

# **2022 Annual Drinking Water Quality Report**

## **Pasco County Utilities - Pasco County Regional Water System**

### **PWS ID No. 651-1361**

Pasco County Utilities is pleased to present the 2022 Annual Water Quality Report. This report is designed to inform Regional customers about the quality of water and services delivered every day. Pasco County Utilities' constant goal is to provide customers with a safe and dependable supply of drinking water. This report is provided to better understand the efforts made to continually improve the water treatment process and protect water resources.

The Pasco County Regional Water System is a member of the regional water supplier known as Tampa Bay Water (TBW). The Pasco County Regional Water System receives an estimated 95 percent of our drinking water from TBW-operated treatment plants. These plants supply a dynamic blend of groundwater, surface water, and desalinated water, depending on availability of supply. Water quality testing results for each of the individual TBW treatment plants are included in the information below.

The Pasco County Regional Water System's primary water source is groundwater from several deep wells, located throughout Pasco County. These wells draw from the Floridan Aquifer. The Alafia River, Hillsborough River, C.W. Bill Young Regional Reservoir, and the Tampa Bypass Canal are the primary sources for the regional surface water supply. Hillsborough Bay is the primary source of seawater for the regional desalinated supply.

The Pasco County Regional Water System uses chloramines to disinfect the water supply. For more information on chloramines, please contact Pasco County Utilities Environmental Lab at 727-847-8902, or visit the website at [PascoCountyUtilities.com](https://www.pascocountyutilities.com). For additional information or questions concerning TBW's water quality, please contact TBW's Public Affairs department at 727-796-2355 or 813-996-7009. Additional information is available by visit the TBW website at [TampaBayWater.org](https://www.tampabaywater.org).

Both Pasco County Utilities and TBW routinely 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 monitoring for the period of Jan. 1, to Dec. 31, 2022. Data obtained before Jan. 1, 2022, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil

and gas production, mining or farming.

- (C) ***Pesticides and herbicides***, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- (D) ***Organic chemical contaminants***, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) ***Radioactive contaminants***, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency Safe Drinking Water Hotline at 800-426-4791.

In 2022, the Florida Department of Environmental Protection (DEP) performed a Source Water Assessment on the Pasco County Utilities Regional Water System. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of Pasco County Utilities Regional wells. There are three (3) potential sources of contamination identified for this system with a low susceptibility level.

In 2022, the DEP performed Source Water Assessments for Tampa Bay Water Facilities and a search of the data sources indicated no potential sources of contamination near the groundwater wells operated by TBW. The TBW surface water system assessment was also conducted by DEP to provide information about any potential sources of contamination in the vicinity of surface water intake. The surface water system is considered to be at high risk because of the number of potential sources of contamination present in the assessment area.

All assessment results are available by contacting Pasco County Utilities, TBW, or by accessing them on the DEP Source Water Assessment and Protection Program (SWAPP) website at <https://prodapps.dep.state.fl.us/swapp/Welcome/detailsByPublicOutreachDate/6511361/10012022>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

## Terms and Abbreviations

In the tables below, you may find unfamiliar terms and abbreviations. To help you better understand these terms the following definitions are being provided:

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

**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.

**'ND'**: Means "not detected" and indicates that the substance was not found by laboratory analysis.

**Parts per billion (ppb) or micrograms per liter (µg/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 by weight of analyte to 1 million parts by weight of the water sample.

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

**Range of Results**: Indicates the lowest and highest concentrations detected for each contaminant. If only one sample was taken, 'Range of Results' = N/A.

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

### **Key**

- AL = Action Level
- LRAA = Locational Running Annual Average
- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- MRDL = Maximum Residual Disinfectant Level

- MRDLG = Maximum Residual Disinfectant Level Goal
- N/A = Not Applicable
- ND = Not Detected
- ppm = parts per million, or milligrams per liter (mg/l)
- ppb = parts per billion, or micrograms per liter (µg/l)
- pCi/l = picocuries per liter
- TT = Treatment Technique

**Note:** As authorized and approved by U.S. Environmental Protection Agency, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data (e.g., for organic contaminants), though representative, is more than one year old.

