



2015 Annual Drinking Water Quality Report

**BUFFALO
WATER**
managed by  **VEOLIA**

Consumer Confidence Report
Buffalo, New York

Introduction

To comply with State regulations, the Buffalo Water Authority (managed by Veolia NA) will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources.

Last year, your tap water met all State drinking water standards. This report is an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are pleased to provide you with this information because informed customers are our best customers.

If you have any questions about this report or concerning your drinking water, please contact Jan Robin Ford, Water Treatment Supervisor at 716-847-1065 ext. 130. We want you to be informed about your drinking water. If you would like to learn more, please attend any regularly scheduled Water Board meetings, typically held the second Wednesday of each month at 8:00 AM, Room 502 – City Hall.



Buffalo Water Authority Operated by Veolia Water

2 Porter Avenue
Buffalo, NY 14201
PWS ID# NY1400422

MAYOR BYRON W. BROWN

Commissioner of Public Works:
Steven J. Stepniak

Buffalo Water Board:

Chairperson: Oluwole McFoy, P.E.

Members:

Michael Finn, P.E.
Gerald E Kelly
William Sunderlin

Veolia Manager: Timothy Cupo

Billing & Customer Service

281 Exchange Street
Buffalo, NY 14204

Water Treatment Plant

2 Porter Avenue
Buffalo, NY 14201

Useful Phone Numbers

Customer Service & Emergency: **847-1065**
Water Quality Inquiries: **847-1065, ext. 133**

Website:

www.buffalowater.org

LAKE ERIE FACTS

- Lake Erie is the 11th largest world lake (4th largest Great Lake by surface area)
- Length: 241 miles; Width 57 miles
- Average Depth: 62 feet
- Max Depth: 210 feet; Vol: 116 miles³
- Elevation: 569 feet; Shoreline: 871 miles
- Surface Area: 9,910 miles²
- Drainage Basin Area: 30,140 miles²
- Outlet: Niagara River & Welland Canal

Where does our water come from?

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

Our water source is Lake Erie

(a surface water source) which is the southernmost of the Great Lakes, bounded on the north by the Canadian province of Ontario, on the south by the U.S. states of Ohio, Pennsylvania, and New York, and on the west by the state of Michigan. Lake Erie is the shallowest of the Great Lakes, with an average depth of only 62-ft. It also has the shortest detention time of the Great Lakes. Water remains in the lake for only 2.6 years before it is replaced by fresh water (as compared with 191 years in Lake Superior or 22.6 years in Lake Huron). It is also the siltiest of the Great Lakes. Its bottom consists of fine sand, easily upset during turbulent storms. The combination of its shallowness, short detention time and sandy unstable bottom is especially beneficial to our water quality. The lake is able to flush itself of harmful contaminants such as pesticides and other organic wastes. When Lake Erie becomes turbulent, fine particles of sand and silt become agitated and suspended throughout the lake. Organic contaminants have the propensity to cling to these particles and be flushed from the lake. Therefore, water treatment begins as a natural process due to the structure and makeup of Lake Erie. During 2015, our system did not experience any restriction of our water source.

For health issues, contact:

Erie County Health Dept: **961-6800**

Senior Citizen's Discount, contact:

Dept of Assessments at **851-5733**

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



Customer cost

The average 2015 annual water charge was only \$413.56 per year. The total quarterly bill includes the cost of water used and the service charge. Eligible senior citizens receive a discount.

Water Usage (gallons)		Price per 1000 gallons		Quarterly Service Charge as of July 1, 2012				
Monthly	Quarterly	Regular	Seniors	Meter Size	Regular	Seniors	Meter Size	Regular
Up to 29,913	Up to 74,793	\$3.05	\$1.84	5/8"	\$34.90	\$17.17	3"	\$523.47
29,920 - 97,240	74,800 - 269,280	\$2.86	\$1.71	3/4"	\$49.22	\$25.86	4"	\$872.42
				1"	\$87.30	\$42.96	5"	\$1,744.88
over 97,240	over 269,280	\$2.18	\$0.64	1 1/2"	\$174.61	\$86.02	8"	\$2,829.61
				2"	\$279.19	\$137.42	10"	\$4,013.26

Abbreviations and Definitions of Terms used in this report:

MCLG (Maximum contaminant level goal): The level of contaminant in drinking water below which there is no known or expected risk to health, MCLGs allows for a margin of safety.

