2023 Consumer Confidence Report on Water Quality for 2022

Annual Water Quality Report

Beaver Dam Lake Water System

Public Water Supply ID# NY3503550

Liberty

Message from the President

Dear Liberty Customers,

At Liberty, providing customers with safe, quality drinking water is at the forefront of everything we do – day in and day out. We do this by continuously investing in our infrastructure and by constantly looking for opportunities improve our operations and seek enhancements to our daily processes.

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 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.

In the pages that follow, you will find our 2022 Water Quality Report (Consumer Confidence Report), which outlines detailed information regarding the quality of water we provided in calendar year 2022. This report can be found on our website at www.libertyenergyandwater.com. It includes information like the source of your water, the areas we serve, information about naturally occurring substances in the water and how we get eliminate them, our complex intake and distribution system, and more.

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 and look forward to serving you for years to come.

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.

Where Does My Water Come From?

The Beaver Dam Lake water system serves 465 people through 147 service connections. The water source is 3 groundwater wells under the direct influence of surface water (GWUDI) located in the Towns of New Windsor & Cornwall N.Y. Water treatment includes: a membrane filtration system and sodium hypochlorite for disinfection.

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 are analyzed every year by a NYS certified laboratory. 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.

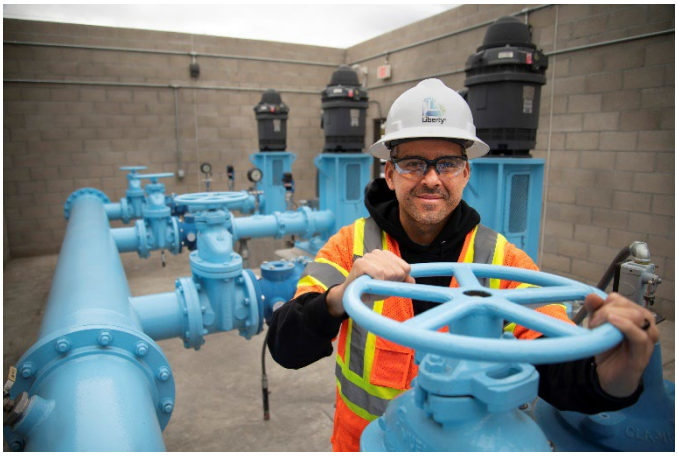
Contaminants that may be present in source water include:

- **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 NYSDOH 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. 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 can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Beaver Dam Lake Water System is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Liberty NY Water at 1-877-426-6999 TDD:711.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

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

During 2022, 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.

Beaver Dam Lake 2022 Annual Water Quality Report

PRIMARY STANDARDS - Health Based

DISTRIBUTION SYSTEM

Disinfectant Residuals	Violation? (Yes/No)	Date of Sample	MRDL	MCLG	Range of Detection	Average	Typical Source of Constituent
Chlorine (ppm) [1]	No	2022	4	N/A	0.63 – 2.97	1.61	Water additive used to control microbes.

Disinfection By-Products	Violation? (Yes/No)	Date of Sample	Primary MCL	MCLG	Detection	Typical Source of Constituent
TTHMs (ppb) [2]	No	08/2022	80	N/A	21.5	By-product of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
HAA5 (ppb) [2]	No	08/2022	60	N/A	5.7	
TOC (ppm)	No	2022	TT	N/A	Average – 5.61 ND – 59.8	Naturally present in the environment.
Turbidity (NTU) [3]	No	05/2022	5	N/A	1.90	Soil runoff.

Lead & Copper [4]	Violation? (Yes/No)	Date of Sample	AL	MCLG	Sample Data	Range of Detection	90th % Level	Typical Source of Constituent
Copper (ppm)	No	09/2020	1.3	1.3	0 of the 5 samples exceeded the AL	ND – 0.14	0.12	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Lead (ppb)	No		15	0		ND – 15.00	11.85	

ENTRY POINT

Inorganic Constituents	Violation? (Yes/No)	Date of Sample	Primary MCL	MCLG	Detection	Typical Source of Constituent
Barium (ppm)	No	01/2022	2	2	0.09	Erosion of natural deposits; runoff from orchards, glass, and electronics production wastes.
Zinc (ppm)	No	01/2022	5	N/A	0.02	Naturally occurring; Mining waste.
Arsenic (ppm)	No	01/2022	0.01	N/A	0.002	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride (ppm)	No	01-02/2022	2.2	N/A	ND – 0.32	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Sulfate (ppm)	No	01/2022	250	N/A	47.9	Naturally occurring.
Chloride (ppm)	No	01/2022	250	N/A	125	Natural occurring or indicative of road salt contamination.
Turbidity (NTU) [5]	No	8/18 & 11/15/2022	TT ≤ 1.0	N/A	Max – 0.18	Soil runoff.
Turbidity (NTU) [5]	No	2022	TT=95% ≤ 0.3	N/A	100% ≤ 0.3	Soil runoff.

