

WATER COMPLIANCE OFFICE
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CITY OF GLOUCESTER
 DEPARTMENT OF PUBLIC WORKS

2018 DRINKING WATER QUALITY NOTICE

This notice is a snapshot of drinking water quality that the Department of Public Works is providing in 2018. The water supply for Gloucester is provided from five surface water reservoirs. Before water is pumped to the distribution system it is treated at water treatment plants for fine particle removal with polyaluminum chloride; for oxidation of manganese and iron with potassium permanganate; for corrosion control and pH adjustment with sodium hydroxide; for additional corrosion control with orthophosphate (creates a thin coating on the walls of distribution pipes and house plumbing); for alkalinity increase with sodium bicarbonate; for water treatment plant disinfection with sodium hypochlorite; and for distribution system disinfection with the addition of ammonium sulfate to water leaving the treatment plants to create chloramines. The treatment process uses fine particle settling followed by rapid sand filtration to reduce turbidity. Sodium fluoride is also added for dental health at the plants to levels set by the Gloucester Board of Health.

Under the direction of the City of Gloucester Department of Public Works Water Compliance Office, routine laboratory analyses of the drinking water supply are performed in accordance with Massachusetts Department of Environmental Protection and Federal Environmental Protection Agency requirements. **Gloucester’s water supply is currently in compliance with all federal and state primary drinking water standards.**

Below is a representative list of parameters which are monitored at varying frequencies, for regulatory compliance, general background information on water quality or process control. (Specific analytical data are available for review at the Water Compliance Office.)

turbidity	alkalinity	pH
color	aluminum	total organic carbon
iron & manganese	chlorine residual	inorganics
synthetic organic compounds	asbestos	radionuclides
lead & copper	fluoride	perchlorate
volatile organic compounds	nitrate & nitrite	sulfate
ammonia	coliform bacteria	heterotrophic plate count
total trihalomethanes (THM’s)	haloacetic acids (HAA’s)	

Typical Water Treatment Plant Operating Data (concentrations in mg/L unless otherwise noted)

turbidity: <0.5 NTU	alkalinity 28 – 35	pH: 7.5 - 8.2	sodium 27-49
total THM’s 0.1-0.3	Haloacetic Acids 0.2	total chlorine 1.5-2.0	fluoride 0.7

A copy of the most recent annual water quality report for 2017 can be found at the following link:
<http://gloucester-ma.gov/DocumentCenter/View/5241>

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