

PLEASE HELP US OUT

- Security and public safety are number one with us. If you see anything that looks out of the ordinary or "Just not right" please call us immediately at 674-8855 or call 911. Only the Elma Water Department personnel or town of Elma fire companies are allowed to use our fire hydrants
 - Please have your house number posted on your house and mailbox for our service personnel
 - Estimated readings can create thousand dollar water bills if you have an internal leaking toilet or water powered sump pump becoming primary without you noticing.
 - We need the larger half of your bill (the half with the barcode on it) returned with your payment.
 - Trim trees around fire hydrants and keep area clean. Shovel the snow around the hydrant to help protect your family and neighbors in the time of need.
 - Learn more about the Town of Elma by visiting our web site at www.elmanewyork.com and check out departments
 - If you snowbird for the season, we need your out-of-state mailing address so you can get your bills on time. We are noticing a problem with forwarded bills being received late.
- E-mail any comments you have to us at elmawater@roadrunner.com.

Attention Elma Residents

Re: Water System Emergency

At times, we are forced to shut down the water mains due to a water main break. We need to know if anyone in your home is on home dialysis or has any medical water dependent needs. Please contact our office so we can put your name in our emergency plan book so we can contact you if we have a problem in your area.

During the winter, we requested updated phone numbers so we could contact you in the case of an emergency. If you did not provide us with a number, please do so now so that we will have the ability to reach you. We do not have time to look up numbers.

Most homes are prepared for power outages, but are you prepared for a water shut down. Each residence should have some water in storage. Remember to rotate this water to keep it fresh.

Each home should also have clean containers to haul water should we have a long term emergency. We suggest a 5 gallon collapsible plastic water jug (used in camping) sold in any sporting goods store.

Do you think your household is prepared if we have a water emergency shut down that may last for 10 to 12 hours.

***Annual Drinking Water Quality Report for 2007
Elma Water Department
5730 Seneca St. ,Elma, New York 14059
(Public Water Supply ID#1420549)***

INTRODUCTION

To comply with State regulations, [the Elma Water Department](#), 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](#)

[health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard.](#) This report provides 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.

If you have any questions about this report or concerning your drinking water, please contact [the Elma Water Department at 716-674-8855](#). We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held [the first and third Wednesdays of the month at the Elma Town Hall located at 1600 Bowen Road, Elma, New York at 8:00 P.M.](#) Also any member of the public may participate in decisions affecting the quality of water. The Board of Commissioners at the Authority 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 849-8484 in advance for updated board meeting information.

WHERE DOES OUR WATER COME FROM?

The Elma Water Department is a special district in the Town of Elma, which was formed in 1964 to distribute potable water to its residents. Elma receives 100% of its water from the Erie County Water Authority. Our objective and goals are to give out water customers good quality water, available water for fire protection, maintain our distribution system, and good service to our customers and residences for the Town of Elma, at the best possible price. 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 EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water comes from two sources. The Authority's Sturgeon Point Treatment Plant in the Town of Evans draws water from Lake Erie to supply southern 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 deliver an average of 65 million gallons a day to 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 where it arrives at your tap, fresh, pure, and ready for you to enjoy. During 2007, our system did not experience any restriction of our water source.

FACTS AND FIGURES

Our water system serves [4670 water accounts through 4670 service connections](#). The total water pumped in 2007 was 628,349,000 gallons purchased from Erie County Water Authority. The daily average of water pumped into our distribution system is 1,741,000 gallons per day. Our highest single day was 3,165,000 gallons. The amount of water delivered to customers was 568,097,000 gallons. Thirteen million gallons of water was used in our annual flushing program to maintain our mains. [This leaves an unaccounted for total of 47,252 million gallons. This water was used to flush mains, fight fires and leakage, accounts for the remaining 47,252 million gallons \(7.52% of the total amount pumped\).](#) In 2007, water customers were charged \$3.59 per 1,000 gallons of water or the annual average water charge per user is \$100.52.

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 tables presented at the end of this report depicts 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, are 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 716/858-7690.

