

City of Buffalo- Division of Water  
Managed by



## Buffalo Water Board's Annual Water Quality Report 2000 - 2001

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PWS ID # NY0000422

**Mayor Anthony M. Masiello**

**Commissioner of Public Works: Joseph N. Giambra**

**Buffalo Water Board:**

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**American Water Services, Inc.™ Managers:**

**Regional:** James Halliday

**Project:** James Campolong

**Water Treatment Plant  
American Water Services, Inc.™  
2 Porter Avenue  
Buffalo, NY 14201**

**Billing Office  
American Water Services, Inc.™  
281 Exchange Street  
Buffalo, NY 14204**

### Customer Service Numbers

<b>Dispatch: To report</b>	<b>851-4747</b>	<b>Meter Installation</b>	<b>852-0197</b>
<b>leaks</b>	<b>851-4748</b>	<b>Meter Repair</b>	<b>851-4741</b>
<b>Billing</b>	<b>851-4749</b>	<b>Filter Plant Control Room</b>	<b>851-4720</b>
	<b>847-1065</b>	<b>Filter Plant Laboratory: water quality questions</b>	<b>851-4704</b>
<b>Inspector: Final reads on meter</b>	<b>851-4782</b>	<b>Senior Citizen Discount: contact Dept. of Assessments</b>	<b>851-5733</b>

### Introduction:

The following is the seventh annual water quality report prepared by the Buffalo Water Board managed by American Water Services, Inc.™. The purpose of this report is to answer consumer questions about the quality and safety of Buffalo's water, and to inform our customers and consumers about recent and future developments in Buffalo's water treatment process. Buffalo's water meets and exceeds the most stringent standards outlined by state and federal regulations. Find out more about the Buffalo Water Authority on the internet website [www.ci.buffalo.ny.us](http://www.ci.buffalo.ny.us)

The Buffalo Water Board is committed to serving the community by revamping and modernizing the water treatment process to take advantage of the most effective and economical technology available. Many changes have recently taken place, and more will be undertaken in the near future in response to the changing environment and stricter government regulations.

New York State requires water suppliers to notify their customers and consumers about the risks of cryptosporidiosis and giardiasis. Cryptosporidiosis and giardiasis are intestinal illnesses caused by microscopic parasites. Cryptosporidiosis can be very serious for those with weakened immune systems, such as chemotherapy, dialysis or transplant patients, and people with Crohn's disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using certified bottled water or a specially approved home filter. Individuals who think they may have cryptosporidiosis or giardiasis should contact their health provider immediately.

For further information about cryptosporidiosis please see "Facts About *Cryptosporidium*" discussed in detail in this report.

For additional information on cryptosporidiosis and giardiasis, please contact: Erie County Health Dept., 95 Franklin Street, Buffalo, NY 14202, (716) 858-7677.

We are eager to respond to any question or comments you may have concerning water quality or this report. Please forward your remarks to: Water Quality Laboratory, 2 Porter Ave, Buffalo, NY 14201, Tel: (716) 851-4704, Fax: (716) 851-4697.

## Raw Water Source:

The source of all Buffalo's water is Lake Erie (a surface water source). 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 finely graded sand, easily upset during turbulent storms.

The combination of its shallowness, short detention time and sandy unstable bottom bestows a great asset upon this body of water. The lake is able to quickly 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 will tightly cling to these particles and will be quickly flushed from the lake. Therefore water treatment begins as a natural process due to the structure and makeup of Lake Erie.

## Lake Erie Facts

Lake Erie is the 11<sup>th</sup> largest world lake  
(4<sup>th</sup> largest Great Lake by surface area).

Length: 241 miles; Width: 57 miles

Avg. Depth: 62'

Max Depth: 210'; Vol.: 116 miles<sup>3</sup>

Elevation: 569'; Shoreline: 871 miles

Surface area: 9,910 miles<sup>2</sup>

Drainage Basin Area: 30,140 miles<sup>2</sup>

Outlet: Niagara River & Welland Canal



## Water Treatment Process

Buffalo's water intake is located in Lake Erie at the mouth of the Niagara River. This region is known as the Emerald Channel, due to the sparkling clarity of the water. The water is gravity fed through a 12 x 12-foot conduit to an onshore screen house. There, traveling screens remove large objects such as sticks and other debris that can damage pumps.

