Pinellas County

2022

CONSUMER CONFIDENCE
Water Quality Report

You Use It Every Day, But How Well Do You Know Your H_2O?

Your water meets or is better than all state and federal drinking water health standards. That's more than 90 water quality parameters!

We recognize the tremendous responsibility it is to provide you 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.

Your drinking water comes from a diverse mix of groundwater, river water and seawater.

Pinellas County and the regional supplier, Tampa Bay Water, monitor and test your water throughout the supply system. Together, we collect more than 7,000 samples and conduct more than 57,000 water quality tests in state-certified laboratories each year.

Depending on the source, your water is cleaned and disinfected through multi-step processes using proven technology, advanced disinfection and corrosion control measures.

Your tap water has had quite a journey by the time it reaches you. It has been monitored and tested for quality thousands of times.

Your Water is Checked By:

- Tampa Bay Water, the regional wholesale supplier
- The Florida Department of Environmental Protection
- The Environmental Protection Agency
- Pinellas County

These agencies are there every step of the way to ensure water is safe for you and your family.

More than **7,000** samples collected

More than **57,000** water quality tests performed

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

TAMPA BAY WATER
Supplying Water To The Region

Pinellas County

This report confirms that your drinking water continues to:

- Surpass all state and federal standards for safe drinking water.
- Be as fresh as possible, with minimal storage times.

Federal and State Standards

Introduction

Pinellas County Utilities (PCU) is pleased to report that the water provided to our customers meets all Federal and State compliance standards for safe drinking water. All the information contained in this report has been collected and reported in accordance with the rules and regulations of the United States Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP). Utilities employees work 24 hours a day, seven days a week to ensure that the water provided meets these standards and expectations for safety, reliability and quality. We hope that you will take a few minutes to review this important information.

Source Water Information

Utilities customers receive potable (drinking) water from sources managed by the regional water supplier, Tampa Bay Water (TBW). This regional water supply is a blend of groundwater, treated surface water and desalinated seawater. Eleven regional wellfields pumping water from the Floridan Aquifer are the primary sources for the regional groundwater supply. The Alafia River, Hillsborough River, C. W. Bill Young Regional Reservoir and the Tampa Bypass Canal are the primary sources for the regional treated surface water supply. Hillsborough Bay is the primary source of seawater for the regional desalinated supply.

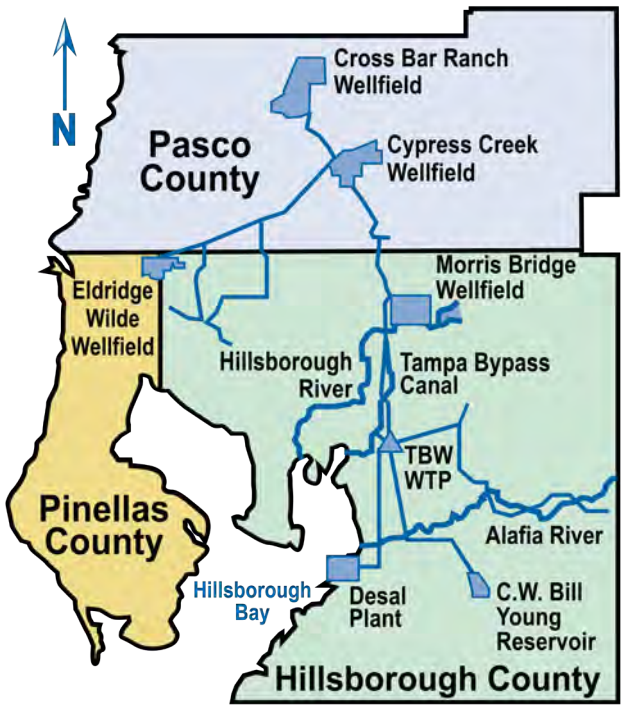
The groundwater acquired from the County's Eldridge-Wilde Wellfield undergoes water treatment processes that are comprised of three steps. First, the water goes through a hydrogen sulfide removal process. Hydrogen sulfide is a natural element that has a displeasing odor. Next, the groundwater is treated to a standard of 99.99% bacteriological inactivation by adding free chlorine as the primary disinfectant. Then, chloramine disinfectant is formed by adding chlorine and ammonia for disinfectant residual maintenance in the distribution system. Lastly, the Eldridge-Wilde Wellfield water is blended with the water blend provided by TBW at its Regional Treatment Facility.

