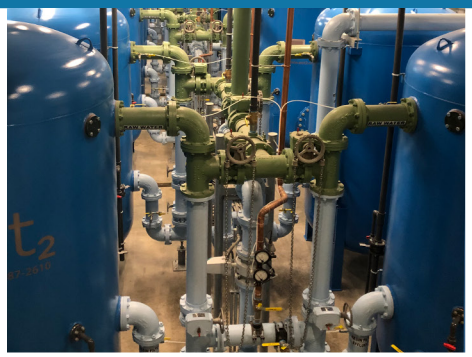

# PEASE

## ANNUAL DRINKING WATER QUALITY REPORT

PEASE INTERNATIONAL TRADEPORT WATER SYSTEM
2020 TESTING RESULTS
PWSID 1951020

# SERVING OUR COMMUNITY



**City of Portsmouth Water Division is pleased to present the Annual Drinking Water Quality Report.** The report summarizes the results of drinking water testing performed from 01/01/2020 to 12/31/2020, and is provided to keep you informed about the quality of the water you rely on every day. It is being sent to every water customer served from the Pease Tradeport water system (PWSID# 1951020).

**Through 2020, the Pease Tradeport water has continued to meet all water quality standards as regulated by the US Environmental Protection Agency and the NH Department of Environmental Services.**

An extensive amount of information is provided in this report. Please contact us if you would like help understanding the information provided or have suggestions for future reports.

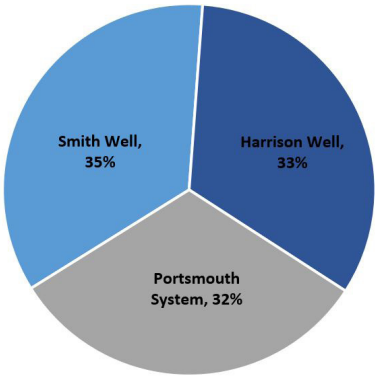
Our mission is to provide the community with drinking water that meets all current federal and state drinking water standards. The Portsmouth Water Division is constantly monitoring and routinely testing the drinking water according to these requirements to ensure the quality of water delivered to our customers consistently meets these water quality standards. Potential contaminants and impacts from changing weather cause new challenges. We 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 our water users.

Water supplied to Pease Tradeport water system customers comes primarily from the groundwater wells located on the Tradeport (Harrison Well and Smith Well). Portsmouth water system (EPA PWSID# 1951010) supplies water to the Pease Tradeport water system as needed. Thirty-two percent (32%) of the water supplied to Pease Tradeport was from the Portsmouth water system in 2020.

Water from the Harrison Well and Smith Well is pumped to the Grafton Road Drinking Water Treatment Facility (WTF) where it is treated through two Granular Activated Carbon (GAC) filters, with Calgon FILTRASORB F-400 Carbon. These filters remove per- and polyfluoroalkyl substances (PFAS) that have been detected in the Harrison Well and Smith Well water. Sodium hypochlorite (bleach) for disinfection, fluoride as hydrofluorosilicic acid (used to prevent tooth decay) and poly/ortho- phosphate (a sequestering chemical to reduce precipitation of iron and manganese, and inhibit corrosion is used to protect distribution system pipes) are added before entering the distribution system.

Three groundwater wells supply most of the water from Portsmouth to Pease Tradeport. Two of them, Portsmouth Well #1 and Collins Well, are located off Route 33 (Greenland Road). The third well, Greenland Well, is located off Post Road in Greenland. Sodium hypochlorite and poly/ ortho-phosphate are added to the water supplied by the Portsmouth Well #1, Collins Well, and Greenland Well. Fluoride as hydrofluorosilicic acid is also added at the Greenland Well. Occasionally water from the City's sources in Madbury contribute to the water pumping into Pease from the Portsmouth water system. The Madbury sources are the Bellamy Reservoir and three wells. The water from the reservoir is treated using a coagulation, dissolved air floatation and dual-media filtration process. The treated water is chlorinated with sodium hypochlorite before distribution into the system. Sodium hydroxide (used to adjust the final pH and alkalinity), fluoride as hydrofluorosilicic acid and poly/ ortho-phosphate are also added prior to distribution.