Gravity delivers the water through a conduit where chlorine, fluoride, and polyaluminum chloride (PACl) are added. Chlorine is used to disinfect the water, control zebra mussels and other organisms. Fluoride is added to guard against tooth decay. PACl is a chemical coagulant designed to cause fine particles in the water to bind together forming floc.

Pumps direct the rushing water to an underground basin for flocculation and sedimentation. Here the water is flocculated by mechanical mixers (large paddles) and travels to the settling basins where debris in the water is allowed to settle out by gravity.

The water, still containing some floc, is directed over rapid sand filter beds where filtration occurs, removing fine floc. A filter aid (an anionic polymer) is added to enhance filtration.

As the water leaves the plant, a corrosion control additive (a sodium orthophosphate blend) is used. This serves as a shield against lead leaching into the water from aged residential water pipes and service lines.

The quality and safety of the water is tested by our in house laboratory at every stage of the treatment process. The water is then pumped through the water mains to the community, where further tests are conducted from samples taken throughout the city, including private homes, businesses and public facilities. This is done to ensure the water remains high in quality and safety.

## Water Distribution:

Water is essential for all life. Besides drinking, bathing and recreation, water is used to fight fires, and has countless industrial applications. In 2001 the City of Buffalo treated over 36 billion gallons of water averaging 99 million gallons each day for a population of over 310 thousand people covering 46 square miles of piping network. Water travels through 800 miles of pipes, 25,000 valves to 90,000 service connections and 7,800 fire hydrants. This enormous network of pipes, valves, service connections and hydrants is diligently maintained, day and night. In the past year we have replaced or renovated approximately 7.7 miles of water mains.

## Customer Costs:

The billing rate for our customers is among the lowest in the region. The average water bill is only \$??? per year. The Buffalo Water Board charges \$?.??/1000 gal for up to 67,325 gal purchased; \$1.15/1000 gal for purchases between 74,805 and 269,300 gal; and 89 ¢/1000 gal for purchases over 279,300 gal. Seniors receive reduced rates of 77¢, 69¢ & 26¢ respectively. The total quarterly bill includes the cost of water used and the service charge. Quarterly service charges are as follows:

Meter	Regular Rate	Senior Rate	Meter	Regular Rate*
5/8"	\$13.05	\$7.83	3"	\$195.75
3/4"	\$19.59	\$11.76	4"	\$326.25
1"	\$32.64	\$19.59	6"	\$652.50
1-1/2"	\$65.25	\$39.15	8"	\$1044.00
2"	\$104.40	\$62.64	10"	\$1500.75

\* Senior Rate not applicable for meters over 2"

## 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 allow 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 feasible using the best available treatment technology

**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 5NTU is just noticeable to the average person.

**ortho-phosphate:** A chemical blend used as a TT intended to reduce the level of lead and copper contamination in drinking water.

**ppm:** Parts per million, or milligrams per liter (mg/L). **n/a:** Not any.

**ppb:** Parts per billion, or micrograms per liter (µg/L). **ND:** Not Detected.

**TTHM (Total Trihalomethane):** Organic compounds, which are disinfection by-products of the chlorination of drinking water. Some people who drink water containing 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.

**90<sup>th</sup> % Value:** The value reported for lead & copper represents the 90<sup>th</sup> %. A % is a value on a scale of 100 that indicates the % of a distribution that is equal to or below it. The 90<sup>th</sup> % is equal to or greater than 90% of the lead & copper values detected at your water system.

## Facts About Cryptosporidium:

*Cryptosporidium* has been tested for monthly in our raw water from 6/97 – 12/98 and was never found. It was tested for once on 11/95 in the treated water that goes to your tap and was not found.

*Cryptosporidium* is a parasite that lives and multiplies in the intestines of warm-blooded animals. Its eggs are shed through feces, where they can enter lakes, reservoirs and other sources of drinking water. When exposed to adverse conditions, these eggs can form a spore so rugged that they become impervious to even concentrated bleach. Once the spore is ingested, an intestinal illness called *Cryptosporidiosis* may result. The incubation period may range from 1 - 12 days. *Cryptosporidium* can be spread by person-to-person, or animal-to-person contact, and by drinking contaminated water

Human *Cryptosporidiosis* was first reported in 1976. The primary symptom is acute diarrhea. Other symptoms include abdominal pain, vomiting, headache, loss of appetite and a low-grade fever.

