

2020 Consumer Confidence Report

For

Whitney Estates

Berlin, Massachusetts

PWS # 2028015

Based on Water Quality Analysis Done In 2019

This report is a snapshot of the drinking water quality provided last year and is required of all water systems. It is updated & distributed annually and summarizes all the water quality testing done on your water supply in 2019, as well as the details about your water sources and distribution water system. Please take time to review this report and save it as a reference.

PUBLIC WATER SYSTEM INFORMATION

Water System Improvements

Your water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP), who inspects this system for its technical, financial, and managerial capacity to provide safe drinking water. Your water system is operated by *Small Water Systems Services, LLC (SWSS)* a MA certified, contract operations firm.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may attend meetings or educational events as held by your HOA or property manager. This property is managed by Breton Property Management Company. For more information on upcoming meetings, please call their office at 508-233-8911 and ask for Mark A. Leone.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Whitney Estates Condominiums is a community public water supply located in the Town of Berlin and serves a drinking water population of approximately 40 persons per day. Whitney Estates is a townhouse condominium complex consisting of five buildings. Drinking water is supplied by two bedrock water supply wells, each capable of producing 1,100 gpd. The wells are located on the northern half of the site, adjacent to North Brook. The water is pumped to a 2,500-gallon steel storage tank inside the pump station. From the tank, water flows through two variable frequency drive (VFD) booster pumps that maintain the system pressure and demand for water. Water then flows through a 20-gallon hydropneumatic pressure tank into the distribution.

Is My Water Treated?

Our water system makes every effort to provide you with safe and pure drinking water. We are pleased to report that your water does not need to be treated at this time to meet these goals. The water quality of our system is continually monitored by SWSS and MassDEP to determine if any future treatment may be required.

How Are These Sources Protected?

The SWAP Report assesses the susceptibility of public water supplies. MassDEP has not yet conducted a Source Water Assessment Program (SWAP) Report for the water supply sources serving this water system.

What Can Be Done to Improve Protection?

Residents can help protect sources by:

- Practicing good septic system maintenance
- Supporting water supply protection initiatives at the next town meeting
- Taking hazardous household chemicals to hazardous materials collection days
- Contacting the water department or Board of Health to volunteer for monitoring or education outreach to schools
- Limiting pesticide and fertilizer use, etc.

SUBSTANCES FOUND IN TAP WATER

Sources of drinking water (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.

Contaminants that may be present in source water include:

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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides -which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants -including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants -which can be naturally occurring or be the result of oil and gas production and mining activities.

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 by 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).

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. Whitney 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>.

IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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

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

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

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL) -- The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) -- The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health.

MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppm = parts per million, or milligrams per liter (mg/l)
 ppt = parts per trillion, or nanograms per liter
 NTU = Nephelometric Turbidity Units
 TC+ = Total Coliform positive
 mrem/year = millirem per year (a measure of radiation absorbed by the body)

ppb = parts per billion, or micrograms per liter (ug/l)
 pCi/l = picocuries per liter (a measure of radioactivity)
 N/A = Not Applicable
 EC- or E. Coli- = E. Coli negative

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

MassDEP has reduced the monitoring requirements for inorganic contaminants because the source is not at risk of contamination. The last sample collected for these contaminants was found to meet all applicable US EPA and DEP standards.

	Date(s) Collected	90 TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	June 2019*	3.5	15	0	5	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	June 2019	0.0405	1.3	1.3	5	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

* 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. SWSS 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>.

Bacteria	MCL / TT	MCLG	Value	Date	Violation (Y/N)	Possible Sources
Total Coliform Bacteria	0	0	Positive	8/12/19	Y, (1 of 6 samples tested positive)	Human and animal fecal waste
				10/7/19	Y, (3 of 6 samples tested positive)	
E. Coli	0	0	Negative	8/12/19	N	Human and animal fecal waste
				10/7/19	N	

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. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify any problems that were found during these assessments.

During the past year, we were required to conduct a Level 1 Assessment and a Level 2 Assessment on Whitney Estates. The Level 1 Assessment was completed on 9/10/19. SWSS collected a total of six samples on 8/14/2019 due to RS001 being reported as TC +/- EC - on 8/12/2019. There was one (PT Tank) out of six samples reported TC +/- EC -. SWSS continued over the next month taking multiple corrective actions to resolve the issue at hand, including an assessment of the well, chlorination of the system, chlorine residual monitoring, and an engineer evaluation.

On 8/21/2019 all 6 samples collected were reported TC- / E. Coli - . In addition to the sampling, on 9/6/2019 an engineer was called in and investigated the mislabeling of the wells. He found that the well completion reports match what is actually on site and that the tags on each casing also support these documents. The engineers site plan, pump test report, and GIS mapping contradicts the aforementioned documents. All documents were submitted to DEP.

