

ANNUAL
WATER
QUALITY
REPORT

*Water testing performed
in 2008*

CITY OF PLANTATION



Plantation
the grass is greener®

Plantation Preserve
GOLF COURSE & CLUB

PWS ID#: FL4061121

A Message From the Director

Dear Valued Customers,

The Utilities Department staff is pleased to present its 2008 Consumer Confidence Report. The bottom line of the report is that the water from Plantation's public utility meets the highest drinking water standards in the world. In the water works industry, we call this "quality on tap." And it's delivered to your home or business, twenty-four hours a day, seven days a week, at a very reasonable price.

Water utilities traditionally use a lot of energy to treat water to such a high standard and to pump it into the distribution system for consumption. Accordingly, when we conserve water, we are conserving energy and ameliorating the harmful effects of global warming as well.

Looking ahead, the imperative to conserve is still very much at the forefront of utilities issues, and will be for years to come. What can we do?

A couple of quick changes can make a world of difference: change out high-water-use plumbing fixtures—principally toilets, shower heads, and faucets—with high efficiency ones, and gradually redesign landscapes so they contain less turf to water and more drought tolerant plantings. If we all do this, we will be well on our way to not only conserving water, but energy as well. For the utility consumer, that will equate to cost savings as well.

So, use water and enjoy water. But please conserve water for the future of Florida and the planet. Each one of us can make a difference, one gallon of conserved water at a time.

Best regards,

Hank Breitenkam

Director of Utilities

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.

Community Participation

You are invited to participate and voice your concerns about your drinking water. You can visit the Utilities Department at Plantation City Hall, 400 NW 73 Avenue, or call David Grey at (954) 797-2209 for more information about this report, or for any questions relating to your drinking water.

Where Does My Water Come From?

Plantation water comes from a network of sixteen groundwater wells that reach 110 feet into the Biscayne Aquifer. The wells are located so that the land can still be used for parks.

The Plantation water you drink is regularly tested to ensure quality. Even with laboratory methods that can find ever smaller amounts of substances in water, Plantation continues to be a utility that can proudly and truthfully say its water is the best.

The water is pumped through specially designed composite membranes with pores smaller than particles of undesirable elements of the groundwater, thus eliminating impurities. This process replaces chemical softening. Membrane softening processes water to the extent that the water is of such high quality that many of the health and aesthetic concerns of chemical softening are eliminated. Our customers will be happy to know that Plantation water is also fluoridated and disinfected.

If you buy a gallon of bottled water for 59 cents per gallon, that is 536 times the cost of Plantation water. And the cheapest bottled water comes from the tap and is put into a bottle by companies that want to make money selling something at 536 times the cost you can buy it for.

Our advanced treatment process provides the highest quality water available anywhere: better than bottled, better than any other source.

Source Water Assessment

In 2003 the 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. There are 19 potential sources of contamination identified for this system. 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 Plantation Utilities Department.



Lead and Drinking Water

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.



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

Sampling Results

This edition covers all testing completed from January 1 through December 31, 2008. 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. We continue to meet all state and federal drinking water standards. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present 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													
Microbiological Contaminants		East Plant			Central Plant			Combined System					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	HIGHEST MONTHLY PERCENTAGE/NUMBER		DATE OF SAMPLING (MO./YR.)	HIGHEST MONTHLY PERCENTAGE/NUMBER		DATE OF SAMPLING (MO./YR.)	HIGHEST MONTHLY PERCENTAGE/NUMBER	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Total Coliform Bacteria (% positive samples)	No	NA	NA		NA	NA		NA	0.0%	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment	
Radiological Contaminants		East Plant			Central Plant			Combined System					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS ¹	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS ¹	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ¹	RANGE OF RESULTS ¹	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Radium 226 + 228 [Combined Radium] (pCi/L)	No	8/08	0.1	0.1–0.1	8/08	0.3	0.3–0.3	NA	NA	NA	0	5	Erosion of natural deposits
Inorganic Contaminants		East Plant			Central Plant			Combined System					
Barium (ppm)	No	8/08	0.0229	NA	8/08	0.0001	NA	NA	NA	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	No	8/08	0.91	NA	8/08	0.81	NA	NA	NA	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
Nitrate [as Nitrogen] (ppm)	No	8/08	0.16	NA	8/08	0.13	NA	NA	NA	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	8/08	15.9	NA	8/08	12.7	NA	NA	NA	NA	NA	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectants and Disinfection By-Products		East Plant			Central Plant			Combined System					
CONTAMINANT AND UNIT OF MEASUREMENT	MCL VIOLATION (YES/NO)	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ²	RANGE OF RESULTS ²	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ²	RANGE OF RESULTS ²	DATE OF SAMPLING (MO./YR.)	LEVEL DETECTED ²	RANGE OF RESULTS ²	MCLG OR [MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION
Haloacetic Acids (five) [HAA5] (ppb)	No	NA	NA	NA	NA	NA	NA	9/08	1.64	1.22–1.64	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	No	NA	NA	NA	NA	NA	NA	9/08	ND	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 VIOLATION (YES/NO)	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	7/07	0.042	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [tap water] (ppb)	No	7/07	1	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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 For bromate, chloramines, or chlorine, the level detected is the 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).