

# ANNUAL WATER QUALITY REPORT CLIFTON PARK WATER AUTHORITY May 2023

Contained on the following pages is the 2022 Annual Water Quality Report for the Clifton Park Water Authority (PWSID# 4500175). The CPWA system has 13,817 service connections (approx. 35,000 people). This report will be made available to our customers each year providing analytical data compiled during the previous year. This report is a requirement of the NYS Department of Health (DOH). It is designed to allow our customers to review the sample results from their water supply and compare those results with standards established by the DOH. Should you have any questions or comments regarding this report or wish to address the Authority regarding any related issues, you may contact the Authority Administrator, Mr. Donald Austin, during business hours at 383-1122. The Authority also holds a public meeting once a month at the Authority offices located at 661 Clifton Park Center Road, just west of Town Hall (PLEASE CALL TO CONFIRM DATE AND TIME).

## Where Does Our Water Come From?

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 can pick up substances 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** 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, are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Ground water wells are the predominant source of water in the Authority's system. We have wells located throughout town at 6 different sites listed below:

Vischer Ferry Preserve (2), Plank Road, Kinns Road, Boyack Road (2), Berry Farm and Oakwood.

The Vischer Ferry Preserve wells are considered ground water under the direct influence of surface water (GWUDI). Additional treatment is performed on this water to ensure removal of certain surface water organisms.

The majority of our water (approximately 70%) is pumped from the Preserve and Boyack wells. This water is treated to remove iron and manganese at the Boyack Road Treatment Plant. Cartridge filters are also used to provide adequate treatment of the GWUDI wells in the Preserve. This source is pumped on a year-round basis because of the improved quality. Also pumped year-round are: the Berry Farm, Oakwood and Plank Road sources. These sources provide the highest quality water with the lowest hardness available. The remainder of the sources are used during the summer months to meet the higher demand created by outdoor uses. Liquid chlorine is added to the water at all sources for disinfection purposes. Phosphates are added at the Berry Farm and Oakwood locations in an effort to sequester the iron, manganese and hardness in those sources.

In 2022, we purchased a portion of our water from the Saratoga County Water Authority. The water source for the SCWA is the Hudson River. Water treatment consists of addition of a coagulant and

filtration through 0.1 micron membrane filters. Caustic soda is added for pH adjustment and orthophosphates are added for corrosion control. Sodium hypochlorite is added for disinfection and to maintain a residual through the transmission system. Granular activated carbon filters are used on the finished water to adsorb natural organic compounds, taste and odor compounds and synthetic organic chemicals.

The CPWA also purchased a portion of its water from the Town of Glenville in 2022. The Town of Glenville's water system consists of four drilled wells in the Great Flats Aquifer just west of the Village of Scotia, between Route 5 and the Mohawk River. The aquifer is an extensive bed of sands and gravel underlying the Mohawk River channel. Glenville adds Sodium Hypochlorite (liquid chlorine) to the finished water for disinfection.

### **Restricted or Limited Use Sources**

Our water supply includes groundwater from 8 wells on 6 different sites. Most of these sources are in use year-round. However, due to limitations in the production capabilities, or due to less than favorable water qualities, some sources are limited to backup use or have been removed from service. The backup sources are generally used during periods of high demand or at times when one or more of our everyday sources are out of service for repair or maintenance.

The Clifton Park Water Authority has an interconnection with the Town of Halfmoon water system at The Crossing. The CPWA did not purchase water from the Town of Halfmoon in 2022. The Authority also has an interconnection with the Town of Glenville and the Saratoga County Water Authority. The CPWA purchased a total of 487,623,000 gallons of water from the Saratoga County Water Authority in 2022. The CPWA purchased a total of 989,600 gallons of water from the Town of Glenville in 2022.

### **Source Water Assessment Summary**

The NYS Department of Health has completed a source water assessment for this system based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. For ground water sources, the assessment evaluated risk of contamination in two zones: an inner zone, of smaller radius around the well, considered more sensitive; and an outer zone, extending either 1 mile from the well, or as limited by a hydrogeologic barrier (such as a change in soil or rock layer or the presence of a water body). The higher of these ratings was used as the overall rating for the source. **The susceptibility rating is an estimate of the potential for contamination of the source water, and does not mean that the water delivered to consumers is, or will be contaminated.** See the spreadsheet that follows for a list of contaminants detected. The source water assessments provide resource managers with additional information for protecting source waters in the future.

Our source of drinking water is derived from ground water (drilled wells) and ground water under the direct influence of surface water sources. The source water assessment has rated most of our ground water sources as having an elevated susceptibility to microbial and nitrate contamination. These ratings are due primarily to the residential land use and associated activities, such as fertilizing lawns, in the assessment area. One well is also rated as having an elevated susceptibility to herbicide/pesticide contamination, primarily due to the agricultural land use near the well. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected, and the Vischer Ferry wells filtered, to ensure that the finished water delivered to your home meets the

New York State's drinking water standards for microbial contamination. Public notification is required if regulated contaminants are found in our water, and increased monitoring may result.

