



# Water Quality Report 2022



Tampa Bay Water reliably provides clean, safe water to the region now and for future generations.





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Our water treatment plants use proven technology, advanced disinfection, corrosion control and state-certified operators to ensure a high-quality product.

# About This Report

Tampa Bay Water is pleased to present its 2022 Annual Drinking Water Quality Report, also known as a 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.







The water we provide to our member governments meets or is better than all state and federal drinking water health standards.



# Providing You With High-Quality Water

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 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 2022 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 more than 3,500 samples and conducted more than 45,000 water quality tests in our state-certified laboratory to ensure we meet:

- More than 90 state and federal drinking water parameters
- 13 parameters monitored more frequently than state and federal requirements.
- 12 additional 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.



More than **3,500** samples collected



More than **45,000** water quality tests performed



More than **90** state and federal parameters met



**13** parameters monitored more frequently than state and federal requirements



**12** additional parameters met



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

# Where Does Your Water Come From?

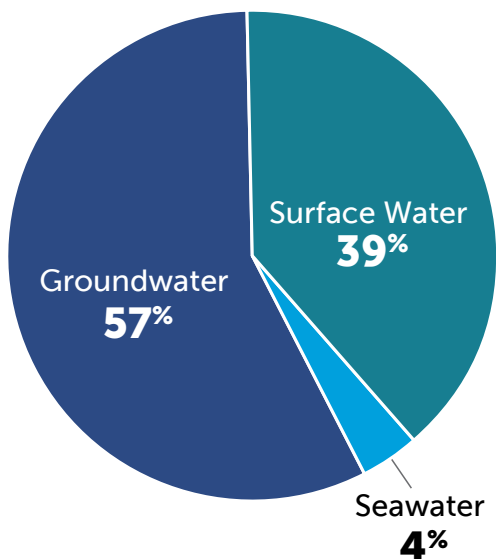
Most residents who live in Hillsborough, Pasco and Pinellas counties get their water from Tampa Bay Water through their local utility. Your drinking water comes from a diverse water supply network that is designed to be responsive to weather conditions, environmental conditions, water quality and more. Tampa Bay Water's supply is a blend of treated groundwater, river water and 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

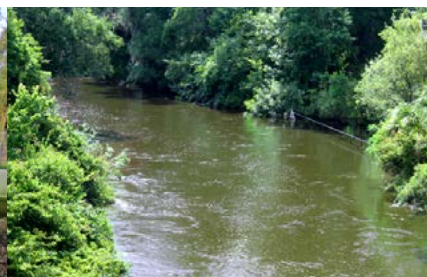
River and the Tampa Bypass Canal. Surplus river and canal water is stored in the C.W. Bill Young Regional Reservoir, which supplies our Tampa Bay Regional Surface Water Treatment Plant during dry times. Tampa Bay is the source of seawater for the Tampa Bay Seawater Desalination Plant.

After treatment, all of these potable water supplies meet stringent safe drinking water standards as set by EPA and the FDEP. Even more, our member utilities have 12 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.

**2022 WATER SUPPLY SOURCE BLEND**



**GROUNDWATER**



**RIVER WATER**



**SEAWATER**





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.

# Understanding Source Water Quality

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 by-products 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, 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.



# 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 with chloramines and blend it with our other sources.

Our Tampa Bay Regional Surface Water Treatment Plant and Tampa Bay Seawater Desalination Plant use multi-step processes for added safety. Both facilities screen water to remove large debris, then they 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 with biologically activated carbon 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

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 EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting [epa.gov/wqs-tech](https://www.epa.gov/wqs-tech).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised

people such as patients with cancer undergoing chemotherapy, people 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. 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.



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



EPA's Water Quality Standards  
**[epa.gov/wqs-tech](https://www.epa.gov/wqs-tech)**





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 two minutes before using water.

# Lead in Drinking Water

Lead is not a concern with the regional water supply. 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 being used in plumbing components.

If present, elevated levels of lead can cause serious health problems, especially in pregnant women and young children. If you are concerned about lead in your drinking 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 at (800) 462-4791 or at [epa.gov/lead](https://www.epa.gov/lead).