Some persons infected with *Cryptosporidium* will not become ill, but others may be especially susceptible to *Cryptosporidiosis*. In most individuals with normal immune systems, symptoms generally persist for two weeks or less. But immunocompromised persons, including individuals receiving chemotherapy and kidney dialysis patients, persons on steroid therapy, and those with Crohn's disease or HIV/AIDS, may have severe and long-lasting illness.

Properly operated water treatment procedures are effective in providing a barrier to *Cryptosporidium* and other pathogenic microorganisms from reaching the distribution system. Due to their high resistivity to chlorine, normal disinfection methods are ineffective against these parasites. Proper filtration of these small tough organisms, including the coagulation and sedimentation processes, is the most important vehicle in their control and elimination.

*Cryptosporidium* is spread through contact with fecal matter. One can minimize the risk of acquiring and spreading this parasite by cleansing hands after fecal contacts such as after toilet use, diaper changing and picking up pet waste. Since cattle are a common source, avoid drinking raw milk, and cleanse hands after contact with any farm animals. Avoid drinking unfiltered water, and comply with any water advisory issued by local and state authorities. If uncertain about the quality of a water supply, exposing water to a rolling boil for at least one minute will kill *Cryptosporidium*.

Bottled water, unless distilled or certified for cyst removal may contain *Cryptosporidium*. Current standards for bottled water do not guarantee that it be *Cryptosporidium*-free. If home water filters are used, filters should have a pore size of less than 2 microns. Home filters should be certified for cyst removal by the National Sanitation Foundation (NSF; Standard #53).

#### **Giardia:**

*Giardia* is a microbial pathogen present in varying concentrations in many surface waters and ground water under the influence of surface water. It is removed/inactivated through a combination of filtration and disinfection or by disinfection. From 7/97 – 12/98, as part of the Information Collection Rule, 18 monthly samples were collected and analyzed for *Giardia* cysts in our source water. 3 samples were presumed positive for *Giardia*, but none were confirmed. Therefore, our monitoring indicated the presence of *Giardia* in our source water. It was tested for once on 11/95 in the treated water that goes to your tap and was not found.

Ingestion of *Giardia* may cause giardiasis, an intestinal illness. People exposed to *Giardia* may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care provider about what steps would best reduce their risks of becoming infected. Anyone who thinks they may have been exposed to Giardiasis should contact their health care provider immediately. The *Giardia* parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

#### **Radon:**

In August 1998 a finished water sample was collected and tested for the presence of radon, it was not detected.

Radon is a naturally- occurring radioactive gas found in soil and outdoor air. It may also be found in drinking water and indoor air. Some people exposed to elevated radon levels, from drinking water, over many years, may have an increased risk of getting cancer. The main risk is lung cancer primarily from radon entering indoor air from soil under homes.

#### **Consumer Tips:**

##### ⇒ **Appearance**

- If your cold tap water appears brown or red it is probably dislodged mineral deposits caused by :
  - \* a water main break
  - \* water or sewer workers flushing fire hydrants
  - \* vibrations caused by construction
  - \* children playing with fire hydrants

To report these problems, call the water dept. at 851-4704 or 851-4747. Once the reason has been identified and the disruption of the water main has ceased, run your cold water tap until it clears.

If your water appears cloudy in winter or early spring or during a water main break, it is most likely entrapped air. If the water is allowed to sit for a short while, the bubbles will rise to the surface and dissipate

##### ⇒ **Taste & Odor**

After chlorination there remains minute amounts of chlorine, required by state and federal regulatory agencies to protect public health. The following are some ways to eliminate or improve this taste:

- a) Place water in refrigerator, in an uncapped bottle.
- b) Cool water to less than 60°F in the summer, cool water definitely tastes better.

