The

TOWN OF BATAVIA

PWS ID# NY1800544

Annual Water Quality Report

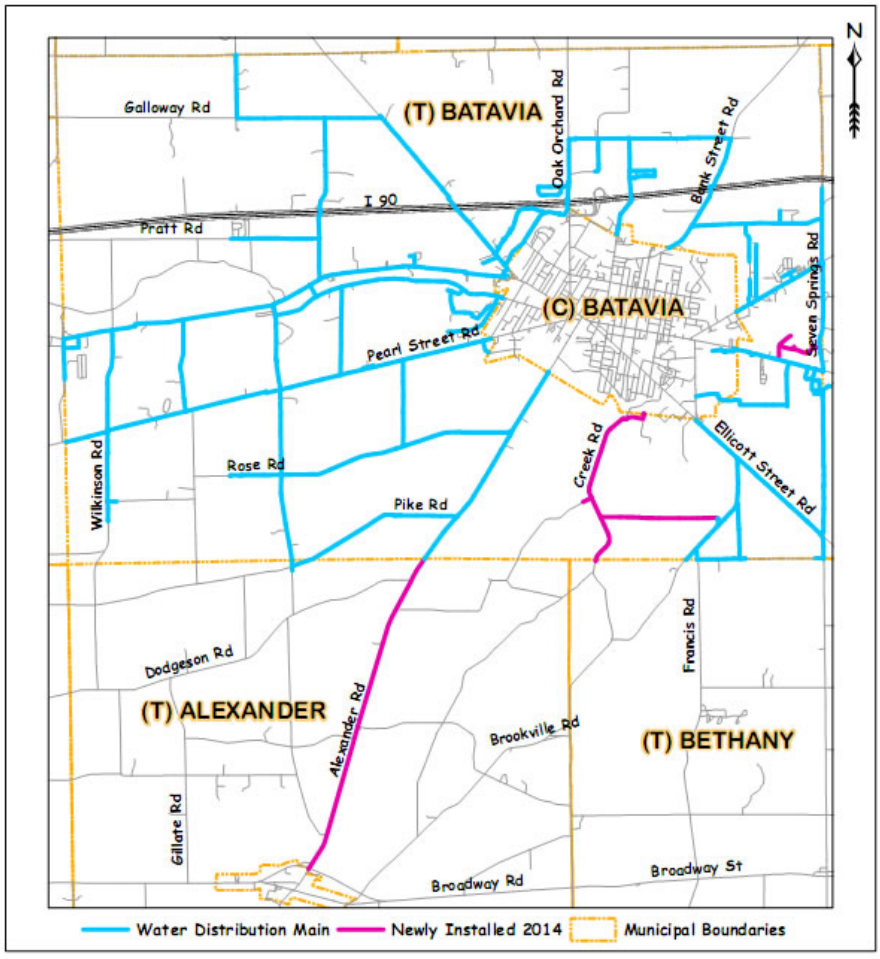
Reporting Year: 2014

Water System

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. Although we purchase our water supply, we track the efforts that Genesee County, 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.

Service Area



Facts & Figures

Population Serviced with Public Water	5,669
Commercial Services	232
Residential Services	1,621
Water Purchased in 2014	271.7 million gallons
Water Used in 2014	234.1 million gallons
Unaccounted for Water*	37.6 million gallons
Cost of Water in 2014	$4.47/1,000 gallons

* Approximately 15 million gallons of lost water is attributed to a major water main break that occurred on West Main Street Road in September. Additional unaccounted for water can be attributed to maintenance, Kiwanis Park, hydrants, and leaks.

Water System Improvements

In 2014, 22,000 linear feet of water main was installed along portions of Creek, Dorman, East, and Lehigh Roads for the Creek & East Road Water District in the Town of Batavia. The first phase of the Oakwood Hills Subdivision was also constructed, adding about 4,800 linear feet of water main to the public water system with a second phase planned for construction in 2015. The Town of Alexander installed 21,500 linear feet of water main in 2014 along NYS Route 98 extending from the Town of Batavia to the Village of Alexander. The Town of Batavia will be responsible for the operation and maintenance of this portion of water system in the Town of Alexander along with the customer billing.

Additional water system improvements are being done in 2015 with the construction of the Townline Water Project already under way. This project consists of the installation of 104,700 linear feet of water main in the north of the Town of Batavia and into the Towns of Elba and Oakfield. The Town of Batavia will be responsible for the operation and maintenance of all the water main installed under this project along with the customer billing. The design plans for the Pratt Road Water District will be bid and construction will begin in 2015. This project will install 16,000 linear feet of water main along Pratt and Powers Roads.

