City of Portsmouth Department of Public Works



May 10, 2021 Portsmouth Water Supply Status Report



Water use restrictions are currently not in effect. Management of our water system has helped reduce water loss due to leaks and increase groundwater levels through the efficient use of our surface water supply. However, as the accompanying information shows, prior to the rain events in late April and early May, weather conditions have been very dry. If dry conditions persist, the City may ask for voluntary restrictions and if conditions deteriorate, mandatory restrictions on non-essential water use may be required. They could include odd/even or two-days/week watering schedules.

We continue to ask our water customers to please use water wisely, minimize waste, and incorporate water efficient fixtures and appliances whenever possible. The City of Portsmouth's Water/Stormwater Division encourages residents to "Think Blue" and consider some of these watersaving measures you can practice at home, including potentially replacing inefficient toilets and washing machines:

www.cityofportsmouth.com/publicworks/water/water-efficiency-information

Water operations staff continue to assess the supply conditions and will provide updates as needed.



DRY CONDITIONS CONTINUE FOR SEACOAST AREA

The Seacoast area of New Hampshire continues to be dryer than normal. Recent rains in late April and early May have helped to replenish the reservoir and groundwater a bit, however, as the graphic shows, we are over 12 inches below normal for the last twelve months, or 72 percent of normal.

PRECIPITATION TREND

As shown in the previous graphic, our precipitation since May 2020 is below normal. Currently, the drought outlook anticipates continued dry conditions.

RIVER FLOW AND RESERVOIR LEVEL

Portsmouth Water System operators track the USGS stream flow gauges in the Oyster River and Lamprey River to assess flow conditions. These gauged watersheds are used to assess the relative recharge to the Bellamy Reservoir through its tributaries, the Bellamy River and Mallego Brook. The recent rains helped the reservoir recover from the dry conditions earlier this year. Water is currently flowing over the reservoir's spillway.

GROUNDWATER LEVELS AND SUPPLY CAPABILITY

As previously stated, the integrated management of our water system allows our system operators the potential to utilize surface water when that source is of sufficient quantity and quality. The following graphic shows the amount of surface versus groundwater. As the light blue columns show, we are withdrawing about 30 percent less water from our groundwater sources than we were ten to fifteen years ago. This has helped preserve the availability of water from these sources.



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WATER DEMAND

The cooler and somewhat wetter cycle we are in right now has helped reduce water demands for the time-being. However, we expect demands to increase if the weather gets hotter and dryer.



Overall, as the graphic above shows, the water demand in the combined Portsmouth/Pease drinking water systems has held steady for the last six years despite recent developments. This can be attributed to our efforts to promote water efficiency and that a lot of the development that has occurred is re-development with more efficient water use.

WATER QUALITY

Portsmouth Water Division routinely monitors water quality parameters and performs water quality sampling and analysis as directed by the Federal Safe Drinking Water Act and the New Hampshire Department of Environmental Services. Water sources are monitored for radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. Critical water treatment parameters for turbidity, pH, chlorine, orthophosphate and fluoride are continually monitored and tracked by our system operators. The regulations require us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are reported, along with the year in which the sample was taken. Annual Water Quality Reports for both water systems detail these efforts. The reports for 2020 will be mailed to each water system customer soon. They are also available at:

cityofportsmouth.com/publicworks/water/drinking-water-quality

PFAS TRACKING AND RESPONSE

Our efforts to track and treat the PFAS contamination at the Pease International Tradeport continue. PFAS stands for a broad group of perfluoroalkyl and polyfluoroalkyl substances, produced and found in many commercial products and also used in firefighting foam. In response to the discovery of PFOS in the Haven Well in May 2014 at levels that exceeded the EPA

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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. Since 2014, the Harrison Well and Smith Well on 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.

Activated carbon filters continue to treat the Harrison and Smith wells at Pease. A new treatment facility has just completed construction to treat those two wells together with the reactivation of the Haven well later this summer of 2021 after comprehensive well and water quality testing of that source. PFAS tracking of the other Portsmouth surface and groundwater drinking sources continues on a quarterly basis and all data is posted on the city's website.

The City has been and will continue to sample PFAS quarterly according to assure compliance with New Hampshire's new regulatory standards for four regulated PFAS compounds – PFOA, PFOS, PFHxS and PFNA.

SAFE WATER ADVISORY GROUP

The City Council voted on October 5, 2020 to create a Safe Water Advisory Group. This group meets to gather advisory input from local stakeholders, scientists and activists focused on the PFAS (Per- and Polyfluoroalkyl Substances) contamination that has impacted the City of Portsmouth with legislative, health advisory and fiscal changes. Additional information, meeting schedules and archives can be found on the City's webpage at:

www.cityofportsmouth.com/citycouncil/safe-water-advisory-group

Further Updates and Information

This information will be distributed electronically on the City of Portsmouth's website at:

www.cityofportsmouth.com/publicworks/water.

If anyone needs additional information or has questions contact Al Pratt, Water Supply Operations Manager at 520-0622 or Brian Goetz, Deputy Director of Public Works at 766-1420.