

2007 WATER QUALITY REPORT

FOR THE CITY OF EUSTIS



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3354953;
3354954

Utility Introduction

We are once again proud to present our annual water quality report. This edition covers all testing completed from January 1, 2007 through December 31, 2007. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best-quality drinking water. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.



On November 8, 2007, the City of Eustis received two awards for Drinking Water Treatment Plant Excellence from the Florida Department of Environmental Protection. Drinking water facilities are on the front lines of public health and environmental protection in Florida.

The City is pleased to provide this water report to you. We have completed another successful year of providing quality drinking water to our citizenry. Our water utility system is one of the finest in the state and our professional staff is committed to ensuring that we maintain a safe, dependable water supply. We encourage you to be a responsible consumer of our water resources and to help protect our water supply by complying with the mandatory water restrictions.

Evelyn H. Smith, Mayor/Commissioner

Important Health Information



Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Description

Your water starts with a safe and reliable groundwater source. This water resource is called the Floridan Aquifer. Your utility pumps this water from six wells which are located at the city's three water plants. The water is pumped from the aquifer into aerators to remove hydrogen sulfide, a naturally occurring compound commonly found in Florida's water. The water is treated with chlorine for disinfection purposes, fluoridated for dental health purposes and then stored in ground storage tanks. From there, the water is pumped to elevated tanks and the distribution system for use by you, the customer.

Sorrento Springs customers receive their water from the Eustis Eastern Water Treatment Plant. This water resource is also from the Floridan Aquifer. The water is pumped from two wells into an aerator to remove hydrogen sulfide, a naturally occurring compound found in Florida's water and is chlorinated for disinfection purposes. Then it is stored in a ground storage tank and pumped out into the system for your use. In 2004 the Florida Department of Environmental Protection (FDEP) conducted a statewide assessment of the public drinking water systems. This system was not assessed at that time.

Heathrow Country Estates' water is pumped from two wells that draw from the Floridan Aquifer. The water is aerated to remove hydrogen sulfide, a naturally occurring compound found in Florida's water. Chlorine is injected for disinfection purposes and then the water is stored in a ground storage tank before being pumped out to the customers. In 2004, the FDEP conducted a statewide assessment of the public drinking water systems. This system was not assessed at that time.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call Greg Dobbins, Eustis Water Department Supervisor, at (352) 357-5618.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Substances That Could Be in 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:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

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 U.S. 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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

To Learn More About Drinking Water Issues

The Eustis City Commission regularly meets at 7:00 p.m. on the first and third Thursday of each month. Meeting agendas may contain items pertaining to water treatment, budget, water quality and other water-related issues, and the commission's actions may include decisions concerning your drinking water. We encourage you to be an active, cognizant and involved partner in our decision-making process. Agendas can be obtained from the City Clerk's office or by calling (352) 483-5430.

Source Water Assessment

In 2004 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. For this system there are six potential sources of contamination identified with moderate to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at www.dep.state.fl.us/swapp or they can be obtained from the City of Eustis Water Department by calling (352) 357-5618.



Sampling Results

According to federal and state laws, rules, and regulations, the City of Eustis routinely monitors for contaminants in your drinking water. The tables below show only those contaminants that were detected in the water. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1, 2007 to December 31, 2007. Data obtained before January 1, 2007, and presented in this report are from the most recent testing performed in accordance with laws, rules, and regulations.

PRIMARY REGULATED CONTAMINANTS

PRIMARY REGULATED CONTAMINANTS													
Radiological Contaminants		City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Alpha Emitters (pCi/L)	No	1/2002	2.30	1.10–2.30	1/2005	0.7	NA	3,4,7,8 & 10/2005	0.75 (avg)	ND–1.5	0	15	Erosion of natural deposits
Radium 226 (ppb)	No	NA	NA	NA	NA	NA	NA	8/2005	0.6	NA	0	5	Erosion of natural deposits
Uranium (ppb)	No	NA	NA	NA	NA	NA	NA	8/2005	0.8	NA	0	30	Erosion of natural deposits
Inorganic Contaminants²													
Arsenic (ppb)	No	1, 4 & 7/2006	0.0023	ND–0.0023	NA	NA	NA	NA	NA	NA	NA	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	No	NA	NA	NA	7/2006	0.014	NA	NA	NA	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	No	10/2005	0.943	0.531–0.943	NA	NA	NA	NA	NA	NA	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	No	10/2005	7.33	3.55–7.33	NA	NA	NA	NA	NA	NA	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	No	1–12/2007	1.1	0.44–1.1	7/2006	0.021	NA	7/2006	0.26	NA	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead [point of entry] (ppb)	No	NA	NA	NA	NA	NA	NA	7/2006	13	NA	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	No	10/2005	6.91	ND–6.91	NA	NA	NA	NA	NA	NA	NA	100	Pollution from mining and refining operations; natural occurrence in soil
Nitrate [as Nitrogen] (ppm)	No	1/2007	0.37	ND–0.37	1/2007	0.19	NA	NA	NA	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	10/2005	12.4	7.0–12.4	7/2006	5.5	NA	7/2006	11	NA	NA	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products													
		City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ³	RANGE OF RESULTS ³	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ³	RANGE OF RESULTS ³	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ³	RANGE OF RESULTS ³	MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION
Chlorine (ppm)	No	1-12/2007	0.8 (avg)	0.4–1.7	1-12/2007	1.0 (avg)	0.4–1.4	1-12/2007	0.7 (avg)	0.4–1.4	[4]	[4.0]	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	No	7/2007	1.77	ND–4.2	7/2006	3.2	NA	7/2007	7.2	NA	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	No	7/2007	18.0	10.5–26.4	7/2006	16.41	NA	7/2007	23.8	NA	NA	80	By-product of drinking water disinfection

Lead and Copper (Tap water samples were collected from sites throughout the community.)

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CONTAMINANT AND UNIT OF MEASUREMENT	AL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	DATE OF SAMPLING (MO./YR.)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	DATE OF SAMPLING (MO./YR.)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	MCLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION
Copper [tap water] (ppm)	No	7/2007	0.21	0	2/2005	0.37	0	7/2007	0.075	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	No	7/2007	ND	NA	2/2005	1	0	7/2007	1.3	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

SECONDARY CONTAMINANTS													
		City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	HIGHEST RESULT	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	HIGHEST RESULT	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	HIGHEST RESULT	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Iron (ppm)	No	NA	NA	NA	NA	NA	NA	7 & 8/2006	0.32	0.0894-0.32	NA	0.3	Natural occurrence from soil leaching
Odor (Units)	No	NA	NA	NA	NA	NA	NA	7 & 8/2006	4	ND-4	NA	3	Naturally occurring organics

¹ Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile 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.

² The Eustis Eastern Water Treatment Plant and Heathrow Country Estates Water Treatment Plant are operating on a FDEP waiver for asbestos because there are no asbestos pipes in their distribution systems.

³ For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.

Definitions

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

IDSE (Initial Distribution System Evaluation): 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.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).