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

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant (chlorine) 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 disinfectant (chlorine) 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.

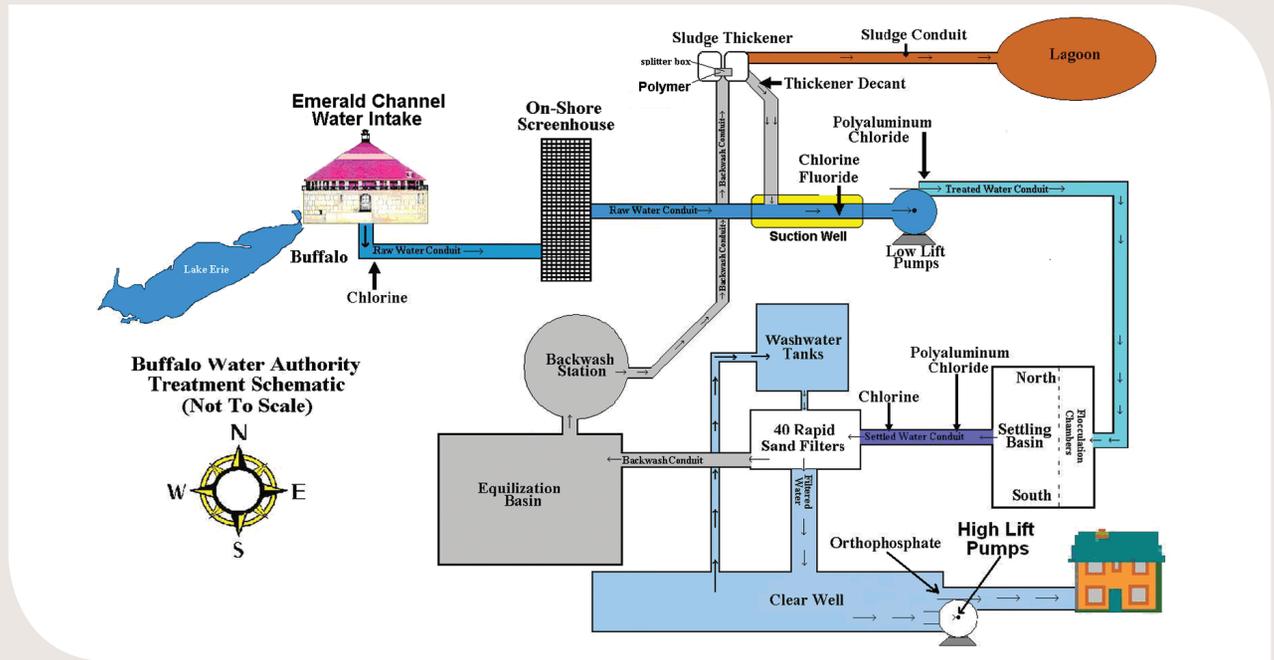
TT (Treatment Technique): A required process intended to reduce the level of contamination in drinking water.

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

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

Poly/Ortho – phosphate: A chemical blend used as a treatment technique (TT) intended to minimize the potential for lead and copper contamination in drinking water. EPA's Action Level (AL) for lead in water delivered to users of public drinking water systems is 15 µg/L. (parts per billion) Its goal for lead is zero.

Floc: Clumps or tufts formed when suspended particles combine with chemical substance or compound that promotes



the combination, agglomeration, aggregation or coagulation of suspended particles in the water.

Sedimentation: The process of suspended solid particles settling out (going to the bottom of the vessel) in water.