Water Source & Treatment

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, in some cases, radioactive material, 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 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. In order 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 which 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.

Where does my water come from?

The Town of Batavia purchases the water provided to you from Genesee County. Genesee County receives its water through the City of Batavia and Monroe County Water Authority (MCWA) sources. These sources come from the Tonawanda Valley Watershed and the Tonawanda Creek (City of Batavia) and Lake Ontario (MCWA).

MCWA Source Water Assessment

MCWA's primary water source is Lake Ontario which is treated at their Shoremont Plant in Greece. They also operate the Corfu Plant, a small well supply in the Village of Corfu, and purchase water from the City of Rochester and the Erie County Water Authority (ECWA). The New York State Department of Health 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 and ECWA are not very susceptible because of the 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. Because storm and wastewater contamination are potential threats to any source water, the water provided to MCWA's 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 preserves 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 U.S. EPA operational and monitoring requirements. For more information on the State's Source Water Assessment plan and how you can help protect the source of your drinking water, contact MCWA Customer Service at (585) 442-7200 or visit their website at www.MCWA.com.

City of Batavia Source Water Assessment

A source water assessment was prepared through the New York Department of Health in 2002. It evaluated possible and actual threats to the City of 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 can move through the subsurface into the wells. The susceptibility rating is an estimate of the potential for contamination 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 waters in the future. The City of Batavia's 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 (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or 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 the Tonawanda Creek has found an elevated susceptibility to contamination for this source of drinking water. 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 (particularly for protozoa). 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 the City of Batavia's wells and the Tonawanda Creek as being susceptible to microbials, please note that the City of 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, or Matt Worth at Batavia's City Hall at (585) 345-6315.

Water Test Results

Who tests my water?

The Town of Batavia purchases drinking water from Genesee County who in turn receives their 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 tables below. For the complete Annual Water Quality Report of our suppliers, please visit www.MCWA.com & www.batavianewyork.com.

MCWA - Water Quality Table

Detected Substances					**2014 results, except as noted**	
Substances	*Units*	*MCLG*	*MCL*	*Range of Detected Values*	*Likely Source*	*Meets EPA Standards*
Barium	mg/L	2	2	0.014 - 0.023	Erosion of natural deposits	Yes
Chloride	mg/L	N/A	250	24 - 38	Naturally Occurring	Yes
Chromium	ug/L	100	100	ND - 1.4	Naturally Occurring	Yes
Dacthal (DCPA)	ug/L	N/A	50	ND - 0.1	Herbicide	Yes
Fluoride	mg/L	N/A	2.2	0.1 - 1.4	Natural & additive - promotes strong teeth	Yes
Nitrate	mg/L	10	10	0.22 - 0.34	Erosion of natural deposits	Yes
Sodium	mg/L	N/A	NS	14 - 23	Naturally Occurring	Yes
Sulfate	mg/L	N/A	250	26 - 28	Naturally Occurring	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	N/A	TT	0.03 -	Soil Runoff	Yes
Microbial - No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.						

Detected Substances					2014 results, except as noted	
Coliform	% positive	0	5%	ND	Naturally Occurring	Yes

City of Batavia - Sampling Results

Regulated Substances							
Substance (unit of measure)	*Date Sampled*	*MCL [MRDL]*	*MCLG [MDRLG]*	*Amount Detected*	*Range (low-high)*	*Violation*	*Typical Source*
Chloride (mg/L)	8/6/2014	250	N/A	144	N/A	No	Naturally occuring; road salt; fertilizer runoff
Barium (mg/L)	8/6/2014	2	2	0.014	N/A	No	Erosion of natural deposits
Fluoride (mg/L)	8/8/.2014	2.2	N/A	0.77	N/A	No	Natural & additive; promotes strong teeth
Fluoride (mg/L)	Daily	2.2	N/A	yearly average 0.81	0.12-1.09	No	Natural & additive; promotes strong teeth
Nitrate as N (mg/L)	8/6/2014	10	10	0.89	N/A	No	Fertilizer runoff; septic leaching; erosion of natural deposits
Sulfate (mg/L)	8/6/2014	250	N/A	35	N/A	No	Naturally occurring
Total Organic Carbon [TOC] (mg/L)	2014, monthly	250	N/A	1.08	ND - 2.80	No	Organic contaminants

