



2022 DRINKING WATER QUALITY REPORT



The Water Resources Department is pleased to provide this year's Water Quality Report. This report contains important information about your drinking water. Our goal is, and always has been, to provide to you a high-quality product that meets or exceeds Federal and State standards.

The City of St. Petersburg 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 our monitoring for the period of January 1 through December 31, 2022. As authorized and approved by EPA, 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 inorganic contaminants), though representative, is more than one-year old. This report shows our water quality results, and you will notice that we had no maximum contaminant level (MCL) violations.

Unless otherwise indicated, the data provided in this report are results from testing of treated water from the **Cosme Water Treatment Plant**. However, if you would like to request a copy of our wholesaler's annual water quality report, please contact **Tampa Bay Water** at 727-796-2355. This report will be mailed to customers only upon request by calling the **Water Resources Department** at 727-893-7261. This report is also available upon request at the Water Resources Administration Building and is online at stpete.org/waterqualityreport.

PROVIDING HIGH-QUALITY DRINKING WATER

This year, about 10.3 billion gallons of water were treated at our plant, which is in northwest Hillsborough County. This treatment includes aeration, lime softening to help with corrosion control, disinfection with chloramines and filtration. Sodium hydroxide is utilized to maintain a stable pH for enhancement of disinfection and corrosion control in the distribution system. Fluoride is added to benefit dental health.

OUR DRINKING WATER SOURCES

The City of St. Petersburg is one of six member governments who formed **Tampa Bay Water**, the regional water utility which supplies all our drinking water. The water is a dynamic blend of groundwater, surface water and desalinated water. Groundwater is supplied by six different well fields (TBW controls thirteen well fields in total), pumping water from the Floridan Aquifer. Surface water is drawn from the Alafia River, the Hillsborough River, the C. W. Bill Young Regional Reservoir, and the Tampa Bypass Canal. Hillsborough Bay is the primary supply for the Tampa Bay Seawater Desalination facility.

The **Florida Department of Environmental Protection (FDEP)** performs source water assessments to provide information about potential sources of contamination to water systems. In 2022, the FDEP performed assessments for Tampa Bay Water. The assessment results are available on the **FDEP Source Water Assessment and Protection Program** website at prodapps.dep.state.fl.us/swapp or they can be obtained from **Tampa Bay Water**, 2575 Enterprise Road, Clearwater, FL 33763, phone **727-796-2355**.

SOME SPECIAL PRECAUTIONS

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. EPA/**Center for Disease Control (CDC)** 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 **1-800-426-4791**.

LEAD IN DRINKING WATER

In the summer of 2020, we performed lead and copper testing of tap water collected at residences throughout the City. Results of these analyses indicated very low levels of lead in all the household taps tested. Although these tests indicate that our corrosion control measures are successful in preventing leaching of lead in household plumbing, the **EPA** would like you to know that, 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. The City of St. Petersburg is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the **Safe Drinking Water Hotline** or at: epa.gov/safewater/lead.

UNREGULATED CONTAMINANTS

The City of St. Petersburg has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. **Environmental Protection Agency (EPA)** determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the **Safe Drinking Water Hotline** at **1-800-426-4791**.

POSSIBLE SOURCES OF DRINKING WATER CONTAMINATION

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

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

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

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The **Food and Drug Administration (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 **EPA's Safe Drinking Water Hotline** at **1-800-426-4791**.

FOR MORE INFORMATION

To report leaks or other water quality problems (answered 24 hrs.):
Water Resources Department • 727-893-7261

Questions regarding your utility bill:
Customer Service • 727-893-7341

For questions regarding water treatment:
Water Plant Operations Specialist • 727-551-3715

For questions regarding this report:
Water Plant Operations Specialist • 727-551-3715

Questions about watering restrictions and conservation:
Water Watch Info Line • 727-892-5300

To request speakers for your neighborhood association meetings:
Water Resources Department • 727-893-7261

Online information about the city of St. Petersburg's water system:
stpete.org/water

Online drinking water information from EPA:
epa.gov/sdwa

GET INVOLVED

We encourage public interest and participation in our community's decisions affecting drinking water. The public is welcome at City Council meetings which occur regularly on Thursdays. Please call the **St. Pete Service Center** at **727-893-7111** for more information. Other ways to become involved include contacting elected officials and participating in your neighborhood association.

COMMONLY-REQUESTED TESTING RESULTS:

The following results are the averages of monthly samples taken in 2022.

pH • 8.1

Hardness • 166 mg/L

Alkalinity • 122 mg/L

Calcium • 55.7 mg/L

Magnesium • 5.26 mg/L

Sulfate • 58.1 mg/L

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Highest Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	6/20, 9/20	N	0.0120	0.0107 - 0.0120	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	6/20, 9/20	N	0.3	ND - 0.3	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	6/20	N	0.73	N/A	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
Lead (ETDS) (ppb)	6/20, 9/20	N	0.2	ND - 0.2	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm)	10/22	N	0.088	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	10/22	N	0.03	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	6/20, 9/20	N	30.7	19.1 - 30.7	N/A	160	Salt water intrusion; leaching from soil

