Dear Customer:

Water Quality is essential to all of us - and the quality of our water affects the quality of our lives. The Erie County Water Authority is committed to providing its customers safe, high-quality, drinking water. That is why the Authority maintains a rigorous quality control program and continues to invest substantial financial resources to improve our two treatment facilities, distribution system and internationally recognized water quality lab. Our water is constantly monitored and tested. The water produced and delivered by the Authority far exceeds the most stringent water quality standards currently mandated by federal and state water quality regulations, and last year was no exception.

During the last forty-eight years, the Authority has significantly enhanced the quality of life throughout Erie County and beyond by meeting the growing need for safe, clean water in the communities we serve.

As we enter a new year, we are confident that the Authority has positioned itself to continue to achieve its mission of providing a high-quality product and reliable, cost-effective service at especially reasonable rates to the more than 540,000 people that rely on us everyday, 24 hours a day, 365 days a year.

The Authority’s highly trained staff looks forward to continuing to bring our most abundant, our most precious, our most natural resource into the homes, the businesses, and the lives of the residents of Western New York.

Therefore, it is with pleasure that we provide you with the Authority’s Annual Water Quality Report (AWQR)/Consumer Confidence Report (CCR) for 2001. This report provides an overview of the Authority’s water quality during the past year. It shows the source of your water, how it compares to standards set by regulatory agencies, how your water is treated and tested, discusses Authority programs to improve your water quality and answers common questions asked by our customers.

Your comments and questions about this report are important to us. Please forward them to: Brian A. Gould, Public Affairs Officer, 350 Ellicott Square Building, 295 Main Street, Buffalo, N.Y. 14203, phone 849-8468, or E-mail to bgould@ecwa.org.

WHAT IS THE ERIE COUNTY WATER AUTHORITY?

The Erie County Water Authority (ECWA) was created by a special act of the New York State Legislature to ensure that the people and industry of Erie County would have a safe, plentiful supply of water for the future.

Since it began operations in 1953, the Authority has produced and reliably delivered water of the highest quality.

As an independent, public-benefit corporation, the Authority receives no tax revenues from the federal, state, county or local governments. The Authority operates as a financially self-sustaining business enterprise, paying all operating expenses from revenues generated by the sale of water to its 136,478 customers. The Authority is not an agency of New York State and is totally independent of Erie County government.

Annually, the Authority treats and distributes roughly 25 billion gallons of high-quality water for residential, commercial, and industrial use in 32 municipalities throughout Erie and Chautauqua counties. The Authority will also begin supplying water to western Genesee County in late 2002.

The Authority owns and operates two state-of-the-art water treatment plants, an internationally recognized water quality lab, 24 pumping stations, 34 water storage tanks and maintains 2,173 miles of waterlines and 14,308 fire hydrants.

The Authority’s residential rate is $2.31 per 1,000 gallons of delivered water. This affordable rate is among the lowest in New York State.
CONSERVATION TIPS:
Except for the air we breathe, water is the single most important element in our lives. It's too precious to waste. In an effort to make the most efficient use of our water resources, the Authority encourages customers to practice water conservation measures such as the daily conscientious use of water, proper use of water conserving appliances, and retro-fitting plumbing fixtures. Practice some of the following conservation tips to preserve our most precious resource:

- Use the clothes washer for full loads only.
- Instead of letting the water run in the sink when you want a cold drink, keep a jug or a pitcher in the refrigerator.
- Turn the water off while brushing your teeth.
- Take a shorter shower. The shower uses about 10 gallons a minute. Time yourself.
- Check your toilet for leaks by putting a few drops of food coloring in the tank. If the color shows up in your toilet bowl without flushing, you have a leak that is costing you money and wasting water.
- Check every faucet in your home for leaks. Just a slow drip can waste 20 gallons of water a day.
- Sweep outside with a broom not a hose.
- Only water your lawn when necessary.

To request water conservation brochures, call 849-8484.
WHO SETS AND ENFORCES DRINKING WATER STANDARDS?

