

What Can We Expect to Find in Drinking Water?

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 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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that 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 1-800-426-4791.**

How This Report Shows Our Water Quality Results and What They Mean

This report shows our water quality results and what they mean to you. It also provides important information about your water and how it relates to your health. The information in this report is based primarily on 2019 facts and figures. However, the U.S. Environmental Protection Agency (EPA) does not require us to perform all tests every year. When necessary, some data was obtained from prior years. As directed by the agencies that regulate our industry, only values from these tests that exceeded specified criteria are included. We will notify you immediately if there is any reason for concern.

The City of Palm Coast Utility Department operates the water treatment and distribution system serving Palm Coast. Our water source is groundwater drawn through sixty-four wells from the Confined Surficial and the Floridan Aquifers and is treated through a complex multi-step water treatment process that includes lime softening, filtration, membrane softening, forced draft aeration, corrosion control and chloramination for disinfection purposes at three different facilities. The Florida Department of Environmental Protection (DEP) has completed a Source Water Assessment for the Palm Coast watershed. The State has determined that 17 of our 64 wells have a low to moderate susceptibility to contamination based on their proximity to the sixteen potential sources of contamination that were last evaluated in 2019. For additional information, please visit the DEP website at www.DEP.state.fl.us/swapp.

The following information will assist you in making adjustments to your water softener, washer or dishwasher. The average hardness in Palm Coast water is:
Total Hardness: 100ppm = 5.8 grains/gal.
Calcium Hardness: 80ppm = 4.7 grains/gal.

If you have any questions about this report or concerns about your water utility, please **visit Palm Coast Connect at www.palmcoastconnect.com or contact your City of Palm Coast Utility Representative at 386-986-2360.** You may also call the **EPA Safe Drinking Water Hotline at 1-800-426-4791.** We want our valued customers to be informed about their water utility. If you would like to learn more, please call us for information about the next opportunity for public participation in decisions about your drinking water.



2019 City of Palm Coast Water Quality Report

“When the Well is Dry, We’ll Know the Worth of Water” - Ben Franklin

Wherever water flows, you’ll find life. Humans, animals and plants gravitate to water to function every day. A living thing can survive for a month without food, but only for a week without water. Many people believe that our water supply is infinite. Not true. Approximately 2.5% of the Earth’s water supply is fresh water, much of which is locked in ice caps and glaciers. Water is a precious lifeline that must be protected.

Here in Palm Coast, we must respond right now to our growing population. By 2035, our residential numbers should double, making it even more imperative to reduce wastage with conservative habits and to improve water management. Protect our water supply and you’ll reduce your water bill and save the City the energy we use to pump water from our water treatment plants.

Don't Let Water Slip Through Your Fingers

Committing to just a bit of conservation can make all the difference for future generations in Palm Coast. Here are some good ways to start:

- Water plants with leftover water already poured for lunch or dinner.
- Use a broom instead of a hose to clean driveways and patios.
- Wash your dog outside in a spot that needs watering.
- Reward your kids for following water saving tips.
- Use only Florida-friendly native plants that are supported in our region.

Water Less

	SUN	MON	TUE	WED	THU	FRI	SAT
Odd-numbered addresses				💧			💧
Even-numbered addresses	💧				💧		

Indicates an additional day of watering during daylight savings time (summer)

Water only between 4 p.m. and 10 a.m. and only if needed



Online Utility Billing – Let’s keep Palm Coast green with online paperless billing! Save paper, stamps, envelopes and time by managing your utility bill online. You can view present and past bills, make payments each month or pay monthly via automatic deduction from a credit card, checking or savings account. Go to www.palmcoastgov.com for details.

How Do I Read This?

It's easy. The table shows the results of our water quality analyses. The column marked "Level Detected" shows the highest results from the last time tests were performed. "Likely Sources" shows where this substance usually originates. Descriptions below explain other important details. In this table you may find unfamiliar terms and abbreviations. To help you better understand these terms, we've provided the following definitions:



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.

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

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.

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.

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

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

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.

N/A: Means not applicable.

2019 Annual Drinking Water Quality Test Results

The City of Palm Coast Utility Department 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, 2019 for the **City of Palm Coast – PWS ID # 2180863**. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

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)	05/17	N	0.15	ND - 0.15	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	05/17	N	0.0071	0.0029 - 0.0071	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	05/17	N	0.44	ND - 0.44	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	09/19	N	0.073	ND - 0.073	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	05/17	N	82	18 - 82	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectant and Disinfection By-Product							
For bromate, 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 of all the individual samples collected during the past year.							
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

Chloramines (ppm)	01/19 - 12/19	N	3.5	0.6 - 5.3	MRDLG = 4.0	MRDL = 4.0	Water additive used to control microbes
Chlorine (ppm)	02/19 - 03/19, 06/19, 10/19	N	3.9	0.6 - 5.2	MRDLG = 4.0	MRDL = 4.0	Water additive used to control microbes

Periodically throughout the year the distribution system is maintained by conversion of Chloramine to Free Chlorine disinfection for additional microbiological control

Stage 2 Disinfectant and Disinfection By-Product							
If during 2019, the system had only annual or triennial results and these results were at or below the MCL, report the highest result as the level detected and the range of individual sample results as the range of results.							
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	

Haloacetic Acids (five) (HAA5) (ppb)	05/19	N	9.78	N/A	MCL = 60	By-product of drinking water disinfection	
TTHM [Total trihalomethanes] (ppb)	02/19	N	32.94	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	Sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06/19	N	0.06	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/19	N	0.85	0 of 30	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. The City of Palm Coast 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 <http://www.epa.gov/safewater/lead>.

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. Call the SAFE DRINKING WATER HOTLINE (1-800-426-4791) for EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants.