

A Clear Picture
of Water...

Billions of
drops



What You Can Expect to Find in your 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 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.

In order 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 1-800-426-4791.**



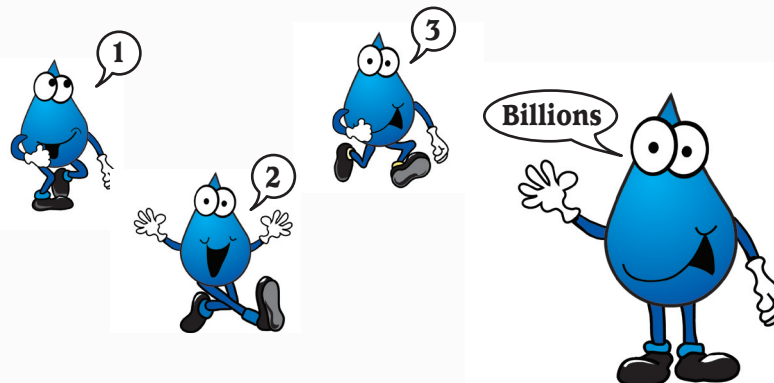
Making Every Drop of Water Count

Florida residents can never take water for granted. The State may be surrounded by lakes, canals, waterways and the ocean, but much of these natural sources are not consumable. Additionally, with weather conditions and population growth being unpredictable, demands for water will continue to increase. This being said, if everyone in Palm Coast makes an effort to save just a little bit of water, together we can all save so much.

Top Ten Simple Ways to Save Water

- 1 - Fix faucets, toilets, showerhead leaks or install low-flow systems.
- 2 - Use dishwashers and washing machines only with full loads.
- 3 - Don't run water continuously for vegetable or dish washing.
- 4 - Don't let water run while brushing teeth or shaving.
- 5 - Use a broom to clean driveways, walks, patios.
- 6 - Use a sponge and bucket of water to wash the car.
- 7 - Take showers rather than baths; keep them short.
- 8 - Keep grass at least two inches high to shade roots.
- 9 - Aerate grass regularly and use mulch to reduce evaporation.
- 10 - Don't run the tap to get cold water; keep a bottle in the refrigerator.

Do you have a unique idea for conserving water?
If you're willing to share, please email mlidskin@ci.palm-coast.fl.us



Your Water Utility



Pure, clean water is the sustenance of life for residents of Palm Coast. It impacts our daily lives as we bathe, drink, clean, wash, swim and nourish – actions that we assume as normal and healthy. The City of Palm Coast owns the Water Utility, giving its citizens ultimate quality control for providing pristine water services, processed at its award-winning facilities. Your Utility Department is proud to report that Palm Coast water meets the stringent drinking water standards set forth by State and Federal requirements. Staff remains vigilant in meeting the challenge of source water protection, water conservation and community education and continues to focus on providing its customers the highest level of service while maintaining fiscal responsibility.

The Palm Coast Utility Department is responsible for providing high quality safe drinking water, fire flow capacity and environmentally responsible wastewater service to residents and businesses. In May, 2005, the City Council passed a Resolution establishing

conservation rates for water use and higher impact fees for new construction. The conservation rates resulted in a small decrease in the cost of water for the average customer while placing a premium on heavy users. The new impact fees will help finance our revised capital improvement plan, designed to keep pace with projected growth.

As we near completion of a \$13 million expansion to our wastewater treatment facility, we are embarking on our newest project – a new water treatment plant. Initially designed to produce 3 million gallons per day of high quality drinking water, current estimates put the cost of the plant and associated wellfields at nearly \$20 million. In addition, the Utility's consultants are wrapping up design of Phase I of a new reuse system that will deliver advance treated wastewater to Town Center and The Conservatory, to be used for irrigation and thereby reducing the community's use of groundwater for non-potable purposes.

Monitoring Your Outdoor Watering Habits

As our community continues to expand, Palm Coast's water use consistently increases. Statistics are startling: more water is used in Florida than in any other state east of the Mississippi River. Florida uses 60% of all water used for agricultural irrigation east of the Mississippi.

