

ADOPT-A-HYDRANT PROGRAM



The Cortland Water Department has an ongoing program that allows residents to adopt a fire hydrant in the City of Cortland. By adopting the fire hydrant you provide for new paint as needed, keep the grass trimmed around it during summer months and the snow shoveled away from it for easy access during the winter months. We have adoption certificates available for your hydrant complete with identification and origin records, just pick a name.

Over the past thirty one years, many civic groups have taken the time and initiative to paint some of our five hundred fire hydrants around the city. Our thanks and appreciation go out to these groups and those who adopt our fire hydrants.

If you are interested in adopting a fire hydrant or are interested in painting hydrants, we will provide the cleaning tools, paint and paint brushes and a list of hydrants in need of your services. Please call 753-3061 and make arrangements for yours today.



CITY OF CORTLAND WATER DEPARTMENT

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Public Water Supply Number
1101754

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**ANNUAL WATER
QUALITY REPORT
FOR 2019**

A LITTLE ABOUT YOUR PUBLIC WATER SUPPLY, FACTS AND FIGURES

The Cortland Water Department is pleased to provide you with this informational piece regarding water operations in the City of Cortland. During 2019, 1,001,002,903 gallons of water were pumped. Metered water totaled 451,624,500 gallons. Sources of water loss include water main breaks, fire hydrant flushing and ageing water meters. Department personnel repair leaks in the system each year to keep water loss at a minimum.

In the City of Cortland, water is measured in cubic feet. One unit of water is 100 cubic feet which equals 748 gallons. The cost to deliver water to the residence in 2019 was \$3.40 per unit. Units sold over 500 per quarter were at \$3.10 per unit and over 1001 units were at \$3.30 per unit. Consumption of 12 units or less per quarter resulted in a minimum bill of \$38.76. In 2020 water rates will increase to \$3.42 per unit. Units sold over 500 will be at \$3.12 and over 1001 units will be at \$3.32. The minimum bill amount will be \$41.04.

The \$3.42 residential rate with the \$3.12 and \$3.32 commercial rates generate approximately \$2,270,500 to operate the water treatment facility, perform maintenance and improvements on 70 miles of distribution mains, over 500 fire hydrants, and manage 5200 accounts for a population of 20,000. This is accomplished with a compliment of 10 fulltime staff members; three in Administration, two in Water Treatment and five in Distribution Maintenance.

In 2019, Water department crews repaired leaks in the water system. All fire hydrants were flushed to improve water quality and inspected by the Water Department. All fire hydrant repairs are completed by Water Department personnel. Water main pipe was replaced on Douglas St and most of Clinton Ave. Water mains, hydrants and valves are replaced as part of our ongoing infrastructure improvement program.

During 2019 our water system was in compliance with applicable State drinking water operating, monitoring, and reporting requirements.

In 2020, the Water Department plans to continue the water meter replacement project. Residents that have not received a new water meter will be notified by mail. The Clinton Avenue water main project will be completed. Iron pipe water service laterals will be replaced as part of a New York State grant program. Property owners with iron pipe services will be notified with a replacement schedule. Water Department personnel will continue to survey the water system for leaks and perform repairs as needed.

The Otter/Dry Creek Aquifer is our "Sole Source Aquifer" which provides water for our production Wells. Well #3 produces 3.3 mgd, Well #4 produces 5.8 mgd and Well #5 produces 5 mgd. (mgd-million gallons daily). Our finished water requires chlorination at 0.55 mg/l (milligrams per liter), our only treatment process.

On the backside of this report you will find those contaminants that were found in the finished water. None of the contaminants found exceeded established Maximum Contaminant Levels (MCL's).

The Cortland Water Department works with the Cortland County Health Department in providing the safest water possible. For more information on water quality and the effects of contamination and microorganisms, call 753-5035 or visit your local Health Department at 60 Central Ave., Cortland, New York 13045.

After reading this report, please feel free to contact us at 753-3061. A good report is one that is read and understood. We hope that we have accomplished that goal. Please let us know.

