

# **Water Quality Report**





# **Table of Contents**



Tampa Bay Water's mission is to reliably provide clean, safe water to the region now and for future generations.

Our vision is to be the leader in supplying sustainable, quality water.

About This Report	1
Providing You With High Quality Water	
Where Does Your Water Come From?	3
Understanding Source Water Quality	4
Cleaning and Disinfecting Your Water	5
About Water Quality	6
Lead in Drinking Water	7
Source Water Assessments	7
Safeguarding Our Sources of Supply	8
Key Terms in This Report	9
About Tampa Bay Water	10
Results for Regulated Water Contaminants1	1-20



# **About This Report**



Our water treatment plants use proven technology, advanced disinfection, corrosion control and state-certified operators to ensure a high-quality product. Tampa Bay Water is pleased to present its 2021 Annual Drinking Water Quality Report, also known as the Consumer Confidence Report.

The United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) require that all water utilities provide their customers with a water quality report annually.

This report contains details about your sources of drinking water, how it is treated, what it contains and how it compares to federal and state standards.

This report is a snapshot of last year's water quality.



# **Providing You With High Quality Water**



5,000 samples collected



45,000 water quality tests performed



100+ local, state and federal parameters met



17
additional parameters
met

If you live in Hillsborough, Pasco or Pinellas counties, chances are you get your water from a utility that is served by Tampa Bay Water. We are a regional water utility that provides wholesale water to those three counties as well as the cities of New Port Richey, St. Petersburg and Tampa. These municipalities, in turn, provide drinking water to more than 2.5 million people in the Tampa Bay region.

We consider it a tremendous responsibility, and honor, to provide our region with high-quality drinking water 24 hours a day, 365 days a year. Water is vital not only to our health and well-being but to our economy and way of life. We are pleased to report that in 2021 the water we provided to our member governments met or was better than all state and federal drinking water health standards. Public health and safety are top priorities and Tampa Bay Water is committed to providing a clean and reliable drinking water supply.

Tampa Bay Water works hard to ensure the quality of your drinking water. Last year, we collected nearly 5,000 samples and conducted nearly 45,000 water quality tests in our state-certified laboratory to ensure we meet:

- More than 100 local, state and federal drinking water parameters
- 17 additional, stringent parameters established by our member governments

Our high-quality supply is also a great value. We withdraw, treat, disinfect and supply our member utilities with high-quality water for less than a penny a gallon. The next time you reach for a glass of water, you can feel confident in its quality as well as its cost.



### Where Does Your Water Come From?



Tampa Bay Water's supply is a blend of treated groundwater, river water and desalinated seawater.

Most residents who live in Hillsborough, Pasco and Pinellas counties get their water from Tampa Bay Water through their local utility. Your drinking water comes from a diverse water supply network that is designed to be responsive to weather conditions, environmental conditions, water quality and more. Tampa Bay Water's supply is a blend of treated groundwater, river water and desalinated seawater. Our supplies are interconnected, so we can shift sources as needed. For example, when river water is plentiful, we can use more of that supply and less of others.

Groundwater comes from wellfields pumping water from the Floridan Aquifer. River water is withdrawn from the Alafia River, Hillsborough River and the Tampa Bypass Canal. Surplus river and canal water is stored in the C.W. Bill Young Regional Reservoir, which supplies our surface water treatment plant during dry times. Hillsborough Bay is the source of seawater for the Tampa Bay Seawater Desalination Plant.

After treatment, all of these potable water supplies meet stringent safe drinking water standards as set by the EPA and the FDEP. Even more, our member utilities have 17 additional parameters that Tampa Bay Water must meet beyond what is required. We are also studying ways to further improve the quality of water delivered to our member governments.



# **Understanding Source Water Quality**



In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The sources of drinking water include rivers, seawater, and groundwater wells. As water travels over the surface of the land or through the ground, it can dissolve 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 that may come from sewage treatment plants, septic systems, agricultural-livestock operations and wildlife.
- Inorganic contaminants such as salts and metals that can be naturally-occurring or result from stormwater runoff, industrial or domestic wastewater discharges, mining or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, stormwater runoff and residential uses.
- Organic chemical contaminants including synthetic and volatile organics that are byproducts of industrial processes, and can come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of mining activities.