Radiological Constituents [6]	Violation? (Yes/No)	Date of Sample	Primary MCL	MCLG	Detection	Typical Source of Constituent
Gross Alpha (pCi/L)	No	01/2022	15	0	0.05	Erosion and decay of natural deposits and man-made emissions.
Gross Beta (pCi/L)	No	01/2022	50 [a]	0	2.29	
Uranium (ppb)	No	01/2022	30 [b]	0	0.63	
Radon (pCi/L) [c]	No	05/2019	N/A	0	16.80	
Combined Radium-226 & 228 (pCi/L)	No	01/2022	5	0	1.06	

RAW WATER						
Organic Constituents	**Violation? (Yes/No)**	**Date of Sample**	**Primary MCL**	**MCLG**	**Detection**	**Typical Source of Constituent**
Dichloromethane (ppb) [7]	No	01-02/2022	5	0	ND – 1.01	Discharge from pharmaceutical and chemical factories.

SECONDARY STANDARDS – Aesthetics						
ENTRY POINT						
Constituent	**Violation? (Yes/No)**	**Date of Sample**	**Secondary MCL**	**MCLG**	**Average**	**Typical Source of Constituent**
Sodium (ppm) [8]	No	01/2022	N/A	N/A	80.8 - 81.6	Naturally occurring; Road salt; Water softeners.
Nickel (ppm)	No	01/2022	0.1	0.1	0.0006	Erosion of natural deposits.
Color	No	01/2022	15	N/A	10	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant by-products such as trihalomethanes, the presence of metals such as copper, iron and manganese.
Manganese (ppm)	No	01/2022	0.3	N/A	0.04	Naturally occurring; Indicative of landfill contamination.

Notes:

1- Chlorine residual results in the table above represent averages of samples taken at the treatment plant Point-of-Entry location to the distribution system.

2- The level detected from the table above for TTHM's and HAA's represent the result from one distribution location sampled. TTHMs include chloroform, bromodichloromethane, dibromochloromethane, and bromoform. HAA5 include mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid.

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. 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 (1.90 NTU) occurred in May 2022. This value is below the State's maximum contaminant level (5 NTU).

4- 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 lead and copper values detected at your water system. The action level for lead and copper was not exceeded at any of the sites tested.

5- 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 8/18/2022 and 11/15/2022 (0.18 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

6- 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. (c) Radon is a naturally occurring radioactive 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. The USEPA has a proposed MCL of 300 pCi/L of radon. As you can see in the table, we are below that threshold at entry point.

7- Dichloromethane, also known as methylene chloride, was sampled in February with a detection of 1.01 ug/L. The resample demonstrated methylene chloride to non-detect

8- 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.

Definitions, Terms and Abbreviations

90th %: 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-chloracetic 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.
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.
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 2022. 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? How To Avoid Wasting It.

Although our system has an adequate amount of water to meet present and future demands, there are several 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. More efficient water use protects our valuable natural resource and conservation is easy. Useful tips for conserving include:

- Turn off the tap when brushing your teeth.

- Consider water and energy-efficient appliances. Upgrade to EPA certified Energy Star and WaterSense appliances to save both on water and energy without sacrificing performance. The USEPA reports that EPA-certified Energy Star washing machines may use 35% less water per load.
- Check every faucet, toilet and showerhead in your home for leaks - 10 percent of homes have leaks that waste 90 gallons or more per day; don't be part of the 10%.

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 save more than 30,000 gallons a year. More conservation tips and leak detection tools can be found at www.libertyenergyandwater.com.

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 call Liberty Customer Service at 1-877-426-6999 TDD:711; or on the web at www.libertyenergyandwater.com.

Liberty - New York Water
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Merrick, NY 11566

Spanish Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.	***French*** Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.
Korean 이것의 보고는 귀하께서 드시는 식수에 대한 중요한 정보가 포함되어 있습니다. 번역은 해석되지 아니면 이보고를 읽고 이해하시는 분과 말씀하시기를 바랍니다.	***Chinese*** 這份報告含有非常重要有関您喝的水的資料 请找能譯這份報告的人翻译或解釋給您聽。