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



EPA's Water Quality Standards  
**[epa.gov/lead](https://www.epa.gov/lead)**

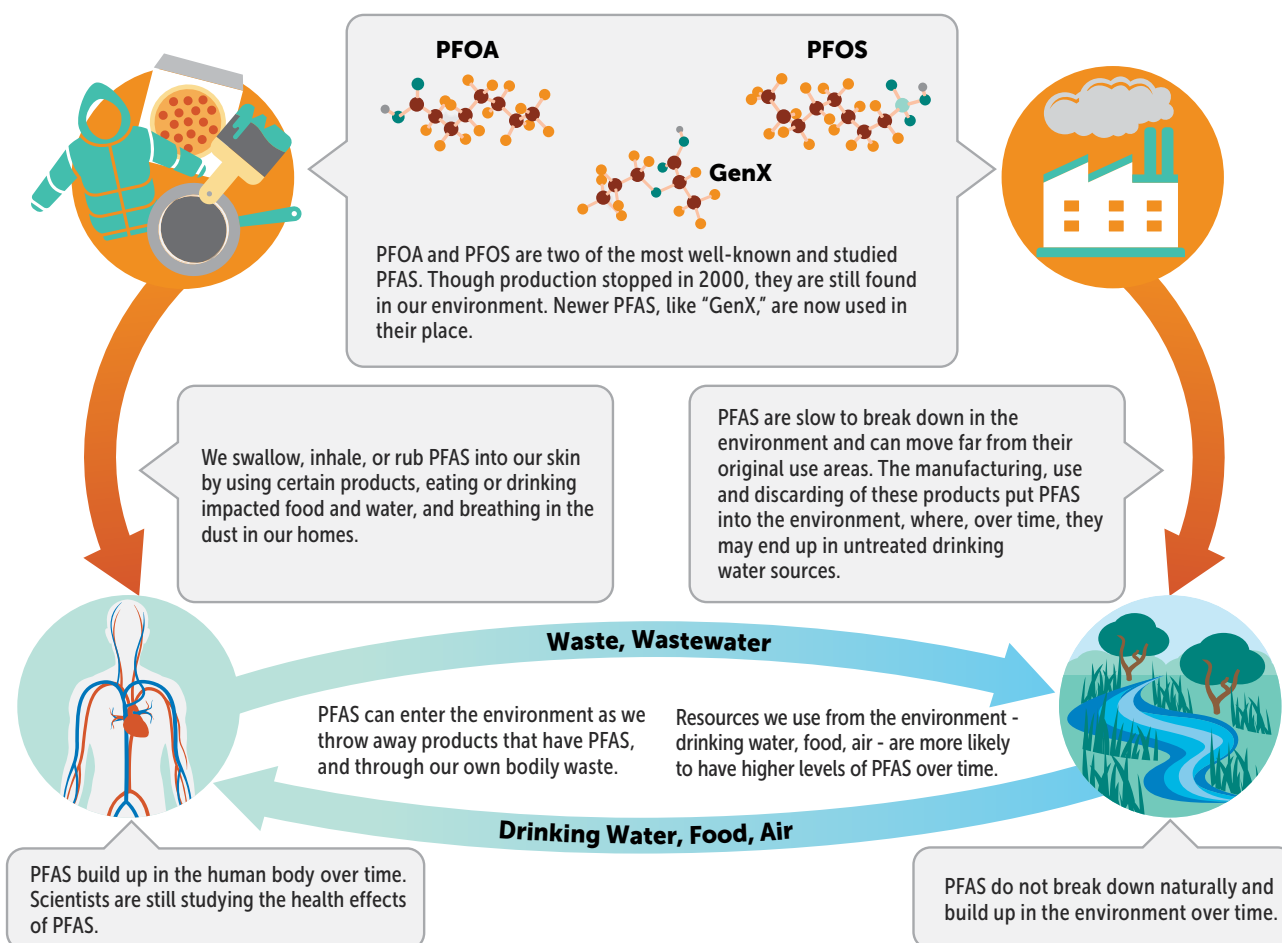


Per- and polyfluoroalkyl substances (PFAS) are a concern for all communities, including here in Tampa Bay, and we want to help residents understand the facts about PFAS.

# What to Know About PFAS and Drinking Water

PFAS are man-made compounds that have been widely used in the manufacturing of clothing, sealants and stains, furniture fabrics, Teflon™-coated products, food packaging, and other materials since the 1940s. They are also used in firefighting foam, carpet manufacturing and other industrial processes.

PFAS do not originate in drinking water supplies. When products containing PFAS are used and discarded, they can release PFAS into the environment, including drinking water sources.



## PRODUCTS THAT CONTAIN PFAS



**NON-STICK  
COOKWARE**



**WATER RESISTANT  
CLOTHING**



**PAINTS, STAINS &  
VARNISHES**



**STAIN RESISTANT  
PRODUCTS**



**FIREFIGHTING  
FOAMS**



**FAST FOOD  
PACKAGING  
& PIZZA BOXES**



**MICROWAVE  
POPCORN BAGS**



**CANDY  
WRAPPERS**



**DENTAL FLOSS**



**EYE MAKEUP**



**NAIL POLISH**



**SHAMPOO**



**CLEANING  
PRODUCTS**



**PESTICIDES**

## What Is EPA Doing?

EPA has not regulated PFAS in drinking water but estimates it will issue PFAS regulations by the end of 2023. When EPA sets regulations for PFAS, Tampa Bay Water will meet those regulations.