#### **Water Conservation:**

Water is a vital and limited resource. It is crucial to conserve water and conserving water reduces water bills and protects our children's future from shortages. Severe shortages in many areas already exist. We must learn to conserve water now, to avoid severe shortages in the future. By saving water you reduce your water, sewer, and utility bills, while easing the burden on water storage, purification, distribution, and treatment. There are four basic ways to save water: economize; repair leaks; install water saving devices; reuse water.

#### **Leak Detection:**

✓ Check the small red (leak detection) dial, found between the 7 & 8 on the face of the new water meter. If this dial is turning when you think the water is not being used, this indicates a leak somewhere inside the house.

✓ Check for leaks from faucet. A slow drip can waste 15 to 20 gallons a day, fix it and save 6,000 gallons per year. Most leaks are caused by worn out washers, which often can be repaired by the homeowner.

✓ Check for leaks from toilet tanks by putting a few drops of food coloring in the tank. Without flushing; wait 10 to 15 minutes; if the color shows up in the bowl, you have a leak. It's possible to lose up to 100 gallons a day from an "invisible leak", that's more than 30,000 gallons per year. Nearly 90% of all residential leaks are caused by leaks from toilet tanks.

✓ Check for leaks from tub faucets and showers. Replacing showerheads with low flow models can save 5 to 10 gallons per minute.

✓ Listen for a "hissing" noise on service lines at your water meter when no water is being used inside the house. You could have a water line that goes to another building, such as: (1) front house to rear building; (2) house to garage. If you suspect a problem, you should contact your plumber to check this out

Note that water loss due to leaks in a multi-family building are multiplied by the number of units in the complex.

#### **Water Saving Tips:**

The following are some water saving suggestions that you may find useful:

- **Dishwashing:** Wash dishes in standing water after you wipe grease off dishes with a paper towel or cloth. Turn off faucet frequently, and you will save over 20 gallons of water a day. Soak pots and pans before washing
- **Tooth-brushing:** Don't let water run while your brushing your teeth. Rinse your mouth with water in a glass and you will save over a gallon of water each time you brush.
- **Shower & Bath:** Take showers instead of baths or take shallow baths. Keep showers short with pressure at low force. Bathe small children together.
- **Toilet:** Flush only when necessary. Don't use as a wastebasket for cigarette butts or disposable diapers. Install water saving displacement devices.
- **Sink:** Fill bowl with water instead of letting water run when you wash or shave.
- **Laundry:** More than 10% of all water used in the home is used in the washing machine. Use the load selector to match water level to size of load. Try to wash full loads whenever possible. Presoak heavily soiled items. If buying a new machine, choose one with conservation features.
- **Cleaning:** Use a pail or basin instead of running water. Use sponge mops instead of string mops (uses less water for mopping and takes less water to keep clean).
- **Lawn & Garden:** Water slowly and thoroughly during cool, shady, and windless times of the day. Let grass grow taller in hot weather. Use judicious amounts of mulch in the garden and around shrubs to conserve moisture. Plant shrubs that don't need a lot of watering.
- **Car Washing:** Wet car quickly, turn hose off, wash car from a bucket of soapy water, and rinse quickly with hose.

#### **The Future of Buffalo's Water Treatment:**

As of September 1997 the Buffalo Water Board commissioned AmericanAnglian Environmental Technologies, LP, now American Water Services, Inc™, to manage the Buffalo Water Authority. AmericanAnglian was a joint venture between American Water and Anglian Water. Together, they operated over 1000 treatment plants, servicing 13 million people in 5 continents. To insure continuing quality and safety in our community's water supply, the Buffalo Water Board plans the following improvements in 2001:

- Upgrade data collection for individual filter beds
- Retrofit North Coagulation Basin to double detention time and dramatically improve water quality.
- Optimization of treatment to reduce costs
- Metering program: Metering will encourage water conservation and customers will be billed for actual water consumption
- Leak Detection – To reduce non-revenue water usage and the amount of water treated

**Sources of Contamination:**

There are many ways contaminants can be introduced into a drinking water source. Potential sources of drinking water contamination may be divided into four main groups: (1) Commercial/Industrial, (2) Residential/Municipal, (3) Agricultural/Rural, (4) Miscellaneous (Underground Injection Control/Naturally Occurring). For a complete list of potential source and corresponding contaminants, please contact the Buffalo Water Authority at: Tel: (716) 851-4726, Fax:(716) 851-4672 or go to internet website: [http:// www.epa.gov/OGWDW/swp/sources1.html](http://www.epa.gov/OGWDW/swp/sources1.html)

◆ **Commercial/Industrial:** May include storage tanks, discharges due to industrial activity, construction/demolition activities, waste dumps/landfills/junk yards, mines/gravel pits and research labs.