A Level 2 Assessment was completed on 11/6/2019. On 10/7/2019, the routine monthly samples were taken along with both wells. Three out of the four samples taken were TC+/EC- (RS 001, PT TANK, RW01G). RW02G confirmed absent (negative). DEP was notified of the bacteria detections and on 10/9/2019 a full round of repeats were sampled by a SWSS operator (RW01G, RW02G, PT Tank, RS001, UR1a, DR1b) for Total Coliform and E. Coli. Five out of the six samples were TC+/EC- (RW01G, PT Tank, RS001, UR1a, DR1b). On 10/11/2019 the well was chlorinated and let sit over the long weekend. SWSS continued over the next week taking multiple corrective actions to resolve the issue at hand. On 10/15/2019, the full round of six samples were taken and all confirmed absent (negative). On 11/5/19 the monthly samples were collected again along with both wells and were confirmed absent as well.

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Inorganic Contaminants							
Fluoride (ppm) ■	6/11/18	0.5	0.1 – 0.7	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
■ Fluoride also has a secondary contaminant level (SMCL) of 2 ppm.							
Nitrate (ppm)	5/14/19	0.34	0.27 – 0.34	10	10	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Perchlorate (ppb)	8/12/19	0.1	0.1	2	N/A	N	Rocket propellants, fireworks, munitions, flares, blasting agents
Di (2-ethylhexyl) phthalate (ppb)	5/14/19	ND	ND	6	0	N	Discharge from rubber and chemical factories
Radioactive Contaminants							
Gross Alpha (pCi/l), minus U	6/11/18	4.9	--	15	0	N	Erosion of natural deposits

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated / Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Chloroform (ppb)	5/14/19	0.7 - 0.8	0.75	N/A	70	By-product of drinking water chlorination (In non-chlorinated sources it may be naturally occurring)
Nickel (ppb)	5/5/15	6 - 7	6.5	N/A	100	Discharge from domestic wastewater, landfills, and mining and smelting operations
Sodium (ppm)	9/10/18	19.6 - 51.5	45.4	N/A	20	Discharge from the use and improper storage of sodium-containing de-icing compounds or in water-softening agents
Iron (ppb)	5/14/19	24 - 44	34	300	N/A	Naturally occurring, corrosion of cast iron pipes
Manganese* (ppb)	5/14/19*	ND	ND	50	Health Advisory of 300	Natural sources as well as discharges from industrial uses
* EPA has established a lifetime Health Advisory (HA) for manganese of 0.3 mg/L and an acute HA at 1.0 mg/L						
Chloride (ppm)	5/14/19	122 - 148	135	N/A	250	Runoff and leaching from natural deposits; seawater influence
Sulfate (ppm)	5/14/19	99 - 145	122	250	N/A	Runoff and leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	5/14/19	487 - 581	534	500	N/A	Erosion of natural deposits.
Zinc (ppm)	5/14/19	0.009 – 0.011	0.01	5	N/A	Erosion of natural deposits, leaching from plumbing materials

COMPLIANCE WITH DRINKING WATER REGULATIONS

Does My Drinking Water Meet Current Health Standards?

In the 2019 calendar year, your drinking water system detected total coliform in August & October, as described in the preceding pages. Please note that although coliform bacteria were detected, these are “indicator” pathogens only, they are not harmful. There was no E.coli detected in any samples and your drinking water continues to be safe to drink, according to all applicable health standards regulated by the MassDEP and US EPA.

EDUCATIONAL INFORMATION

Do I Need to Be Concerned about Certain Contaminants Detected in My Water?

Sodium sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled.

Cross-Connection Control and Backflow Prevention

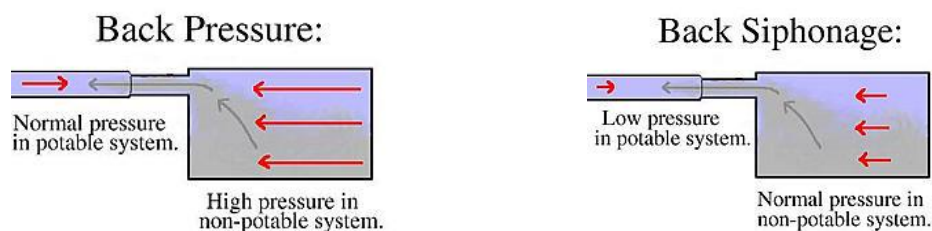
The Whitney Estates makes every effort to ensure that the water delivered to your home is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is extracted via deep wells from underground aquifers, throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.



What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact, over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- NEVER attached a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bibb vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with backflow preventers.
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

ADDITIONAL INFORMATION

SWSS has been contracted on an annual basis to provide licensed water operator coverage for the water system serving Whitney Estates. It is our responsibility to maintain the system's compliance with all drinking water operation requirements. We monitor your drinking water, routinely evaluating the water quality entering your distribution system and inspecting the systems regularly. For more information, call your operators at SWSS at 978-486-1008.