EPA continually studies unregulated contaminants, including PFAS, under its Unregulated Contaminant Monitoring Rule (UCMR). The study collects data for contaminants that are suspected to be present in drinking water but do not have health-based standards set under the Safe Drinking Water Act. The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) requires sample collection for 30 chemical contaminants, including PFAS, between 2023 and 2025.

It can be a lengthy process to set drinking water regulations, but it is important that EPA completes its thorough, scientific process to fully understand the potential health impacts, maximum contaminant levels, analytical methods, and treatment methods to provide public utilities with proven, consistent standards.

Tampa Bay Water and its member utilities are participating in EPA's nationwide UCMR 5 study to identify PFAS concentrations, which involves testing treated drinking water. This helps EPA set regulations for PFAS and helps Tampa Bay Water determine treatment methods.

## How Can I Reduce My Exposure to PFAS?

PFAS exposure can vary depending on your local environment, but you can take steps to reduce your exposure to PFAS. You can identify PFAS in products by looking at ingredient lists for "fluoro" or "perfluoro." Choosing products that do not have PFAS can require some research, but it is an

effective way to reduce your exposure. It can also mean giving up some product features such as "non-stick," or "water- or stain-resistant." Consider replacing older and worn-out products with these features to reduce your exposure.



Find out more about PFAS, including more ways to reduce exposure and follow Tampa Bay Water's participation in EPA's UCMR 5 study at [tampabaywater.org/pfas](https://tampabaywater.org/pfas).





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

# Source Water Assessments

In 2022, the Florida Department of Environmental Protection (DEP) performed Source Water Assessments on our system.<sup>1</sup> These assessments were conducted to provide information about potential sources of contamination in the vicinity of our wells and surface water intakes.<sup>2</sup>

The DEP reported five potential sources of contamination with a low risk<sup>3</sup> susceptibility level and one potential source as moderate risk<sup>4</sup> in the vicinity of our wells. Surface water sources are listed as high risk<sup>5</sup> because many potential sources of contamination were identified by the DEP in the assessment area. Tampa Bay Water also reviews potential sources of contamination, as part of our ongoing Source Water Assessment and Protection Program.

It is important to note that the susceptibility classifications assigned by the DEP are for source waters and not the finished water we deliver to our members. Our surface waters undergo a multi-step, advanced treatment process at Tampa Bay Water's Regional Surface Water Treatment Plant to ensure clean drinking water is supplied to our members and their customers.

The DEP assessment results are available on their Source Water Assessment and Protection Program (SWAPP) website at [prodapps.dep.state.fl.us/swapp/](https://prodapps.dep.state.fl.us/swapp/). For help with searching the website and understanding these results, contact Tampa Bay Water at (727) 796-2355 or (813) 996-7009.

<sup>1</sup> Tampa Bay Water's regional delivery system obtains water from 13 well fields (WF) and two surface water sources

<sup>2</sup> 0 potential sources identified near: BUD5 Wells [629-6320], Cypress Creek/Cross Bar WFs [651-2230], Morris Bridge WF [629-6177], Eldridge-Wilde WF [652-1405], Cosme Odessa WF [652-1715], Section 21 and Northwest Hillsborough WFs [629-0388], South Central Hillsborough WF [629-0787], and the Tampa Bay Desalination Facility [629-6153]

<sup>3</sup> 2 potential low risk sources near Cypress Bridge WF [651-5234], 1 near Starkey WF [651-1255], 1 near BUD7 Well [629-6319], and 1 near South Pasco WF [651- 5275]

<sup>4</sup> 1 potential moderate risk source near Cypress Bridge WF [651-5234]

<sup>5</sup> Potential high risk sources identified near the Tampa Bypass Canal and Alafia River [629-6139], see [prodapps.dep.state.fl.us/swapp/](https://prodapps.dep.state.fl.us/swapp/)

**Note:** Numbers in brackets (see above footnotes) identify Public Water System (PWS) IDs for use when searching DEP SWAPP web site at [prodapps.dep.state.fl.us/swapp/](https://prodapps.dep.state.fl.us/swapp/)



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.



# Safeguarding Our Sources of Supply

Protecting drinking water sources 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 FLORIDA-FRIENDLY FERTILIZER

Use slow-release fertilizer and follow manufacturer instructions on how to apply to your lawn. Watch the weather and never fertilize before it rains. 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.