Coagulation: Agglomeration of finely divided particles into larger particles, which can then be removed by settling and/or filtration.

ppm: Parts per million, or milligrams per liter (mg/L). Corresponds to one part of liquid in one million parts of liquid.

ppb: Parts per billion, or micrograms per liter (µg/L). Corresponds to one part of liquid in one billion parts of liquid.

ND: Not detected.

N/A: Not applicable.

TTHM (Total Trihalomethane): Organic compounds, which are disinfection by-products of the chlorination of drinking water. Some people who drink water with TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

HAA (Halogenated Acetic Acids): Organic compounds, which are disinfection by-products of the chlorination of drinking water, currently the EPA lists HAAs as a health advisory.

TOC (Total Organic Carbon); **SUVA** (Specific Ultraviolet Absorption): A measure of the organic content of the water. This is a precursor to disinfection by-product when combined with the chlorination of drinking water.

90th % Value: The values reported for lead & copper represent the 90th percentile for each of these contaminants. A percentile is a value on a scale of 100 that indicates a percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead (or copper) values detected at your water system.

Stage 2 Disinfection Byproducts (2015)

Sample Site	TTHM Avg. (range), ppb	HAA Avg. (range), ppb
1625 Bailey Ave	36.25 (28.2-47)	21.88 (13.6-26.7)
3043 Main St	25.45 (15.2-39.8)	17.3 (13.5-19.2)
1110 Abbott Rd	30.65 (17.5-48.6)	15.6 (13.9-17.9)
150 Reading St	31.9 (22.1-42.2)	9.9 (7.4-12.4)
396 Kenmore Ave	24.78 (15.1-36.3)	13.9 (9.7-19.4)
262 Grider St	23.88 (13.6-37.3)	16.28 (11.3-21.6)
398 Dingens St	26.3 (15-39.9)	16.33 (11.7-21.8)
3396 Bailey Ave	26.93 (21.4-39.5)	17.35 (9.9-23.5)
300 Dorrance Ave	30.18 (17.7-47.4)	14.05 (11.8-17)
24 Westminster Ave	25.98 (13.8-42.8)	16.65 (11.8-20.2)
2 Templeton Terr.	30.9 (17.9-40.6)	18.1 (15.2-20.6)
939 Abbott Rd	34.63 (18.8-49.7)	20.5 (15-26.6)

Disinfection byproducts and sample site locations.

Source water assessment (SUMMARY)

A source water assessment was completed under New York State Department of Health (NYSDOH) Source Water Assessment Program (SWAP). The following is the Executive Summary of this report:

“The New York State Department of Health recently completed a draft Source Water Assessment of the raw water supply’s source under the state’s Source Water Assessment Program (SWAP). The purpose of this program is to compile, organize, and evaluate information regarding possible and actual threats to the quality of public water supply (PWS) sources. It is important to note that source water assessment reports estimate the potential for untreated drinking water sources to be impacted by contamination. These reports do not address the safety or quality of treated finished potable tap water.

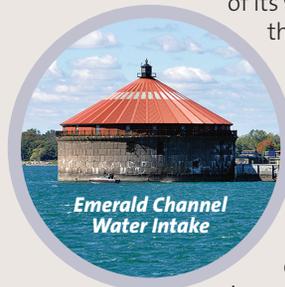
The Great Lakes’ watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels – intake clogging and taste and odor problems). The SWAP is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at this public water supply raw water intake. This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and disinfection byproduct precursor contamination. There is also a high density of sanitary wastewater discharges, which results in elevated susceptibility for nearly all contaminant categories.

There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: Toxics Release Inventory facilities, Chemical Bulk Storage facilities, inactive hazardous waste sites, landfills and Resource Conservation and Recovery Act facilities.”

If you have any questions about the state’s Source Water Assessment Program, please contact the Erie County Health Department at 716-961-6800.