◆ **Residential/Municipal:** Discharges due to industrial/municipal activity (e.g. airports), apartments, campgrounds, cesspools, septic systems, sewer lines, landfills/dumps, storm-water infiltration basins, Water & Wastewater Treatment Facilities.

◆ **Agricultural/Rural:** Discharges due to boarding stables, wildlife feeding, fertilized crops, dairy operations, rural homesteads, wastewater lagoons, grazing lands, pesticides/fertilizer storage and drainage wells.

**Miscellaneous Sources:** Naturally occurring contaminants (e.g. lead copper fluoride, etc.), abandoned drinking wells, deep ground water wells, deep ground oil/gas wells and injection of water/steam into mineral formations for extraction.

### Drinking Water Standards:

The Safe Drinking Water Act (SDWA) was passed in 1974 because of congressional concerns about organic contaminants in drinking water and uneven state supervision of public drinking water supplies. Last year we conducted over 11500 tests for over 80 drinking water contaminants. No contaminants detected were in violation of a Maximum Contaminant Level (MCL), a Treatment Technique (TT), or exceeding an Action Level. (AL). A supplement of testing results titled "Buffalo Water Authority 2000-2001 Water Quality Report" is available at the Erie County Public Library or upon request at the Buffalo Water Authority.

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).

**Table of Detected Contaminants**

Contaminate	Date Sampled of highest detected	Units	MCLG	MCL	Range	Max Reading	Any MCL Violations?	Major Sources in Drinking Water
<b>Barium</b>	1/27/01	ppm	2	2	0.021	0.021	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
<b>Arsenic</b>	1/26/01	ppm	.05	.05	.001	.001	No	
<b>Nickel</b>	1/28/01	ppm	.01	.01	.0014	.0014	No	
<b>Copper</b>	6/99	ppm	1.3	AL=1.3	ND-0.189	0.189	No 90 <sup>th</sup> % = .054ppm	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.
<b>Fluoride</b>	2/18/01	ppm	2.2	2.2	0.0-01.4	1.4	No	Erosion of natural deposits; additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
<b>Lead</b>	6/99	ppb	0	AL=15	ND-23	23	No <sup>(1)</sup> 90 <sup>th</sup> % = 6 ppb	Corrosion of household plumbing; erosion of natural deposits.
<b>Nitrate-as Nitrogen</b>	3/7/00	ppm	10.0	10.0	0.25	0.25	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
<b>TTHM<sup>(2)</sup></b>	6/13/00	ppb	0	80 (running Average)	9.8-27.8	27.8	No	By-product of drinking water chlorination.
<b>Turbidity<sup>(3)</sup>: Distribution</b>	12/7/01: 0.75	NTU	0	TT = 5 NTU	.08 - .75	0.75	No	Soil Runoff.
Point of Entry	11/25/01: 0.31			99.9%:TT= % of samples < 0.35	.04 - 0.31	.04 - 0.31		

### Footnotes for Table of Detected Contaminants:

(1) Out of 56 homes tested, in 1999 only one was above the AL of 15 ppb for Lead. The TT employed by the Buffalo Water Authority, intended to reduce lead contamination of drinking water is the addition of ortho-phosphate as a part of water treatment. This chemical serves to coat water lines, to prevent lead from leaching into the drinking water. 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 before using your tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

(2) Representative testing for TTHM included 20 samples collected through 2000 (5 sites tested quarterly). Our highest detected reading occurred in June. It was 27.8 ppb, which is well 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.

(3) 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 measurement for 2000 occurred on 7/7/00 (1.2 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.5 NTU. Although January and September 2000 were the months that had the fewest distribution measurements meeting the TT for turbidity, the levels recorded were in the acceptable range allowed and did not constitute a violation.