The Saratoga County Water Authority source water assessment states that hydrologic characteristics generally make rivers highly sensitive to existing and new sources of nitrate, phosphorus, and microbial contamination. This does not mean that source water contamination has or will occur, and the SCWA provides treatment and regular monitoring to ensure that the water delivered to customers meets all applicable standards.

The Glenville source water assessment rates their wells as having an elevated susceptibility to contamination. In addition, the wells draw from an unconfined aquifer and the overlying soils are not known to provide adequate protection from potential contamination.

Water suppliers and county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of this assessment, including a map of the assessment area, can be obtained by contacting this office.

### **Are There Contaminants in Our 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 the EPA's Safe Drinking Water Hotline (1-800-426-4791).

#### **Information on 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. The CPWA 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 the CPWA at 518-383-1122. 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>.

#### **Information on Cryptosporidium**

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. During 2018, as part of their routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Cryptosporidium oocysts. Of these samples, no oocysts were detected. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. Also during 2018, the Clifton Park Water Authority collected 12 samples from the Vischer Ferry wells and analyzed for Cryptosporidium oocysts. There were no oocysts found in any of these samples. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a

gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

### **Information on Giardia**

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2018, as part of their routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Giardia cysts. Of these samples, seven samples showed a total of seventy-nine cysts and one sample showed no cysts. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. Also during 2018, the Clifton Park Water Authority collected 12 samples from the Vischer Ferry wells and analyzed for Giardia cysts. There were no cysts found in any of these samples. Testing performed by the SCWA indicates the presence of Giardia in their (our) source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

### **Detected and Non-Detected Contaminants**

In accordance with State regulations, the Clifton Park Water Authority routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants, and disinfection byproducts. Additionally, the CPWA analyzes 40 samples from throughout the distribution system for coliform bacteria each month. Only the contaminants that have been detected in your drinking water are included in the Table of Detected Contaminants. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, is more than one year old.

### **Do I Need to Take Special Precautions?**

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 HN/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).

## Monitoring Violations

The CPWA had no monitoring violations in 2022.

## CPWA System Improvements in 2021

In 2022, the CPWA completed construction of a pumpstation at its connection with the Saratoga County Water Authority. This project has increased the capacity of that connection.

## Why Save Water and How Do We Avoid Wasting It?

Although the CPWA system has an adequate amount of supply to meet the present demands of the system, 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.
- 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 and saving yourself money in the process 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:

- Use low flow shower heads and faucets
- Repair all leaks in your plumbing system
- Water your lawn sparingly early morning or late evening
- Do only full loads of wash and dishes
- Wash your car with a bucket and hose with a nozzle
- Don't cut the lawn too short; longer grass saves water

## Definitions

The following definitions apply to the tables on the following pages for the Clifton Park Water Authority and Saratoga County Water Authority systems:

**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.

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

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

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

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**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).

**Picocuries Per Liter (pCi/l):** Measure of radioactivity in water (curie) - pico corresponds to one part of liquid in one trillion parts of liquid.

**Distribution System Maximum Residence Time (DSMRT):** A location within the water distribution system that represents the point at which water from a particular source has resided in the water system for the longest duration.

**Water Treatment Plant (WTP):** Any facility at which water is taken directly from the source, treated and pumped into the system.