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

**Ozone Disinfection** 



Hydrogen Sulfide Removal



**Reverse Osmosis** 

# **Cleaning and Disinfecting Your Water**

With different sources of supply, Tampa Bay Water has different treatment processes, each engineered to clean and disinfect drinking water so it meets or is better than the health-based standards for drinking water established in accordance with the Safe Drinking Water Act. Our water treatment plants use proven technology, advanced disinfection, corrosion control and state-certified operators to ensure a high-quality product.

Groundwater requires less treatment than river water and seawater because nature does most of the cleaning for us. The Floridan Aquifer serves as a natural filter as water moves through it, eliminating the need to remove particles before we disinfect and blend it with our other sources.

Our surface water treatment plant and seawater desalination plant use multi-step processes for added safety. Both facilities screen water to remove large debris, then they each use a conventional treatment process where water purification chemicals are added that cause small particles to clump together and settle out. At the surface water treatment plant the water is disinfected using ozone, one of the most powerful disinfectants available in water treatment. The water is again filtered and disinfected with chloramines before being blended with other sources and distributed to our members.

At the seawater desalination plant, after the conventional process, water flows through progressively finer filters to remove any remaining matter. Highly filtered seawater is then forced at high pressure through reverse osmosis (RO) membranes that remove salt. The size of each RO membrane pore is about .001 microns, which is about 1/100,000th the diameter of a human hair. Chemicals are added to stabilize the desalinated seawater, which is then disinfected with chloramines before being blended and distributed.

Tampa Bay Water uses chloramines as a final disinfectant to reduce disinfection byproducts, reduce the potential for chlorine smell and produce better tasting water. Tampa Bay Water determined that it is a prudent practice to maintain disinfection residuals higher than the regulatory minimums in our regional water systems. These higher levels ensure microbial safety throughout our vast distribution network and to our most distant customers.



# **About Water Quality**



EPA's Safe Drinking Water Hotline (800) 426-4791



EPA's Water Quality Standards epa.gov/wqs-tech



Tampa Bay Water determined that it is a prudent practice to maintain disinfection residuals higher than the regulatory minimums in our regional water systems.

All drinking water, including bottled water, may reasonably be expected to contain 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 at (800) 426-4791 or by visiting epa.gov/wqs-tech.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as patients 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 of infections. These people should seek advice about drinking water from their health care providers. The EPA and Center for Disease Control 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 (800) 426-4791.



FDEP's Source Water Assessment & Protection Program identifies potential threats to drinking water supplies with the goal to protect our vital resources.



# **Lead in Drinking Water**

### **Source Water Assessments**

If present, elevated levels of 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.

Tampa Bay Water and its members are 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 or at

epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

The FDEP's Source Water Assessment & Protection Program is meant to ensure that your drinking water is safe, not just at the tap, but at its source. Initiated as part of the federal Safe Drinking Water Act, the program identifies potential threats to drinking water supplies with the goal to protect our vital resources.

The most recent Source Water Assessment reported by the FDEP for Tampa Bay Water facilities was in 2021. Potential sources of contamination were assessed by the FDEP as "low risk" and "moderate risk" for groundwater sources and "high risk" near Tampa Bay Water's surface water intakes. The classification is for source waters and does not apply to the finished water we deliver to our members. A multi-step, advanced treatment process is used at Tampa Bay Water's Regional Surface Water Treatment Plant to ensure clean water for our members and their customers. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at **prodlamp.dep. state.fl.us/swapp**. For help with understanding these results, contact Tampa Bay Water at (727) 796-2355 or (813) 996-7009.



# **Safeguarding Our Sources of Supply**



Your efforts, along with local and state ordinances, and best management practices, help promote a healthy watershed and protect our drinking water sources for future generations.