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of your drinking water. Under the authority of the SDWA, the United States Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the states, localities and water suppliers who implement those standards. In New York, the State Health Department enforces the EPA’s regulations, and often makes them even more stringent.

The EPA sets standards for approximately 145 regulated contaminants in drinking water. For each of these contaminants, EPA sets a legal limit, called a maximum contaminant level (MCL).

EPA regulations specify stringent testing and reporting requirements for each contaminant. Water suppliers may not provide water that doesn’t meet these standards. Water that does meet these standards is safe to drink.

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 Safe Drinking Water Hotline at 800-426-4791.

HOW IS MY WATER TREATED?

The Authority’s two state-of-the-art water treatment facilities use the conventional filtration method. At the plants, water undergoes the following treatment steps:

S Raw water flows by gravity through a large intake tunnel to the raw water building.

S Pumps draw the water through traveling screens to prevent large objects such as driftwood and fish from entering the system.

S A chemical, polyaluminum chloride, is added to the water, which causes suspended particles in the water to clump together to form floc.

S Floc particles then settle to the bottom of large sedimentation basins.

S The water is filtered through layers of anthracite, sand, and gravel, to remove any remaining particles. Caustic soda is added to stabilize the alkalinity of the water and prevent corrosion in home plumbing.

S Powdered activated carbon is added in summer months to help remove unpleasant tastes and odors.

S Water is temporarily stored in clearwells or storage tanks before it is pumped to the public.

S High service pumps deliver the clean water through more than 2,173 miles of pipeline to homes and businesses. The Authority has 24

IS THE PUBLIC INFORMED IF THE WATER IS NOT SAFE TO DRINK?

EPA regulations mandate the Authority notify its customers if water is not safe to drink. Water is not safe to drink when testing reveals that contaminants in the water exceed national limits for contaminant levels. In the unlikely event that water becomes unsafe to drink, the Authority has the ability to issue a “boil water order” and will notify the public by newspaper, television, and radio announcements.
CRYPTOSPORIDIUM AND GIARDIA ANALYSIS

The Authority’s Water Quality Laboratory is recognized as one of the most well equipped labs in the United States and Canada that is capable of testing for Giardia and Cryptosporidium. Currently, the Authority tests for these protozoa for several public water suppliers throughout North America, including New York City, Massachusetts and London, Ontario.

Giardia and Cryptosporidium are microscopic protozoa that are widely present in the environment and most surface water sources throughout the United States. They can cause intestinal illnesses if ingested. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the illness within a couple of weeks, however, both can be serious for people with weak immune systems such as those undergoing chemotherapy, dialysis or transplant patients, and people with Crohn’s disease or HIV infection.

In 2001, the Authority analyzed 93 source water samples and 97 treated water samples for Giardia and Cryptosporidium. No positive samples were detected nor has there ever been a positive detection for either protozoa in the Authority’s treated water supply.

The Authority encourages immune compromised individuals to consult their physicians regarding appropriate precautions to avoid infection. Both protozoa must be ingested to cause disease, and they may spread through other means than drinking water. For additional information on Cryptosporidiosis or Giardiosis, please contact the Erie County Health Department at 858-6964.

WHAT WERE ECWA’S TEST RESULTS FOR 2001?

The Authority’s water system operated under "NO VARIANCE OR EXEMPTION" from any federal or state regulatory requirement. In addition, there were "NO VIOLATIONS" of National Primary Drinking Water Regulations. As a matter of fact, the high quality of the Authority’s water either "MET" OR "EXCEEDED" all federal and state water quality and water treatment standards.

To comply with EPA and NYSDOH mandated requirements, Water Quality data tables of detected regulated

HOW IS MY WATER TESTED AND WHO IS RESPONSIBLE FOR MAKING SURE ITS SAFE?