The Elma Water Department takes ten (10) water samples per month at different sites around the town for microbiological contamination. **In 2007, there were no violations.** The department, in its maintenance program, flushed water mains on over 92 streets in town in 2007, and had good chlorine readings at all 92 locations.

This year we also did eight (8) samples every other month for stage II disinfectant for data as mandated by the state. All our samples were without violations.

In 2005 the Elma Water Department concluded a Lead and Copper survey and had NO sample over the 90th percentile value. A percentile is a value on a scale of 100 that indicates the percent of distribution that is equal or below it. The 90th percentile is equal or greater than 90% of the copper and lead values detected at your water system. In this case, 30 samples were collected and the 90th percentile was for lead 0.003 with the highest level at 0.012 and for copper 0.064 with the highest level recorded as 0.140. The action level for lead is 0.015 milligrams per liter of lead or 1.3 milligrams per liter of copper.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2007, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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).

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:

- ◆ A continuous leak from a hole this size at 60 psi would over a three month period, waste the amount shown
 - 1/16" 74,000 gallons
 - 1/8" 296,000 gallons

0 3/16" 666,000 gallons

0 1/4" 1,181,500 gallons

- ♦ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ♦ Turn off the tap when brushing your teeth.
- ♦ 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 one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ♦ 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.
- ♦ If protected by a water powered backup sump pump system, do routine checks on your system to make sure the water powered system does not become the primary system.

SYSTEM IMPROVEMENTS

In 2007, [we installed 6 additional fire hydrants into our water system](#). This improvement gives added fire protection to our community. We replaced 12 fire hydrant restraint systems to prevent future system shut downs. We continue to enhance our system record keeping and mapping with our GIS System. We also replaced the 43 year old generators at the main pump station at 5730 Seneca Street and the Jamison Road pump station with larger units that power the entire station. This will help ensure operational ability during power outages

CLOSING

Thank you for allowing the Elma Water Department 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. Additional copies of this report may be obtained at the Elma Water Department. Please call our office if you have questions.

Erie County Water Authority

2007 WATER QUALITY MONITORING REPORT
ANNUAL WATER QUALITY REPORT SUPPLEMENT
DETECTED CONTAMINANTS

Terms and abbreviations are defined at the end of data tables.

Metals, Inorganics, Physical Tests	Violation Yes/No	MCL	MCLG	Level Detected	Sources in Drinking Water
Arsenic	No	10 ug/liter	NE	0.62-0.72 ug/liter Avg.=0.67	Erosion of natural deposits; orchard runoff, glass & electronic production waste
Asbestos	No	7MFL	7 MFL	ND-0.2 MFL, Avg.=ND	Erosion of natural deposits; decay of asbestos cement water mains
Barium	No	2 mg/liter	NE	0.021 mg/liter	Erosion of natural deposits; drilling & metal wastes
Chloride	No	250 mg/liter	NE	18-26 mg/liter; Avg.=19	Naturally occurring in source water
Chlorine	No	MRDL=4.0	MRDLG = 4mg/liter	<0.20 to 2.2 mg/liter; Avg.=0.76	Added for disinfection
Fluoride	No	2.2 mg/liter	2.2 mg/liter	0.04-1.27 mg/liter; Avg.=0.77	Added to water to prevent tooth decay
Lead*	No	15 ug/liter	0 ug/liter	ND-38 ug/liter, 90 th percentile 4 ug/liter, 1 of 97 above AL	Home plumbing corrosion; natural erosion
Nitrate	No	10 mg/liter	10 mg/liter	0.21 to 0.24 mg/liter Avg. =0.22	Runoff from fertilizer use

pH	No	NR	NE	6.8-8.8 SU; Avg. = 8.0	Naturally occurring; adjusted for corrosion control
Turbidity **	No	TT	NE	0.42 NTU highest detected; 97.3% lowest monthly% < 0.30 NTU	Soil runoff

***Lead.** Lead is not present in the drinking water that is treated and delivered to your home. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The Erie County Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from Safe Drinking Water Hotline(800-426-4791) or on the web at the EPA website www.epa.gov/safewater/lead.