**Pease Supply Sources**
**Source Percentages in 2020**

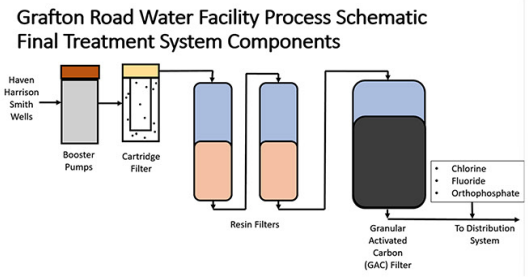


# NEW WATER TREATMENT FACILITY

## NEW WATER TREATMENT FACILITY FOR PFAS TREATMENT

Construction of the new Pease Water Treatment System continued in 2020 and was completed in April 2021. The completion marks the culmination of seven years of response to the presence of PFAS contaminants that were found in May 2014 to be impacting the three Pease drinking water wells. Past use of firefighting foam at the former Pease Air Base containing PFAS compounds contributed to this contamination. Subsequently, the Air Force agreed to work with the City to treat the drinking water serving the Pease International Tradeport System. The 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. In partnership with the Air Force, the City conducted a demonstration project starting in September 2016. This project involved the installation of granular activated carbon (GAC) filters for the Harrison and Smith Wells. Subsequently, the City was invited by the firm ECT2 to pilot resin filter technology for the treatment. The success of that pilot led to the inclusion of resin in the final facility, which together with granular activated carbon filters (GAC) will remove PFAS compounds from the drinking water. A celebration marking the completion of this new facility was held on May 4, 2021. Mayor Rick Beckstead, Deputy Director of Public Works Brian Goetz, Representative Chris Pappas, Senator Maggie Hasson, Testing for Pease co-founder Andrea Amico, Senator Jeanne Shaheen and Jennifer Miller, Acting Assistant Secretary of the Air Force for Energy, Installations, and Environment, attended the ceremony.

Water Treatment Facility
PEASE
2021




# 2020 WATER QUALITY RESULTS

| | CONTAMINANT (UNIT OF MEASUREMENT) | IN COMPLIANCE | VIOLATION (Y/N) | LEVEL MEASURED | RANGE | MCLG | MCL | LIKELY SOURCE OF CONTAMINATION |
|---|---|---|---|---|---|---|---|---|
| DISINFECTION BYPRODUCTS | Total Coliform Bacteria | ✓ | N | **NO** total coliform bacteria detected in the 120 distribution system samples that were collected and analyzed in 2020 | | | | Naturally present in the environment |
| | Haloacetic Acids (ppb) | ✓ | N | Highest Level Measured: 6.0 | 5.9 - 6.0 | N/A | 60 | Byproduct of drinking water disinfection |
| | Total Trihalomethanes (ppb) (Bromodichloromethane, Bromoform, Dibromomethane, Chloroform) | ✓ | N | Highest Level Measured: 8.4 | 2.6 - 8.4 | N/A | 80 | Byproduct of drinking water chlorination |
| LEAD AND COPPER | Lead (ppb) 2019 data | ✓ | N | 90th Percentile = 3 | <1 - 7.0<br>0 sites above AL<br>(22 sites sampled) | 0 | AL = 15 | Corrosion of household plumbing systems; erosion of natural deposits |
| | Copper (ppm) 2019 data | ✓ | N | 90th Percentile = 0.4 | 0.013 - 0.67<br>0 sites above AL<br>(22 sites sampled) | 1.3 | AL = 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| INORGANIC CONTAMINANTS | Barium (ppb) 2018 & 2019 data | ✓ | N | Highest Level Measured: 9.4<br>Avg Source Level: 8.8 | 8.1 - 9.4 | 2000 | 2000 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| | Chlorine (ppm) | ✓ | N | Highest Level Measured: 1.29<br>Avg System Level: 0.68 | 0.15 - 1.29 | MRDLG = 4 | MRDL = 4 | Water additive used to control microbes |
| | Chromium (total) (ppb) 2018 & 2019 data | ✓ | N | Highest Level Measured: 1.3<br>Avg Source Level: <1 | <1 - 1.3 | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| | Fluoride (ppm) | ✓ | N | Highest Level Measured: 1.06<br>Avg Level: 0.63 | 0.15 - 1.06 | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| | Nitrate (as Nitrogen) (ppm) 2019 & 2020 data | ✓ | N | Highest Level Measured: 1.7<br>Avg Source Level: 1.4 | 1.1 - 1.7 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| RADIOACTIVE CONTAMINANTS | Compliance Gross Alpha (pCi/L) 2019 data | ✓ | N | Highest Level Measured: <1 | <1 | 0 | 15 | Erosion of natural deposits |
| | Uranium (ug/L) 2019 data | ✓ | N | Highest Level Measured: <1 | <1 | 0 | 30 | Erosion of natural deposits |
| | Combined Radium 226 + 228 (pCi/L) 2019 data | ✓ | N | Highest Level Measured: 1 | <1 - 1 | 0 | 5 | Erosion of natural deposits |
| *UNREGULATED SUBSTANCES | Manganese (ppb) 2019 UCMR data | ✓ | N | Average Source Level: 26 | <1 - 26 | | | Naturally-occurring element used in a variety of applications including use in steel production to improve hardness, stiffness and strength. Essential nutrient found in vitamin/mineral supplement and in fortified foods |
| PFAS | Per- and Polyfluoroalkyl Substances (PFAS) | ✓ | N | See PFAS section | | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff / leachate from landfills and septic systems | | |
| | *Unregulated Substances: samples collected from Harrison Well and Smith Well | | | | | | | |