Protecting river water, groundwater and Tampa Bay from contamination protects your drinking water, the environment, and saves money and energy. The cleaner the source water, the less treatment that's required — which means less energy and fewer chemicals are needed to clean the water. You can help prevent pollution by following a few simple steps.



#### **Put Trash in the Proper Place**

Whether it's the trash can or recycle bin, put trash where it belongs. Plastic does not decompose and can harm many animals and fish as well as pollute the water.



#### **Use an Ashtray**

Discarded cigarette butts are carried by rainwater to the nearest storm drain, drainage ditch, pond, lake or bay. Cigarettes are not biodegradable — they are pollution.



#### **Use Florida-Friendly Fertilizer**

Use slow-release fertilizer in the garden and on the lawn with only ½ inch of water. Watch the weather and never fertilize before rain. Rain washes fertilizer into the environment. When possible, use Florida-friendly plants — they use minimal water and fertilizer.



#### **Never Dump Into Storm Drains**

In many municipalities, it is illegal to dump chemicals, oil, sewage or yard waste into the stormwater system. If you see someone polluting, report the incident to your local city or county government.



#### Pick Up After Your Pet

Pet waste contains harmful bacteria that make people sick and cause harmful algae blooms.

# **Key Terms in This Report**

**Contaminant:** An undesirable or potentially harmful physical, biological, chemical or radiological substance.

Florida Department of Environmental Protection (FDEP): The government agency that has the primary role of regulating public water systems in Florida.

HAA5: Total concentration of five haloacetic acids: dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid and trichloroacetic acid.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or 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 or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Some of the terms, acronyms and abbreviations used in this report are unique to the water industry and may be unfamiliar to some readers. Following are some definitions of key terms to make this report easier to understand.

No Detect: Not detected in laboratory analysis.

**Parts Per Billion (PPB):** One ppb is comparable to one drop of water in 55,000 gallons.

**Parts Per Million (PPM):** One ppm is comparable to one drop of water in 55 gallons.

Picocuries Per Liter (pCi/L): A measure of radiation.

Running Annual Average (RAA): The average of sample analytical results for samples taken during the previous four calendar quarters.

#### Safe Drinking Water Act (SDWA):

A federal law passed in 1974 and amended in 1986 and 1996 that sets health-based standards for drinking water and requires treatment and monitoring of those standards; established maximum contaminant levels and treatment techniques for chemicals, metals and pathogens.

TTHMs: Total concentration of trihalomethanes - chloroform, bromoform, bromodichloromethane and dibromochloromethane.

**Turbidity:** 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. High turbidity can hinder the effectiveness of disinfectants.

**U.S. Environmental Protection Agency (EPA):** The federal agency responsible for protecting public health and the environment by developing and enforcing regulations, including the Safe Drinking Water Act.

WTP: Water treatment plant.



We encourage public interest and participation in the decisions affecting drinking water.



# **About Tampa Bay Water**



Learn more about the journey of your drinking water and test your water knowledge. tampabayh2o.com



Learn how Tampa Bay Water's microbiology section in its state-certified lab helps provide clean, safe water to the Tampa Bay region.
tampabaywater.org/tampa-bay-region-drinking-water-quality

Tampa Bay Water was created through enabling legislation to provide wholesale drinking water to Hillsborough, Pasco and Pinellas counties and the cities of New Port Richey, St. Petersburg and Tampa. We are a not-for-profit government utility funded solely through the sale of water to our members.

We encourage public interest and participation in decisions affecting drinking water. Tampa Bay Water's board of directors meets at 9:30 a.m. on the third Monday of every month, unless noticed on our website, at 2575 Enterprise Road, Clearwater, FL 33763-1102. Public comment is taken at every meeting. Find out more about Tampa Bay Water at **tampabaywater.org**. For more information about this report, contact Tampa Bay Water's Public Affairs department at (727) 796-2355 or (813) 996-7009.



# Results for Regulated Water Contaminants



This Report was prepared by Tampa Bay Water. For more information, call Tampa Bay Water at (727) 796-2355 or (813) 996-7009



Every regulated contaminant that we detected in the water, even in the most minute traces, is listed in this report.