All the blended water is further treated by PCU. The chloramine residual is adjusted with chlorine to meet the desired residual setpoint. The pH (acid-alkali) is adjusted and stabilized using sodium hydroxide. The water is treated with a polyphosphate inhibitor to control corrosion, and then fluoridated for dental health purposes. This final blend of potable water is pumped to Water Booster Stations where it undergoes additional chloramine residual adjustment, if needed, before being pumped to homes and businesses.

Please go to: ***Pinellas.gov/current-water-sources*** for current water source information.

Source Water Assessment

In 2022, the Department of Environmental Protection (DEP) performed Source Water Assessments for the TBW facilities. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at ***www.dep.state.fl.us/swapp*** or they can be obtained from TBW, 2575 Enterprise Road, Clearwater, FL 33763, phone **(727) 796-2355.**



Terms to Know

Period Covered by this Report

PCU and TBW routinely monitor for the 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, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

As authorized and approved by the USEPA, 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, though representative, is more than one year old. The USEPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the accompanying tables are the only contaminants detected in your drinking water.

Terms and Abbreviations

In the Water Quality tables provided you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

Haloacetic Acids, (HAAs): A group of disinfection by-products formed as a result of the chemical disinfection of water.

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.

Not Applicable, (NA): Not applicable to this contaminant.

Not Detected, (ND): Not detected; indicates that 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 by weight of analyte to 1 million parts by weight of the water sample.

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

Secondary Maximum Contaminant Level, (SMCL): The level of a secondary contaminant which when exceeded may adversely affect the aesthetic quality of the drinking water.

Total Trihalomethanes, (TTHMs): A group of disinfection by-products formed as a result of the chemical disinfection of water.

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

For Your Reference

This water quality information is provided to assist you with understanding the aesthetic characteristics of your drinking water.

Sample results average and range of results is for the time period of January through December of 2022.

Analyte and Unit of Measure	Average Result	Range of Results	SMCL (ppm)
Iron (ppm)	0.040	0.019 – 0.060	0.3
Chloride (ppm)	25	18 – 31	250
Sulfate (ppm)	67	43 – 91	250
Total Dissolved Solids (ppm)	325	287 – 363	500
Calcium (ppm)	71.9	61.5 – 82.2	N/A
Magnesium (ppm)	5.67	4.28 – 7.05	N/A
pH (SU)	7.88	7.70 – 8.06	6.5-8.5
Alkalinity as CaCO3 (ppm)	161	149 – 172	N/A
Total hardness (ppm)	202	171 – 233	N/A
Water softener settings for hardness: Equivalent 10.0 to 13.6 grains per gallon.			

Required Health Information

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 storm water 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 storm water 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 storm water 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 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 Environmental Protection Agency's Safe Drinking Water Hotline at **(800) 426-4791**.

Required vulnerable population health information

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/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 **(800) 426-4791**.

Unregulated Contaminants Monitoring Rule (UCMR)

PCU is in compliance with UCMR. This rule requires monitoring for Unregulated Contaminants as part of a study to help the EPA determine the occurrence of these contaminants in drinking water and whether these contaminants need to be regulated. At present, no health standards (for example, MCLs) have been established for these Unregulated Contaminants.

PCU monitored for 10 Unregulated Cyanotoxins during 2020 as part of UCMR4 and laboratory analysis results indicated that no Unregulated Cyanotoxins were detected. In July 2023 PCU will begin testing for per- and polyfluoroalkyl substances (PFAS) as part of UCMR5. Those results will be available in the 2023 and 2024 CCR or by contacting PCU Water Quality Monitoring. More information on the EPA's UCMR is available at ***https://www.epa.gov/dwucmr.***

Required Lead Specific Health Information

The USEPA requires that every CCR include the following informational statement about lead in drinking water and its effects on children:

Lead in Drinking Water

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. PCU is responsible for providing 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 want 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 ***http://www.epa.gov/safewater/lead***.