Water treatment process

Buffalo’s water intake is located in the northeastern region of Lake Erie, just upstream of the Niagara River. This region is known as the Emerald Channel, due to the sparkling clarity of its water. Water enters into the intake through 12 sluice gates and collects in a circular conduit and is conveyed by gravity down 60 feet into to a 12-foot diameter, mile-long tunnel burrowed under the lakebed. Chlorine may initially be applied in this conduit to control zebra and quagga mussels, and provide some disinfection of the water. The water



is conveyed by gravity to an onshore

screen house at the Colonel Francis G. Ward Pumping Station where traveling screens remove large objects such as fish and other debris that could potentially damage equipment.

Water continues to flow by gravity through the raw water conduit where fluoride is added and chlorine may be fed.

Fluoride is added to guard against tooth decay, and chlorine is added at this location if the feed to the intake is suspended. Six low lift pumps control the amount of water withdrawn from Lake Erie depending on system demands. A poly-aluminum chloride (PACl) coagulant is fed and mixed immediately downstream of the low lift pumps. PACl is a coagulant designed to cause debris in the water to bind

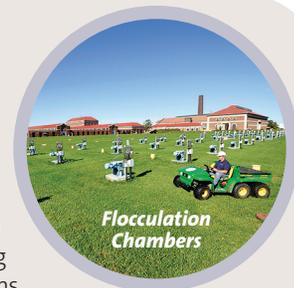


together forming floc. The treated water is conveyed into underground basins where flocculation and sedimentation processes occur. During flocculation, the water is slowly mixed by mechanical equipment to enhance floc formation. Following the flocculation process, water enters into the settling portion of the underground basins where the heavy floc is allowed to settle out by gravity. The treated water, still containing light



floc, is conveyed to 40 rapid sand/anthracite filter beds where the filtration process occurs, removing the light floc. A filter aid (PACl) can be added when necessary to enhance filtration and additional chlorine can also be added if needed. Filtered water then enters a 28 million gallon clearwell, where it is stored until needed in the distribution system.

The 40 filters need to be cleaned on a regular basis, which is accomplished by backwashing the filters with potable water. The backwash wastewater generated during the backwash process contains concentrated amounts of light floc removed by the filters. This wastewater is collected and pumped to gravity thickening clarifiers. Clarified backwash water is recycled to the raw water conduit, and the concentrated residuals generated during the thickening process are pumped to an onsite centrifuge for further processing.



Prior to potable water being pumped into the distribution system, a phosphate based corrosion inhibitor is added, which provides a protective layer inside service connections and plumbing systems, minimizing the potential for contaminants such as lead to leach into drinking water. High lift pumps located at the Colonel Ward and Massachusetts Pumping Stations deliver the treated water to the community. Our in-house laboratory tests the quality and safety of the water at every stage of the treatment process. Additional tests are conducted from samples taken throughout the city, including private homes, businesses and public facilities to ensure our water remains safe.

Facts and figures

Water is essential for all life. Besides drinking, bathing and recreation, water is used to fight fires, and has countless industrial applications. The City of Buffalo treated over 27.04 billion gallons last year averaging over 74 million gallons each day for a population of approximately 259 thousand people, covering 46 square miles of piping network. On our highest single day, March 3, 2015, we treated over 89.4 million gallons of water for distribution.

The distribution system consists of approximately 825 miles of water main pipe, 23,860 valves, 80,000 service connections and 7,978 fire hydrants. The distribution system is maintained, day and night, throughout all seasons. In the past year the Buffalo Water Authority has replaced or renovated approximately 2.81 miles of water mains.

2015 TABLE OF DETECTED CONTAMINANTS

Are there contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The following tables present which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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) or the Erie County Health Department at 716-961-6800.