****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. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for bacterial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. On 8/9/07 the Van de Water Treatment Plant encountered a treatment upset which caused effluent turbidity to exceed 0.3 ntu for a period of time. Corrective actions were taken throughout the day and into 8/10/07 until the plant turbidities were below th 0.3 ntu MCL. At no time did the plant reading exceed the maximum allowable treatment technique MCL. The combined filter turbidities were <0.3 ntu 97.3% of the time for the month of August.2007.

Organic Compounds	Violation Yes/No	MCL (ug/liter)	MCLG (ug/liter)	Level Detected (ug/liter)	Sources in Drinking Water
Total Trihalomethanes	No	RAA<80	NE	13-96 ug/liter; RAA=41.0	By-product of water disinfection (chlorination)
Total Haloacetic Acids	No	RAA<60	NE	5-54ug/liter; RAA= 19.9	By-product of water disinfection (chlorination)
Chloromethane*	No	5	NE	Nd-0.58 UG/LITER; Avg. ND	Used in organic chemistry as an extractant & in industry as a solvent
1,2-Dichloroethane*	No	5	NE	Nd-0.61 UG/Avg ND	Discharge from industrial chemical factories
MIB and Geosmin	No	NR	NE	ND-4.5 ng/liter; Average<2 (ND)	Taste and odor compounds from algae decomposition

*Low levels of these compounds were detected in a sample taken 12/19/07 at the Sturgeon Point Treatment Plant. The low levels detected are not in violation of the MCL. Follow-up testing did not detect these compounds in the water. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

Radioactive Parameters	Violation Yes/No	MCL	MCLG	Level Detected	Sources in Drinking Water
Gross Alpha	No	15.0 pCi/liter	0 pCi/liter	ND-1.7 pCi/liter	Erosion of natural deposits
Gross Beta	No	50**pCi/liter	0 pCi/liter	ND-2.2 pCi/liter	Decay of natural and man-made deposits
Combined Radium 226/Radium 228	No	5.0 pCi/liter	0 pCi/liter	ND	Erosion of natural deposits
Radon-222	No	NR	300 pCi/liter	3 pCi/liter	Natural radioactive gas
Total Uranium	No	30 ug/liter	0 ug/liter	ND-0.48 ug/liter	Erosion of natural deposits

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

Microbiological Parameters	Violation Yes/No	MCL	MCLG (CFU/100ml)	Level Detected	Sources in Drinking Water
Total Coliform Bacteria*	No*	Any positive sample	0	047%=highest % monthly positives	Naturally present in environment
E. coli Bacteria	No**	Any positive sample	0	2***	Human and animal fecal waste

*A violation occurs when more than 5% of the total coliform samples collected per month are positive

** A violation occurs when a total coliform positive sample is positive for E.coli and a repeat total coliform sample is positive or when a total coliform positive sample is negative for E.coli but a repeat total coliform sample is positive and the sample is also positive for E.coli.

*** A water sample taken on 1/16/07 at the Dodge Rd Elementary School was suspected of being positive for E.coli. Follow-up sampling and testing was performed and the results were negative for both total coliform & E.coli. No MCL violation occurred.

On 4/04/07 the Erie County Water Authority was issued a reporting violation for failing to report a suspected positive E.coli within the required time frame. The organism was detected in a water sample taken 3/31/07 at the Van de Water Treatment Plant. Follow-up sampling and testing were performed and the results were negative for both total coliform & E.coli. No MCL violation occurred.

GIARDIA AND CRYPTOSPORIDIUM	Violation Yes/No	Number of Samples Tested	Number of Samples Testing Positive	
			Giardia	Cryptosporidium
Source Water	No	24	5	1
Treated Drinking Water	No	24	0	0

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. Cryptosporidium was not detected in any treated water samples taken in 2007.

Giardia is a microbial pathogen present in varying concentrations in many surface waters. In 2007 Giardia was detected in 5 of 24 raw source water samples but

was not detected in any treated drinking water samples. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection alone.

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.