### Undetected Contaminants:

Below are a list of contaminates that were tested for in 2001, but were not detected in our drinking water:

1,1,1,2-TETRACHLOROETHANE, 1,1,1-TRICHLOROETHANE, 1,1,2,2-TETRACHLOROETHANE, 1,1,2-TRICHLOROETHANE, 1,1-DICHLOROETHANE, 1,1-DICHLOROETHYLENE, 1,1-DICHLOROPROPANONE, 1,1-DICHLOROPROPENE, 1,2,3-TETRACHLOROBENZENE, 1,2,3-TETRACHLOROPROPANE, 1,2,4-TRICHLOROBENZENE, 1,2,4-TRIMETHYLBENZENE, 1,2-DICHLOROBENZENE (ORTHO), 1,2-DICHLOROETHANE, 1,2-DICHLOROPROPANE, 1,3,5-TRIMETHYLBENZENE, 1,3-DICHLOROBENZENE (META), 1,3-DICHLOROPROPANE, 1,4-DICHLOROBENZENE (PARA), 1-CHLOROBUTANE, 2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL, 2,2',3,3',4,5',6,6'-OCTACHLOROBIPHENYL, 2,2',3',4',6-PENTACHLOROBIPHENYL, 2,2',4,4',5,6-HEXACHLOROBIPHENYL, 2,2',4,4'-TETRACHLOROBIPHENYL, 2,2-DICHLOROPROPANE, 2,3-DICHLOROBIPHENYL, 2,4,5-T, 2,4,5-TP(SILVEX), 2,4,5-TRICHLOROBIPHENYL, 2,4-D, 2,4-DB, 2-4-DINITROTOLUENE, 2-6-DINITROTOLUENE, 2-BUTANONE (MEK), 2-CHLOROBIPHENYL, 2-CHLOROTOLUENE, 2-HEXANONE, 2-NITROPROPANE, 3,5-DICHLOROBENZOIC ACID, 3-HYDROXYCARBOFURAN, 4,4'-DDE, 4,4'-DDT, 4-CHLOROTOLUENE, 4-ISOPROPYLTOLUENE, 4-METHYL-2-PENTANONE (MIBK), ACENAPHTHENE, ACENAPHTHYLENE, ACETOCHLOR, ACETONE, ACIFLUORFEN, ACRYLONITRILE, ALACHLOR, ALDICARB, ALDICARB SULFONE, ALDICARB SULFOXIDE, ALDRIN, ALLYL CHLORIDE, ALPHA-CHLORDANE, ANTHRACENE, ANTIMONY, ATRAZINE, BENTAZON, BENZENE, BENZO(A)ANTHRACENE, BENZO(A)PYRENE, BENZO(B)FLUORANTHENE, BENZO(G,H,I)PERYLENE, BENZO(K)FLUORANTHENE, BERYLLIUM, BORON, BROMACIL, BROMOBENZENE, BROMOCHLOROMETHANE, BROMOFORM, BROMOMETHANE, BUTACHLOR, CADMIUM, CARBARYL, CARBOFURAN, CARBON DISULFIDE, CARBON TETRACHLORIDE, CHLORDANE, CHLOROACETONITRILE, CHLOROBENZENE (MONO), CHLOROETHANE, CHLOROMETHANE, CHROMIUM, CHRYSENE, cis-1,2-DICHLOROETHYLENE, cis-1,3-DICHLOROPROPENE, COBALT, COPPER, CYANAZINE, CYANIDE, DACTHAL, DALAPON, DI(2-ETHYLHEXYL)ADIPATE, DIBENZO(A,H)ANTHRACENE, DIBROMOCHLOROPROPANE (DBCP), DIBROMOMETHANE, DICAMBA, DICHLOROFLUOROMETHANE, DICHLOROPROP, DIELDRIN, DIETHYL ETHER, DIMETHYLPHTHALATE, DI-N-BUTYLPHTHALATE, DINOSEB, DIQUAT, ENDOTHALL, EPTC, ETHYL METHACRYLATE, ETHYLBENZENE, ETHYLENE DIBROMIDE (EDB), FLUORANTHENE, FLUORENE, FLUOROTRICHLOROMETHANE, GLYPHOSATE, HEPTACHLOR, HEPTACHLOR EPOXIDE, HEXACHLORETHANE, HEXACHLOROBENZENE, HEXACHLOROBUTADIENE, HEXACHLOROCYCLOPENTADIENE, INDENO(1,2,3-cd)PYRENE, IRON, ISOPROPYLBENZENE, LEAD, LINDANE, MANGANESE, MERCURY, METHIOCARB, METHOMYL, METHOXYCHLOR, METHYL IODIDE, METHYL METHACRYLATE, METHYL TERT-BUTYL ETHER (MTBE), METHYLACRYLATE, METHYLACRYLONITRILE, METHYLENE CHLORIDE (DICHLOROMETHANE), METOLACHLOR, METRIBUZIN, MOLINATE, NAPHTHALENE, NAPHTHALENE, N-BUTYLBENZENE, NITRITE-N, NITROBENZENE, N-PROPYLBENZENE, OXAMYL (VYDATE), PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, PCB 1260, PCB 1262, PENTACHLOROETHANE, PENTACHLOROPHENOL, PERCHLORATE, PHENANTHRENE, PICLORAM, POTASSIUM, PROMETON, PROPACHLOR, PROPANAZINE, PROPIONITRILE, PYRENE, sec-BUTYLBENZENE, SELENIUM, SILICA, SILVER, SIMAZINE, STYRENE, TERBACIL, TERT-AMYL METHYL ETHER, TERT-BUTYL ETHYL ETHER, TERT-BUTYLBENZENE, TETRACHLOROETHYLENE (PCE), TETRAHYDROFURAN, THALLIUM, THIOMBENCARB, TOLUENE, TOXAPHENE, TRANS-1,2-DICHLOROETHYLENE, TRANS-1,3-DICHLOROPROPENE, TRANS-1,4-DICHLORO-2-BUTENE, TRANS-NONACHLOR, TRICHLOROETHYLENE (TCE), TRIFLURALIN, VANADIUM, VINYL CHLORIDE, XYLENES (TOTAL)

