



**2009**

**Annual Water**

**Quality Report**

PWS ID#: NY1800544

**Facts & Figures**

<b>Town Population</b>	6,000
<b>Water Customers</b>	1,900
<b>Water Used in 2009</b>	199 million gallons
<b>Unaccounted for Water*</b>	17 million gallons
<b>Cost of Water in 2009</b>	\$4.22 per thousand gallons

\* Maintenance, Kiwanis Park, Hydrants, Leaks

**Our Goal**

We are pleased to inform you of this year’s Annual Water Quality Report. The report is designed to inform you about the water quality and the services delivered to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts the City of Batavia and Monroe County Water Authority make to continually improve the water treatment process and to protect their water resources. We are committed to ensuring the quality of your water.

**Concerns?**

If you have any questions concerning your water utility or if you have suggestions on how we can improve our service to you, please contact Steve Mountain, Town Engineer at (585) 343-1729 extension 220. We want our valued customers to be informed about their water utility. For questions on health related issues, please contact the Department of Health at (585) 344-2580 extension 5569.

**Public Forum**

The Batavia Town Board meets the third Wednesday of each month at 7:00 P.M. You are invited to attend these meetings to become informed with the activity in the Town or voice your opinion in the decision making process affecting you water.

**Important Numbers and Sites**

*Town of Batavia:* (585) 343-1729  
[www.townofbatavia.com](http://www.townofbatavia.com)

*Department of Health:* (585) 344-2580 x5569

*Safe Drinking Water Hotline:* (800) 426-4791

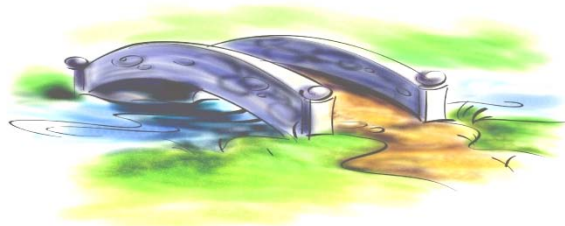
*City of Batavia:* [www.batavianewyork.com](http://www.batavianewyork.com)

*Monroe County Water Authority:*  
(585) 442-7200  
[www.mcwa.com](http://www.mcwa.com)

**Water Conservation Tips**

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

- Repair leaking faucets, pipes, toilets, hoses, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets, and appliances.
- Wash only full loads of laundry.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Run the dishwasher only when full.
- Keep a jug of drinking water in the refrigerator instead of running the faucet to get cool water.
- Water the lawn and garden in the morning or evening to reduce the amount of water lost to evaporation.
- Use mulch around plants and shrubs.
- Use water saving nozzles on garden hoses.



## **Where Does My Water Come From?**

The Town of Batavia purchases the water provided to you from Genesee County. There are four sources from which the water is received and transmitted to the Town. Two of the four sources the City of Batavia receives water from are the Tonawanda Valley Watershed and the Tonawanda Creek. The other two sources Monroe County Water Authority (MCWA) receives water from are Lake Ontario and Hemlock Lake.

## **Drinking Water**

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 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.

## **MCWA Source Water Assessment**

Our primary water source is Lake Ontario which is treated at our Shoremont Plant in Greece. We also operate the Corfu Plant, a small well supply in the Village of Corfu, and purchase water from the City of Rochester, Erie County Water Authority (ECWA), the Town of Ontario, and the City of Batavia. The New York State Department of Health (NYSDOH) has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP). In general, the Great Lakes sources used by Shoremont, ECWA and the Town of Ontario are not very susceptible because of their size and quality of the Great Lakes. Hemlock and Canadice Lakes, used by the Hemlock plant, are also not very susceptible because of their size and controlled watersheds. The well water used by the Corfu Plant is more