The Authority conducts more than 70,000 tests annually to make sure all federal and state drinking water regulations are met. Your water is tested 24 hours a day, 365 days a year to assure the delivery of safe, clean water to every customer’s tap. The Authority operates three New York State-certified laboratories; one located at each water treatment plant and an internationally recognized water quality laboratory in Lackawanna, which contains state of the art testing equipment. The National Environmental Laboratory Accreditation Program (NELAP) certifies this laboratory. NELAP is a national accrediting body, made up of state, federal, and commercial laboratory accreditation officials, that sets strict standards for public and commercial laboratories across the country.

Highly trained water treatment plant operators perform hourly tests at each phase of the treatment process. Our professional water quality staff also collects 200 samples a month from the distribution system and tests for organic and inorganic compounds. All results are sent to the New York State and Erie County Health Departments to confirm that the Authority meets all regulations.

The Authority employs 252 dedicated professionals who continuously participate in educational training, licensing
SHOULD I BUY BOTTLED WATER OR A HOME FILTER SYSTEM TO BE SAFE?

No. Your water is extremely safe to drink and very inexpensive. The Authority far exceeds even the most stringent governmental standards.

Your water is rigorously treated and is fluoridated to prevent tooth decay. All this is provided to you for only $2.31 per 1,000 gallons.

The bottled water industry is far less regulated than public water suppliers. The standards which govern the quality of the Authority’s water, and which are established by the Environmental Protection Agency and enforced by the New York State Health Department, are more stringent than the regulations that govern the bottled water industry and are enforced by the Food and Drug Administration (FDA).

Water treatment devices also are not needed to make your water safe. In fact, if not properly maintained, the devices may cause an adverse affect on your water quality.

Authority customers receive the same quality water that entrepreneurs try to sell with fancy packaging and

SYSTEM IMPROVEMENTS

In 2001, the Authority completed several system improvements in its effort to maintain a safe and dependable water supply.

Improvements included the installation of 18,650 linear feet of pipeline, refurbishing the interiors and exteriors of four water storage tanks and large valve replacements at eight locations throughout the Authority’s service district.

Internal operational upgrades were made in areas such as chemical dosage control, energy use management, and filter backwashing procedures. After a yearlong study at the Authority’s Pilot Treatment Plant, a new filter media design was selected and installed in six of the Sturgeon Point Treatment Plant’s ten filters. The new media replaces previous media installed in 1966 and

1972 and will enhance the Authority’s treated water quality with greater particulate removal. The implementation of the Authority’s Supervisory Control and Data Acquisition (SCADA) system technology continues to expand to increase efficiency in the distribution system. SCADA is a computer system that monitors all of the Authority’s pump stations and storage tanks. During the past year, the Authority completed the SCADA installation at its Van de Water Treatment Plant in Tonawanda. This project will further improve efficiency by eliminating manual controls and provide on-line monitors as well as automated control of plant operations.

The Authority will continue its aggressive system improvement program. The 2002 budget contains a $12 million capital-spending plan for significant upgrades to the Authority’s system, including line replacements in Lackawanna, Cheektowaga, Newstead and Amherst,

PROMOTING REGIONALISM

The Authority also continues to assist local governments in providing water less expensively and more efficiently, by leading the effort to consolidate the region’s public water systems. Municipalities are realizing that joining the Authority’s system is a sound economic decision for them and their residents.

Recent consolidations have added more than 7,300 new customers to the Authority’s service area, but more important, they’ve resulted in significant savings for the towns and their ratepayers through reductions in water rates, maintenance costs, and expenses associated with system improvements. Last year, the City of Tonawanda decided to join the Authority’s system and get out of the water business. The merger will be completed by early 2003 and will provide for improved and more cost-effec-
WHERE DOES MY WATER COME FROM?

Your water comes from two sources. The Authority's Sturgeon Point Treatment Plant in the Town of Evans draws water from Lake Erie to supply the southern part of Erie County and communities in Cattaraugus County. The Van De Water Treatment Plant in Tonawanda draws water from the "mighty" Niagara River and services municipalities in northern Erie County. These two plants serve more than a half million people in Western New York. In each plant, the water is rigorously treated, then sent through the Authority's extensive distribution system until it arrives at your tap, fresh, pure, and ready for you to enjoy.
ERIE COUNTY WATER AUTHORITY
2001 WATER QUALITY MONITORING REPORT
ANNUAL WATER QUALITY REPORT SUPPLEMENT
DETECTED CONTAMINANTS
Terms and abbreviations are defined at end of data tables.