## PROPERLY DISPOSE OF HOUSEHOLD CHEMICALS AND HAZARDOUS WASTE

The safest way to dispose of household chemicals and hazardous waste such as paint, motor oil, fertilizer and pesticides is to take them to your local county recycling center. This prevents the chemicals from making their way into our water supplies.



## PROPERLY DISPOSE OF MEDICATION

The safest way to dispose of old medications, both prescription and over-the-counter, is to take them to a local drop-off location and keep them out of the environment and our waterways.

Find medication drop-off locations and county recycling centers at [tampabaywater.org/protecting-our-drinking-water-sources](https://tampabaywater.org/protecting-our-drinking-water-sources).

# Key Terms in This Report

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.

**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.

**HAA5s:** 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 analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**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 using the best available treatment technology.

**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 addition of a disinfectant is necessary for 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 contaminants.

**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:** 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.

**Per- and polyfluoroalkyl substances (PFAS):** Man-made compounds that have been widely used in the manufacturing of clothing, sealants and stains, furniture fabrics, Teflon™-coated products, food packaging, and other materials since the 1940s. They are also used in firefighting foam, carpet manufacturing and other industrial processes.

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

**Running Annual Average (RAA):** The average of 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.

**Trihalomethanes (TTHMs):** 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.

**Unregulated Contaminant Monitoring Rule (UCMR):** Program developed by EPA to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act.

**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

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](http://tampabaywater.org). For more information about this report, contact Tampa Bay Water's public communications department at (727) 796-2355 or (813) 996-7009.



Learn more about the journey of your drinking water and test your water knowledge:

**[tampabayh2o.com](http://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](http://tampabaywater.org/tampa-bay-region-drinking-water-quality)**



# Results for Regulated Water Contaminants

## 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, 2022. Data obtained before January 1, 2022, if presented in these tables, are from the most recent testing done in accordance with applicable laws, rules and regulations.

These tables show the results of our water quality analyses. Tampa Bay Water analyzes for all regulated contaminants. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed in this report. Regulated

contaminants we do not detect are not all listed in this report. For a complete list, please call (727) 796-2355 or (813) 996-7009. The tables contain the name of each substance, the maximum contaminant level (MCL) allowed by regulation, the ideal maximum contaminant level goals (MCLG) for public health, 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.



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

# Regulated Water Contaminants in River Water Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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	0.013	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.218	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nickel	ppb	100	N/A	4	N/A	NO	4/22	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen)	ppm	10	10	0.456	0.189 - 0.456	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	28.5	N/A	NO	4/22	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	0.80 Highest RAA	No Detect - 7.00	NO	1/22-12/22	By-product of drinking water disinfection.

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	1.54 - 2.70	1.92	NO	1/22-12/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	0.7	N/A	NO	4/22	Erosion of natural deposits.
Uranium	ug/L	30	0	1.0	N/A	NO	4/22	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	1/22-12/22	Soil runoff.

## FOOTNOTES AND 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 2022.

**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 using the best available treatment technology.

**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.

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**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 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 2022, the facility did not use any chlorine

- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.



# Regulated Water Contaminants in Seawater

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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								
Mercury (inorganic)	ppb	2	2	0.033	N/A	NO	4/22	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (as Nitrogen)	ppm	10	10	0.047	No Detect - 0.047	NO	1/22, 4/22, 11/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	55.1	N/A	NO	4/22	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	0.00791	N/A	NO	1/22-12/22	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	3.83 - 6.33	3.50	NO	1/22-6/22, 11/22-12/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.

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	0.0899	100	NO	1/22-6/22, 11/22-12/22	Soil runoff.

## FOOTNOTES AND 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 2022.

**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 using the best available treatment technology.

**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 addition of a disinfectant is necessary for 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 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 2022, the facility did not use any chlorine

dioxide in its operation.

- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.

# Regulated Water Contaminants in Groundwater Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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								
Barium	ppm	2	2	0.017	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.221	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Mercury (inorganic)	ppb	2	2	0.090	N/A	NO	4/22	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (as Nitrogen)	ppm	10	10	0.971	0.834 - 0.971	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	16.2	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	3.1	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.3	N/A	NO	4/22	Erosion of natural deposits.
Uranium	ug/L	30	0	2.2	N/A	NO	4/22	Erosion of natural deposits.

## FOOTNOTES AND DEFINITIONS

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

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**Maximum Residual Disinfectant Level (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 (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 2022, the facility did not use any chlorine

- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.