susceptible, but the confined nature of the aquifer provides protection against the few nearby potential contaminant sources. Tonawanda Creek and the well water used by the City of Batavia plant are much more susceptible because of the smaller watershed and the number of potential contaminant sources in it. Because storm and wastewater contamination are potential threats to any source water, the water provided to our customers undergoes rigorous treatment and testing prior to its delivery. The Shoremont Plant and the purchased water producers all use a similar treatment process: coagulation, filtration and disinfection. Coagulants are added to clump together suspended particles, enhancing their removal during filtration. Chlorine is used to disinfect the water and to provide the residual disinfectant that ensures the sanitary quality of the water as it travels from each plant to your home. Fluoride is also added to help prevent tooth decay. The treatment process at the Corfu Water Plant consists of filtration, softening and disinfection with chlorine. These plants are in full compliance with all NYS and the EPA operational and monitoring requirements. For more information on SWAP and how you can help protect the source of your drinking water, contact MCWA Customer Service at (585) 442-7200.

## **City of Batavia Source Water Assessment**

A source water assessment was prepared through the NYDOH in 2002. It evaluated possible and actual threats to Batavia's drinking water sources. The State source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants of the source water; it does not mean that the water delivered to consumers is or will become contaminated. The source water assessments provide resource managers with additional information for protecting source water in the future. Our water is derived from two drilled wells and the Tonawanda Creek. The source water assessment has rated these wells as

having a medium-high to very high susceptibility to microbials, nitrates, petroleum products, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities, regulated by the state/federal government, to the wells and the associated industrial activity in the assessment area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. The source water assessment for Tonawanda Creek has found an elevated susceptibility to contamination. The amount of agricultural lands in the assessment area results in elevated potential for microbials, phosphorus, DBP precursors, and pesticides contamination. In addition, the moderate density of CAFOs (Concentrated Animal Feeding Operations) in the assessment may add to the potential for contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality, based on their density in the assessment area. However, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination. There is also noteworthy contamination susceptibility associated with other discrete contaminate resources. These facility types include mines. Finally, it should be noted that relatively high flow velocities make river drinking water supplies highly sensitive to existing and new sources of microbial contamination. While the source water assessment rates our Wells and the Tonawanda Creek as being susceptible to microbials, please note that Batavia's water is filtered and disinfected to ensure that the finished water delivered to your home meets New York State's drinking water standards for microbial contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Genesee County Health Department at (585) 344-2580 extension 5569.

**Treatment & Sampling Results**

The Town of Batavia purchases drinking water from the Monroe County Water Authority (MCWA) and the City of Batavia who each perform testing on the water they produce. Additional testing is performed by the Town of Batavia after the water reaches our system. Test results are listed in the table below. For the complete Annual Water Quality Report of our suppliers, please visit [www.mcwa.com](http://www.mcwa.com) & [www.batavianewyork.com](http://www.batavianewyork.com).

MCWA - Water Quality Table						
Detected Substances				2009 Results except as noted		
Supply (Source)			Shoremont WTP (L.Ontario)			Meets EPA Standards
Substances	Units	MCLG	MCL	Range of detected values	Likely Source	
Barium	mg/L	2	2	0.021 - 0.023	Erosion of natural deposits	Yes
Chloride	mg/L	NA	250	24 - 27	Naturally occurring	Yes
Fluoride	mg/L	NA	2.2	0.1 - 1.1	Natural and additive - promotes strong teeth	Yes
Nitrate	mg/L	10	10	0.28 - 0.40	Erosion of natural deposits	Yes
Sodium	mg/L	NA	NS	13 - 15	Naturally occurring	Yes
Sulfate	mg/L	NA	250	25	Naturally occurring	Yes
Organics, Pesticides, Herbicides						
Caffeine	ng/L	NS	NS	4 (2008)	Pharmaceutical	Yes
Cotinine	ng/L	NS	NS	2.1 (2008)	Pharmaceutical	Yes
Triclosan	ng/L	NS	NS	ND (2008)	Personal care products	Yes
Treatment Requirements - 95% of samples each month must be less than 0.3 NTU. Range and lowest monthly percentage are listed. Turbidity is a measure of water clarity and is used to gauge filtration performance.						
Turbidity - Entry Point	NTUs	NA	TT	0.04 - 0.12 100%	Soil runoff	Yes
Microbial - No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.						
Coliform	% Positive	0	0.05	1.1% July	Naturally occurring	Yes
Disinfectant and Disinfectant By-products (DBPs) - Average and Range are listed. * Chlorine has a MDRL (Maximum Disinfectant Residual Level) and MDRLG (MDRL Goal) rather than an MCL and MCLG.						
Chlorine Residual - Entry Pt	mg/L	4 *	4 *	1.1 (0.8-1.5)	Additive for control of microbes	Yes
Total THMs	ug/L	NA	80	33 (17-52)	Byproduct of water chlorination	Yes
Haloacetic Acids	ug/L	NA	60	11 (4-28)	Byproduct of water chlorination	Yes
Lead and Copper - 90% of samples must be less than the Action Level (AL). The 90th Percentile and the number of samples exceeding the AL are listed.						
Copper (Customer Tap Samples)	mg/L	1.3	AL=1.3	0.1 (None)	Corrosion of household plumbing	Yes
Lead (Customer Tap Samples)	ug/L	0	AL=15	4.3 (None)	Corrosion of household plumbing	Yes