## Pasco County Regional Test Results Tables

Radioactive Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Uranium (µg/L)	1/2020	N	1.4	0.45 – 1.4	0	30	Erosion of natural deposits

Results in the Level Detected column for radioactive contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	1/2020	N	1.9	ND – 1.9	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	1/2020	N	0.0147	0.0062 – 0.0147	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	1/2020	N	1.4	ND - 1.4	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	1/2020	N	5.5	ND – 5.5	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories

Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	1/2020	N	0.17	0.05 – 0.17	4	4.0	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)	1/2022	N	1.33	0.26 – 1.33	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	1/2022	N	0.11	ND – 0.11	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	1/2020	N	32.7	8.44 – 32.7	N/A	160	Saltwater intrusion, leaching from soil

Results in the Level Detected column for inorganic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

Stage 1 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	1/22 – 12/22	N	2.79	0.6-5.4	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

For chlorine or chloramines, 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.

Stage 2 Disinfectants and Disinfection By-Products							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	1,4,7,10/2022	N	17.8	1.7 – 17.8	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	1,4,7,10/2022	N	24.6	2.5 – 24.6	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Exceeded (Y/N)	90 <sup>th</sup> Percentile Result	No. of Sample Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	6/2020	N	0.702	4	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6/2020	N	0.8	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

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. Pasco County Utilities is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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 at 800-426-4791 or at [EPA.gov/SafeWater/Lead](https://www.epa.gov/safewater/lead).

Microbiological Contaminants							
Contaminant	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Total Number of Positive Samples for the Year	Range of Results	MCLG	MCL	Likely Source of Contamination
E. coli (in the distribution system)	5/22	Y	One (1) Positive Sample	0	0	0	Human and animal fecal waste

In May 2022, there was one positive E.coli sample during testing. The site was resampled along with two other samples upstream and downstream of the site and sites were absent for total coliform, E.coli and fecal indicators. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Water Quality Testing Results							
Contaminant and Unit of Measurement	Dates of Sampling (mo. /yr.)	MCL Violation (Y/N)	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Iron (ppm)	2,3/2020	Y	0.535	0.449 – 0.535	N/A	0.3	Natural occurrence from soil leaching

Pasco County Utilities has been monitoring for unregulated contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UC. However, Pasco County Utilities is required to publish the analytical results of our UC monitoring in our annual water quality report. For more information on the U.S. Environmental Protection Agency Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at 800-426-4791. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at 800-426-4791. For additional information concerning UC sampling results for PWS 651-1361, or to request a hard copy, please contact Pasco County Utilities' Water Operations Supervisor, Jim Kaplan, at 813-929-2755 Ext: 6882.

Unregulated Contaminants				
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	Level Detected (average)	Range	Likely Source of Contamination
Manganese (ppm)	5/2020	0.127	0.127	Natural occurrence from soil leaching

Pasco County Utilities encourages public participation in community decisions that affect drinking water. Regular [Pasco County Board of County Commissioners](#) (BOCC) meetings are normally held every other Tuesday, either at the West Pasco Government Center in New Port Richey or the Pasco County Historic Courthouse in Dade City. All meetings are broadcast live on [Pasco Television](#) and streamed online (and available on-demand) on Pasco County's [YouTube Channel](#).

Please contact the West Pasco Government Center at 727-847-2411 to inquire on the exact date, time, and location or forum type for future BOCC meetings or visit [PascoCountyFL.net](#).