**Clifton Park Water Authority Water System Table of Detected Contaminants**

| Microbiological Contaminants             |             |           |                     |      |       |                             |                                                                                                                   |
|------------------------------------------|-------------|-----------|---------------------|------|-------|-----------------------------|-------------------------------------------------------------------------------------------------------------------|
| Contaminant                              | Sample Date | Violation | MCL, (AL) or ((TT)) | MCLG | Units | Contaminant Level           | Likely Source of Contamination                                                                                    |
| Total Organic Carbon                     | Monthly     | No        | N/A                 | N/A  | mg/l  | Range: 1.5 -2.8<br>Avg: 2.0 | Naturally present in the environment.                                                                             |
| Inorganic Contaminants                   |             |           |                     |      |       |                             |                                                                                                                   |
| Berryfarm Well                           |             |           |                     |      |       |                             |                                                                                                                   |
| Arsenic                                  | 6/15/20     | No        | 10                  | 0    | ug/l  | 0.3                         | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes            |
| Nitrate                                  | 6/28/22     | No        | 10                  | 10   | mg/l  | 0.1                         | Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.                      |
| Barium                                   | 6/15/20     | No        | 2                   | 2    | mg/l  | 0.129                       | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries                        |
| Sodium                                   | 6/28/22     | No        | N/A                 | N/A  | mg/l  | 100                         | Erosion of natural deposits; road salt; water softeners; animal waste                                             |
| Sulfate                                  | 6/28/22     | No        | 250                 | N/A  | mg/l  | 28                          | Erosion of natural deposits                                                                                       |
| Chloride                                 | 6/28/22     | No        | 250                 | N/A  | mg/l  | 176                         | Erosion of natural deposits; road salt                                                                            |
| Nickel                                   | 6/15/20     | No        | N/A                 | N/A  | ug/l  | 5.4                         | Erosion of natural deposits                                                                                       |
| Fluoride                                 | 6/15/20     | No        | 2.2                 | N/A  | mg/l  | 0.0767                      | Erosion of natural deposits; discharge from fertilizer; water additive that promotes strong teeth                 |
| Chromium                                 | 6/15/20     | No        | 100                 | 100  | ug/l  | 0.7                         | Erosion of natural deposits; discharge from steel and pulp mills                                                  |
| Iron                                     | 6/28/22     | No        | 300                 | N/A  | ug/l  | 230                         | Erosion of natural deposits                                                                                       |
| Manganese                                | 6/28/22     | No        | 300                 | N/A  | ug/l  | 90                          | Erosion of natural deposits; landfill contamination                                                               |
| Plank Road Well                          |             |           |                     |      |       |                             |                                                                                                                   |
| Barium                                   | 6/30/21     | No        | 2                   | 2    | mg/l  | 0.31                        | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries                        |
| Zinc                                     | 6/9/20      | No        | 5                   | N/A  | mg/l  | 0.00664                     | Erosion of natural deposits; mining waste                                                                         |
| Manganese                                | 6/9/20      | No        | 300                 | N/A  | ug/l  | 18.5                        | Erosion of natural deposits; landfill contamination                                                               |
| Sodium                                   | 6/28/22     | No        | N/A                 | N/A  | mg/l  | 47.6                        | Erosion of natural deposits; road salt; water softeners; animal waste                                             |
| Nitrate                                  | 6/28/22     | No        | 10                  | 10   | mg/l  | 0.01                        | Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.                      |
| Chloride                                 | 6/9/20      | No        | 250                 | N/A  | mg/l  | 35.2                        | Erosion of natural deposits; road salt                                                                            |
| Vischer Ferry Preserve Wells (Raw Water) |             |           |                     |      |       |                             |                                                                                                                   |
| Manganese                                | 6/29/21     | No        | 300                 | N/A  | ug/l  | 2800                        | Erosion of natural deposits; landfill contamination                                                               |
| Sodium                                   | 6/29/21     | No        | N/A                 | N/A  | mg/l  | 18                          | Erosion of natural deposits; road salt; water softeners; animal waste                                             |
| Barium                                   | 6/29/22     | No        | 2                   | 2    | mg/l  | 0.026                       | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries                        |
| Chromium                                 | 6/29/22     | No        | 100                 | 100  | ug/l  | 1.0                         | Erosion of natural deposits; discharge from steel and pulp mills                                                  |
| Mercury                                  | 6/29/22     | No        | 2                   | 2    | ug/l  | 0.3                         | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Sulfate                                  | 6/29/21     | No        | 250                 | N/A  | mg/l  | 15.1                        | Erosion of natural deposits                                                                                       |
| Chloride                                 | 6/29/21     | No        | 250                 | N/A  | mg/l  | 40.3                        | Erosion of natural deposits; road salt                                                                            |
| Nitrate                                  | 6/29/22     | No        | 10                  | 10   | mg/l  | 0.02                        | Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.                      |

