# 2023 Annual Drinking Water Quality Report Pasco County Utilities - Jasmine Lakes Service Area PWS ID No. 651-2070

Pasco County Utilities is pleased to present the 2023 Annual Water Quality Report. This report is designed to inform Jasmine Lakes 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 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, 2023. Data obtained before January 1, 2023, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

During the 2023 monitoring period, the water source for this area was groundwater from four (4) wells located within Pasco County. These wells draw from the Floridan Aquifer. Chlorine was added for disinfectant purposes. As of March 4, 2024, the Jasmine Lakes potable water system (651-2070) was connected to the Pasco County Regional system (651-1361).

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.

The Pasco County Regional Water System's primary water source is groundwater from fifteen (15) 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. Visit <u>bit.ly/PascoRegionalCCR</u> to view the 2023 Pasco County Regional Water System's Annual Water Quality Report. For additional information or questions concerning TBW's water quality, please contact TBW's Public Affairs department at 727-796-2355 or visit the TBW website at <u>TampaBayWater.org</u>.

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 2023, the Florida Department of Environmental Protection (DEP) performed a Source Water Assessment on the Jasmine Lakes Water System, and a search of the data sources indicated no potential sources of contamination for the 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/6512070/10012023

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:

<u>Action Level (AL)</u>: 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.

<u>Maximum Contaminant Level Goal or MCLG</u>: 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.

<u>Maximum residual disinfectant level or MRDL</u>: 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.

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

<u>**Treatment Technique or TT:**</u> 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.

Page 3 of 7 PWS – 651.2070

## Test Results Tables

#### **Microbiological Contaminants**

Contaminant		Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely Source of Contamination
E. coli (at the ground water source)*	3/23	Y	Five (5) Positive Samples	0	0	Human and animal fecal waste

\*On March 14, 2023, we sampled Jasmine Well #7 for the fecal indicator, *E. coli.* We were notified on March 15, that there was a positive Total Coliform and E. coli sample during testing at Jasmine Well #7. We immediately took Jasmine Well #7 off-line at that time. As an interim measure, the community was supplied with water from three other wells (Well # 7C, 7D, & 7E) that all tested negative for Total Coliform and E. coli. Customers did not see an interruption in water service.

Actions were taken to chlorinate and flush Jasmine Well #7. The well was resampled in quintuplicate on March 16, and on March 17, we were notified that four samples (Samples # JL7-2, JL7-3 JL7-4, JL7-5) were positive for Total Coliform and E. coli. Actions were taken again to chlorinate and flush Jasmine Well #7. The well was resampled in quintuplicate on March 20, and March 22, and the results received from the lab on March 21, and March 23, respectively, were absent for E. coli. However, we were notified that these same samples (Samples # JL7-2) were positive for Total Coliforms. As a result, Jasmine Well #7 was chlorinated and flushed in both instances. The well was resampled in quintuplicate again on March 27, and on March 28, we were notified that all sample results were absent for Total Coliform, E. coli, and fecal indicators. Jasmine Well #7 was then put back into service.

As of March 4, 2024, the Jasmine Lakes potable water system (651-2070) was connected to the Pasco County Regional system (651-1361). Customers did not see an interruption in water service.

**Health Effects**: Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MC L	Likely Source of Contamination
Alpha emitters (pCi/L)	3/23	N	3.53	N/A	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	3/23	Ν	1.34	ND - 1.34	0	5	Erosion of natural deposits
Uranium (µg/L)	3/23	Ν	1.73	N/A	0	30	Erosion of natural deposits

### Radioactive Contaminants

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.

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)	3/23	N	5.5	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	3/23	N	0.013	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	3/23	Ν	0.075	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
Mercury (inorganic) (ppb)	3/23	N	0.11	N/A	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)	3/23	N	2.1	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	1/23, 3/23	N	0.55	0.37- 0.55	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	3/23	N	64.2	N/A	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		MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	1/23-12/23	Ν	1.57	0.8-2.1	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.

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)	7/23	Ν	11.1 (highest LRAA at Site 1)	9.6-11.1	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/23	Ν	54.1 (highest LRAA at Site 1)	41.9-54.1	N/A	80	By-product of drinking water disinfection

### Stage 2 Disinfectants and Disinfection By-Products

## 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)	6/23	N	0.372	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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.

#### **Secondary Contaminants**

Contaminant and Unit of Measurement	Sampling	MCL Violation Y/N	•	Range of Results	MCLG	MCL	Likely Source of Contamination
Iron (ppm)	3/23	Y	0.351	0.35- 0.351	N/A	0.3	Natural occurrence from soil leaching

The MCL for Iron was exceeded during testing in March of 2023. 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 <u>Pasco County Board of County Commissioners</u> (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. Meetings are broadcast live on <u>Pasco Television</u> and streamed online (and available on-demand) on <u>Pasco County's YouTube Channel</u>.

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 <u>PascoCountyFL.net</u>.

Helpful Pasco County Links:

- Pasco Television:
  <u>https://www.pascocountyfl.net/services/media\_relations\_and\_communications/pasco\_tv.php</u>
- Commission Meeting Information: <u>https://pascocountyfl.net/government/county\_commissioners/index.php</u>

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 about proper disposal methods and disposal locations is available at

https://pascocountyfl.net/services/utilities/garbage\_and\_recycling/household\_hazardous\_waste.php.