What you can do to get the lead out

To learn more about what you can do to get the lead out, please watch this video provided by American Water Works Association on how to identify potential sources of lead in your household plumbing and how to reduce potential problems: ***AWWA: Together, Let's Get the Lead Out***.

You may contact the Florida Department of Health in Pinellas County to find out about testing your water for lead at **(727) 824-6900**, or email ***Info.PinCHD52@flhealth.gov***.

What Pinellas County is doing about Lead and Copper

PCU is proactive and nationally recognized for participation in research applicable to emerging health and safety issues in the water industry. It has been found that corrosion of pipes is the primary contributor of lead in drinking water. A polyphosphate corrosion inhibitor is incorporated into the distribution system based on results from a study done by University of Central Florida and previous work done by PCU. The inhibitor is formulated to form a protective layer inside the piping and acts as a barrier to corrosion. As a result of this work PCU has been designated as "optimized" for corrosion control of copper and lead by the FDEP based on results of samples collected since the mid-1990s from residential plumbing.

The current USEPA regulatory potable water 90th percentile Lead Action Level is 15 ppb. During 2020 PCU completed tri-annual Residential Tap Water sampling resulting in a 0.8 ppb 90th percentile for lead that is well below the 15 ppb Action Level. In addition, the FDEP requires lead levels in the source water be analyzed annually to confirm the quality of the source water supply. The 2022 source water lead sample analysis results reported no detection of lead. PCU will be collecting Residential Tap Water samples again between June and September of 2023 with the results being reported in the 2023 CCR.

PCU is currently in compliance with USEPA's Lead and Copper Rule. PCU is actively working toward compliance with the 2021 Lead and Copper Rule Revisions and is confident that we will meet all compliance milestones.

Please go to: ***Pinellas.gov/pinellas-county-lead-and-copper-monitoring*** for more lead and copper monitoring information.

Closing statement from PCU

PCU personnel work around the clock to provide top quality water to every tap. We ask that our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. More information is available at ***www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm***.

We at PCU would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed below.

Contact Pinellas County

PCU works hard to ensure our customers' satisfaction. If you have questions or comments about this report or other issues, please call us:

Customer Service .....**(727) 464-4000**

Water Quality Monitoring ..... **(727) 582-2379**

Emergencies .....**(727) 464-4000**

If you would like to request a copy of the Tampa Bay Water 2022 CCR, please contact them at .....**(727) 796-2355**

Your Participation Is Welcome!

The Pinellas County Board of County Commissioners meets twice a month, usually, but not always, on the first and third Tuesdays. The earlier meeting in the month begins at 9:30 a.m. Meetings in the latter part of the month are held in two parts. Agenda items are discussed with the Board at 2:00 p.m., after which there is a break and the Board reconvenes at 6:00 p.m. The public is invited to attend these meetings held in the 5th floor Assembly Room of the Pinellas County Courthouse located at 315 Court Street, Clearwater, Florida 33756 or in the Palm Room at 333 Chestnut St, Clearwater. The Board is taking public comment at regular meetings both in person and virtually via the Zoom conferencing platform. Preregistration is required to address the Board virtually. For more information and to view the meeting agendas, visit the County's website at ***https://pinellas.legistar.com/Calendar.aspx*** or call **(727) 464-3485**.

Tampa Bay Water's Board of Directors meetings occur on the third Monday of every month at 9:30 a.m. at 2575 Enterprise Road, Clearwater, Florida 33763. To view their agenda, visit their website at ***www.tampabaywater.org*** or call **(727) 796-2355**.

Pinellas County 2022 Water Quality Report

As collected by Pinellas County Utilities

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	TT Violation (Y/N)	Result	MCLG	TT	Likely Source of Contamination
Total Coliform Bacteria *	1/22-12/22	N	0	NA	NA	Naturally present in the environment

*PCU collects at least 210 water samples a month for Total Coliform Bacteria Analysis.
NA indicates that there were no MCLG exceedances or Treatment Technique issues.