| Inorganic Contaminants                                    |             |           |             |      |       |                   |                                                                                                        |
|-----------------------------------------------------------|-------------|-----------|-------------|------|-------|-------------------|--------------------------------------------------------------------------------------------------------|
| Contaminant                                               | Sample Date | Violation | MCL (or AL) | MCLG | Units | Contaminant Level | Likely Source of Contamination                                                                         |
| <b>Boyack Wells (Raw Water)</b>                           |             |           |             |      |       |                   |                                                                                                        |
| Iron                                                      | 6/29/21     | No        | 300         | N/A  | ug/l  | 1100              | Erosion of natural deposits                                                                            |
| Manganese                                                 | 6/29/21     | No        | 300         | N/A  | ug/l  | 400               | Erosion of natural deposits; landfill contamination                                                    |
| Barium                                                    | 6/29/21     | No        | 2           | 2    | mg/l  | 0.059             | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries             |
| Nickel                                                    | 6/29/21     | No        | N/A         | N/A  | ug/l  | 2.4               | Erosion of natural deposits                                                                            |
| Sodium                                                    | 6/29/21     | No        | N/A         | N/A  | mg/l  | 60                | Erosion of natural deposits; road salt; water softeners; animal waste                                  |
| <b>Boyack Road Water Treatment Plant (Finished Water)</b> |             |           |             |      |       |                   |                                                                                                        |
| Barium                                                    | 6/18/18     | No        | 2           | 2    | mg/l  | 0.069             | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries             |
| Fluoride                                                  | 6/18/18     | No        | 2.2         | N/A  | mg/l  | 0.0845            | Erosion of natural deposits; discharge from fertilizer; water additive that promotes strong teeth      |
| Sodium                                                    | 6/29/22     | No        | N/A         | N/A  | mg/l  | 81                | Erosion of natural deposits; road salt; water softeners; animal waste                                  |
| Nickel                                                    | 6/18/18     | No        | N/A         | N/A  | ug/l  | 6.3               | Erosion of natural deposits                                                                            |
| Selenium                                                  | 6/18/18     | No        | 50          | 50   | ug/l  | 1.7               | Erosion of natural deposits; discharge from petroleum and metal refineries; discharge from mines       |
| Arsenic                                                   | 6/18/18     | No        | 10          | 0    | ug/l  | 0.8               | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes |
| Chromium                                                  | 6/18/18     | No        | 100         | 100  | ug/l  | 9.7               | Erosion of natural deposits; discharge from steel and pulp mills                                       |
| Sulfate                                                   | 6/29/21     | No        | 250         | N/A  | mg/l  | 51.8              | Erosion of natural deposits                                                                            |
| Chloride                                                  | 6/29/21     | No        | 250         | N/A  | mg/l  | 76                | Erosion of natural deposits; road salt                                                                 |
| Nitrate                                                   | 6/11/19     | No        | 10          | 10   | mg/l  | 0.285             | Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.           |
| <b>Kinns Road Well</b>                                    |             |           |             |      |       |                   |                                                                                                        |
| Barium                                                    | 6/30/21     | No        | 2           | 2    | mg/l  | 0.46              | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries             |
| Sulfate                                                   | 6/28/22     | No        | 250         | N/A  | mg/l  | 3                 | Erosion of natural deposits                                                                            |
| Iron                                                      | 6/28/22     | No        | 300         | N/A  | ug/l  | 20                | Erosion of natural deposits                                                                            |
| Sodium                                                    | 6/28/22     | No        | N/A         | N/A  | mg/l  | 8.7               | Erosion of natural deposits; road salt; water softeners; animal waste                                  |
| Chloride                                                  | 6/28/22     | No        | 250         | N/A  | mg/l  | 15                | Erosion of natural deposits; road salt                                                                 |
| Nitrate                                                   | 6/28/22     | No        | 10          | 10   | mg/l  | 0.11              | Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.           |



| Inorganic Contaminants                 |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
|----------------------------------------|----------------------|------------------|-------------|------|--------------------------|-------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Contaminant                            | Sample Date          | Violation        | MCL (or AL) | MCLG | Units                    | Contaminant Level | Likely Source of Contamination                                                             |                                                                      |
| <b>Oakwood Blvd Well</b>               |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Barium                                 | 6/29/21              | No               | 2           | 2    | mg/l                     | 0.088             | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries |                                                                      |
| Nickel                                 | 6/29/21              | No               | N/A         | N/A  | ug/l                     | 1.2               | Erosion of natural deposits                                                                |                                                                      |
| Iron                                   | 6/28/22              | Yes <sup>1</sup> | 300         | N/A  | ug/l                     | 440               | Erosion of natural deposits                                                                |                                                                      |
| Manganese                              | 6/28/22              | No               | 300         | N/A  | ug/l                     | 70                | Erosion of natural deposits; landfill contamination                                        |                                                                      |
| Sodium                                 | 6/28/22              | No               | N/A         | N/A  | mg/l                     | 29.0              | Erosion of natural deposits; road salt; water softeners; animal waste                      |                                                                      |
| Sulfate                                | 6/28/22              | No               | 250         | N/A  | mg/l                     | 61                | Erosion of natural deposits                                                                |                                                                      |
| Chloride                               | 6/28/22              | No               | 250         | N/A  | mg/l                     | 79                | Erosion of natural deposits; road salt                                                     |                                                                      |
| <b>Radiological Contaminants</b>       |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| <b>Berryfarm Well</b>                  |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 9/6/17               | No               | 5           | 0    | pCi/L                    | 1.49              | Erosion of natural deposits                                                                |                                                                      |
| <b>Oakwood Blvd Well</b>               |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 6/27/17              | No               | 5           | 0    | pCi/L                    | 2.48              | Erosion of natural deposits                                                                |                                                                      |
| <b>Plank Road Well</b>                 |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 6/9/20               | No               | 5           | 0    | pCi/L                    | 1.121             | Erosion of natural deposits                                                                |                                                                      |
| <b>Boyack Wells (Raw Water)</b>        |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 6/9/20               | No               | 5           | 0    | pCi/L                    | 1.887             | Erosion of natural deposits                                                                |                                                                      |
| <b>Vischer Ferry Wells (Raw Water)</b> |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 6/9/20               | No               | 5           | 0    | pCi/L                    | 0.578             | Erosion of natural deposits                                                                |                                                                      |
| <b>Kinns Road Well</b>                 |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| Radium 226 & 228                       | 6/9/20               | No               | 5           | 0    | pCi/L                    | 0.415             | Erosion of natural deposits                                                                |                                                                      |
| <b>Lead and Copper</b>                 |                      |                  |             |      |                          |                   |                                                                                            |                                                                      |
| <b>Distribution System</b>             |                      |                  |             |      | Range of Detected Levels |                   | 90th Percentile <sup>2</sup>                                                               |                                                                      |
| Lead                                   | July and August 2022 | No               | (15)        | 0    | ug/l                     | ND-28             | 1.9                                                                                        | Corrosion of household plumbing systems; Erosion of natural deposits |
| Copper                                 | July and August 2022 | No               | (1.3)       | 1.3  | mg/l                     | ND-1.06           | 0.72                                                                                       | Corrosion of galvanized pipes; Erosion of natural deposits           |

