



Haystack Estates

2023

PWS ID: #3330019

REPORT ON WATER QUALITY

This report is a snapshot of the quality of the drinking water that we provided last year. The statistics in this report are based on testing done throughout 2023 and prior years. We hope you will find it helpful to know the sources of your water and the process by which safe drinking water is delivered to your home.

Is My Water Treated?

Haystack Estates is located in Westford, MA. The water for this community water system comes from two gravel packed wells near the pump station which have been approved by the Massachusetts

Department of Environmental Protection (MassDEP) and are monitored and maintained to meet the Commonwealth of Massachusetts Regulations regarding public water supply (310 CMR 22.00). These wells are operated and maintained by WhiteWater, Inc.

Water Quality



It's Their Legacy

Our water system makes every effort to provide you with safe and pure drinking water. To improve the quality of the water delivered to you, we treat it to remove several contaminants.

- We use a pressure vessel with cationic resin for removal of iron, manganese, and hardness.
- A second pressure vessel with anion resin will reduce the amount of gross alpha and uranium concentrations.
- We have limestone vessels which are used for pH adjustment.
- We inject water with a polyphosphate material to help reduce lead and copper concentrations, and reduce the staining effects of iron and manganese.
- We aerate the water to reduce radon concentrations.
- We add sodium hypochlorite as a disinfectant to protect you against microbial contaminants.

The water quality of our system is constantly monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.

Opportunities to Participate

Any matters that concern your drinking water supply or issues you would like to see addressed can be presented at the annual meeting in June each year. If your concerns need immediate attention feel free to contact our current Certified Operator, WhiteWater, Inc., at 1-888-377-7678.

Maintaining Water Quality

Haystack Estates continuously strives to produce the highest quality water possible to meet or surpass every water quality standard. We monitor both our sources and distribution system very closely. The standards we operate under were enacted by the U.S. Congress as the Safe Drinking Water Act in 1974 and were amended in 1986 and 1996.

In order to ensure tap water is safe to drink, the MassDEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

SHOULD SOME PEOPLE TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/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 (800)426-4791.

Haystack Estates

The water system at Haystack Estates is operated and maintained by WhiteWater, Inc. If you have any questions about this report, please contact WhiteWater at 1-888-377-7678.

Additional copies of this report are available upon request and at www.whitewateronline.com



DISTRIBUTION SYSTEM WATER QUALITY

This report summarizes only those items detected during sampling - not all contaminants that are monitored.

<i>Microbial Results</i>	Highest # Positive in a Month	MCL	MCLG	Violation	Possible Source of Contamination
Total Coliform Bacteria	0	1	0	No	Naturally present in the environment
E. Coli	n/a	*	0	No	Human and animal fecal waste

*Compliance with the Fecal Coliform/E. coli MCL is determined upon additional testing.

Total Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system

<i>Lead & Copper</i>	Date(s) Collected	90 th Percentile of Sample	Action Level	MCLG	# of Sites sampled	# of Sites Above Action Level	Exceeds Action Level?	Possible Source of Contamination
Lead (ppb)	2023	0	15	0	5	0	No	Corrosion of household plumbing systems
Copper (ppm)		0.105	1.3	1.3		0	No	Corrosion of household plumbing systems

TESTING FOR LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. **Haystack Estates** is 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 your tap for 30 seconds to 2 minutes before using 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 or at <http://www.epa.gov/safewater/lead>.

Key to Tables
<ul style="list-style-type: none"> • ppm – Parts per million, corresponds to one penny in \$10,000 • ppb – Parts per billion, corresponds to one penny in \$10,000,000 • pCi/L – Picocuries per liter (a measure of radioactivity) • ND – Not detected • n/a - not applicable • RAA –Running annual average • TT—Treatment technique

SOME TERMS DEFINED

Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.*

Maximum Contaminant Level Goal (MCLG): *The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety*

Maximum Contaminant Level (MCL): *The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.*

Secondary Maximum Contaminant Level (SMCL): *These standards are developed to protect the aesthetic qualities of drinking water and are not health based.*

Massachusetts Office of Research and Standards Guideline (ORSG): *This is the concentration of a chemical in drinking water, at or below which, adverse, non-cancer health effects are likely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.*

Total Coliform: *A bacteria that indicates other potentially harmful bacteria may be present.*

Unregulated Contaminants: *Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.*

