

2022 Annual Drinking Water Quality Report

Pasco County Utilities - Pasadena Shores Service Area

PWS ID No. 651-2205

Pasco County Utilities is pleased to present the 2022 Annual Water Quality Report. This report is designed to inform Pasadena Shores 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.

Pasco County Utilities routinely monitors for contaminants in 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 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.

The water source for this area is groundwater from two wells located in Pasco County. These wells draw from the Floridan Aquifer. Chlorine is added for disinfectant purposes.

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

In 2022, the Florida Department of Environmental Protection (DEP) performed a Source Water Assessment on the Pasadena Shores Water System, and a search of the data sources indicated no potential sources of contamination for the two wells. The assessment results are available by contacting Pasco County Utilities, 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/6512205/10012022>.

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. 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 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.

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 |
| Radium 226+228 or combined radium (pCi/L) | 1/21 | N | 0.380 | N/A | 0 | 5 | Erosion of natural deposits |
| Uranium (µg/L) | 1/21 | N | 1.6 | N/A | 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) | 1/21 | N | 0.47 | N/A | 0 | 10 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes |
| Barium (ppm) | 1/21 | N | 0.0059 | N/A | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Cyanide (ppb) | 1/21 | N | 8 | N/A | 200 | 200 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Fluoride (ppm) | 1/21 | N | 0.063 | N/A | 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 |
| Lead (point of entry) (ppb) | 1/21 | N | 0.12 | N/A | 0 | 15 | Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder |
| Nickel (ppb) | 1/21 | N | 1.7 | N/A | N/A | 100 | Pollution from mining and refining operations. Natural occurrence in soil |
| Nitrate (as Nitrogen) (ppm) | 1/21 | N | 2.81 | N/A | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Selenium (ppb) | 1/21 | N | 0.82 | N/A | 50 | 50 | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Sodium (ppm) | 1/21 | N | 13 | N/A | N/A | 160 | Saltwater intrusion, leaching from soil |
| Thallium (ppb) | 1/21 | N | 0.27 | N/A | 0.5 | 2 | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories |

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 (ppm) | 1/22 – 12/22 | N | 1.59 | 1.2-2.4 | MRDLG = 4 | MRDL = 4.0 | Water additive used to control microbes |

For 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 range of results of all the individual samples collected during the past year.

For the following disinfectant residuals and disinfection by-products monitored under Stage 2 D/DBP regulations, the level detected is the highest Locational Running Annual Average (LRAA), computed quarterly, for any single sampling point. Range of results is the range of individual sample results (lowest to highest) for all monitoring locations.

| 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) | 1/21, 8/21 | N | 3.59 | ND – 3.59 | N/A | 60 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) (ppb) | 1/21, 8/21 | N | 15.61 | 1.09 - 15.61 | 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 th Percentile Result | No. of Sampling Sites Exceeding the AL | MCLG | AL (Action Level) | Likely Source of Contamination |
| Copper (tap water) (ppm) | 6/21 | N | 0.207 | 0 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (tap water) (ppb) | 6/21 | N | 9.0 | 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).

| 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 |
| Picloram (ppb) | 1/21 | N | 0.38 | ND – 0.38 | 500 | 500 | Herbicide runoff |

Results in the Level Detected column for synthetic organic 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.

| Secondary Contaminants | | | | | | | |
|-------------------------------------|-----------------------------|-------------------|----------------|------------------|------|-----|---------------------------------------|
| 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 |
| Total Dissolved Solids (ppm) | 1/21 | Y | 540 | N/A | N/A | 500 | Natural occurrence from soil leaching |

The MCL for Total Dissolved Solids was exceeded during testing in January of 2021. Secondary standards were developed to measure the aesthetic qualities of drinking water (i.e. taste, odor, color, etc.), and are not health-based.

Pasco County Utilities encourages public participation in community decisions that affect drinking water. Regular [Pasco County Board of County Commissioners](https://www.pascocountyfl.net/754/Watch-Live-Pasco-TV) (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](https://www.pascocountyfl.net/754/Watch-Live-Pasco-TV) and streamed online (and available on-demand) on Pasco County’s [YouTube Channel](https://www.pascocountyfl.net/572/County-Commissioners).

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](https://www.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>.