#### **How To Read These Tables**

Tampa Bay Water continually monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2021. Data obtained before January 1, 2021, if presented in this report, are from the most recent testing done in accordance with the laws, rules, and regulations.

The table shows the results of our water quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed in this report. The table contains the name of each substance, the maximum level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to the units of measurement. Definitions of MCL and MCLG are important. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some data, though representative, are more than one year old.

### **Regulated Water Contaminants in River Water Sources**

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

	_	-	_	•		•		•
Compound	Unit of Measurement	MCL	MCLG	Regional Surface Water Treatment Plant Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.007	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.30	N/A	NO	4/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	ppb	100	100	2	N/A	NO	4/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.485	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Lead (point of entry)	ppb	15	0	2	No detect-2	NO	1/21, 4/21, 7/21, 10/21	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nickel	ppb	100	N/A	2	N/A	NO	4/21	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen)	ppm	10	10	0.478	0.230-0.478	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	25.4	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL or MRDL	MCLG or MRDLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 1 Disinfection and Disinfection By-Products								
Bromate	ppb	10	0	1.50 Highest RAA	No Detect - 3.98	NO	1/21-12/21	By-product of drinking water disinfection.

Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Monthly Removal Ratios	TT Violation	Dates of Sampling	Likely Source of Contamination
Stage 1 Disinfectants and Disinfection By-Products - Total Organic Carbon								
Total Organic Carbon	ppm	TT	N/A	Less than 2.0	N/A	NO	1/21-12/21	Naturally present in the environment.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
<b>Radioactive Contaminants</b>								
Alpha emitters	pCi/L	15	0	0.9	N/A	NO	4/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	0.5	N/A	NO	4/21	Erosion of natural deposits.

Contaminant	Unit of Measurement	MCL	MCLG	Highest Single Measure	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCL Violation	Dates of Sampling	Likely Source of Contamination
Turbidity								
Turbidity	NTU	TT	N/A	0.196	100	NO	1/21-12/21	Soil runoff.

#### **Definitions**

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water.

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

 $\textbf{Sampling Point:} \ Point \ of entry \ or \ point \ of \ connection \ to \ the \ distribution \ system \ where \ sample \ is \ collected.$ 

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

### **Regulated Water Contaminants in Seawater Desalination**

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Tampa Bay Seawater Desalination Plant Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.002	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.20	N/A	NO	4/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Sodium	ppm	160	N/A	54	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Contaminant	Unit of Measurement	MCL	MCLG	Highest Monthly Average	Highest Average	MCL Violation	Dates of Sampling	Likely Source of Contamination
Stage 1 Disinfectants and Disinfection By-Products - Chlorite								
Chlorite	ppm	1.0	0.8	0.01413	N/A	NO	1/21-12/21	By-product of drinking water disinfection.

Disinfectant	Unit of Measurement	MRDLG	MRDL	Level Detected	*Non-Acute Violation	Acute Violation	Dates of Sampling	Likely Source of Contamination
Stage 1 Disinfectants and Disinfection By-Products - Chlorine Dioxide								
Chlorine Dioxide	ppb	800	800	0.50	NO	NO	4/19*	Water additive used to control microbes.

Contaminant	Unit of Measurement	MCL	MCLG	Range of Monthly Removal Ratios	Lowest Running Annual Avg Computed Quarterly of Monthly Removal Ratios	TT Violation	Dates of Sampling	Likely Source of Contamination
Stage 1 Disinfectants and Disinfection By-Products - Total Organic Carbon								
Total Organic Carbon	ppm	TT	N/A	3.41-3.90	3.34	NO	1/21-4/21, 12/21	Naturally present in the environment.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
<b>Radioactive Contaminants</b>								
Radium 226 + 228	pCi/L	5	0	0.4	N/A	NO	4/21	Erosion of natural deposits.

Contaminant	Unit of Measurement	MCL	MCLG	Highest Single Measure	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCL Violation	Dates of Sampling	Likely Source of Contamination
Turbidity								
Turbidity	NTU	TT	N/A	0.0918	100	NO	1/21-5/21, 12/21	Soil runoff.