## WATER QUALITY PARAMETERS

The 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 the differences between the characteristics of the surface water supply and the groundwater supply.

| | PARAMETERS (UNITS) | AVERAGE LEVEL | RESULTS RANGE | SECONDARY DRINKING WATER STANDARD SMCL |
|---|---|---|---|---|
| WATER QUALITY PARAMETERS | Chloride (ppm) | 115 | 41 - 176 | 250 |
| | Copper (ppb) | 3 | <2 - 4 | 1000 |
| | Iron (ppb) | 20 | 10 - 40 | 300 |
| | Manganese (ppb) | 23 | 13 - 42 | 50 |
| | pH | 7.5 | 7.4 - 7.6 | 6.5 - 8.5 |
| | Sulfate (ppm) | 15 | <1 - 15 | 250 |
| | Conductivity (umos/com) | 564 | 396 - 855 | N/A |
| | Alkalinity (ppm) | 113 | 108 - 122 | N/A |
| | Hardness (ppm as CaCO3) | 117 | 112 - 120 | N/A |
| | Ortho-Phosphate (ppm) | 0.95 | 0.67 - 1.13 | N/A |
| | Sodium (ppm) | 43 | 41 - 45 | N/A |
| | Zinc (ppb) | 3.2 | <0.1 - 3.3 | 5000 |

# 2020 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. The EPA Health Advisory concentration has remained at 70 (ppt) for (PFOS) and (PFOA) since 2016. In response to the discovery of PFOS in the Haven Well in May 2014 at levels that exceeded the EPA Provisional Health Advisory (200 ppt at that time), the Haven Well was removed from service. This well has remained disconnected from the Pease Tradeport water system since this finding. The source of the PFAS at the Tradeport was aqueous film-forming foam that had been used to extinguish fires and in training exercises at the former Air Force Base.

Over the past seven 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. The City of Portsmouth has sampled all of the Portsmouth water supply sources at least twice per year, and since October 2019 is sampling quarterly. Sample results from 2020 are summarized in the PFAS table in this report. All monitoring data is available online: cityofportsmouth.com/publicworks/water/pease-tradeport-water-system
For more information about PFAS health effects: www.atsdr.cdc.gov/sites/pease/index.html

In September 2016, the City of Portsmouth installed a Granular Activated Carbon (GAC) filtration system to treat the water from the Harrison Well and Smith Well. Testing of this system has demonstrated effective removal of PFAS. The City of Portsmouth is currently upgrading the treatment facility on Grafton Road under an agreement with the Air Force. The upgraded treatment system is designed with a combination of GAC and anionic exchange resins that will be capable of treating water from the Haven Well, Smith Well and Harrison Well when completed in 2021. Additional information and routine updates on the progress of this project are on the City's website.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

| | | | 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) | | PORTSMOUTH WELL #1 | COLLINS WELL | GREENLAND WELL | SUPPLIED AFTER GAC TREATMENT |
| # of samples in 2020 | | | 16 | 15 | 4 | 13 |
| % of water supplied in 2020 | | | 11.9% | 4.6% | 15.4% | 68.1% |
| **Perfluorobutane-sulfonic acid (PFBS)** | not regulated | Average | 3 | 15 | 2 | ND |
| | | Range | 2 - 4 | 11 - 19 | 1 - 3 | ND |
| **Perfluorobutanoic acid (PFBA)** | not regulated | Average | 3 | 4 | 2 | 4 |
| | | Range | 2 - 4 | 3 - 6 | 2 | ND - 12 |
| **Perfouoroheptanoic acid (PFHpA)** | not regulated | Average | 3 | 1 | 2 | ND |
| | | Range | 2 - 4 | ND - 2 | 1 - 2 | ND |
| **Perfluorohexane-sulfonic acid (PFHxS)** | 18 | Average | 6 | 2 | 2 | ND |
| | | Range | 4 - 8 | 1 - 3 | 1 - 3 | ND |
| **Perfluorohexanoic acid (PFHxA)** | not regulated | Average | 4 | 2 | 3 | BD |
| | | Range | 3 - 6 | ND - 3 | 2 - 4 | ND - <1 |
| **Perfluorononanoic acid (PFNA)** | 11 | Average | BD | ND | ND | ND |
| | | Range | ND-1 | ND | ND | ND |
| **Perfluorooctane-sulfonic acid (PFOS)** | 15 | Average | 4 | 4 | 3 | ND |
| | | Range | 2 - 6 | 1 - 5 | 1 - 4 | ND |
| **Perfluorooctanoic acid (PFOA)** | 12 | Average | 5 | 3 | 3 | ND |
| | | Range | 3 - 6 | 1 - 5 | 2 - 4 | ND - <1 |
| **Perfluoropentanoic acid (PFPeA)** | not regulated | Average | 5 | 2 | 4 | BD |
| | | Range | 3 - 7 | ND - 4 | 2- 4 | ND - 3 |