| Disinfection Byproducts                |                     |           |             |      |       |                          |                |                                                                                              |
|----------------------------------------|---------------------|-----------|-------------|------|-------|--------------------------|----------------|----------------------------------------------------------------------------------------------|
| Contaminant                            | Sample Date         | Violation | MCL (or AL) | MCLG | Units | Range of Detected Levels | Annual Average | Likely Source of Contamination                                                               |
| <b>Total Trihalomethanes</b>           |                     |           |             |      |       |                          |                |                                                                                              |
| State Farm - Malta                     | See Note 3          | No        | 80          | N/A  | ug/l  | Range: 34.0 - 60.9       | Avg: 66.5      | By-Products of drinking water chlorination.                                                  |
| Blue Spruce Water Tank                 | See Note 3          | No        | 80          | N/A  | ug/l  | Range: 29.0 - 55.6       | Avg: 40.2      | By-Products of drinking water chlorination.                                                  |
| Knolltop Water Tank                    | See Note 3          | No        | 80          | N/A  | ug/l  | Range: 17.0 - 55.2       | Avg: 33.0      | By-Products of drinking water chlorination.                                                  |
| Grooms Tavern                          | See Note 3          | No        | 80          | N/A  | ug/l  | Range: 34.0 - 60.9       | Avg: 43.5      | By-Products of drinking water chlorination.                                                  |
| <b>Haloacetic Acids</b>                |                     |           |             |      |       |                          |                |                                                                                              |
| State Farm - Malta                     | See Note 3          | No        | 60          | N/A  | ug/l  | Range: 18.4 - 39.7       | Avg: 34.3      | By-Products of drinking water chlorination.                                                  |
| Blue Spruce Water Tank                 | See Note 3          | No        | 60          | N/A  | ug/l  | Range: 24.4 - 39.9       | Avg: 49.7      | By-Products of drinking water chlorination.                                                  |
| Knolltop Water Tank                    | See Note 3          | No        | 60          | N/A  | ug/l  | Range: 11.5 - 27.4       | Avg: 21.7      | By-Products of drinking water chlorination.                                                  |
| Grooms Tavern                          | See Note 3          | No        | 60          | N/A  | ug/l  | Range: 3.0 - 16.8        | Avg: 12.6      | By-Products of drinking water chlorination.                                                  |
| <b>Synthetic Organic Contaminants</b>  |                     |           |             |      |       |                          |                |                                                                                              |
| <b>Kinns Road Well</b>                 |                     |           |             |      |       |                          |                |                                                                                              |
| bis(2-ethylhexyl)phthalate             | 6/30/21             | No        | 6           | 0    | ug/l  | 1.1                      |                | Released into the environment from widespread use in commercial and industrial applications. |
| <b>Vischer Ferry Wells (Raw Water)</b> |                     |           |             |      |       |                          |                |                                                                                              |
| 1,4-Dioxane                            | 1/25/22 and 6/29/22 | No        | N/A         | N/A  | ug/l  | Range: ND - 0.029        | Avg: 0.015     | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorohexanesulfonic Acid           | 1/25/22 and 6/29/22 | No        | N/A         | N/A  | ng/l  | Range: ND - 0.875        | Avg: 0.438     | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorobutanoic Acid                 | 1/25/22 and 6/29/22 | No        | N/A         | N/A  | ng/l  | Range: ND - 1.97         | Avg: 0.99      | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluoropentanoic Acid                | 1/25/22 and 6/29/22 | No        | N/A         | N/A  | ng/l  | Range: ND - 0.802        | Avg: 0.401     | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorobutanesulfonic Acid           | 1/25/22 and 6/29/23 | No        | N/A         | N/A  | ng/l  | Range: ND - 0.102        | Avg: 0.051     | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorooctane sulfonic acid          | 1/25/22 and 6/29/22 | No        | 10          | N/A  | ng/l  | Range: 2.3 -2.99         | Avg: 2.645     | Released into the environment from widespread use in commercial and industrial applications. |

