## **Holliston Water Department**

703 Washington Street Holliston, MA 01746 PRESORT STANDARD
U.S. POSTAGE
PAID
HOLLISTON, MA 01746
PERMIT NO. 7

POSTAL PATRON HOLLISTON, MA 01746

The Holliston Water Department makes every effort to provide you, its customers, with safe drinking water of the highest quality. In continuing this commitment, the Department is proposing construction of a new Water Treatment Facility (WTF) for the Town's Well No. 5 located at 784 Central Street for consideration at the Annual Town Meeting on Monday, May 7, 2018 and at the Annual Town Election on Tuesday, May 22, 2018.



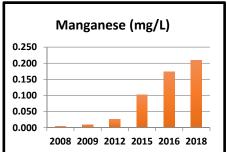
The intent of this flyer is to provide you with important details about the water quality issues of Well No. 5 and to inform you about the importance and benefits of constructing a new WTF for this well.

The water quality of the Town's system is constantly monitored by the Water Department and the Massachusetts Department of Environmental Protection (MassDEP) to ensure compliance with drinking water regulations. Currently, Holliston owns and operates two WTFs to treat three of its five active water supply sources. Due to the rising levels of manganese in Well No. 5, Holliston must implement treatment for this source as well.

The new WTF will reduce the elevated manganese levels in groundwater from Well No. 5 to levels that will considerably improve the taste and appearance of the Town's water. It will provide a long-term solution for treating Well No. 5 and will provide Holliston the capability to treat another existing well or a new water supply source in the future. This translates into future cost savings and a higher quality, more reliable water supply for our customers.

Manganese is a naturally occurring mineral found in rocks, soil, groundwater and surface water. The United States Environmental Protection Agency (USEPA) and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 0.05 mg/L (milligrams per liter). At levels, greater than 0.05 mg/L, the water may impart color, taste and staining to plumbing fixtures and laundry. While the mineral is part of a healthy diet, it can be harmful if consumed in high concentrations. The USEPA health guideline for life time exposure to manganese in drinking water is 0.3 mg/L.

Over the years, manganese levels in the groundwater from Well No. 5 have gradually increased from less than 0.01 mg/L to approximately 0.2 mg/L. As a result of this trend and the associated degrading aesthetic water quality, there have been frequent water quality complaints from the residents in and around Central Street. Once the water from Well No. 5 blends with treated water from the two existing WTFs it adversely impacts the water quality of the entire distribution system.



Considering the reality that manganese levels in Well No. 5 will continue to increase and thus impact the water quality in the entire water distribution system, the Water Department has taken the initiative to evaluate treatment that would reduce current and future anticipated levels to those that are significantly below health guidelines and aesthetic drinking water standards. Successful pilot testing conducted on Well No. 5 groundwater has shown that greensand filtration would remove manganese from the groundwater supply to virtually undetectable levels. This is a proven treatment process that has been used for years at the Town's two existing WTFs.



The proposed WTF would not only benefit those water customers in Central Street that have been directly affected for years by the manganese issues but would improve the water quality throughout the water distribution system. The new Well No. 5 WTF would initially treat 0.70 million gallons per day (MGD) and would take into consideration the expansion potential of conveying groundwater from a future new groundwater source or from Well No.1, located on the shore of Lake Winthrop off Norfolk Street to this WTF. Well No. 1, having an estimated flow rate of 375 gpm, is currently inactive and designated as an emergency water source.

The total estimated cost to construct the new WTF, along with making improvements to the Well No. 5 Pump Station and allowances for associated permitting, engineering, and contingencies is \$8.375 million. This cost also includes replacement of the original greensand media and filter vessel internals at the Dopping Brook WTF; refurbishments that would improve WTF operations and the overall distribution system water quality and reliability.

The Town is considering local funding and will also pursue financing through the Drinking Water State Revolving Fund (DWSRF) loan program. The DWSRF is a joint federal-state financing program that provides state subsidized interest rate loans for projects that improve drinking water quality and upgrade the water infrastructure systems in Massachusetts. MassDEP evaluates all applications through a competitive process to rank and select projects eligible to receive the low interest financing offers. For 2017 the DWSRF distributed approximately \$95 million to 16 projects at a 2-percent interest rate. Several of the funded projects were for new WTFs or improvements to existing WTFs; similar to Holliston's proposed Project.

The tax impact per thousand dollar value for funding of the \$8.375 million Project is shown in the table below:

Fiscal Year	Impact	Fiscal Year	Impact
2020	0.26	2021	0.24
2022	0.23	2023	0.23
2024	0.23	2025	0.22
2026	0.22	2027	0.22
2028	0.21	2029	0.21
2030	0.20	2031	0.20
2032	0.20	2033	0.19
2034	0.19	2035	0.19
2036	0.18	2037	0.18
2038	0.18	2039	0.17

As an example, the tax Impact to a single family home having a Town average assessed value of \$449,700 in 2018, would be approximately \$117 for fiscal year 2020.

## Important dates to remember:

Monday May 7, 2018 - Town Meeting and Tuesday May 22, 2018 - Annual Town Election

Sean M. Reese, Director of Public Works can be reached at 508.429.0603 with any questions or concerns that you may have.