

2010
Annual Drinking Water Quality Report

FLORIDA GULF COAST UNIVERSITY WATER SYSTEM PWS 5360275

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want 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. Lee County operates the water system which supplies the Gulf Coast Center community. Gulf Coast Center purchases water from Lee County Utilities. The source of the water purchased from Lee County is: Olga Water Treatment Plant water is obtained from the Caloosahatchee River. This water is treated for color removal followed by lime softening, it is then chlorinated for disinfection purposes and then fluoridated for dental purposes.

Source Water Assessment Plan

In 2009 the Department of Environmental Protection performed a Source Water Assessment for Lee County Utilities. 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 by contacting Patricia Di Piero, 239-533-8534 or dipierpm@leegov.com.

If you have any questions about this report or concerning your water utility, please contact Dennis Nourse at 239-425-5240 during business hours, Monday through Friday, 8:00 AM to 5:00 PM

Lee County 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, 2010 Data obtained before January 1, 2010, and presented this report is from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, 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.

A Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR. **ction Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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

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.

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 ($\mu\text{g/l}$) – one part by weight of analyte to 1 billion parts by weight of the water sample.

“ND” means not detected and indicates that the substance was not found by laboratory analysis.

Picocurie per liter (pCi/L) - measure of the radioactivity in water.

N/A – Not applicable.

NON-SECONDARY CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)		MCL Violation Y/N	Highest Monthly Percentage/Number		MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination		
	Olga	Gulf Coast		Olga	Gulf Coast					
Microbiological Contaminants										
Total Coliform	01/10-/12/10	01/10-/12/10	Olga N Gulf Coast Center N	2.8%	0	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% of monthly samples. For systems collecting fewer than 40 samples per month: presence of coliform bacteria in 1 sample	Naturally present in the environment		
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 or MRDL	Likely Source of Contamination
	Olga	Gulf Coast		Olga	Gulf Coast	Olga	Gulf Coast			
Turbidity (NTU)	01/10-/12/10	NA	N	.4	NA	99.5%	NA	N/A	TT	Soil runoff
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)		MCL Violation Y/N	Level Detected		Range of Results		MCLG	MCL	Erosion of natural deposits
Radiological										
	Olga	Gulf Coast	All Plants	Olga	Gulf Coast	Olga	Gulf Coast			
Alpha (pCi/l)	4/10, 7/10, & 10	11/18/09	N	4.1	4.2	ND -4.1	NA	0	15	Erosion of natural deposits
Radium 226 + Radium 228 pCi/L	4/10, 7/10, & 10	11/18/09	N	1.0	1.6	ND-1.0	NA	0	5	Erosion of natural deposits

Inorganic Contaminants										
Arsenic (ppb)	02/10	ND	N	1.38	NA	NA	NA	6	6	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	02/10	12/03/2009	N	0.03	0.03	NA	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	02/10	ND	N	4.3	NA	NA	NA	5	5	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	1/10-12/10	12/03/2009	N	0.82	00.7	ND -0.82	NA	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Nickel (ppb)	02/10	ND	N	2.3	NA	NA	NA	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Ni) (ppm)**	1/10, 2/10, 4/10, 7/10 & 10/10	7/14/10	N	1.2	0.661	0.27 – 1.2	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Ni) (ppm)**	11/10, 2/10, 4/10, 7/10 & 10/10	ND	N	0.68	ND	0.014-0.68	NA	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Selenium (ppb)	2/10	12/03/09	N	3.3	1.7 I	NA	NA	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)*	01/10-/12/10	12/03/09	N	99.6	86.8	45.4 -99.6	NA	N/A	160	Salt water intrusion, leaching from soil
TTHMs and Stage I Disinfectant/Disinfection By-Product (D/DBP) Contaminant										
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
Chlorine (ppm)	N/A	01/10-/12/10	N	N/A	2.1	NA	1.0-2.1	4	4.0	Water additive used to control microbes
Chloramines (ppm)	01/10-/12/10	NA	N	3.4	NA	0.1 - 5.8	NA	4	4.0	Water additive used to control microbes
HAA5s (Haloacetic acids) (five) (ppb) Stage I	Quarterly 2010	08/2010	N	9.0	7.2	ND-28	NA	N/A	60	By-product of drinking water disinfection
HAA5s (Haloacetic acids) (five) (ppb) Stage II	N/A	10/09/07	N	N/A	0.838	NA	NA	NA	60	By-product of drinking water disinfection
TTHM s [Total trihalomethanes] (ppb) Stage I	Quarterly 2010	08/2010	N	8.3	6.58	0.34 – 22.0	NA	N/A	80	By-product of drinking water disinfection
TTHM s [Total trihalomethanes] (ppb) Stage II	N/A	10/09/07	N	N/A	1.6	NA	NA	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)		TT Violation Y/N	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios		Range of Monthly Removal Ratios		MCLG	MCL	Likely Source of Contamination
Total organic carbon	01/10-/12/10	N/A	N	2.0	N/A	1.5 – 2.63	N/A	N/A	TT	Naturally present in the environment

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)		AL Violation Y/N	90th Percentile Result		No. of samples exceeding the AL		MCLG	AL (Action Level)	Likely Source of Contamination
Lead and Copper (Tap Water)										
Copper (tap water) (ppm)	8/10	9/30/09	N	0.464	0.07	0	0	1.3	1.3	Corrosion of plumbing systems; erosion of natural deposits; leaching from wood preservatives
				0.05						
Lead (tap water) (ppb)	8/10	9/30/09	N	1.3	7.0	0	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Contaminants

Contaminant	Dates of sampling (mo./yr.)		Level Detected	
Cryptosporidium				
Source Water	1/10- 4/10	NA	O out of 4	NA
Finished Water	1/10- 4/10	NA	O out of 4	NA

SECONDARY CONTAMINANTS TABLE

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
Secondary Contaminants											
TDS (ppm)*	1/10 -12/10	NA	N	NA	582	NA	266 -582	NA		500	Natural occurrence from

Microbiological Contaminants:

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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. Gulf Coast Center 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>.

TABLE NOTES

- A. *The Total Dissolved Solids (TDS) results from 2010 are not in violation of the secondary standard of 500ppm because of the Emergency Final Order (EFO) (OCG Case No.: 09-0735 issued by the Florida Department of Environmental Protection (FDEP), The EFO was originally issued on April 16, 2007 to address severe drought conditions of which LCU entered into on April 24, 2007. Under this EFO the limit for TDS was increased to 1,200 ppm of which FDEP considers this limit to still be protective of public health.

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.

We constantly monitor the water supply for various contaminants. We had no detects of Cryptosporidium in the source water . We had 0 detects in 4 out of 4 samples tested. We believe it is important for you to know that Cryptosporidium may cause serious illness in 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. These people should seek advice from their health care providers.

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.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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).

We at Florida Gulf Coast University WTP 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 insuring 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.