Regulated Substances							
Sodium (mg/L)	8/6/2014	TT	N/A	59	N/A	No	Naturally occuring; road salt
Alkalinity as CaCO3 (mg/l)	8/6/2014	N/A	N/A	70.7	N/A	No	Natural minerals; lime softening process
Calcium (mg/L)	8/6/2014	N/A	N/A	17	N/A	No	Mineral deposits
Magnesium (mg/L)	2014, daily	N/A	N/A	22	N/A	No	Dissolution of nickel in well water
Turbidity (1) (NTU)	2014, daily	TT<=1.0	N/A	0.02	0.01 - 0.06	No	Soil runoff
Turbidity (lowest monthly % of samples meeting limits) (NTU)	2014, daily	TT<=0.3	N/A	100%	N/A	No	Soil runoff
Turbidity [Distribution System](2)(NTU)	2014, weekly	>5	N/A	0.05	0.02 - 0.38	No	Cloudiness in main disruptions and breaks.

(1)Turbidity is a measure of the cloudiness of the water. It is tested because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year occurred as indicated in the table. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. (Note that TT is dependent upon filtration method: conventional 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although the month as indicated in the Date column was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

(2)The highest measurement of the monthly average distribution results for the year occurred as indicated in the table.

Town of Batavia - Test Results

Substance (unit of measure)	MCL [MRDL]	MCLG	Highest Running Ann. Average	Range (low-high)	Date Sampled	Meets EPA Standard	Typical Source
Chlorine Residual (mg/L)	[4]	N/A	N/A	0-1.2	2014 Daily	Yes	Treatment Chemical
Haloacetic Acids (HAAs) (ug/L)	60	N/A	19.15	11.46-26.20	2014 Quarterly	Yes	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (ug/L)	80	N/A	57.6	28.9-96.4	2014 Quarterly	Yes	By-product of drinking water chlorination

Substance (unit of measure)	AL	Sites Sampled	Sites Detected	Range (low-high)	Date Sampled	Meets EPA Standard	Typical Source
Asbestos Fibers [MFL]	7.0	6	1	ND-0.2	July 2014	Yes	Disturbance of Asbestos Cement Water Main

Substance (unit of measure)	AL	MCLG	90th % Result	Range (low-high)	Date Sampled	Meets EPA Standard	Typical Source
Copper (mg/L)	1.3	1.3	0.0814	0.00546-0.301	July 2014	Yes	Corrosion of household plumbing
Lead (mg/L)	0.015	0	0.00584	ND-0.0304*	July 2014	Yes	Corrosion of household plumbing

*One sample did exceed the Action Level for lead and the homeowner was informed on ways to reduce lead exposure in their household.

Educational Information

Lead Awareness

If present, the elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Batavia is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When you 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Fluoride

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 (CDC), fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. Fluoride is added to your water by both our water suppliers and fluoride levels monitored daily before it is delivered to our system.

Taste & Odor

You may notice a chlorinous taste and odor in your water. Although some people may find this objectionable, we're required to maintain a chlorine residual in the distribution system to prevent the growth of bacteria. Simply storing water drawn from your tap in a container overnight in your refrigerator will reduce or eliminate the taste. Alternatively, using an inexpensive carbon filter will yield the same results but should be replaced regularly.

Health Vulnerability

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 for 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 at (1-800-426-4791).

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.

Report Definitions

- **90th Percentile:** A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.
- **AL (Action Level):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

- **CDC (Centers for Disease Control and Prevention):** One of the major operating components of the Department of Health and Human Services.
- **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.
- **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 possible.
- **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.
- **MFL (million fiber per liter):** a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **mg/L (milligrams per liter):** corresponds to one part of liquid in one million parts of liquid (parts per million – ppm).
- **MRDL (Maximum Residual Disinfectant Level):** 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.
- **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 contamination.
- **N/A:** Not applicable.
- **ND:** Not Detected by the precision of laboratory tests.
- **NS:** No standard.
- **NTU (Nephelometric Turbidity Unit):** A measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **ug/L (micrograms per liter):** corresponds to on part of liquid in one billion parts of liquid (parts per billion – ppb).

Contact Information

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. 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 your water.

Town of Batavia	585-343-1729
Department of Health	585-344-2580 x5569 / www.co.genesee.ny.us
Safe Drinking Water Hotline	800-426-4791
City of Batavia	585-345-6315 / www.batavianewyork.com
Monroe County Water Authority	585-442-7200 / www.mcwa.com

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