<sup>1</sup> During 2022, the CPWA exceeded the MCL for iron at the Oakwood well. We are required to present the following information. Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter and is based on iron's effects on the taste, odor and color of the water.

<sup>2</sup> The CPWA took 31 lead and copper samples in 2022. 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 of values detected at your water system. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. 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. The Clifton Park 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 the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

<sup>3</sup> Sampling for disinfection byproducts was conducted quarterly by the CPWA on 2/8/22, 5/10/22, 8/10/22 and 11/29/22 at four locations in the water system. 2021 sample results are shown for each location as a range of results as well as the highest quarterly locational running annual average (LRAA).

Every five years, the USEPA directs water suppliers to analyze samples for suspected drinking water contaminants that do not have health-based standards under the Safe Drinking Water Act. This information is used as a tool to determine if a contaminant should or should not be regulated in the future. In 2018 and 2019, the Clifton Park Water Authority monitored for 30 currently unregulated contaminants. The chart below shows those contaminants that were detected in 2019.

**2019 UCMR4 Data**

| <b>Disinfection Byproducts Group</b>                  |                              |       |              |         |
|-------------------------------------------------------|------------------------------|-------|--------------|---------|
| Contaminant                                           | Sample Date                  | Units | Range        | Average |
| <b>Boyack Road WTP Raw Water</b>                      |                              |       |              |         |
| Bromide                                               | 3/5/19, 6/10/19              | ug/l  | 38 - 41.1    | 39.6    |
| Total Organic Carbon                                  | 3/5/19, 6/10/20              | mg/l  | 1.6 - 1.61   | 1.61    |
| <b>State Farm Distribution System Sample Point</b>    |                              |       |              |         |
| Bromochloroacetic Acid                                | 3/14/19, 6/10/19 and 9/12/19 | ug/l  | 0.553 - 0.75 | 0.63    |
| Bromodichloroacetic Acid                              | 3/14/19, 6/10/19 and 9/12/20 | ug/l  | 0.62 - 1.13  | 0.84    |
| Dichloroacetic Acid                                   | 3/14/19, 6/10/19 and 9/12/21 | ug/l  | 8.01 - 14.5  | 10.27   |
| Trichloroacetic Acid                                  | 3/14/19, 6/10/19 and 9/12/22 | ug/l  | 16.5 - 24.3  | 21.5    |
| <b>Blue Spruce Distribution System Sample Point</b>   |                              |       |              |         |
| Bromochloroacetic Acid                                | 3/14/19, 6/10/19 and 9/12/19 | ug/l  | 0.64 - 1.90  | 1.17    |
| Bromodichloroacetic Acid                              | 3/14/19, 6/10/19 and 9/12/20 | ug/l  | 0.78 - 1.87  | 1.22    |
| Chlorodibromoacetic Acid                              | 3/14/2019                    | ug/l  | 0.511        |         |
| Dibromoacetic Acid                                    | 3/14/2019                    | ug/l  | 0.468        |         |
| Dichloroacetic Acid                                   | 3/14/19, 6/10/19 and 9/12/21 | ug/l  | 7.29 - 20.4  | 12.03   |
| Trichloroacetic Acid                                  | 3/14/19, 6/10/19 and 9/12/22 | ug/l  | 12.0 - 29.5  | 21.9    |
| <b>Knolltop Distribution System Sample Point</b>      |                              |       |              |         |
| Bromochloroacetic Acid                                | 3/14/19, 6/10/19 and 9/12/19 | ug/l  | 1.0 - 1.35   | 1.15    |
| Bromodichloroacetic Acid                              | 3/14/19, 6/10/19 and 9/12/20 | ug/l  | 0.72 - 1.07  | 0.9     |
| Chlorodibromoacetic Acid                              | 3/14/2019                    | ug/l  | 0.948        |         |
| Dibromoacetic Acid                                    | 3/14/2019                    | ug/l  | 0.96         |         |
| Monochloroacetic Acid                                 | 6/10/2019                    | ug/l  | 2.1          |         |
| Dichloroacetic Acid                                   | 3/14/19, 6/10/19 and 9/12/21 | ug/l  | 1.67 - 26.0  | 13.29   |
| Trichloroacetic Acid                                  | 3/14/19, 6/10/19 and 9/12/22 | ug/l  | 1.95 - 36.7  | 19.7    |
| <b>Grooms Tavern Distribution System Sample Point</b> |                              |       |              |         |
| Dichloroacetic Acid                                   | 6/10/2019                    | ug/l  | 1.5          |         |
| Trichloroacetic Acid                                  | 6/10/2019                    | ug/l  | 7            |         |