Footnotes for table of detected contaminants:

** Water containing more than 20 mg/l of sodium should not be used for drinking by anyone on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

(1) Out of 60 homes tested, in 2014 only 2 were above the action level (AL) of 15 ppb for Lead, and none were above or the AL of 1.3 ppm for Copper. The treatment technique (TT) employed by the Buffalo Water Authority, intended to reduce lead and copper contamination of drinking water is the addition of a poly/orthophosphate blend as a part of water treatment. This chemical serves to coat water lines, to prevent lead and copper from leaching into the drinking water. Ingesting copper in excess of the 1.3 ppm AL may result in gastrointestinal distress. Long term exposure to copper above the 1.3 ppm AL may result in liver or kidney damage. Infants & children who drink water containing lead in excess of the AL could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Infants & young children are more vulnerable to lead in drinking water than the general population. Lead levels in your home might be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested, and you should flush your tap for 30 seconds – 2 minutes (or until you feel a change in water temperature) before using your tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). **We anticipate testing again for lead and copper during summer of 2017.**

(2) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single distribution measurement for 2015 occurred on 1/29/15 (0.90 NTU). State regulations require that the distribution average monthly turbidity must be below 5.0 NTU.

(3) The regulations also require that 95% of the effluent turbidity samples collected have measurements below 0.3 NTU and that no single turbidity measurement be above 1.0 NTU. Although January was the month that had the highest effluent measurement, 99.82% for all the months met TT for turbidity (0.3 NTU), and were in the acceptable range allowed and did not constitute a violation.

(4) Representative testing for TTHM included samples collected through 2015. Our highest detected reading occurred in August, 49.7 ppb, which was below the MCL of 80 ppb. Some people who drink water, containing TTHM in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

What does this information mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

UNDETECTED CONTAMINANTS:

According to State regulations, the Buffalo Water Authority routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants and total trihalomethanes. Additionally, your water is tested for coliform bacteria a minimum of 150 times a month. The contaminants detected in your drinking water are included in the Table of Detected Contaminants. Below is a list of contaminants that were tested for in 2015, but **were not detected** in our drinking water:

LOCATION	INORGANICS							
	Contaminant	Violation Yes/No	Date of Sample	Level Detected (Min/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
ENTRY POINT	Barium	No	12/9/2015	0.021 - 0.023 Avg: 0.022	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; and erosion of natural deposits
	Fluoride	No	6/1/2015	0 - 1.27 Avg: 0.40	ppm	N/A	2.2	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
	**Sodium	No	5/23/07	11	ppm	N/A	**	Naturally-occurring; road salt; water softeners; animal waste
	Sulfate	No	5/23/07	23	ppm	N/A	250	Naturally-occurring mineral
	Nitrate	No	12/9/2015	0.09 - 0.19 Avg: 0.14	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage, erosion of natural deposits
DISTRIBUTION	Nckel	No	4/14/2015	1.4	ppb	N/A	N/A	Naturally occurring mineral
	Copper ⁽¹⁾	No: 90% = 0.067	7/4/2014	ND - 0.158 Avg: 0.028	ppm	0	AL = 1.3	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
DISTRIBUTION	Lead ⁽²⁾	No: 90% = 0.004	7/4/2014	ND - 0.034 Avg: 0.003	ppm	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits
	MICROBIOLOGICAL							
ENTRY POINT	Heterotrophic Bacteria	No	12/15/2015	0-500 Avg: 15	count / ml	N/A	N/A	Naturally occurring
	Turbidity ⁽³⁾	No	12/7/2015	0.04 - 0.62 Avg: 0.14	NTU	N/A	TT ≤ 5.0	Soil runoff
	Turbidity ⁽³⁾	No	1/20/2015	0.04 - 0.42 Avg: 0.08	NTU	N/A	TT ≤ 1.0	
ENTRY POINT	Heterotrophic Bacteria	No	9/17/2015	ND-241 Avg: 2.30	count / ml	N/A	N/A	Naturally occurring
	TOTAL AND FREE CHLORINE RESIDUALS - DISINFECTANTS							
ENTRY POINT	Total Chlorine	No	11/3/2015	1.00 - 1.71 Avg: 1.31	ppm	N/A	N/A	Water additive used to control microbes
	Free Chlorine	No	11/9/2015	0.80 - 1.59 Avg: 1.10	ppm	(MRDLG) 4.0	(MRDLG) 4.0	
	Free Chlorine	No	11/13/2015	0.02 - 2.30 Avg: 0.79	ppm	(MRDLG) 4.0	(MRDLG) 4.0	
DISINFECTION BYPRODUCTS								
DISTRIBUTION	TTHM ⁽⁴⁾	No	11/11/2015	13.6 - 49.7 RAA = 28.98	ppb	N/A	TT = 80	By-product of drinking water chlorination needed to kill harmful microorganisms. TTHMs are formed when source water contains large amounts of organic matter.
	HAA	No	11/11/2015	7.4 - 26.7 RAA = 16.49	ppb	N/A	TT = 60	By-product of drinking water disinfection needed to kill harmful microorganisms
	TOC	No	12/8/2015	1.3 - 2.6 Avg: 1.83	ppm	N/A	TT < 2.0	Precursors to by-products of drinking water chlorination
SUVA	No	12/8/2015	0.5 - 1.19 Avg: 0.79	L/mg-m	N/A	TT < 2.0		
OTHER PROPERTIES OF WATER								
ENTRY POINT	Total Solids	No	12/24/2015	163	ppm	N/A	N/A	Naturally occurring
	Total Dissolved Solids	No	12/31/2015	164 - 170 Avg: 167	ppm	N/A	N/A	
	Alkalinity (as CaCO ₃)	No	9/10/2015	82 - 111 Avg: 92.3	ppm	N/A	N/A	
	Calcium Hardness (as CaCO ₃)	No	9/10/2015	75.2 - 96 Avg: 85.4	ppm	N/A	N/A	
	pH	No	8/11/2015	7.3 - 110 Avg: 7.6	SU	N/A	N/A	
DISTRIBUTION	pH	No	8/11/2015	71 - 8.3 Avg: 7.63	SU	N/A	N/A	
	Alkalinity (as CaCO ₃)	No	10/30/14	86.4 - 92.2 Avg: 90	ppm	N/A	N/A	
	Calcium Hardness (as CaCO ₃)	No	10/30/14	86 - 96 Avg: 91.0	ppm	N/A	N/A	

1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1-Dichloropropene, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 2,2-Dibromo-3-chloropropane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 2,4-D, 3-Hydroxycarbofuron, Alachlor, Aldicarb, Aldicarb Sulfoxide, Aldicarb Sulfone, Aldrin, Antimony, Arsenic, Atrazine, Benzene, Benzopyrene, Beryllium, Bromobenzene, Bromochloromethane, Bromoform, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbon Tetrachloride, Carbofuran, Chlordane, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Cyanide, Dalapan, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dibromoethane, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dieldrin, Dinoseb, Dioxin, Endrin, Ethylbenzene, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Isopropylbenzene, Lindane, Mercury, Methomyl, Methoxychlor, Methyl Ethyl Ketone, Methylene Chloride, Metolachlor, Metribuzin, Monobromoaetic acid, Monochloroacetic acid, MTBE, m-Xylene, Naphthalene, N-Butylbenzene, Nitrite as Nitrogen, n-Propylbenzene, Oxamyl vydate, o-Xylene, p-Isopropyltoluene, Pentachlorophenol, Picloram, Polychlorinated biphenyls, Propachlor, Propylene Glycol, p-Xylene, sec-Butylbenzene, Selenium, Silvex, Simazine, Styrene, tert-Butylbenzene, Tetrachloroethene, Thallium, Toluene, Toxaphene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl Chloride

Is our water system meeting other rules that govern operations?

Monitoring Violations

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2015, we did not monitor or test for Synthetic Organic Compounds (SOC's) during the specified time period of January 1, 2014 through June 30, 2015, and therefore cannot be sure of the quality of your drinking water during that time. We did however perform monitoring and testing for SOC's on September 24, 2015, less than three months after the specified time period and did not experience any violations with samples tested. However, this did not fulfill our regulatory obligation.

