to provide the same protection for public health. Therefore, drinking water including bottled water may contain small amounts of some contaminats; but that does not necessarily mean that the water poses a health risk. For more information about the potential health effects of water contaminants, call the EPA Safe Drinking Water Hotline at 800-426-4791 or visit <u>epa.gov/safewater</u>.

During the past year, the City has routinely monitored and tested for the presence of radioactive, biological, inorganic, volatile organic and synthetic organic contaminants. The 2024 Water Quality Results table (located on page 4) shows only those contaminants that were detected in the water. Tests included many more substances that registered at 'non-detect' levels and are not included in this report. The state requires the City to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included.

The Portsmouth Water System participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on the City's drinking water. UCMR5 testing benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water, should the U.S. EPA consider introducing new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are summarized in the Portsmouth Water System's Water Quality Report. Collections and testing for the Pease Tradeport System will occur in 2025. For more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

The full set of UCMR5 results is also available for download and review at https://portsnh.co/3ECeVgW.

## **Water Quality Parameters**

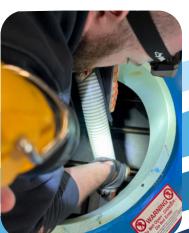
WATER QUALITY PARAMETERS

Water quality parameters are routinely monitored to assess the general characteristics of the water supply. Note that the range of some of these parameters illustrates differences among three groundwater supply wells and their characteristics.



	PARAMETERS (UNITS)	AVERAGE LEVEL RESULTS RANGE		SECONDARY DRINKING WATER STANDARD SMCL	
	Chloride (ppm)	52	37 - 65	250	
	<b>Copper (ppb)</b> 2019 - 2024 data	38	4 - 66	1300	
	Iron (ppb)	4	<1 - 10	300	
	Manganese (ppb)	18	4 - 34	50	
	рН	7.5	7.3 - 7.9	6.5 - 8.5	
	Sulfate (ppm) 2019 - 2024 data	15	15 - 16	250	
	Conductivity (umos/com)	453	350 - 515	N/A	
	Alkalinity (ppm)	132	100 - 150	N/A	
	Hardness (ppm as CaCO3)	120	83 - 149	N/A	
	Ortho-Phosphate (ppm)	1.02	0.87 - 1.17	N/A	
	<b>Sodium (ppm)</b> 2020-2024 data	33	33 - 35	N/A	
	Zinc (ppb) 2021-2024 data	3	3 - 4	5000	





Loading of new ion-exchange resin media into existing vessels.



## **Important Contact Information**

**City of Portsmouth Department of Public Works** Water Division 680 Peverly Hill Road Portsmouth NH 03801 (603) 427-1530 portsmouthnh.gov/publicworks/water

#### WATER QUALITY QUESTIONS:

Mason Caceres Assistant Water Resource Manager mecaceres@portsmouthnh.gov (603) 312-3804

Mariah Habershaw Water Quality Specialist mlhabershaw@portsmouthnh.gov (603) 501-9308

#### **BILLING QUESTIONS:**

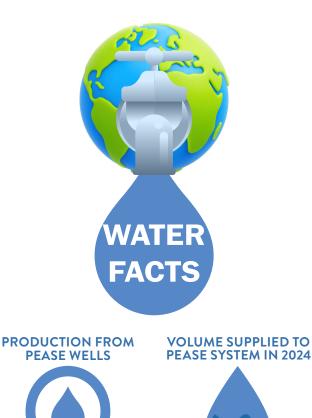
(603) 610-7248 or (603) 610-7237 billpay@cityofportsmouth.com To pay utility bills online cityofportsmouth.com/city/pay-my-bill

#### **FEDERAL & STATE AGENCIES:**

EPA Safe Drinking Water (800) 426-4791 epa.gov/environmental-topics/water-topics NH Department of Environmental Services (603) 271-3503 des.nh.gov/water

#### Get involved! It's your drinking water and your input is important to us.

Participate in a City Council meeting. Meeting agendas are posted on the City's website and posted in the lobby of City Hall at 1 Junkins Avenue. Portsmouth's Government TV Channel is located on Comcast Channel 22 and in HD on Comcast Channel 1072. Meetings are broadcast live and rebroadcast. Municipal meetings are also live streamed in HD on the City's YouTube channel.





**PEASE SYSTEM IN 2024** 



244.3 million gallons