**CITY OF BUFFALO  
METERING PROGRAM  
Managed by  
American Water Services, Inc™**

*What is the Meter Program About?*

This program has been mandated by New York State's Department of Environmental Conservation. In general, the water meter project will either replace existing meters or "convert" all flat rate water service to metered accounts using the most automated water meters available. These meters can be read from outside the home and accurately bill you for the amount of water that has been used, in the same way that you are currently billed by other utilities.

### FLAT RATE TO METERED BILLING CONVERSIONS

#### IMPORTANT INFORMATION ABOUT YOUR NEW METER

**Maintenance** Your new meter should register and run without any problems for fifteen years or more. The City of Buffalo owns and maintains the meter only and will replace any meter that fails due to mechanical problems at no charge to you. There is a charge for repairing meters, cables or remotes that are damaged willfully or through the neglect of the property owner. Meters must be protected from freezing if they are located in an unheated area.

**Meter Reading** The remote reading device placed on the outside of your home allows us to accurately read the meter without entering your home. Please do not disturb the remote device or the wire between it and the meter, or place any objects directly in front of the remote device that would make access to this device difficult for the meter reader.

**Meter Billing** The City of Buffalo currently reads and bills metered accounts quarterly. Metered customers are billed for the actual amount of water used during the quarterly period; bills are processed and mailed within approximately 30 days following the previous quarter. Plans are currently being reviewed to change to monthly billing for metered customers; you will receive information about this change in the future.

**Billing Cycle** Depending upon the timing of your new meter installation, you may receive a flat rate bill for your property before the new-metered account is set up. If you have already received a flat rate bill, or receive one before the metered account is established, please disregard this bill. You will receive a notice from the billing department with information regarding any credits or monies owed on your flat rate account. Because of the time required to set up a new-metered account, it could take anywhere from 30 to 60 days to process this new account. Even though your first metered bill may be delayed, you will still only pay for the amount of water you actually used.

**Water Conservation** Conservation is one of the primary goals of the metering program. In order to conserve water, people must know how much water they actually use. To conserve water, and to keep your bills low, fix any leaky fixtures in your house or building. Additional conservation tips have been made available to you to help you better understand this important measure.

If you have any questions regarding your bill, please contact our customer service department at 847-1065. ....Thank you for your cooperation