The City has imposed the following ordinance to assure all homeowners and businesses have enough water to irrigate their lawns and shrubs:

- Odd Numbered addresses may water on Wednesdays and Saturdays
- Even Numbered addresses may water on Thursdays and Sundays
- Consumers may not water between 10:00am and 4:00pm.
- Irrigation of new landscaping is allowed with no restrictions on the first 30 days and every other day for the next 30 days. Irrigation and car washing is allowed at any time if residents use a hand-held hose equipped with an automatic shut-off valve.



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

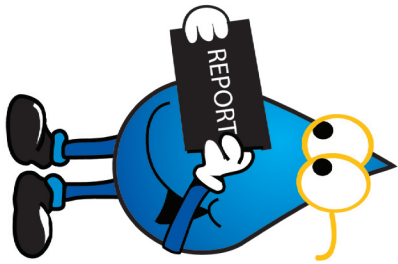


This report provides important information about your water and how it relates to your health. The information in this report is based primarily on 2005 facts and figures. However, the U.S. Environmental Protection Agency (EPA) does not require us to perform all tests every year. When necessary, some 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 about our water.

The City of Palm Coast Utility Department operates the water treatment and distribution system serving Palm Coast. Our water source is groundwater drawn

from the Surficial and the Floridan Aquifer and is treated through a complex multi-step water treatment process that includes lime softening, filtration, membrane softening, corrosion control and chloramination for disinfection purposes. The Florida Department of Environmental Protection (DEP) has completed a Source Water Assessment for the Palm Coast watershed. The State has determined that four of our thirty-seven wells have a low to moderate susceptibility to contamination based on their proximity to potential sources of contamination.

For additional information, please visit the DEP website at www.dep.state.fl.us/swapp. If you have any questions about this report or concerns about your water utility, please contact your **City of Palm Coast Utility Department Representative at 386-986-2360**. You may also visit the **City of Palm Coast website at www.ci.palm-coast.fl.us** or 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, our City Council meets on the first Tuesday of each month at 6:30 p.m. and the third Tuesday at 9:00 a.m. at the Palm Coast Community Center, 305 Palm Coast Parkway N.E.



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.

2005 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, 2005 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.

Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides are the highest detected level at any sampling point. Range of Results is the range of results (lowest to highest) at the individual sampling sites.

Radiological 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 or combined radium (pCi/l)	02/05	N	0.4	ND – 0.4	0	5	Erosion of natural deposits

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
Barium (ppm)	02/05	N	0.0053	0.0043 – 0.0053	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppm)	02/05	N	0.0013	0.00036 – 0.0013	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	02/05	N	0.12	ND – 0.12	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrite (as Nitrogen) (ppm)	02/05	N	0.036	0.033 – 0.036	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	02/05	N	1.6	ND – 1.6	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	02/05	N	32	N/A	N/A	160	Salt water intrusion, leaching from soil

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
Di(2-ethylhexyl) phthalate (ppb)	06/05	N	1.3	ND – 1.3	0	6	Discharge from rubber and chemical factories

The level detected for this contaminant is not considered a health risk although we failed to report the detection of Di(2-ethylhexyl) phthalate and complete the required follow-up quarterly monitoring on time and therefore were in violation of monitoring and reporting requirements. The monitoring and reporting period was 7/15/05 through 7/01/06. Sampling resumed during the first quarter of 2006.

TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters

For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Chloramines, Haloacetic Acids, and/or TTHM (MCL 80 ppb). Range of Results is the range of results (lowest to highest) at the individual sampling sites.

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
Chloramines (ppm)	01/05 – 12/05	N	3.1	1.0 – 5.6	N/A	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	01/05, 08/05, 10/05	N	22.38	9.4 – 49.0	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	01/05, 08/05, 10/05	N	11.95	3.85 – 37.0	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 Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	07/04 and 09/04	N	0.099	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	07/04 and 09/04	N	1.7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. **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 (1-800-426-4791).**