As New York State regulations require, the Cortland Water Department routinely tests your drinking water for numerous contaminants. The list includes: Total Coliform, Inorganic Compounds, Nitrates, Nitrites, Volatile Organic Compounds, Total Trihalomethanes, Haloacetic Acids, Lead, Copper, Radiologicals and Synthetic Organic Compounds. As you can see, our system had no violations, but we have learned through our testing that some contaminants have been detected; these contaminants were detected below New York State requirements. Only those contaminants detected are listed below. A complete list can be made available upon request.

Contaminants	Violation Yes/No	Date of Sample	Level Detected	*Unit of Measure	MCLG Limit	Regulatory Limit	Likely Source of Contamination
Barium	No	5-11-17	43	ug/l	2000	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloride	No	5-30-19	83.8	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Sodium	No	5-30-19	49.1	mg/l	20	(1) N/A	Naturally occurring; road salt; water softeners; animal wastes.
Nitrate	No	5-30-19	3.11	mg/l	10	10	Nitrates can be from fertilizer use runoff; leaching from septic tanks, sewage and/or erosion of natural deposits.
Chromium	No	5-11-17	1.8	ug/l	100	100	Discharge from steel and pulp mills; erosion of natural deposits.
Trichloroethylene (Trichloroethene) (TCE)	No	'19 Ann. Ave. Range Well 4	0.35 (ND-0.56)	ug/l	0	5	Discharge from metal degreasing sites and other factories.
	No	'19 Ann. Ave. Range Well 5	0.53 (0.52-0.54)	ug/l	0	5	Discharge from metal degreasing sites and other factories.
Total Trihalomethanes (TTHM)	No	'19 Ann. Ave. Range	10.5 (10.4-10.6)	ug/l	N/A	80	Resulting from the reaction of chlorine on organic matter.
Combined Radium 226 and 228	No	5-30-19	1.12	pCi/L	N/A	5	Erosion of natural deposits.
Gross alpha	No	5-30-19	-0.43	pCi/L	0	15	Erosion of natural deposits.
Gross beta	No	5-30-19	0.63	pCi/L	0	(2) 50	Decay of natural deposits and man-made emissions.
Sulfates	No	5-11-17	13.3	mg/l	N/A	250	Naturally occurring.
Zinc	No	12-28-17	25	ug/l	N/A	500	Naturally occurring; Mining waste.

(1) Water containing more than 20 mg/l of sodium should not be used for drinking by people 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.

(2) The state considers 50pCi/l to be the level of concern for beta particles.

Lead sampling of 30 sites during 2019 revealed a range of lead detection from a low of ND to a high of 9.4 ug/l. We had no samples above the AL of 15 ug/l and the 90th percentile was the 4th highest value 2.4 ug/l. No violation. Sources of contamination include corrosion of household plumbing systems; erosion of natural deposits.

Copper sampling of 30 sites during 2019 revealed a range of copper detection from a low of 8.2 ug/l to a high of 187.0 ug/l. We had no samples above the AL of 1300 ug/l and the 90th percentile was the 4th highest value 91.3 ug/l. No violation. Sources of contamination include corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Bacteriological sampling consists of 5 routine micro-biological samples taken four times per month (a total of 240 per year). New York State Department of Health requires that if bacteria shows up in a water sample, we must do a repeat sample at the failed site plus the water service both sides of the failed site. In addition, a fourth sample anywhere in the system and one additional sample is taken the following month.

*Definitions you need to know:

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

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfection Level (MRDL):

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.

Maximum Residual Disinfectant Level Goal's (MRDLGs):

The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Milligrams per Liter (mg/l): Corresponds to one part of liquid to one million parts of liquid (parts per million—ppm).

Micrograms per Liter (ug/l): Corresponds to one part of liquid to one billion parts of liquid. (parts per billion—ppb).

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

90th Percentile Value: The values reported for lead and copper represent the 90th percentile of the 30 sites. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90 percent of the lead and copper values detected at your water system.

Picocuries per liter (pCi/l): Picocuries per liter is a measure of the radioactivity in water.

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

This year, quarterly Water and Sewer Bills will be considered late and subject to a 10% penalty if paid after the following dates: April 30, July 31, October 31.

There is a night box at the rear of City Hall for payments made after business hours or holidays and weekends.

A Source Water Assessment Program (SWAP)

New York State Department of Health has completed a source water assessment for our system. The assessment rates the susceptibility of a water system's source water. The City of Cortland's rating is "highly susceptible" due to the highly permeable nature of our aquifer and the close proximity of land uses and activities to our three wells. The nitrate, chloride and sodium levels reported in this document help to support the "highly susceptible" rating.

