



# The City of DeLand – Tomoka Woods Water System DeLand, Florida



## 2009 Annual Consumer Report on the Quality of Our Drinking Water

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence Report" to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The City of DeLand is committed to providing you with the safest and most reliable water supply. We are proud to share our results with you. Please read this report carefully and, if you have any questions, call the numbers listed below. Informed consumers are our best allies in maintaining safe water.

### Water Source and Source Water Assessment/ Protection Program

The raw water supply for the City of DeLand – Tomoka Woods Water System is derived from 2 deep wells obtaining groundwater from the Floridan Aquifer. These wells can produce a total firm capacity in excess of 432 thousand gallons per day. The wells are located at the Tomoka Woods Water Treatment Plant site. Well depths range from 315 feet to 325 feet. Water treatment processes include chlorination only. The Department of Environmental Protection performed a Source Water Assessment on the Tomoka Woods system in 2009. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. No potential sources of contamination were found during this study for the Tomoka Woods Water System. The assessment results are available on the FDEP Source Water Assessment Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

### Overview

In 2009, your water department distributed 8.0 million gallons of water to 71 connections servicing an estimated 178 residents. We encourage public interest and communication to assist us in making decisions affecting your drinking water. In keeping with our directive of a customer oriented utility, we are proud to provide a Water Quality Hotline (386-740-6854) and an informational website at [www.deland.org](http://www.deland.org). City Commission meetings offer opportunities for public participation in decisions that may affect the quality of water. The Commission meets at 7:00 PM on the first and third Monday of each month at 120 South Florida Avenue. Please call City Hall at (386-626-7000) for additional information. For further information, also see U.S. Environmental Protection Agency (EPA) Water at [www.epa.gov/safewater/](http://www.epa.gov/safewater/) or on the world wide web at <http://www.waterdata.com>.

### An Explanation of the Water-Quality Data Table

Our water is tested to assure that it is safe. The table shows the results of our water-quality analyses for the period of January 1, 2009 to December 31, 2009. Regulated contaminants that are required, by Federal and State regulatory agencies, to be tested in our water and that have been detected, are listed here. The table contains the name of each detected substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination, and a key to units of measurement. Definitions of MCL and MCLG are important.

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

**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.

**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.

**Not Detected or ND:** Not detected by laboratory analysis.

**Parts per million (ppm) or Milligrams per liter (mg/l):** one part per million corresponds to one minute in two years, or a single penny in \$10,000,000.

**Parts per billion (ppb) or Micrograms per liter (ug/l):** one part per billion corresponds to one minute in 2,000 years, or a penny in \$10,000,000.

All public utilities are required to monitor drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During May 2009, we failed to fulfill monitoring requirements for Microbiological Contaminants, and therefore cannot be sure of the quality of your drinking water during that time. This is a violation to Chapter 62-550 of the Florida Administrative Code. We are required to monitor on a monthly basis for this community system but failed to monitor the additional number of bacteriologicals during May 2009 after a positive total coliform result in April 2009. During June 2009, we monitored all required monthly microbiological contaminants to ensure the water quality. The results from this monitoring showed the absence of Total Coliform bacteria.

#### Microbiological Contaminants:

(1) 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. If coliforms were found in more samples than allowed, this may be a warning of potential problems.

The following tables list the contaminants which were present or within detectable levels during the City of DeLand's most recent testing. Even though the following contaminants were present, the detected levels are well below the MCL's (Maximum Contaminant Levels) prescribed by Federal and State regulation.

Again, the data presented in this report is from the most recent testing performed in accordance with regulations.

### PRIMARY DRINKING WATER STANDARD (Regulated in order to protect against possible adverse health effects)

Microbiological Contaminants						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation (Y/N)	High Monthly # of Positive Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	April 2009	N	1	0	Presence of total coliform bacteria in more than one monthly sample.	Naturally present in the environment

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
Arsenic (ppb)	June/2009	N	2.4	n/a	0	10	Erosion of natural deposits, runoff from orchards; glass and electronics production wastes
Barium (ppm)	June/2009	N	0.009	n/a	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	June/2009	N	0.097	n/a	4	4	Erosion of natural deposits; water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm; discharge from fertilizer and aluminum factories
Nickel (ppb)	June/2009	N	2.6	n/a	0	100	Pollution from mining and refining operations. Natural occurrence in soil
Sodium (ppm)	June/2009	N	8.2	n/a	0	160	Saltwater intrusion, leaching from soil

\*\* The result in the Level Detected column for TTHMs, HAA5s & Chlorine is the highest of the four quarterly running annual averages of results from all sampling sites. Range of results is the range (lowest to highest) from all individual sample sites.

Stage 1 Disinfection By-Product (D/DBP) Contaminants and Disinfectant Residuals							
Contaminant, Disinfectant Residuals and Unit of Measurement	Dates of sampling	MCL Violation (Y/N)	Level Detected	Range of Results (lowest to highest)	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
TTHM-Total Trihalomethanes (ppb)	July/2009	N	15	n/a	n/a	MCL=80	By-product of drinking water disinfection
HAA5-Haloacetic Acids (ppb)	July/2009	N	2.89	n/a	n/a	MCL=60	By-product of drinking water disinfection
Chlorine (ppm)	2009 (monthly)	N	1.7	1.06 – 1.89	MRDLG=4.0	MRDL=4.0	Water additive used to control microbes

**Lead and Copper** (Tap water samples were collected for lead and copper analyses from homes throughout the service area)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sample sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	June/2009	N	0.19	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	June/2009	N	3.6	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

**As you can see by the table, our system had no primary drinking water violations. We are proud that your drinking water meets or exceeds all Federal and State requirements.**

### Additional Health Information

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. The City of DeLand 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>.

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 radioactive material, and can pick up substances resulting from the presence of plants, 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 and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm 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, stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, 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, 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

**Some people may be more vulnerable to contaminants in drinking water than is 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

*We at the City of DeLand work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future. Thank you.*