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 Highest RAA	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	1/22 - 12/22	N	3.90	0.59 - 6.22	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	1/22, 4/22, 7/22, 10/22	N	22.38	12.93 - 28.98	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	1/22, 4/22, 7/22, 10/22	N	21.49	12.91 - 28.59	N/A	MCL = 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)	90th Percentile Result	No. of sampling sites exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (Tap water) (ppm)	07/20 - 09/20	N	0.38	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap water) (ppb)	07/20 - 09/20	N	1.6	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

UNREGULATED CONTAMINANTS

Special monitoring to help the EPA to determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future

AM1: METALS, PESTICIDES, ALCOHOLS, SVOCs

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	Level Detected (Average)	Range of Results	Likely Source of Contamination
Manganese (ppb)	2/20	1.14	N/A	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient

AM2: HAA GROUPS

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	Level Detected (Average)	Range of Results	Likely Source of Contamination
HAA5 (ppb)	1/20	12	10 - 15	By-product of drinking water disinfection
HAA6Br (ppb)	1/20	5.8	4.9 - 7.0	By-product of drinking water disinfection
HAA9 (ppb)	1/20	17	14 - 20	By-product of drinking water disinfection

Overseen by the Florida Department of Environmental Protection, the City of St. Petersburg routinely monitors for over 80 drinking water contaminants. If a contaminant was not detected in any of your system's annual water samples, it will not be included in the contaminant tables. For a full list of contaminants monitored under Chapter 62-550 of the Florida Administrative Code, please visit dep.state.fl.us/water/drinkingwater/standard.htm.

RESULTS OF TAMPA BAY WATER MONITORING

MICROBIOLOGICAL CONTAMINANTS							
Contaminant and Unit of Measurement	Dates of Sampling	TT Violation (Y/N)	Highest Single Measurement	Lowest monthly % of samples meeting regulatory limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1/22 - 12/22	N	0.196	100	N/A	TT	Soil runoff

RADIOACTIVE CONTAMINANTS							
Compound and Unit of Measurement	Dates of Sampling	MCL Violation (Y/N)	Highest Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	4/22	N	4.8	ND - 4.8	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	4/22	N	4.3	ND - 4.3	0	5	Erosion of natural deposits
Uranium (ppb)	4/22	N	1.0	ND - 1.0	0	30	Erosion of natural deposits

INORGANIC CONTAMINANTS							
Compound and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Highest Level Detected	Range of Results	MCLG or MRDLG	MCL or MDRL	Likely Source of Contamination
Barium (ppm)	4/22	N	0.028	ND - 0.028	2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	4/22	N	0.218	ND - 0.218	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.
Lead (point of entry) (ppb)	1/22, 4/22, 7/22, 10/22	N	2	ND - 2	15	0	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Mercury (inorganic) (ppb)	4/22	N	0.033	ND - 0.033	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nickel (ppb)	4/22	N	4	ND - 4	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium (ppm)	4/22	N	55.1	8.54 - 55.1	N/A	160	Saltwater Intrusion; leaching from soil

SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES							
Compound and Unit of Measurement	Dates of Sampling	MCL Violation (Y/N)	Highest Level Detected	Range of Results	MCLG or MRDLG	MCL or MDRL	Likely Source of Contamination
Dalapon (ppb)	1/22, 4/22, 7/22, 10/22	N	1.84	ND - 1.84	200	200	Runoff from herbicide used on rights of way.

DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Bromate (ppb)	1/22 - 12/22	N	0.80 Highest RAA	ND - 7.00	MCLG = 0	MCL = 10	By-product of drinking water disinfection
Chlorine Dioxide (ppb)	Desal WTP 4/19*	Acute Violations (Y/N) N	Non-Acute Violations (Y/N) N	Level Detected 0.50	MRDLG = 800	MDRL = 800	Water additive used to control microbes
Chlorite (ppm)	1/22 - 12/22	MCL Violation (Y/N) N	Highest Monthly Average 0.00791	Highest Average following an MCL exceedance at the ETDS N/A	MCLG = 0.8	MCL = 1.0	By-product of drinking water disinfection
Total Organic Carbon (ppm)	1/22 - 12/22	TT Violation (Y/N) N	LRAAMRR 3.50	Range of MRR 1.54 - 6.33	N/A	TT	Naturally present in the environment

*Chlorine Dioxide not used at the Desal WTP in 2022

LEGEND

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

ETDS • Entrance to the distribution system.

LRAAMRR • Lowest running annual average, compiled quarterly, of monthly removal ratios.

MCL or Maximum Contaminant Level • 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.

MCLG or Maximum Contaminant Level Goal • 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.

MRDL or Maximum Residual Disinfectant Level • 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.

MRDLG or Maximum Residual Disinfectant Level Goal • 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.

MRR • Monthly removal ratios.

N/A • not applicable.

ND • Means not detected and indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Unit) • Turbidity is a measure of the cloudiness of the water. Turbidity in excess of 5 NTU is just noticeable to the average person. It is monitored because it is a good indicator of the effectiveness of filtration systems. High turbidity can hinder the effectiveness of disinfectants.

PPB (Parts Per Billion) or µg/L (Micrograms Per Liter) • One part by weight of analyte to 1 billion parts by weight of the water sample.

PPM (Parts Per Million) or mg/L (Milligrams Per Liter) • One part by weight of analyte to 1 million parts by weight of the water sample.

RAA – Running annual average (computed quarterly) of monthly averages.

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