

**Annual Drinking Water Quality Report for 2018**  
Marlborough Water District  
PO Box 305  
Milton NY 12547  
Public Water Supply ID#5503377

Our Mission Continues. We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all State and Federal standards. We continually strive to adopt new methods for delivering: the best quality drinking water to you. Please remember that we are always available for you.

If you have any questions about this report or concerning your drinking water, please contact **Charles Muggeo, Water Superintendent at (845)795-5100**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held on the second and fourth Monday of each month at 7:00 at the town hall at 21 Milton turnpike in Milton.

Our water source is supplied from the New York City Delaware Aqueduct. The Aqueduct originates at the Roundout Reservoir in the Catskill Mountains. It is very high quality source that is vigorously protected by the New York City Department of Environmental Protection to maintain its high quality. The Marlborough Water District has its own tap to the Aqueduct but has now completed an interconnection with the Town of Newburgh to receive water from their tap of the Aqueduct. This interconnection, which was completed in November 2000, has allowed us to increase water pressure and delivery. We also have a reservoir that can be used in emergencies. During Aqueduct shutdowns filtered water is received from Chadwick Lake in Newburgh. The Town utilizes two sources of water: Chadwick Lake Filter Plant and the New York City Delaware Aqueduct. The Chadwick Lake filter plant has the capacity to treat 3.2 million gallons of water per day. The Delaware Aqueduct supply is taken from New York City's Delaware Watershed, which comprises four large reservoirs in the Catskill region. The Delaware Aqueduct Facility has the capacity to supply 6 million gallons of water per day. A new filtration plant for the Delaware aqueduct went on line November 2013. The treatment takes place at the aqueduct tap. The water is also treated with phosphate based corrosion inhibitor to reduce the corrosion of the pipe in the distribution system as well as the leaching of lead and copper from household plumbing. Fluoride is also added for good dental health.

**SUBSTANCES THAT COULD BE IN WATER.**

In general, the 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, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. Drinking water, including bottle 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. To ensure that tap water is safe to drink, the State and the U.S. EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the U.S.FDA's regulations establish limits for contaminants in bottled water must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791 or the Ulster County Health Department at (845) 340-3010

**SOURCE WATER ASSESSMENT PROGRAM (SWAP) SUMMARY**

**The NYS DOH has evaluated this TOMWD susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this TOMWD. This TOMWD provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards**

**Chadwick Lake Reservoir Assessment Summary**

This assessment found an elevated susceptibility to contamination for this source of drinking water. Land cover and its associated activities within the assessment area does not increase the potential for contamination. Non-sanitary wastewater discharges may also contribute to contamination. There are no noteworthy contamination threats associated with other discrete contaminant sources. Additional sources of potential contamination include: roadway.

*A copy of the assessment, including a map of the assessment area, can be viewed by contacting us, as noted in this report.*

**Delaware Aqueduct Source Water Assessment Summary**

The TOMWD also obtains water from the New York City water supply system. Water comes from the Delaware watershed west of the Hudson River. The New York City Department of Environmental Protection (DEP) implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas: the enforcement of strengthened Watershed Rules and Regulations; the acquisition and protection of watershed lands; and implementation partnership programs that target specific sources of pollution in the watersheds.

Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied to the Delaware Aqueduct Source. Additional information on the water quality and protection efforts in these New York City watersheds can be found at DEP's web site [www.nyc.gov/dep/watershed](http://www.nyc.gov/dep/watershed).

**Source Specific Assessments**

Specifically, this TOMWD obtains its water from the Delaware watershed west of the Hudson. The reservoirs in this mountainous rural area are relatively deep with little development along their shorelines. The main water quality concern associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae producing nutrients. There are also some potential contaminations concerns associated with residential lands and associated wastewater discharges. However, advanced treatments that reduce contaminants are in place for most of these discharges. There are also a number of other discrete facilities, such as landfills, chemical bulk storage sites, etc. that have the potential to impact local water quality; but large significant water quality problems associated with these facilities are unlikely due to the size of the watershed and surveillance and management practices.

**FACTS AND FIGURES**

Our water system serves approximately 3,480 people through 1365 service connections. The water system pumped 178 million gallons of water .The daily average of water used in the distribution system is 488,000gallons per day. In 2018, water customers were charged \$ 7.66 per 1,000 gallons of water for the first 100,000 used, \$8.66/1,000 for the next 100,000 used and \$9.66/1,000 gallons therefore.

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Town of Marlborough  
Table 1- Detected Contaminants