### Metals, Inorganics, Physical Tests

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (mg/liter)</th>
<th>MCLG (mg/liter)</th>
<th>Level Detected</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloride</td>
<td>250</td>
<td>NE</td>
<td>18-25 mg/liter; Average = 18</td>
<td>Naturally occurring in source water</td>
</tr>
<tr>
<td>Chlorine</td>
<td>4.0</td>
<td>NE</td>
<td>0.6 to 1.8 mg/liter; Average = 1.2</td>
<td>Added for disinfection</td>
</tr>
<tr>
<td>Copper</td>
<td>1.3 mg/liter (AL)</td>
<td>1.5 mg/liter (AL)</td>
<td>ND-0.24 mg/liter; 90th percentile 0.06 mg/liter, 0 of 51 above AL</td>
<td>Home plumbing corrosion; erosion of nature deposits</td>
</tr>
<tr>
<td>Fluoride</td>
<td>2.2 mg/liter</td>
<td>2.2 mg/liter</td>
<td>0.86 -1.13 mg/liter; Average = 0.98</td>
<td>Added to water to prevent tooth decay.</td>
</tr>
<tr>
<td>Iron</td>
<td>300</td>
<td>NE</td>
<td>1000 mg/liter</td>
<td>Naturally occurring in source water</td>
</tr>
<tr>
<td>Lead*</td>
<td>15 μg/liter</td>
<td>0 μg/liter</td>
<td>ND-70 μg/liter; 90th percentile 9 μg/liter, 4 of 51 above AL</td>
<td>Home plumbing corrosion; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrate</td>
<td>10 mg/liter</td>
<td>10 mg/liter</td>
<td>0.27 mg/liter</td>
<td>Runoff from fertilizer use; sewage</td>
</tr>
<tr>
<td>pH</td>
<td>NR</td>
<td>NE</td>
<td>7.4-8.1 SU; Average = 7.9</td>
<td>Naturally occurring; adjusted for corrosion control</td>
</tr>
<tr>
<td>Sodium</td>
<td>NR</td>
<td>10.5 mg/liter</td>
<td>Naturally occurring in source water</td>
<td></td>
</tr>
</tbody>
</table>

* Lead. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

**Turbidity is a measure of the cloudiness of water. ECWA monitors turbidity because it is a good indicator of the effectiveness of our filtration system.

### Organic Compounds

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (μg/liter)</th>
<th>MCLG (μg/liter)</th>
<th>Level Detected (μg/liter)</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Trihalomethanes</td>
<td>60</td>
<td>NE</td>
<td>18-48 μg/liter; Average = 33</td>
<td>By-product of water disinfection (chlorination)</td>
</tr>
<tr>
<td>Chlora Hydrate</td>
<td>NR</td>
<td>NE</td>
<td>ND-6.4 μg/liter; Average = 3.3</td>
<td>By-product of water disinfection (chlorination)</td>
</tr>
<tr>
<td>Haloacetonitriles</td>
<td>NR</td>
<td>NE</td>
<td>1.7-5.5 μg/liter; Average = 3.8</td>
<td>By-product of water disinfection (chlorination)</td>
</tr>
<tr>
<td>Haloalkenes</td>
<td>NR</td>
<td>NE</td>
<td>ND-2.4 μg/liter; Average = 1.3</td>
<td>By-product of water disinfection (chlorination)</td>
</tr>
<tr>
<td>Total Haloacetic Acids</td>
<td>60</td>
<td>NE</td>
<td>15-41 μg/liter; Average = 24</td>
<td>By-product of water disinfection (chlorination)</td>
</tr>
<tr>
<td>Total Organic Halides</td>
<td>NR</td>
<td>NE</td>
<td>61-134 μg/liter; Average = 96</td>
<td></td>
</tr>
</tbody>
</table>