| <b>Metals</b>                                   |                    |      |            |     |
|-------------------------------------------------|--------------------|------|------------|-----|
| <b>Berryfarm Treatment Plant Entry Point</b>    |                    |      |            |     |
| Manganese                                       | 6/10/2019          | ug/l | 96.3       |     |
| <b>Kinns Road Treatment Plant Entry Point</b>   |                    |      |            |     |
| Manganese                                       | 6/10/2019          | ug/l | 15.2       |     |
| <b>Oakwood Blvd Treatment Plant Entry Point</b> |                    |      |            |     |
| Manganese                                       | 6/10/2019          | ug/l | 16         |     |
| <b>Plank Road Treatment Plant Entry Point</b>   |                    |      |            |     |
| Manganese                                       | 6/10/2019          | ug/l | 87.2       |     |
| <b>Boyack Road Treatment Plant Entry Point</b>  |                    |      |            |     |
| Manganese                                       | 3/5/2019           | ug/l | 1.1        |     |
| <b>SCWA Intertie</b>                            |                    |      |            |     |
| Manganese                                       | 3/5/19 and 6/10/19 | ug/l | 0.69 - 1.9 | 1.3 |
| <b>Semivolatiles</b>                            |                    |      |            |     |
| <b>Boyack Road Treatment Plant Entry Point</b>  |                    |      |            |     |
| Quinoline                                       | 3/5/2019           | ug/l | 0.021      |     |
| <b>SCWA Intertie</b>                            |                    |      |            |     |
| Quinoline                                       | 3/5/2019           | ug/l | 0.039      |     |

### Saratoga County Water Authority Water Supply Table of Detected Contaminants

| Contaminant                   | Date of Sample | Violation (Yes/No) | MCL, (AL) or ((TT)) | MCLG | Units | Contaminant Level Detected             | Likely Source of Contamination                                                              |
|-------------------------------|----------------|--------------------|---------------------|------|-------|----------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Turbidity</b>              |                |                    |                     |      |       |                                        |                                                                                             |
| Entry Point                   | 9/6/2022       | No                 | ((1.0))             | N/A  | NTU   | 0.072                                  | Soil Runoff                                                                                 |
| Transmission System           | 1/15/2022      | No                 | ((5.0))             | N/A  | NTU   | 0.19                                   | Soil Runoff                                                                                 |
| Total Organic Carbon (TOC)    | 2022           | No                 | TT                  | N/A  | mg/l  | 4.19 (Avg. Raw)<br>1.67 (Avg. Treated) | Naturally present in the environment                                                        |
| <b>Inorganic Contaminants</b> |                |                    |                     |      |       |                                        |                                                                                             |
| Nitrate                       | 1/19/2022      | No                 | 10                  | 10   | mg/l  | 0.12                                   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Manganese                     | 4/8/2020       | No                 | 300                 | N/A  | ug/l  | 2.0                                    | Naturally present in the environment                                                        |
| Sodium                        | 4/8/2020       | No                 | 270                 | N/A  | mg/l  | 8.7 <sup>1</sup>                       | Naturally present in the environment. Road salt contamination                               |
| Chloride                      | 4/8/2020       | No                 | 250                 | N/A  | mg/l  | 11.3                                   | Naturally present in the environment. Road salt contamination                               |
| Barium                        | 1/19/2022      | No                 | 2                   | 2    | mg/l  | 0.005                                  | Naturally present in the environment                                                        |

<sup>1</sup> Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets; 270 mg/l for people on moderately restricted sodium diets.