Helpful Pasco County Links:

- Pasco Television: <https://www.pascocountyfl.net/754/Watch-Live-Pasco-TV>
- Commission Meeting Information: <https://www.pascocountyfl.net/572/County-Commissioners>

Pasco County Utilities would like customers to understand the efforts made to continually improve the water treatment process and protect water resources. Pasco County Utilities is committed to ensuring water quality. If there are any questions or concerns about the information provided, please contact any of the numbers listed, or the Pasco County Utilities Laboratory Manager at 727-847-8902.

**A special message regarding safe disposal of medications:**

Pasco County Utilities works around the clock to provide top quality water to every customer and asks that customers help to protect all water sources. Please do not flush unused or unwanted medications down toilets or sink drains. More information is available at <https://pascocountyfl.net/475/Household-Hazardous-Waste>.



## Tampa Bay Water Test Results Tables

Tampa Bay Water (TBW) was created through enabling legislation to provide wholesale drinking water to Hillsborough, Pasco, and Pinellas counties, as well as the cities of New Port Richey, St. Petersburg, and Tampa. TBW is a not-for-profit, government utility funded solely through the sale of water to their members.

TBW encourages public interest and participation in decisions affecting drinking water. Tampa Bay Water's Board of Directors meets on the third Monday of every month at 9:30 a.m. 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 Affairs department at 727-796-2355 or 813-996-7009.

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](mailto:Records@TampaBayWater.org).

### Regulated Water Contaminants in River Water Sources

Tampa Bay Water – Regional Surface Water Treatment Plant (RSWTP)							
Inorganic Contaminants - (RSWTP)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil
<b>Stage 1 Disinfection and Disinfection By-Products - (RSWTP)</b>							
<b>Disinfectant or Contaminant and Unit of Measurement</b>	<b>MCL or MRDL</b>	<b>MCLG or MRDLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL or MRDL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Bromate (ppb)	MCL= 10	MCLG= 0	0.80 Highest RAA	No Detect - 7.00	NO	1/22-12/22	By-product of drinking water disinfection
<b>Stage 1 Disinfectants and Disinfection By-Products - (RSWTP)</b>							
<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Range of Monthly Removal Ratios</b>	<b>Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios</b>	<b>TT Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Total organic carbon (ppm)	TT	N/A	1.54-2.70	1.92	NO	1/22-12/22	Naturally present in the environment
<b>Stage 2 Disinfection and Disinfection By-Products - (RSWTP)</b>							
<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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
<b>Radioactive Contaminants - (RSWTP)</b>							
<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL Violation Y/N</b>	<b>Dates of Sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Radium 226 + 228 (pCi/L)	5	0	0.7	N/A	NO	4/22	Erosion of natural deposits
Uranium (µg/L)	30	0	1.0	N/A	NO	4/22	Erosion of natural deposits
<b>Turbidity - (RSWTP)</b>							
<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>The Highest Single Measure</b>	<b>The Lowest Monthly Percentage of Samples Meeting Regulatory Limits</b>	<b>MCL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Turbidity (NTU)	TT	N/A	0.196	100	NO	1/22-12/22	Soil runoff

## Regulated Water Contaminants in Seawater Desalination

Tampa Bay Water Seawater Desalination Plant (DESAL)							
Inorganic Contaminants - (DESAL)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Mercury (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) (ppb)	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	Saltwater intrusion, leaching from soil
Stage 1 Disinfectants and Disinfection By-Products - Chlorite - (DESAL)							
Contaminant and Unit of Measurement	MCL	MCLG	Highest Monthly Average	Highest Average	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Chlorite (ppm)	1.0	0.8	0.00791	N/A	NO	1/22-12/22	By-product of drinking water disinfection
Stage 1 Disinfectants and Disinfection By-Products - Chlorine Dioxide - (DESAL)							
Disinfectant and Unit of Measurement	MRDLG	MRDL	Level Detected	Non-Acute Violation Y/N	Acute Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Chlorine Dioxide (ppb)	800	800	0.50	NO	NO	4/19*	Water additive used to control microbes
Stage 1 Disinfectants and Disinfection By-Products - (DESAL)							
Contaminant and Unit of Measurement	MCL	MCLG	Range of Monthly Removal Ratios	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios	TT Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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

Stage 2 Disinfection and Disinfection By-Products - (DESAL)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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
Turbidity - (DESAL)							
Contaminant and Unit of Measurement	MCL	MCLG	The Highest Single Measure	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCL Violation	Sample Date	Likely Source of Contamination
Turbidity (NTU)	TT	N/A	0.0899	100	NO	1/22-6/22, 11/22-12/22	Soil runoff

\* 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.

## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water – Brandon Urban Dispersed Well 5 (BUD5WTPEFF)

#### Inorganic Contaminants - (BUD5WTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil

### Stage 2 Disinfection and Disinfection By-Products - (BUD5WTPEFF)

<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

### Radioactive Contaminants - (BUD5WTPEFF)

<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
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 (µg/L)	30	0	2.2	N/A	NO	4/22	Erosion of natural deposits

## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water – Brandon Urban Dispersed Well 7 (BUD7WTPEFF)

#### Inorganic Contaminants - (BUD7WTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil

#### Stage 2 Disinfection and Disinfection By-Products - (BUD7WTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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

Total Trihalomethanes (TTHM) (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
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Radioactive Contaminants - (BUD7WTPEFF)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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 (µg/L)	30	0	0.75	N/A	NO	4/22	Erosion of natural deposits



## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water – Morris Bridge Water Treatment Plant (MBWTPEFF)

#### Inorganic Contaminants - (MBWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil

#### Synthetic Organic Contaminants - (MBWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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 - (MBWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

#### Radioactive Contaminants - (MBWTPEFF)

<b>Contaminant and Unit of Measurement</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Results</b>	<b>MCL Violation Y/N</b>	<b>Dates of sampling (mo./yr.)</b>	<b>Likely Source of Contamination</b>
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

## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water - Lake Bridge to Regional (LBWTPREG)

#### Inorganic Contaminants - (LBWTPREG)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	4/21	Saltwater intrusion, leaching from soil

#### Stage 2 Disinfection and Disinfection By-Products - (LBWTPREG)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

#### Radioactive Contaminants - (LBWTPREG)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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

## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water - Cypress Creek Water Treatment Plant (CCWTPEF)

#### Inorganic Contaminants - (CCWTPEF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	0.011	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	Saltwater intrusion, leaching from soil

#### Stage 2 Disinfectant and Disinfection By-Products - (CCWTPEF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

# Radioactive Contaminants - (CCWTPEF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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 (µg/L)	30	0	0.35	N/A	NO	4/22	Erosion of natural deposits

## Regulated Water Contaminants in Groundwater Sources

Tampa Bay Water – Maytum Water Treatment Plant (MAYTUMEFF)							
Inorganic Contaminants - (MAYTUMEFF)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil
Stage 2 Disinfection and Disinfection By-Products - (MAYTUMEFF)							
Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

# Radioactive Contaminants - (MAYTUMEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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

## Regulated Water Contaminants in Groundwater Sources

### Tampa Bay Water – South Pasco Water Treatment Plant (SPWTPEFF)

#### Inorganic Contaminants - (SPWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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	Saltwater intrusion, leaching from soil

#### Stage 2 Disinfection and Disinfection By-Products - (SPWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
Haloacetic Acids (HAA5) (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
Total Trihalomethanes (TTHM) (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

#### Radioactive Contaminants - (SPWTPEFF)

Contaminant and Unit of Measurement	MCL	MCLG	Level Detected	Range of Results	MCL Violation Y/N	Dates of sampling (mo./yr.)	Likely Source of Contamination
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



## Tampa Bay Water Footnotes & 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 DEP, Consumer Confidence Report Template Instructions and Template, FRWA/DEP, February 2022.

**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 or (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 or (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 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 (LRAA). 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.