CITY OF BATAVIA SAMPLING RESULTS							
REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	
Barium (mg/L)	2	2	8/5/2009	0.015	N/A	No	
Chloride (mg/L)	250	N/A	8/5/2009	110	N/A	No	
Chlorine Residual (mg/L)	[4]	N/A	2009 (hourly)	0.98	0.30 - 1.38	No	
Di(2-ethylhexyl Phthalate [DEHP] (ug/L)	6	0	8/5/2009	0.98	N/A	No	
Fluoride (mg/L)	2.2	N/A	8/5/2009	0.74	0.04 - 1.25	No	
Mercury [inorganic] (ug/L)	2	2	8/5/2009	0.24	N/A	No	
Nitrate (mg/L)	10	10	8/5/2009	0.89	N/A	No	
Sodium (mg/L)	N/A	N/A	8/5/2009	48	N/A	No	
Sulfate (mg/L)	250	N/A	8/5/2009	37	N/A	No	
Total Organic Carbon (mg/L)	TT	N/A	2009 (monthly)	1.2	ND - 2.3	No	
Turbidity (NTU)	TT	N/A	2009 (daily)	0.12	0.01 - 0.12	No	
Turbidity (Lowest monthly percent of samples meeting limit)	TT	N/A	2009 (daily)	100	N/A	No	

TOWN OF BATAVIA TEST RESULTS							
Substance	Units	MCL [MRDL]	MCLG [MRDLG]	Result (avg.)	Date Sampled	Meets EPA Standards	Typical Source
Chlorine Residual	mg/L	[4]	N/A	0.47	2009 (daily)	Yes	By-product of drinking water chlorination.
Haloacetic Acids (HAAs)	ug/L	60	N/A	15.2	2008 (quarterly)	Yes	By-product of drinking water chlorination.
Total Trihalomethanes (TTHMs)	ug/L	80	N/A	38.7	2008 (quarterly)	Yes	By-product of drinking water chlorination.
Total Coliform				negative	2009 (3 samples/month)	Yes	Contaminated source water or contaminated backflow.
E. coli				negative	2009 (3 samples/month)	Yes	Contaminated source water or contaminated backflow.

**Report Definitions**

**EPA (U.S. Environmental Protection Agency):** A federal agency designed to protect human health and safeguard the natural environment.

**FDA (U.S. Food and Drug Administration):** A federal agency within the Department of Health and Human Services.

**CDC (Centers for Disease Control and Prevention):** One of the major operating components of the Department of Health and Human Services.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant that is allowed in drinking water.

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

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfection 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 contaminants.

**NTU (Nephelometric Turbidity Unit):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**mg/L (milligrams per liter):** 1/1,000 gram of substance per liter of water.

**ug/L (micrograms per liter):** 1/1,000,000 gram of substance per liter of water.

**ng/L (nanograms per liter):** 1/1,000,000,000 gram of substance per liter of water.

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

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

**ND:** Not Detected by the precision of laboratory tests.

**NS:** No standard.

**N/A:** Not applicable.