Do I need to take special precautions?

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 (CDC), fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 1.0 mg/l. During 2015, monitoring showed that fluoride levels in your water were within 0.2 mg/l of the target level. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride. Currently there is an interruption to fluoride addition due to capital improvements associated with upgrades to our fluoride system. Since June 22, 2015 fluoride has not been added to your drinking water, and we do not expect fluoride addition to be restored before March 1, 2016. You may want to discuss this with your family dentist to see if some other form of fluoride supplement should be considered for your dental protection.

Once fluoride addition resumes, we anticipate following the CDC's new interim target level of 0.7 mg/L

Why save water and how to avoid wasting it?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Run only full loads in the washing machine and dishwasher saves 300 to 800 gallons per month.
- Turning off the tap when brushing your teeth and shaving saves three gallons each day.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it 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. It is not uncommon to lose up to 100 gallons a day from an otherwise invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Put a plastic bottle or a plastic bag weighted with pebbles and filled with water in your toilet tank. Displacing water in this manner allows you to use less water with each flush. Saves 5 to 10 gallons a day. That's up to 300 gallons a month, even more for large families. Better yet, for even greater savings, replace your water-guzzling 5-7 gallon a flush toilet with a 1.6 gallon, low flush, or 1.28 gallon, ultra-low flush model.
- Avoid flushing the toilet unnecessarily. Dispose of tissues, insects and other similar waste in the trash rather than the toilet.
- Retrofit all household faucets by installing aerators with flow restrictors to slow the flow of water.
- Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end. Saves 150 gallons each time. For a two-car family that's up to 1,200 gallons a month.
- Place a bucket in the shower to catch excess water and use this to water plants. The same technique can be used when washing dishes or vegetables in the sink.
- 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.

System improvements

To insure continuing quality and safety in our communities' water supply, the Buffalo Water Authority has made or began the process of making the following improvements to our treatment facility in 2015:

- SCADA system upgrades will continue. The improved SCADA monitoring systems will optimize control over water treatment and plant pumping systems.
- Over 120 hydrants are scheduled to be replaced.
- Construction of a treated backwash wastewater dechlorination system.
- Fluoride system upgrades are scheduled to be complete in the first half of 2016.
- Electrical improvements associated with the Massachusetts Avenue substation transformers.
- A pilot project utilizing streaming current monitoring and in-line rapid mixing is anticipated, improving overall water treatment process efficiency.
- Mechanical upgrades to high service pumps at Colonel Ward and Massachusetts Avenue Pumping Stations will continue.
- Installation of a new water main under the City Ship Canal at Michigan Avenue.
- Rehabilitation of the Manhattan Avenue Pump Station.
- Building envelope improvements at the Colonel Ward and Massachusetts Avenue Pumping Stations.
- Distribution system improvements including a large valve replacement project, water cut restoration, and rehabilitation/replacement of water mains.

Metering program

The New York State's Department of Environmental Conservation has mandated that all households and businesses served by the Buffalo Division of Water have a water meter installed to insure equitable billing and to foster water conservation. The water meters installed under this program, are read from outside your residence, and accurately bill for the water that has been used, the same way you are currently billed by other utilities. The Buffalo Water Board currently reads and bills metered accounts quarterly. Bills are processed and mailed within approximately 30 days following the previous quarter. If your meter is stopped, or we cannot read your meter, you may receive an estimated bill, which could result in an inaccurate bill. If you receive a notice regarding a problem with your meter, or an estimated bill, you should contact customer service at 847-1065.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. An enhanced Annual Water Quality Report Supplement can be found on the Buffalo Water Authority's Website (www.buffalowater.org). Please call our treatment plant supervisor at 847-1065 ext. 130 or the laboratory at 847-1065 ext. 133 if you have questions about water quality.