# Regulated Water Contaminants in Groundwater Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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								
Barium	ppm	2	2	0.012	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cadmium	ppb	5	5	0.10	N/A	NO	4/22	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Fluoride	ppm	4.0	4	0.153	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Mercury (inorganic)	ppb	2	2	0.160	N/A	NO	4/22	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nickel	ppb	100	N/A	0.80	N/A	NO	4/22	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen)	ppm	10	10	2.72	2.37 - 2.72	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	15.7	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	1.5	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	0.7	N/A	NO	4/22	Erosion of natural deposits.
Uranium	ug/L	30	0	0.75	N/A	NO	4/22	Erosion of natural deposits.

### FOOTNOTES AND 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 2022.

**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 using the best available treatment technology.

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**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.

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**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 2022, the facility did not use any chlorine

dioxide in its operation.

- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.



# Regulated Water Contaminants in Groundwater Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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	0.028	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.133	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nitrate (as Nitrogen)	ppm	10	10	0.083	No Detect - 0.083	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	10.5	N/A	NO	4/22	Salt water intrusion, leaching from soil.
Synthetic Organic Contaminants								
Dalapon	ppb	200	200	1.84	No Detect - 1.84	NO	1/22, 4/22, 7/22, 10/22	Runoff from herbicide used on rights of way.
Stage 2 Disinfection and Disinfection By-Products								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	3.8	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	2.8	N/A	NO	4/22	Erosion of natural deposits.

### FOOTNOTES AND DEFINITIONS

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

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**Maximum Residual Disinfectant Level (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 (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.

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**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 2022, the facility did not use any chlorine

- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.

# Regulated Water Contaminants in Groundwater Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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	0.013	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.113	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nitrate (as Nitrogen)	ppm	10	10	0.073	No Detect - 0.073	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	8.54	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	2.1	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.7	N/A	NO	4/22	Erosion of natural deposits.

## FOOTNOTES AND 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 2022.

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**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.

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**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.
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- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.

# Regulated Water Contaminants in Groundwater Sources

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

Compound	Unit of Measurement	MCL	MCLG	Cypress Creek Water Treatment Plant CCWTPEF Level Detected	Range of Results	MCL Violation	Dates of Sampling	Likely Source of Contamination
Inorganic Contaminants								
Barium	ppm	2	2	0.017	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.111	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nitrate (as Nitrogen)	ppm	10	10	0.091	0.027 - 0.091	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	15.1	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	3.2	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.5	N/A	NO	4/22	Erosion of natural deposits.
Uranium	ug/L	30	0	0.35	N/A	NO	4/22	Erosion of natural deposits.

## FOOTNOTES AND 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 2022.

**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 using the best available treatment technology.

**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 addition of a disinfectant is necessary for 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 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 2022, the facility did not use any chlorine

- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled 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 (LRAA). The range of results is lowest to highest at individual sampling sites

**Treatment Technique (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.



# Regulated Water Contaminants in Groundwater Sources

The results for the tables below are regulated by federal and state agencies. For a complete list of regulated and unregulated contaminants, please call (727) 796-2355 or email [records@tampabaywater.org](mailto: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	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.578	N/A	NO	4/22	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	1	No Detect - 1	NO	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nitrate (as Nitrogen)	ppm	10	10	0.046	No Detect - 0.046	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	11.3	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	1.5	N/A	NO	4/22	Erosion of natural deposits.

## FOOTNOTES AND 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 2022.

**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 using the best available treatment technology.

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**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.

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**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.
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- dioxide in its operation.
- For total organic carbon, the result in the “Lowest Running Annual Average Compiled Quarterly Monthly Removal Ratio” column contains the lowest running annual average result of monthly removal ratios.

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**Treatment Technique (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.

# Regulated Water Contaminants in Groundwater Sources

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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	0.018	N/A	NO	4/22	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4.0	4	0.079	N/A	NO	4/22	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	1/22, 4/22, 7/22, 10/22	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nitrate (as Nitrogen)	ppm	10	10	0.118	No Detect - 0.118	NO	1/22, 4/22, 7/22, 10/22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	ppm	160	N/A	12.4	N/A	NO	4/22	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								
HAA5s	ppb	60	N/A	19.48 Highest LRAA	0.79 - 28.53	NO	1/22, 4/22, 7/22, 10/22	By-product of drinking water disinfection.
TTHMs	ppb	80	N/A	25.46 Highest LRAA	6.18 - 32.74	NO	1/22, 4/22, 7/22, 10/22	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	4.8	N/A	NO	4/22	Erosion of natural deposits.
Radium 226 + 228	pCi/L	5	0	4.3	N/A	NO	4/22	Erosion of natural deposits.

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