#### **Definitions**

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water.

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**No Detect:** Indicates the substance was not found by laboratory analysis.

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Brandon Urban Dispersed Well 5 BUD5WTPEFF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	ppb	10	0	0.670	N/A	NO	4/21	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
Barium	ppm	2	2	0.013	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	ppb	100	100	1	N/A	NO	4/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.175	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nitrate (as Nitrogen)	ppm	10	10	0.890	0.832-0.890	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	ppm	1	1	0.066	No detect - 0.066	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	13.7	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Alpha emitters	pCi/L	15	0	3.4	N/A	NO	4/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.3	N/A	NO	4/21	Erosion of natural deposits.
Uranium	ug/l	30	0	1.5	N/A	NO	4/21	Erosion of natural deposits.

#### **Definitions**

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water.

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

**Picocurie per liter (pCi/L):** Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Brandon Urban Dispersed Well 7 BUD7WTPEFF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	ppb	10	0	0.280	N/A	NO	6/21	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
Barium	ppm	2	2	0.011	N/A	NO	6/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.200	N/A	NO	6/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Mercury	ppb	2.0	2	0.130	N/A	NO	6/21	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (as Nitrogen)	ppm	10	10	3.0	2.70-3.0	NO	1/21, 6/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	ppm	1	1	0.069	No detect - 0.069	NO	1/21, 6/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	15	N/A	NO	6/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Radium 226 + 228	pCi/L	5	0	1.4	N/A	NO	6/21	Erosion of natural deposits.
Uranium	ug/l	30	0	0.51	N/A	NO	6/21	Erosion of natural deposits.

#### Definitions

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

 $\label{prop:cocurie} \textbf{Picocurie per liter (pCi/L):} \ \ \textbf{Measure of the radioactivity in water.}$ 

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Morris Bridge Water Treatment Plant MBWTPEFF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.018	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.30	N/A	NO	4/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	ppb	100	100	2	N/A	NO	4/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.083	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nitrate (as Nitrogen)	ppm	10	10	0.059	No Detect - 0.059	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	10.5	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Synthetic Organic Contaminants								
Dalapon	ppb	200	200	1.20	No Detect - 1.20	NO	4/21, 7/21, 10/21	Runoff from herbicide used on rights of way.
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Alpha emitters	pCi/L	15	0	3.4	N/A	NO	4/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.2	N/A	NO	4/21	Erosion of natural deposits.

#### Definitions

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water.

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

**Picocurie per liter (pCi/L):** Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For 2021, the facility did not use any chlorine dioxide in its operation.

- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

**Turbidity:** The result in the "Lowest Monthly Percentage" column is the lowest monthly percentage of samples reported in the Monthly Operation Report that meet the required turbidity limits.

**Synthetic Organic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point, depending on the sampling frequency.

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Lake Bridge to Regional LBWTPREG Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.014	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.20	N/A	NO	4/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Fluoride	ppm	4.0	4	0.098	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Mercury	ppb	2	2	0.030	N/A	NO	4/21	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nickel	ppb	100	N/A	6.0	N/A	NO	4/21	Pollution from mining and refining operatios. Natural occurrence in soil.
Nitrate (as Nitrogen)	ppm	10	10	0.053	No detect-0.053	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	8.8	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Alpha emitters	pCi/L	15	0	2.0	N/A	NO	4/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.4	N/A	NO	4/21	Erosion of natural deposits.

#### **Definitions**

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

 $\label{prop:cocurie} \textbf{Picocurie per liter (pCi/L):} \ \ \textbf{Measure of the radioactivity in water.}$ 

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Cypress Creek Water Treatemnt Plant CCWTPEF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	ppb	10	0	0.420	N/A	NO	4/21	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
Barium	ppm	2	2	0.017	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	ppb	100	100	2	N/A	NO	4/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.081	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nitrate (as Nitrogen)	ppm	10	10	0.065	No Detect-0.065	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	15.9	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Radium 226 + 228	pCi/L	5	0	1.1	N/A	NO	4/21	Erosion of natural deposits.
Uranium	ug/l	30	0	0.68	N/A	NO	4/21	Erosion of natural deposits.