### Radioactive Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (pCi/liter)</th>
<th>MCLG (pCi/liter)</th>
<th>Level Detected (pCi/liter)</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Alpha</td>
<td>15.0</td>
<td>0</td>
<td>0.4</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Beta</td>
<td>50**</td>
<td>0</td>
<td>1.7</td>
<td>Decay of natural and man-made deposits</td>
</tr>
<tr>
<td>Combined Radium 226/Radium 228</td>
<td>5.0</td>
<td>0</td>
<td>1.1</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Radon-222</td>
<td>NR</td>
<td>300</td>
<td>3</td>
<td>Natural radioactive gas</td>
</tr>
</tbody>
</table>

**New York State Department of Health considers 50 pCi/liter to be the level of concern for beta particles.

### Microbiological Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (CFU/100ml)</th>
<th>MCLG (CFU/100ml)</th>
<th>Level Detected (CFU/100ml)</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>95% &lt;1/100mL</td>
<td>0.0</td>
<td>99.4% &lt; 1/100 ml lowest monthly negatives</td>
<td>Naturally present in environment</td>
</tr>
<tr>
<td>E. Coli Bacteria</td>
<td>&lt;1/100mL</td>
<td>0.0</td>
<td>100% &lt; 1/100 ml (no positive tests in 2001)</td>
<td>Human and animal fecal waste</td>
</tr>
</tbody>
</table>

### UNREGULATED SUBSTANCES

**Contaminants that may be present in source water before we treat it include:**

- **Microbial/Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic/Contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides** which may come from a variety of sources such as urban storm water runoff, agricultural and residential uses.
- **Organic/Chemical/Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive/Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Cryptosporidium is a microscopic pathogen found in surface waters throughout the United States, as a result of animal waste runoff. It can cause abdominal infection, diarrhea, nausea, and abdominal cramps if ingested. Our filtration process effectively removes cryptosporidium. It was not detected in any raw or treated water samples in 2001. Giardia is a microbial pathogen present in varying concentrations in many surface waters. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. In

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (μg/liter)</th>
<th>MCLG (μg/liter)</th>
<th>Level Detected (μg/liter)</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkalinity</td>
<td>NR</td>
<td>NE</td>
<td>8.0</td>
<td>Naturally occurring in source water</td>
</tr>
<tr>
<td>Aluminum</td>
<td>NR</td>
<td>NE</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td>NR</td>
<td>NE</td>
<td>31.0</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>NR</td>
<td>NE</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Hardness</td>
<td>NR</td>
<td>NE</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>Silicon</td>
<td>NR</td>
<td>NE</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>NR</td>
<td>NE</td>
<td>156</td>
<td></td>
</tr>
</tbody>
</table>
AL = Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

CFU/100 ml = Colony Forming Units per 100 milliliters

MCL = Maximum Contaminant Level: the highest level of a contaminant allowed in drinking water.

MCLG = Maximum Contaminant Level Goal: the level of a contaminant in drinking water below which there is no known or expected risk.

mg/liter = milligrams per liter (parts per million)

mrem/yr = millirems per year

ND = Not Detected

Abbreviations and terms:

ND = Not Detected

QUESTIONS?

If you have any questions or would like more information concerning this report or the Erie County Water Authority, please contact Customer Service at 849-8484; visit our web site at www.ecwa.org, or E-mail to contacts@ecwa.org.

Thank you for allowing the Erie County Water Authority to continue to provide you with quality drinking water. The Authority is committed to providing you with information about your water supply. Customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

Any member of the public may participate in decisions affecting the quality of water. The Authority’s three member Board of Commissioners ultimately makes those decisions on behalf of our customers. Board meetings take place every other Thursday at 4:00 p.m. in the board meeting room, Erie County Water Authority, 350 Ellicott Square Building, 295 Main Street, Buffalo, New York 14203. Occasionally a board meeting is rescheduled. Call 849-