



2022 Consumer Confidence Report on
Water Quality for 2021

Annual Water Quality Report

Beaver Dam Lake
Water System

Public Water Supply ID# NY3503550



Message from the President

Providing customers with safe, quality drinking water is a top priority for Liberty, and we are proud to present this Water Quality Report (Consumer Confidence Report) that shares detailed information regarding local water service and our compliance with state and federal quality standards during the 2021 calendar year.

Liberty makes significant investments each year to ensure the water we deliver to customers meets all Safe Drinking Water Act (SDWA) standards established by the United States Environmental Protection Agency (EPA) and New York State Department of Health (NYSDOH). We invest responsibly in order to maintain the local water infrastructure, because strong infrastructure is a key factor in delivering quality water. Additionally, we have a top-notch water quality program that ensures the water delivered to your home or business is thoroughly tested by independent laboratories and the data is provided to the state to verify compliance with all applicable SDWA and NYSDOH water regulations.

We know our customers rely on us to make sure the water at their tap is safe to drink, and we take that responsibility seriously. Our employees live in the local community and take great pride in providing quality water and reliable service to you and your neighbors.

If you have any questions about the information within this report, please don't hesitate to contact us anytime at 1-877-426-6999 TDD:711. We encourage you to visit our website at www.libertyenergyandwater.com to stay up-to-date and receive tips about water conservation and more.

On behalf of the entire Liberty family, thank you for being a valued customer and neighbor. We are proud to be your water provider.

Sincerely,
Chris Alario
President, Liberty New York Water

To request a printed copy of this report, please call us at 1-877-426-6999 TDD:711. This report can also be found at www.libertyenergyandwater.com.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.



Where Does My Water Come From?

The Beaver Dam Lake water system serves 147 homes located in the Towns of New Windsor & Cornwall N.Y. The water source is groundwater drawn from three (3) drilled wells. The depths are 328', 225', & 600' deep respectively. Water treatment includes: a membrane filtration system and disinfected with sodium hypochlorite. Booster pumps maintain the volume of the water storage tank.

Source Water Assessment

The source water assessment has rated all three wells as having a medium-high susceptibility to microbials, and one of the wells as having a medium-high susceptibility to nitrates, industrial solvents, metals, and other industrial contaminants. These ratings are due primarily to the proximity of a permitted discharge facility (industrial / commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells and low-intensity residential land use practices in the assessment area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. The water is disinfected at the well



station to ensure that that the finished water delivered into your home meets New York State's drinking water standards.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us at the telephone number provided in this report.

What are Drinking Water Standards?

Drinking water standards are the regulations set by the USEPA to control the level of contamination in the nation's drinking water. The USEPA and the NYSDOH are the agencies responsible for establishing drinking water quality standards in New York. This approach includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated by qualified operators; ensuring the integrity of the distribution system; and making information about water quality available to the public. The water delivered to your home meets the standards required by the USEPA and the NYSDOH.

This report describes those contaminants that have been detected in the analyses of almost 200 different potential contaminants, nearly 100 of which are regulated by the USEPA and the NYSDOH.

Liberty is proud to tell you that there have been no contaminants detected that exceed any federal or state drinking water standards. Hundreds of samples analyzed every year by Liberty's contract certified laboratory assures that all primary (health-related) drinking water standards are being met. Sample results are available on the

Table in this report.

This report is intended to provide information for all water users. If received by an absentee landlord, a business, or a school, please share the information with tenants, employees, or students.

We are happy to make additional copies of this report available. You may also access this report on the Liberty web page at www.libertyenergyandwater.com.

Substances That Could be in Water

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 activity.

Contaminants that may be present in source water 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 stormwater 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 agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic

systems.

Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the Orange County Department of Health prescribe regulations that limit the amount of certain contaminants in water provided by



public water systems. The U.S. Food and Drug Administration (USFDA) also establishes limits for contaminants in bottled water that provide the same protection for public health.

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 USEPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting their website at <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>. For information on bottled water visit the USFDA website at www.fda.gov.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 about drinking water from their health care providers. The USEPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.



Important Health Information

Lead

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. We are responsible for providing high-quality drinking water, but we 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Is Our Water System Meeting Other Rules That Govern Our Operations?

During 2021, Beaver Dam Lake water system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Testing Results

During the year, Liberty collects water samples to determine the presence of any radioactive, biological, inorganic, or organic contaminants. All of the substances listed in the table below tested under the Maximum Contaminant Level (MCL). Liberty believes it is important you know what was detected, and how much of the substance was present. The state allows the monitoring of certain substances less than once a year because the concentrations of these substances do not change frequently. If a substance was tested and there was no detection, it is not listed in this table. You can find Definitions, Terms and Abbreviations related to this Table in the next section for easy reference.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Barium	N	05/2021	0.103	mg/L	2	2	Erosion of natural deposits.
Antimony	N	05 & 06/2021	Avg- 0.0004 (ND – 0.0007)	mg/L	0.006	0.006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	05/2021	0.0031	mg/L	N/A	0.010	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride	N	05 & 06/2021	Avg- 0.13 (ND - 0.25)	mg/L	N/A	2.2	Erosion of natural deposits; water additive that promotes strong teeth
Nickel	N	05/2021	0.0014	mg/L	N/A	N/A	Naturally occurring.
Nitrate	N	03/2021	0.19	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	N	03/2021	65	mg/L	N/A	See Health Effects (footnote 1)	Naturally occurring; Road salt; Water softeners.
Sulfate	N	06/2021	38	mg/L	N/A	250	Naturally occurring.
Radiological Contaminants (footnote 2) Entry Point							
Gross Alpha activity	N	04-05/2019	0.903	pCi/L	0	15	Erosion and decay of natural deposits.
Gross Beta	N	04-05/2019	2.06	pCi/L	0	50 (a)	
Uranium	N	05/2019	0.868	ug/L	0	30 (b)	
Radon	N	05/2019	16.8	pCi/L	0	N/A	
Microbiological Contaminants (footnote 3)							
Turbidity (Entry)	N	09/05/2021	Max- 0.25	NTU	N/A	TT <= 1.0	Soil runoff.
Turbidity (Entry)	N	2021	100% ≤0.3	NTU	N/A	TT=95%≤0.3	
Turbidity (Distribution)	N	2021	Max= 1.85 Avg= 1.38	NTU	N/A	MCL=5.0	
Disinfectant/ Disinfection By-product (D/DBP) Parameters (footnote 4)							
HAA5	N	08/2021	9.5	ug/L	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms; TTHMs are formed when source water contains large amounts of organic matter.
TTHM	N	08/2021	33	ug/L	N/A	80	
Total Organic Carbon	N	2021	Max- 1.1	mg/L	N/A	TT	Naturally present in the environment.
Chlorine*	N	2021	1.72	mg/L	N/A	4	Water additive used to control microbes.
Lead and Copper (Tap water at homeowner's premise) (footnote 5)							
Copper	N	09/2020	90 th percentile= 0.120 (ND – 0.140)	mg/L	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	N	09/2020	90 th percentile= 11.85 (ND- 15.00)	ug/L	0	15	

- Notes:**
- 1- Sodium (mg/l): Water containing more than 20 mg/l of sodium should not be used for drinking by people on a severely restricted sodium diet. Water more than 270 mg/l of sodium should not be used for drinking by people on a moderately restricted diet.
 - 2- Radiological constituents were also sampled on raw water wells, as per health department requirements. (a) The State considers 50 pCi/L to be the level of concern for beta particles. (b) 30 µg/l of uranium is approximately 20.1 pCi/L.
 - 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 turbidity measurement for the year occurred on 09/05/2021 (0.25 NTU). State regulations require that turbidity must always be less than or equal to 0.3 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (1.85 NTU) occurred in July 2021. This value is below the State's maximum contaminant level (5 NTU).

- 4- The level detected from the table above for TTHM's and HAA's represent the result from one distribution location sampled. (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform). (HAA5 --- mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid). *Chlorine residual results in the table above represent averages of samples taken at the treatment plant Point-of-Entry location to the distribution system.
- 5- The level presented represents the 90th percentile of the 5 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 and lead values detected at your water system. The action level for lead and copper were not exceeded at any of the sites tested.



Definitions, Terms and Abbreviations

90th percentile: For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.

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

HAA5: Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di- bromoacetic acid) as a group.

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal, or 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 contaminants.

NA: not applicable.

ND: not detectable at testing limits.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

pCi/L: picocuries per liter, a measure of radioactivity

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

ppt: parts per trillion or nanograms per liter

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

What Does This Information Mean?

As you can see by the table, our system had no sample limit violations in 2021. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

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 firefighting 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 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. We ask that all our customers help us protect our water sources. For questions concerning this report or your water quality, please contact Natasha Niola, Water Quality Manager, at 516-632-2239 or Liberty Customer Service at 1-877-426-6999 TDD:711; or on the web at www.libertyenergyandwater.com.