# City of Portsmouth

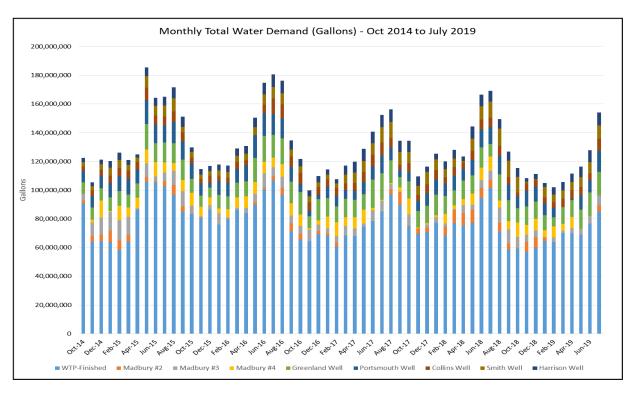
Department of Public Works



# August 6, 2019 Portsmouth Water Supply Status Report

Recent hot and dry weather has caused our water demands to increase in the water system, mostly due to irrigation. We are currently able to meet this demand with our existing sources of supply, however, the continued loss of the Haven Well has warranted the need for Portsmouth Water to supplement the Pease Tradeport water system with approximately 400,000 gallons of water per day. Once the new Pease water treatment facility is on line in a couple of summers we anticipate no longer having the need to utilize Portsmouth water to supplement.

The following graphic shows the current July 2019 water demand as compared with the previous five years. As it shows, demand was a little below normal this year:



Through vigilant monitoring and operational changes, the Portsmouth water system supplies continue to meet the demands of our customers. However, if dryer than normal conditions persist, and they are accompanied by higher than normal customer demand, there may be need for additional efficiency measures. Staff will continue to track and assess these conditions and we will provide updates as warranted.

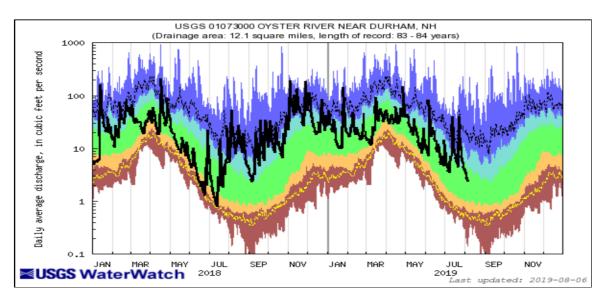
We continue to ask our water customers to please use water wisely, minimize waste, and incorporate water efficient fixtures and appliances whenever possible. The City also continues to offer water efficiency rebates of \$100 per low flow toilet and \$150 for the purchase of a high efficiency washing machine. These are available to all residential customers, including multifamily customers. To date, nearly 1,000 rebates have been issued. Additional information on this program can be obtained from the City's water billing department or from the City's website: <a href="https://www.cityofportsmouth.com/publicworks/water-efficiency-rebate-program">https://www.cityofportsmouth.com/publicworks/water-efficiency-rebate-program</a>

### **Precipitation Status**

The Portsmouth area received approximately 3.2 inches of precipitation in July 2019. This is a little below normal, however, the current 12-month rolling average precipitation totals 47.5 inches, which is nearly normal for Portsmouth. The type of rainfall events that we have been receiving, mostly long duration events rather than brief showers, has helped the water to soak into the ground and recharge our water sources

# **Reservoir Levels and Flow**

The current river flow, according to the gauged Oyster River which we use to assess the flow into the Bellamy Reservoir, is normal for this time of year per the following USGS graphic:



Explanation - Percentile classes							
lowest- 10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Flow
Much below Normal		Below normal	Normal	Above normal	Much above normal		11011

Accordingly, the Bellamy Reservoir water levels continue to be near or just above normal for this time of year. Water quality can be impacted by hot, sunny days, which heat the top layer of water and cause some oxygen depletion in the lower levels of the reservoir. An aeration system installed ten years ago as part of the water treatment facility upgrades has helped improve water quality.

### **Groundwater Levels and Status**

Groundwater levels in most of our water sources continue to be better than normal. Through optimization of our use of surface water our operators have decreased the average daily use from our wells. This has allowed well levels to be maintained in a sustainable manner and more water availability for the system to meet peak demand. Each well has a continuous water level meter and the water pumped is also metered. This allows system operators the capability of assessing groundwater level trends and we are able to determine overall source of supply capability.

## **Further Updates and Information**

This information will be distributed electronically on the City of Portsmouth's website in the Department of Public Works > Operations > Water section. 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.