### Town of Glenville Water Supply Table of Detected Contaminants

| Contaminant                           | Date of Sample | Violation (Yes/No) | MCL, (AL) or ((TT)) | MCLG | Units | Contaminant Level Detected |            | Likely Source of Contamination                                                               |
|---------------------------------------|----------------|--------------------|---------------------|------|-------|----------------------------|------------|----------------------------------------------------------------------------------------------|
| <b>Inorganic Contaminants</b>         |                |                    |                     |      |       |                            |            |                                                                                              |
| Nitrate                               | 9/15/2022      | No                 | 10                  | 10   | mg/l  | 0.25                       |            | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits  |
| Barium                                | 10/20/2021     | No                 | 2                   | 2    | mg/l  | 0.024                      |            | Soil Runoff                                                                                  |
| Sodium                                | 8/16/2022      | No                 | N/A                 | N/A  | mg/l  | 29.0 <sup>1</sup>          |            | Naturally present in the environment. Road salt contamination                                |
| <b>Synthetic Organic Contaminants</b> |                |                    |                     |      |       |                            |            |                                                                                              |
| <b>Well #1</b>                        |                |                    |                     |      |       |                            |            |                                                                                              |
| Perfluorooctane Sulfonate             | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 2.2 - 4.5           | Avg: 3.3   | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorooctanoic Acid                | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 4.7 -10.0           | Avg: 6.7   | Released into the environment from widespread use in commercial and industrial applications. |
| 1,4 Dioxane                           | See Note 2     | No                 | 1                   | N/A  | ug/l  | Range: 0.062 - 0.27        | Avg: 0.173 | Released into the environment from widespread use in commercial and industrial applications. |
| <b>Well #2</b>                        |                |                    |                     |      |       |                            |            |                                                                                              |
| Perfluorooctane Sulfonate             | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 1.9 - 3.7           | Avg: 3.0   | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorooctanoic Acid                | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 3.7 - 10.0          | Avg: 7.1   | Released into the environment from widespread use in commercial and industrial applications. |
| 1,4 Dioxane                           | See Note 2     | No                 | 1                   | N/A  | ug/l  | Range: 0.074 - 0.20        | Avg: 0.57  | Released into the environment from widespread use in commercial and industrial applications. |
| <b>Well #3</b>                        |                |                    |                     |      |       |                            |            |                                                                                              |
| Perfluorooctane Sulfonate             | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 2.2 - 4.1           | Avg: 3.0   | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorooctanoic Acid                | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 2.7 - 7.4           | Avg: 4.4   | Released into the environment from widespread use in commercial and industrial applications. |
| 1,4 Dioxane                           | See Note 2     | No                 | 1                   | N/A  | ug/l  | Range: 0.045 - 0.2         | Avg: 0.12  | Released into the environment from widespread use in commercial and industrial applications. |
| <b>Well #4</b>                        |                |                    |                     |      |       |                            |            |                                                                                              |
| Perfluorooctane Sulfonate             | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 1.9 - 4.1           | Avg: 2.6   | Released into the environment from widespread use in commercial and industrial applications. |
| Perfluorooctanoic Acid                | See Note 2     | No                 | 10                  | N/A  | ug/l  | Range: 0.46 - 4.1          | Avg: 1.92  | Released into the environment from widespread use in commercial and industrial applications. |
| 1,4 Dioxane                           | See Note 2     | No                 | 1                   | N/A  | ug/l  | Range: 0.086 - 0.12        | Avg: 0.103 | Released into the environment from widespread use in commercial and industrial applications. |

<sup>1</sup> Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets; 270 mg/l for people on moderately restricted sodium diets.

<sup>2</sup> Samples were collected from Glenville's source wells and tested for perfluorinated alkyl substances on 3/15/22, 6/21/22, 9/15/22 and 12/20/22.

## 2022 PUMPAGE AND FINANCIAL STATISTICS

|                                |                      |
|--------------------------------|----------------------|
| TOTAL GALLONS PUMPED           | 1,304,592,000        |
| QUANTIFIABLE LOSSES:           |                      |
| Flushing Program               | 25,000,000           |
| Flushing New Mains, Etc        | 2,000,000            |
| TOTAL GALLONS BILLED           | <u>1,172,312,500</u> |
| TOTAL GALLONS ACCOUNTED FOR    | 1,199,312,500        |
| LOST AND UNACCOUNTED FOR WATER | 8.07%                |
| AVERAGE DAILY PUMPAGE FOR 2022 | 3.57 MGD             |
| PEAK DAILY PUMPAGE - 8/3/2022  | 6.32 MG              |

### FINANCIAL SUMMARY

|                      |                    |
|----------------------|--------------------|
| 2022 WATER SALES     | \$4,890,288        |
| BASIC SERVICE CHARGE | \$1,062,203        |
| ALL OTHER SOURCES    | \$ 875,568         |
| TOTAL REVENUES       | <u>\$6,828,059</u> |

### EXPENDITURES

|                              |                    |
|------------------------------|--------------------|
| TOTAL OPERATING EXPENSES     | \$4,177,901        |
| DEBT SERVICE                 | \$1,987,012        |
| RESERVE FOR CAPITAL PROJECTS | \$ 663,146         |
| TOTAL EXPENDITURES           | <u>\$6,828,059</u> |

### Average Annual Residential Charge For Water Service

The average residential customer on the Clifton Park Water Authority system used 75,000 gallons per year in 2022 at a cost of \$371.25. In 2022, the water rate for CPWA customers was \$4.03 per thousand gallons, with a quarterly basic service charge of \$17.25.