Substance Unit of Measure	MCL MRDL	MCLG MRDLG	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2	2	2/02/18	0.0018	ND-0.018	No	Erosion of natural deposits
Chloride (ppm)	250	Na	3/26/18	85	NA	No	Naturally occurring
Nitrate (ppm)	10	10	4/19/18	0.26	ND-0.26	No	Runoff from fertilizer use
Sulfate	250	Na	3/26/18	9.2	ND-9.2	No	Naturally occur
Haloacetic Acid Stage 2 (ppb) Site 1	60	Na	Quarterly 2018	15.7	13.3-20.3	No	By product of drinking water disinfection
Haloacetic Acid Stage 2 (ppb) Site 2	60	Na	Quarterly 2018	26.9	19.5-32.6	No	By product of drinking water disinfection
Sodium	(See footnote)	NS	3/26/18	0.00093	ND-0.00093	No	Naturally occurring
Nickel (ppb)		Na	2/02/18	0.75	ND-0.75	No	Naturally Occurring
Total Stage 2 Trihalomethanes Site 1	80	Na	2018 Quarterly	16.4	13.0-23.6	No	By product of drinking water disinfection
Total Stage 2 Trihalomethanes Site 2	80	Na	2018 Quarterly	29.5	14.3-47.4	No	By product of drinking water disinfection
Turbidity Lowest monthly percent	TT	TT=95% of sample<0.3 NTU	Every Month	100%	NA	NO	Soil Run off
Turbidity (NTU)	1.3	1.3	2/17/18	0.14	0.0014- 0.75	No	Soil Run off
Copper	1.3	1.3	June 29 2017	0.14	0.0014-0.75	No	Corrosion of household plumbing systems
Lead	10	0	June 29 2017	0.234	ND-37	No	Corrosion of household plumbing systems

**Notes**

1. Due to a higher value in the past subsequent quarterly average, the current running annual average is outside the recent sampling range.

2. HAA&THM results are a running annual average, from two different sites. The levels reported as detected are the running average.

3. Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

**Non-Detected Contaminants**

Following is a list of contaminants that we tested for but did not detect in our water supply.

Inorganics: Antimony, Beryllium, Cadmium, Cyanide, Iron, Mercury, Nitrate, Selenium, Silver, Thallium, Zinc.

Volatile Organics: Benzene; Bromobenzene; Bromoform; Bromomethane; n-Butylbenzene; sec-Butylbenzene; tert-Butylbenzene; Carbon Tetrachloride; Chlorobenzene; Chlorobromomethane; Chloroethane; Chloromethane; 2-Chlorotoluene; 4-Chlorotoluene; Dibromomethane; 1,2-Dibromo-3-Chloropropane; 1,2-Dichlorobenzene; 1,3-Dichlorobenzene; 1,4-Dichlorobenzene; Dichlorodifluoromethane; 1,1-Dichloroethane; 1,2-Dichloroethane; 1,1-Dichloroethene; cis-1,2-Dichloroethene; trans-1,2-Dichloroethene; 1,2-Dichloropropane; 1,3-Dichloropropane; 2,2-Dichloropropane; 1,1-Dichloropropene; cis-1,3-Dichloropropene; trans-1,3-Dichloropropene; Ethylbenzene; Ethylene Dibromide; Hexachlorobutadiene; Isopropylbenzene; 4-Isopropyltoluene; Methylene Chloride; Naphthalene; n-Propylbenzene; Styrene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethene; Toluene; 1,2,3-Trichlorobenzene; 1,2,4-Trichlorobenzene;

1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethane;  
Trichlorofluoromethane; 1,2,3-Trichloropropane; 1,2,4-Trimethylbenzene;  
1,3,5-Trimethylbenzene; o-Xylene; m-Xylene; p-Xylene; MTBE; Vinyl  
chloride.  
SOC Group 1 Chemicals: Alachlor; Aldicarb; Aldicarb Sulfone;  
Aldicarb Sulfoxide; Atrazine; Carbofuran; Chlordane; 1,2-Dibromo-3-  
Chloropropane; Endrin; Heptachlor; Heptachlor Epoxide; Methoxychlor;  
PCB 1016; PCB 1221; PCB 1232; PCB 1242; PCB 1248; PCB 1254;  
PCB 1260; Pentachlorophenol; Toxaphene; 2,4,5-TP (Silvex); Ethylene  
Dibromide.  
SOC Group 2 Chemicals: Aldrin; Benzo(a)Pyrene; Di(2-ethylhexyl) adipate;  
bis (2-ethylhexyl) phthalate; Butachlor; Carbaryl; Dalapon; Dicamba;  
Dieldrin; Dinoseb; Diquat; Endothall; gamma-BHC (Lindane); Glyphosate;  
Hexachlorobenzene; Hexachlorocyclopentadine; 3-Hydroxycarbofuran;  
Methomyl; Metolachlor; Oxamyl; Pichloram; Propachlor; Simazine;  
Metribuzin; 2,4-D.

**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.

**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.

**Maximum residual disinfection level MRDL** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of Microbial contaminants.

**Maximum residual disinfection level Goal MRDLG** the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**Nephelometric Turbidity Unit (NTU)** : A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Milligrams per liter (mg/l)** : Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l)** : Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. A complete list of all our analytical results appears elsewhere in this report. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects well below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once a year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

#### **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no water quality violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead may be higher in your home than other homes in the community as a result of materials used in your home's plumbing. We are responsible for providing high quality drinking water, but cannot control the variety of a 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 the water for drinking; or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information about lead is available from the Safe Drinking Water Hotline (800-426-4791)

#### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

#### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

:Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

#### **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 ppm. To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2018 monitoring showed fluoride levels in your water were within optimum range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 ppm MCL for fluoride.

#### **INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS**

[Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.](#)

#### **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less water whenever you can. Here are a few tips.

- ◆ Only run your dishwasher on a full load.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

#### **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In a matter of a time, drinking water has become exponentially safer and more reliable than at any other point in history. We remain vigilant in delivering the best quality drinking water that meets all State and Federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and business.