#### Definitions

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**No Detect:** Indicates the substance was not found by laboratory analysis.

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

**Picocurie per liter (pCi/L):** Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	Maytum Water Treatment Plant MAYTUMEFF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.018	N/A	NO	4/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.30	N/A	NO	4/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	ppb	100	100	2	N/A	NO	4/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.690	N/A	NO	4/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nitrate (as Nitrogen)	ppm	10	10	0.140	No detect-0.140	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	ppm	1	1	0.068	No detect - 0.068	NO	1/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	11.8	N/A	NO	4/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Radioactive Contaminants								
Alpha emitters	pCi/L	15	0	3.0	N/A	NO	4/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	2.0	N/A	NO	4/21	Erosion of natural deposits.

#### Definitions

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

**Picocurie per liter (pCi/L):** Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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

The results for the tables below are regulated by federal and state agencies. For a complete list including unregulated contaminants, please call (727) 796-2355 or email records@tampabaywater.org.

Compound	Unit of Measurement	MCL	MCLG	South Pasco Water Treatment Plant SPWTPEFF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.015	N/A	NO	3/21	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	ppb	100	100	2	N/A	NO	3/21	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4.0	4	0.082	N/A	NO	3/21	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm.
Nitrate (as Nitrogen)	ppm	10	10	0.220	No Detect - 0.220	NO	3/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	ppm	1	1	0.090	No Detect - 0.090	NO	3/21, 4/21, 7/21, 10/21	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	12.1	N/A	NO	3/21	Salt water intrusion, leaching from soil.

Disinfectant or Contaminant	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL or MRDL Violation	Dates of Sampling	Likely Source of Contamination
Stage 2 Disinfection and Disinfection By-Products								
HAA5	ppb	60	N/A	22 Highest LRAA	3.58-31.11	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	27.31 Highest LRAA	8.99-36.13	NO	1/21, 4/21, 7/21, 10/21	By-product of drinking water disinfection.

Compound	Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
<b>Radioactive Contaminants</b>								
Alpha emitters	pCi/L	15	0	2.2	N/A	NO	3/21	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.7	N/A	NO	3/21	Erosion of natural deposits.

#### Definitions

**Inorganic Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Likely Source of Contamination:** Potential sources of contamination generally identified by the FDEP, *Consumer Confidence Report Template Instructions and Template*, FRWA/DEP, February 2021.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or 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 or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal or 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 contaminants.

**Monthly Operating Report:** Report sent to Florida Department of Environmental Protection for public water systems treating raw ground water or purchased finished water

N/A: Not applicable

**Nephelometric Turbidity Units (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

 $\textbf{No Detect:} \ \textbf{Indicates the substance was not found by laboratory analysis}.$ 

**Parts per billion (ppb) or Micrograms per liter (ug/L):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Parts per million (ppm) or Milligrams per liter (mg/L):** One part of weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

**Radioactive Contaminants:** Results in the "Level Detected" column are the highest detected level at any sampling point.

**Sampling Point:** Point of entry or point of connection to the distribution system where sample is collected.

#### Stage 1 Disinfectants and Disinfection By-products:

- For bromate, the "Level Detected" is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.
- For chlorine dioxide, the result in the "Level Detected" column is the highest single measurement collected at the entrance to the distribution system. For

- 2021, the facility did not use any chlorine dioxide in its operation.
- For chlorite, the result in the "Highest Monthly Average" column is the highest monthly average from the three sample set collected in the distribution system.
- For total organic carbon, the result in the "Lowest Running Annual Average Computed Quarterly Monthly Removal Ratio" column contains the lowest running annual average result of monthly removal ratios.

**Stage 2 Disinfectants and Disinfection By-Products:** Results in the level detected for haloacetic acids and total trihalomethanes are based on a locational running annual average. The range of results is lowest to highest at individual sampling sites.

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





2575 Enterprise Road, Clearwater, FL 33763 (727) 796-2355 or (813) 996-7009 | **tampabaywater.org**