PFAS TABLE ABBREVIATIONS AND 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).

EPA Health Advisory Level for PFOS and PFOA concentration separately or combined is 70 ng/L (ppt).

Averages are calculated using half of the method detection limit for samples that were less than detection, per EPA risk assessment protocols.

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

BD (below detected level): Average calculated using half of detection limits for non-detect values resulted in average below the detection limit.

PFAS analyzed but not detected in the samples: 8:2 Fluorotelomer sulfonate (8:2 FTS), N-Ethyl perfluorooctane sulfonamide (EtFOSA), N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE), N-Methyl Perfluorooctane Sulfonamide (MEFOSA), N-Methyl Perfluorooctane Sulfonamidoethanol (MEFOSE), Perfluorodecane sulfonate (PFDS), Perfluorodecanoic acid (PFDA), Perfluorododecanoic acid (PFDoA),Perfluoroheptane sulfonate (PFHpS), Perfluorooctane sulfonamide (PFOSA), Perfluorotetradecanoic acid (PFTeDA), Perfluorotridecanoic acid (PFTrDA), and Perfluoroundecanoic acid (PFUnA).

**DEFINITIONS OF TERMS**

- AGQS (Ambient Groundwater Quality Standard): Groundwater quality standard established by the State of New Hampshire per Env-Or 600.
- AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL (Maximum Contaminant Level): 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.
- MCLG (Maximum Contaminant Level Goal): 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.
- MRDL (Maximum Residual Disinfectant Level): 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.
- MRDLG (Maximum Residual Disinfectant Level Goal): 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.
- N/A (not applicable): Sampling was not completed by regulation or was not required.
- ND (none detected): 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).
- NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
- LRAA (Locational Running Annual Average): The 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.

# 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) may be especially at risk from infections. These people should seek advice about drinking water from their health care providers. The US EPA/Centers for Disease Control and Prevention (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.

## 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.

SOURCE WATER ASSESSMENT RESULTS

| SYSTEM | SOURCE INFORMATION | SUMMARY OF SUSCEPTIBILITY RATINGS | | |
|---|---|---|---|---|
| | | HIGH | MEDIUM | LOW |
| PORTSMOUTH | Greenland Well - GPW 003 | 4 | 3 | 5 |
| | Portsmouth Well - GPW 004 | 5 | 4 | 3 |
| | Collins Well - GPW 010 | 4 | 1 | 7 |
| | | | | |
| PEASE | Smith Well - GPW 001 | 4 | 3 | 5 |
| | Harrison Well - GPW 009 | not rated | | |

## SOURCE WATER ASSESSMENT

Portsmouth Water Division routinely updates inventories of potential contaminant threats and is actively pursuing opportunities to increase the protection of our groundwater supplies and the Bellamy Reservoir through property and easement acquisitions.

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, prepared in 2002, are provided in a 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. The complete assessment report is available for review at the DPW office and online: www.des. nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm

## LEAD and COPPER

Portsmouth Water Division takes the responsibility of protecting your health very seriously. We want you to make informed decisions about your drinking water. Lead is not present in the water when it leaves our 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. Due to the age of many homes in Portsmouth and surrounding towns, and the associated potential for leaded plumbing components, we encourage customers to have their water tested by a certified laboratory, especially if there are children under six or pregnant women in the household. We actively adjust the water chemistry at the treatment facility and well facilities according to our 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 your plumbing system, and is in contact with water, some risk remains. Information about our Corrosion Control Program can be found on the City's website.