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)	3/22	N	0.4	NA	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	3/22	N	0.0136	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	3/22	N	2.7	NA	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	3/22	N	0.71	NA	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Mercury (inorganic) (ppb)	3/22	N	0.1	NA	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	3/22	N	2.5	NA	NA	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	3/22	N	0.06	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	3/22	N	26.8	NA	NA	160	Salt water intrusion, leaching from soil

All the Level Detected results reported were below the MCL.

Pinellas County 2022 Water Quality Report

As collected by Pinellas County Utilities

Stage 1 Disinfectants and Disinfection By-Products

Disinfectant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation (Y/N)	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	1/22 – 12/22	N	3.8	1.0 – 5.3	4	4	Water additive used to control microbes

For chloramines, or chlorine, 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 highest and lowest result 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)	2/22, 5/22, 8/22, 11/22	N	31.32	16.25– 34.55	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2/22, 5/22, 8/22, 11/22	N	49.98	23.66 – 71.770	NA	80	By-product of drinking water disinfection

All the Level Detected and Range of Results reported were below the MCL.
The level detected is the highest locational running annual average (LRAA), computed quarterly, of all sites collected. The range of results is the highest and lowest result of all the individual samples collected during the past year.

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 the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	7/20**	N	0.5	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	7/20**	N	0.8	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

The 90th Percentile Results were below the MCLG and the Action Level.
**The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This data is from 2020 and is still representative though it is more than one year old.

Pinellas County 2022 Water Quality Report

As Collected By Tampa Bay Water

Turbidity

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation (Y/N)	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1/22 – 12/22	N	0.196	100	NA	TT	Soil runoff

NOTE: The result on the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operating report meeting the required turbidity limits.
Turbidity is a measure of the clarity of the water. The Nephelometric Turbidity Unit (NTU) in excess of 5 NTU is just visibly noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of the water treatment filtration system. High turbidity can hinder the effectiveness of disinfectants. The turbidity results that were reported are lower than the turbidity limits.

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
Alpha emitters (pCi/L)	4/22	N	3.8	2.1 – 3.8	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	4/22	N	2.8	0.7 – 2.8	0	5	Erosion of natural deposits
Uranium (ug/L)	4/22	N	1.0	0.35 – 1.0	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. **All the Level Detected and Range of Results reported were below the MCL**.

Synthetic Organic Contaminants including Pesticides and Herbicides

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
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

All the Level Detected results reported were below the MCL.

Pinellas County 2022 Water Quality Report

As Collected By Tampa Bay Water

Stage 1 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
Bromate (ppb)	1/22 -12/22	N	0.80	ND – 7.00	0	10	By-product of drinking water disinfection

For bromate the level detected is the highest running annual average (RAA), computed quarterly of monthly averages of all samples collected.
The Level Detected and Range of Results reported were below the MCL.

Disinfectant and Unit of Measurement	Dates of Sampling (mo./yr.)	Acute Violations? (Y/N)	Non-Acute Violations? (Y/N)	Level Detected	MRDLG	MRDL	Likely Source of Contamination
Chlorine Dioxide (ppb)	4/19	N	N	0.50	800	800	Water additive used to control microbes

For chlorine dioxide, the level detected is the highest single daily sample collected at the entrance to the distribution system.
The Level Detected was below the MRDLG and the MRDL.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation (Y/N)	Highest Monthly Average *	Highest Average**	MCLG	MCL	Likely Source of Contamination
Chlorite (ppm)	1/22 – 12/22	N	0.00791	NA	0.8	1.0	By-product of drinking water disinfection

The Highest Monthly Average was below the MCLG and the MCL.

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	TT Violations (Y/N)	Lowest Running Annual Average*	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm)	1/22 – 12/22	N	1.92	1.54 – 6.33	NA	TT	Naturally present in the environment

All the Level Detected results reported were below the MCL.