



Annual
WATER
QUALITY
REPORT

Reporting Year 2012



Presented By _____
City of Eustis

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Here for You

We are once again proud to present our Annual Water Quality Report covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.



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 or <http://water.epa.gov/drink/hotline>.

Substances That Could Be in Water

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. Food and Drug Administration (FDA) regulations set 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 (800) 426-4791.

From the Mayor's Desk:

Water is one of our most valuable resources. The Eustis City Commission is proud of the Water Department staff for its tradition of providing the residents of Eustis with quality drinking water. Citizens turn on the faucet with the expectation of safe, clean water – and the City of Eustis meets that expectation through the efforts of our dedicated employees. Please visit our Web site (www.eustis.org) and check out the water conservation rules and tips provided by the City of Eustis Water Department.

Sincerely,

Kress Muenzmay, Mayor/Commissioner



Public Meetings

The Eustis City Commission meets regularly. Meeting agendas may contain items pertaining to water treatment, water quality, and other water-related issues. We encourage you to be an active and involved partner in our decision-making process. Meeting dates and agendas can be obtained from the City Clerk's office, Monday-Friday, 8 a.m. to 5 p.m., the City's Web site (www.eustis.org), or by calling (352) 483-5430.

Lead in Home Plumbing

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. We are 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 www.epa.gov/safewater/lead.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS?

Feel free to share your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies. You may contact Greg Dobbins, Eustis Water Department Supervisor, at (352) 357-5618. He will be happy to assist you.

Source Water Description

Your water starts with a safe and reliable groundwater source called the Floridan Aquifer. Your utility pumps this water from seven wells into aerators to remove hydrogen sulfide, a naturally occurring compound commonly found in Florida 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 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 and is chlorinated for disinfection purposes. Then it is stored in a ground storage tank and pumped out into the system for your use.

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. Chlorine is injected for disinfection purposes and then the water is stored in a ground storage tank before being pumped out to the customers.

Source Water Assessment

In 2012, the Department of Environmental Protection performed a Source Water Assessment on our systems. This assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are two potential sources of contamination identified for the City of Eustis system, with a low to moderate susceptibility level. The Eustis Eastern system has four potential sources of contamination identified with low susceptibility levels. Heathrow Country Estates system has no potential sources of contamination. 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

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

PRIMARY REGULATED CONTAMINANTS

Inorganic Contaminants													
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates			MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Antimony (ppb)	No	NA	NA	NA	10/2012	0.16	NA	NA	NA	NA	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	No	10/2011	2.4	ND–2.4	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	10/2011	0.019	0.013–0.019	10/2012	0.0074	NA	10/2012	0.0082	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	No	10/2011	4.6	4.1–4.6	10/2012	1.5	NA	10/2012	2.0	NA	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	No	1-12/2012	0.72	0.32–0.72	10/2012	0.15	NA	10/2012	0.19	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
Nickel (ppb)	No	10/2011	1	0.83–1	10/2012	0.64	NA	10/2012	0.89	NA	NA	100	Pollution from mining and refining operations; natural occurrence in soil
Nitrate [as Nitrogen] (ppm)	No	1/2011	0.4	ND–0.4	10/2012	0.28	0.12–0.28	10/2012	0.26	0.04–0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	No	NA	NA	NA	NA	NA	NA	10/2012	0.93	NA	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	No	10/2011	14	9.6–14	10/2012	6.5	NA	10/2012	13	NA	NA	160	Salt water intrusion; leaching from soil
Synthetic Organic Contaminants including Pesticides and Herbicides													
Dalapon (ppb)	No	NA	NA	NA	NA	NA	NA	1/2012	0.36	NA	200	200	Runoff from herbicide used on rights of way
Volatile Organic Contaminants													
Ethylbenzene (ppb)	No	4,7,10/2012	4.3	0.5–4.3	NA	NA	NA	NA	NA	NA	700	700	Discharge from petroleum refineries
Xylenes (ppm)	No	4,7,10/2012	0.028	0.003–0.028	NA	NA	NA	NA	NA	NA	10	10	Discharge from petroleum factories; discharge from chemical factories
Stage 1 Disinfectants and Disinfection By-products													
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates			MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION
		DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED	RANGE OF RESULTS			
Chlorine (ppm)	No	1-12/2012	1.0	0.4–2.1	1-12/2012	1.2	0.4–1.7	1-12/2012	0.9	0.4–1.5	[4]	[4.0]	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	No	7/2012	6.3	4.1–9.4	7/2012	4.07	NA	7/2012	21.1	NA	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	No	7/2012	22	17.5–28.6	7/2012	14.6	NA	7/2012	49.8	NA	NA	80	By-product of drinking water disinfection

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

CONTAMINANT AND UNIT OF MEASUREMENT	AL EXCEEDANCE (YES/NO)	City of Eustis			Eustis Eastern (Sorrento Springs)			Heathrow Country Estates			MCLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION
		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			
Copper [tap water] (ppm)	No	7/2011	0.19	0	7/2012	0.013	0	7/2012	0.041	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	No	7/2011	0.55	0	7/2012	0.00025	0	7/2012	0.00096	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

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 By-products 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.

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).