Lead was a common material used in plumbing until the 1980s. It is a powerful toxin that is harmful to human health. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to two (2) minutes before using water for drinking or cooking. Do not use hot water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your 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. Additional information is available from NHDES by calling 603-271-2516 or online: www.des. nh.gov/organization/ divisions/water/dwgb/lead-copper

The City of Portsmouth samples for lead and copper at the Pease Tradeport from 10 homes and businesses every three years. Due to the increased population in the Pease Tradeport System, at least 20 samples are now required every three years. The 2019 lead and copper testing resulted in all of the 22 sites sampled having less than the EPA Action Limit, and only five of the sites with levels above the 1 ppb limit of the laboratory testing method. The next sampling event for lead and copper will occur in the fall of 2022. For more information on this topic, please visit the City's website.

The City of Portsmouth conducts extensive monitoring to guard against contaminants in your drinking water according to federal and state laws.

## POSSIBLE CONTAMINANTS IN DRINKING WATER SOURCES

In order to ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may contain small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects are available by calling the EPA's Safe Drinking Water Hotline at 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 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 human activity.

### CONTAMINANTS THAT MAY BE PRESENT INCLUDE:

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.

### REGULATED and UNREGULATED CONTAMINANTS

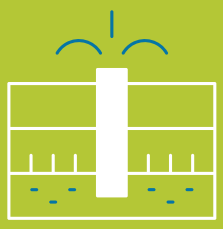
During the past year, we have taken hundreds of water samples in order to monitor and test for the presence of radioactive, biological, inorganic, volatile organic and synthetic organic contaminants. The tables provided show only those contaminants that were detected in the water. Many more parameters were tested for, but not detected. They are not included in this report. The state requires us 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, along with the year when the sample was taken.

Portsmouth has completed the fourth stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program that started in 2018. The UCMR program benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water. This helps the EPA determine if it needs to introduce new regulatory standards to improve drinking water quality. Chemicals analyzed for UCMR 4 included ten cyanotoxins, two metals, eight pesticides, one pesticide manufacturing byproduct, three brominated haloacetic acids, three alcohols, and other semi-volatile chemicals. The results of these tests are summarized in this report. Chemicals that were not detected are not included in the data tables.

In addition to the UCMR4 monitoring, samples of the Bellamy Reservoir untreated water were collected between October 2016 and September 2018 and tested for Cryptosporidium as part of the EPA Long-Term 2 Enhanced Surface Water Treatment Rule requirements. None of the samples contained Cryptosporidium, so the NHDES determined that no additional surface water treatment is needed to meet this rule requirement.


CITY OF PORTSMOUTH
DEPARTMENT OF PUBLIC WORKS
WATER DIVISION
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801
603-427-1530

# WATER FACTS



3 Wells

Pease Grafton Road
Water Treatment Facility

2 Water Storage Tanks

34 Miles
of Pipe


Pay Bill Online
easy & convenient

Pease Water Production
462,403 gallons/avg day

Pease Water Demand
679,601 gallons/avg day

32%
Demand Supplied by
Portsmouth System

68%
Demand Supplied by
Pease Wells

## IMPORTANT CONTACT INFORMATION

CITY OF PORTSMOUTH
DEPARTMENT OF PUBLIC WORKS
WATER DIVISION
680 PEVERLY HILL ROAD
PORTSMOUTH NH 03801
(603) 427-1530
cityofportsmouth.com/publicworks/water

Water Quality Questions - please contact:

**Albert Pratt, P.E.**
Water Supply Operations Manager
anpratt@cityofportsmouth.com (603) 520-0622

**Mason Caceres**
Water Quality and Resource Protection Specialist
mecaceres@cityofportsmouth.com (603) 312-3804

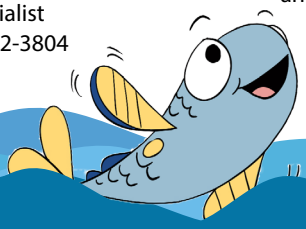
Billing Questions:
Please call (603) 610-7244 or email billpay@cityofportsmouth.com

Federal and State Agencies:

EPA Hotlines
Safe Drinking Water (800) 426-4791
www.epa.gov/environmental-topics/water-topics

NH Department of Environmental Services
(603) 271-3503 https://www.des.nh.gov/water

***It's your drinking water and your input is important.*** Participate in a City Council meeting. Meeting agendas are posted on the City's website & posted in the lobby of City Hall at 1 Junkins Avenue. Meetings are broadcast on Portsmouth's Government TV Channel 22 and on the City's YouTube Channel.



**Have you met Blue?**

cityofportsmouth.com/publicworks/water