Steps have been taken in conjunction with the Town of Cortlandville in delineating the aquifer recharge and contribution areas. A newly written, but not yet implemented Land Use Plan recognizes our highly susceptible aquifer. Through zoning and aquifer protection district changes, our "Sole Source Aquifer" will be better protected.

Specifics of the Aquifer Protection District may be reviewed at the Town of Cortlandville Office at 3577 Terrace Road or the Cortland County Health Department at 60 Central Avenue.

Water Emergency Contact Numbers

Monday thru Friday, 8:30 am—4:00 pm, 753-3061
Treatment Plant, Automated System, 753-0421
Cell Phone Numbers: 345-0011, 345-0013,

Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hot Line (1-800-426-4791). The source of drinking water (both tap 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 EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

Radon

Radon is a naturally occurring radio-active gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes. For additional information call your state radon program at (1-800-458-1158) or call the EPA's Radon Hotline at (1-800-SOS-Radon).

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).

CITY OF CORTLAND WATER DEPARTMENT WATER SUMMARY FOR 2019

The balance of our **2019 Annual Water Quality Report** contains a lot of mandatory technical information in a technical language that tends to detract from the original intent of an Annual Water Quality Report, which is to educate and inform the water consumer about the quality of their public water supply.

While the information is accurate and important, it is also important that the public understand, in simplest terms, that their public water supply meets and often exceeds minimum water quality standards as set forth by the Environmental Protection Agency (EPA).



Water Department personnel are constantly striving to improve the water quality they deliver through programs aimed at protection of the public water before, during and after treatment. In addition, your water department works very closely with the Cortland County Health Department and Cortland County Soil and Water Conservation District in their efforts to educate our public on water quality issues and the protection of our "Sole Source Aquifer", Otter Creek/Dry Creek Aquifer.

So please, drink our water with total confidence that it is very safe, healthy and good for you.

Question: Are there any contaminants in Cortland's Water Supply?
Answer: Yes, those detected are listed in this report. Please note that they are well below the Maximum Contaminant Level (MCL).

Question: How can I be sure that the information in this report is accurate?
Answer: Water Quality Reports from water suppliers in Cortland County are reviewed by the Cortland County Health Department for content and accuracy. The testing of the samples taken are performed by State Certified Laboratories. Our water quality testing is performed by Microbac Environmental Labs in Polkville.

Question: What treatment processes are used on Cortland's water?
Answer: The Cortland Water Department's only treatment process is disinfection, which is accomplished by chlorination.

Question: Why do an annual report?
Answer: The Annual Water Quality Report is required by the EPA. The report also allows us to inform consumers about water quality and accomplishments made by our Department over the last year.

If you have a question regarding your public water supply, please call us at 753-3061 or fax us at 756-1732 or E-mail us at mwethje@cutland.org

Did you know?

Your water bill is a reflection of the amount of water units you used over a three month period. Each unit billed equals 748 gallons. Approximately forty-five percent of our customers use thirteen units of water or less per quarter. A minimum water bill in 2020 is \$38.76.

High water bill?

The bathroom toilet is usually the cause of unexplainably high water and sewer bills. There are two places in the toilet tank where leaks are out of sight. One is the flapper valve in the bottom of the tank and the second is the overflow pipe.

The City of Cortland has approximately 115 acres of land up-gradient of our three production wells providing Well Head Protection. You can learn more about Well Head Protection from the Source Water Assessment Program (SWAP). You can get a copy of the Source Water Assessment Program by calling 753-3061.

The Otter Creek/Dry Creek Aquifer supplies all the water for the City of Cortland and Cortlandville. This aquifer is an Environmental Protection Agency (EPA) designated "Sole Source Aquifer". The aquifer starts near Gracie Road and ultimately empties into the Chesapeake Bay through the Susquehanna River Basin. Although the Aquifer provides an adequate amount of water to meet present and future demands, it is always important to conserve water. We have booklets with water conservation techniques available upon request.

If you have an after hours emergency, call the pump station at 753-0421, and the answering service will provide you with emergency personnel cell phone numbers.