90th Percentile: *Out of every 10 homes, 9 were at or below this level.*



SUMMARY OF FINISHED WATER CHARACTERISTICS

Regulated Contaminants	Date(s) Collected	Highest Detect Value	Range Detected	MCL	MCLG	Violation	Possible Source of Contamination
Inorganic Contaminants							
Arsenic (ppb)	4/22/21	2.4	n/a	10	n/a	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	4/22/21	0.0025	n/a	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	4/22/21	1.3	n/a	100	100	No	Discharge from pulp mills; erosion of natural deposits
Fluoride (ppm)	4/22/21	0.69	n/a	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	4/6/23	1.18	n/a	10	10	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Perchlorate (ppb)	9/25/23	0.094	n/a	2	n/a	No	Rocket propellants, fireworks, munitions, flares, blasting agents

Radioactive Contaminants							
Gross Alpha emitters (pCi/L)	2023	5.65 (average)	ND-17.5	15	0	No	Erosion of natural deposits
Radium 226 & 228 (pCi/L)	2023	0.6	0.3-0.6	5	0	No	Erosion of natural deposits
Uranium (ppb)	2023	5.54 (average)	ND-18.5	30	0	No	Erosion of natural deposits

Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	8/1/2023	1.6	n/a	80	-	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	8/1/2023	0.54	n/a	60	-	No	By-product of drinking water chlorination

Unregulated	Date(s) Collected	Result or Range	Average	SMCL	ORSG	Possible Source of Contamination
Inorganic Contaminants						
Sodium (ppm)	4/22/21	67.9	n/a	-	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process.
Sulfate (ppm)	4/6/23	12	n/a	250	-	Runoff and leaching from natural deposits; industrial wastes

Sodium is a naturally-occurring common element found in soil and water. It is necessary for the normal functioning of regulating fluids in human systems. Some people, however, have difficulty regulating fluid volume as a result of several diseases, including congestive heart failure and hypertension. The guideline of 20 mg/L for sodium represents a level in water that physicians and sodium sensitive individuals should be aware of in cases where sodium exposures are being carefully controlled. For additional information, contact your health care provider, your local board of health or the Massachusetts Department of Public Health, Bureau of Environmental Health Assessment at 617-624-5757.

Regulated	Detect Result or Range	Highest Quarterly Average	MCL	Violation	Possible Sources	Health Effects
PFAS6 (ppt) 10/9/23	3.62	3.62	20	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.

SOURCE WATER CHARACTERISTICS

<p>The sources of drinking water in the United States (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.</p> <p>Contaminants that may be present in source water include:</p> <ul style="list-style-type: none"> Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, 	<p>industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</p> <ul style="list-style-type: none"> Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. These contaminants can also come from gasoline storage, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
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Source Water Protection

The Massachusetts Department of Environmental Protection (MassDEP) has not yet completed a Source Water Assessment Program (SWAP) Report for the water supply source serving Haystack Estates. This report assesses the susceptibility of public water systems to contamination and makes recommendations for improvement.

A susceptibility ranking of **moderate** was assigned to all sources in our system by the MassDEP and they meet all US Environmental Protection Agency (EPA) and MassDEP drinking water quality standards.

For further information, please visit <http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-the-source-water-assessment-and-protection-pr.html>

Be assured that Haystack Estates in concert with its certified operator, WhiteWater, Inc., will address any concerns as stated in the SWAP Report and welcomes your input to our planning. If you have any questions, please contact WhiteWater, Inc., at 1-888 377-7678.

FOR YOUR INFORMATION

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided to public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Where to go for more information

Massachusetts Department of Environmental Protection (MassDEP)
<http://www.mass.gov/eea/agencies/massdep/water/drinking/>



What should I do in an Emergency?

In case of an emergency please contact WhiteWater Inc., (24/7) at 888-377-7678 and one of our representatives will assist you.



Typical Hose
Bibb Vacuum

Cross Connection Control and Backflow Protection in your water system

A Cross Connection means any actual or potential physical connection or arrangement between a pipe conveying potable water from a public water system and any non-potable water supply, piping arrangement or equipment including, but not limited to, waste pipe, soil pipe, sewer, drain, other unapproved sources. The Haystack Estates recommends the installation of Hose Bibb type vacuum breakers on all outside faucets. This will protect all residents from the potential of backflow into their homes and the potable water system from a hose connection. Studies have shown that hoses are the most commonly unprotected cross connection. The MassDEP and Haystack Estates require the physical separation between the public water supply to your home and a private well used for irrigation or other purposes, these instances will be monitored for compliance. For more information please contact Marcus Thompson, the Cross Connection Coordinator for WhiteWater at 888-377-7678.