NON-DETECTED CONTAMINANTS

Compounds or Elements Tested but Not Detected			
2-Chlorotoluene	1,1,2-Trichloroethane	Chloromethane	Methomyl
4-Chlorotoluene	1,2,3-Trichloropropane	Chromium	Methoxychlor
2,4-D	1,1,2-Trichlorotrifluoroethane	Cyanide	Methyl t-butyl ether (MTBE)
4,4'-DDE	1,2,4-Trimethylbenzene	DCPA Diacid degradate	Methylene Chloride
1,2-Dibromo-3-Chloropropane	1,3,5-Trimethylbenzene	DCPA Monoacid degradate	Metolachlor
1,2-Dibromoethane	Acetochlor	Dalapon	Metribuzin
1,2-Dichlorobenzene	Alachlor	Di(2-ethylhexyl) adipate	Molinate
1,3-Dichlorobenzene	Aldicarb	Di(2-ethylhexyl) phthalate	Napthalene
1,4-Dichlorobenzene	Aldicarb Sulfone	Dibromomethane	Nitrite
1,1-Dichloroethane	Aldicarb Sulfoxide	Dicamba	Nitrobenzene
DCPA monoacid degradate	Aldrin	Dichlorodifluoromethane	Oxamyl (Vydate)
1,1-Dichloroethylene	Antimony	Dieldrin	PCB 1016
Cis-1,2-Dichloroethylene	DCPA monoacid degradate	Dinoseb	PCB 1221
Trans-1,2-Dichloroethylene	Atrazine	Diquat	PBC1232
1,2-Dichloropropane	Benzene	EPTC	PCB 1242
1,3-Dichloropropane	Benzo(a)pyrene	Endothall	PCB 1248
2,2-Dichloropropane	Beryllium	Endrin	PCB 1254
1,1-Dichloropropene	Bromobenzene	Ethylbenzene	PCB 1260
Cis-1,3-Dichloropropene	Bromochloromethane	Free Ammonia	Pentachlorophenol
Trans-1,3-Dichloropropene	Bromomethane	Glyphosate	Perchlorate
2,4-Dinitrotoluene	Butachlor	Heptachlor	Phosphate
2,6-Dinitrotoluene	n-Butylbenzene	Heptachlor Epoxide	Pichloram
3-Hydrozycarbofuran	sec-Butylbenzene	Hexachlorobenzene	Propacchlor
1-Naphthol	t-Butylbenzene	Hexachlorobutadiene	Propoxur
2,3,7,8-TCDD (Dioxin)	Cadmium	Hexachlorocyclopentadiene	n-Propylbenzene
2,4,5-TP (Silvex)	Carbaryl	Isopropylbenzene	Selenium
1,1,1,2-Tetrachloroethane	Carbofuran	p-Isopropyltoluene	Silver
1,1,2,2-Tetrachloroethane	Carbon Tetrachloride	Lindane	Simazine
1,2,3-Trichlorobenzene	Chlordane	Manganese	Styrene
1,2,4-Trichlorobenzene	Chlorobenzene	Mercury	Terbacil
1,1,1 Trichloroethane	Chloroethane	Methiocarb	Tetrachloroethylene
Thallium	Toluene	Toxaphene	Trichloroethylene
Trichlorofluoromethane	Vinyl Chloride	Xylenes	Zinc
			Copper

Abbreviations and Terms:

- 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.
- MFL=Million fibers/liter (Asbestos)
- Mg/liter = milligrams per liter (parts per million)
- MRDL= Maximum Residual Disinfectant Level – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- MRDLG = Maximum Residual Disinfectant Level Goal – the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- mrem/yr = millirems per year
- ND= Not Detected – absent or present at less than testing method detection limit
- Ng/liter = nanograms per liter (parts per trillion)
- NE = Not Established
- NR = Not Regulated
- NTU = Nephelometric Turbidity Units
- pCi/liter = picocuries per liter

RAA = Running Annual Average

SU = Standard Units (pH measurement)

TT = Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water

ug/l = Micrograms per liter (parts per billion)

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions

< = Less Than and ≤ = Less Than or Equal to

Results are from 2007 analyses or from the most recent year that tests were conducted in accordance with regulatory requirements. Some tests are not required to be performed on an annual basis. Information can be obtained by contacting the ECWA's Water Quality Laboratory (716-685-8570) or on the internet at www.ecwa.org.