

Annual Drinking Water Quality Report for 2021
Village of Castorland
5185 State Route 410, castorland NY 13620
(Public Water Supply ID# 2402359)

We are very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is two driven wells located off Elm Street. One well is 197' deep and the second well is 210' deep. The average number of gallons used by the approximate 300 residents of the Village of Castorland is 22,073 gallons per day. After the water comes out of the well system, chlorine is added to protect you against microbial contaminants. No fluoride is added to the water. We are pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Andrew Bishop at:

315-289-7998. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled trustees meetings. They are held on the second Tuesday of each month at 7:00 p.m. at the DPW/Village Office building at 5185 State Route 410, castorland NY 13620. You may also obtain more information about contaminants and potential health effects by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or by contacting N.S. Department of Health at 1-315-785-2277.

The Village of Castorland routinely monitors for constituents in your drinking water according to Federal and State laws. We test your drinking water for 11 inorganic compounds, nitrite, 61 volatile organic compounds, and 70 synthetic organic compounds. The synthetic organic compounds tested below the standardized qualifiers. In addition, we test the water for coliform bacteria once a month and chlorine once a day. All monthly coliform samples were negative in 2020. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. The table presented below depicts which compounds were detected in your drinking water for the period of January 1st to December 31st, 2021.

AWQR SWAP SUMMARY

The NYS DOH has evaluated this public water supplies susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this public water supply. This public water supply provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, pesticides/herbicides, and petroleum products. These ratings are due primarily to the close proximity of currently permitted and former discharge facilities (industrial/commercial facilities that discharge wastewater into the environment), and associated agricultural activity in the assessment area.

A copy of the assessment can be obtained by contacting the supplier of water.

Definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level- (mandatory language) The Maximum Allowed (MCL) is the highest level of a contaminant *

It should be noted that all drinking water, including bottled drinking water, might 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 New York State Health Department at 785-2277.

Radiological Contaminants

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Gross Alpha	NO	08/17/17	.88	PCi/L ²	0	15 ¹	Erosion of natural deposits
Combined radium – 226 and 228				pCi/L	0	5 ¹	Erosion of natural deposits
226	NO	08/17/17	.43				
228	NO	08/17/17	.62				

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

Disinfection Byproducts

Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg Range	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Haloacetic Acids (HAA5' S -)	YES	8/18/21	13.5 ND-9.7	ug/l	N/A	MCL=60	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	YES	8/18/21	22.8 ND- 20.1	ug/l	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

Microbiological

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Coliform	No	2021	Negative	N/A	N/A	MCL=2 or more positive samples in 1 month ⁴	Naturally Present in the environment.

⁴ A violation occurs at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive. A violation occurs at systems collecting less than 40 samples per month when two or more samples are total coliform positive.

Inorganics

Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg Range	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nitrate Well#1	NO	11/22/21	5.7	mg/l	10	MCL = 10 mg/l	Runoff from fertilizer use; Leaching from Septic Tanks, sewage, Erosion of natural deposits.
Nitrate Well#2	NO	11/22/21	4.9	mg/l	10	MCL = 10 mg/l	
Barium	NO	08/16/17	.115	mg/l	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Lead	NO	9/21	1.3 ⁵ (ND-2.7)	ug/l	0	AL=15 ⁵	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	NO	9/21	.0681 ⁶ (.0181-.0806)	mg/l	1.3	AL = 1.3 ⁶	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Fluoride	NO	11/22/21	Well# 1 1.43 mg/l Well# 2 1.25	mg/l	N/A	2.2	Erosion of natural deposits

Synthetic Organic Contaminants

Perfluorooctanoic Acid (PFOA)	No	5/26/21	Well# 1 ND Well# 2 ND	ng/l	N/A	MCL = 10	Released into the environment from widespread use in commercial and residential applications.
Perfluorooctanesulfonic acid (PFOS)	No	5/26/21	Well# 1 ND Well# 2 ND	ng/l	N/A	MCL= 10	Released into the environment from widespread use in commercial and residential applications.
Dioxane	No	5/26/21	Well# 1 .04 Well# 2 .04	ug/l	N/A	MCL=1	Released into the environment from widespread use in commercial and residential applications.

⁵ The level presented represents the 90th percentile of the 10 sites tested. 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% of the lead values detected at your water system. The action level was not exceeded at any of the sites tested. 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).

⁶ The level presented represents the 90th percentile of the 10 sites tested. 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% of the copper values detected at your water system. In this case 5 samples were collected at your water system and the 90th percentile value was the 2nd highest value (0.94 mg/l).

Definitions:

Maximum Contaminant Level (MCL): The highest level of a 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 risk to health. MCLGs allow for a margin of safety.

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

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system uncovered some problems this year. We have found elevated levels of Disinfection Byproducts (TTHM's) which is a result of organic compounds found in the water source reacting with Chlorine used for disinfection. The potential adverse health effects for some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. The Department of Health is aware of this problem and we are working to rectify the situation.

Is our water system meeting other rules that govern operations?

During 2021, 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:

- ◆ 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 up 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.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our