

Seminole County Annual Water Quality Report

Additional Information about the Report (See Inside)

Potential Source Water Contaminants

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, 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 results of oil and gas production and mining activities.

Lead Specific 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. Seminole County Environmental Services 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 two 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 (1-800-426-4791) or the Web site, <http://www.epa.gov/safewater/lead>.

Assurance of Healthy Drinking Water

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (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.

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 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 (1-800-426-4791).

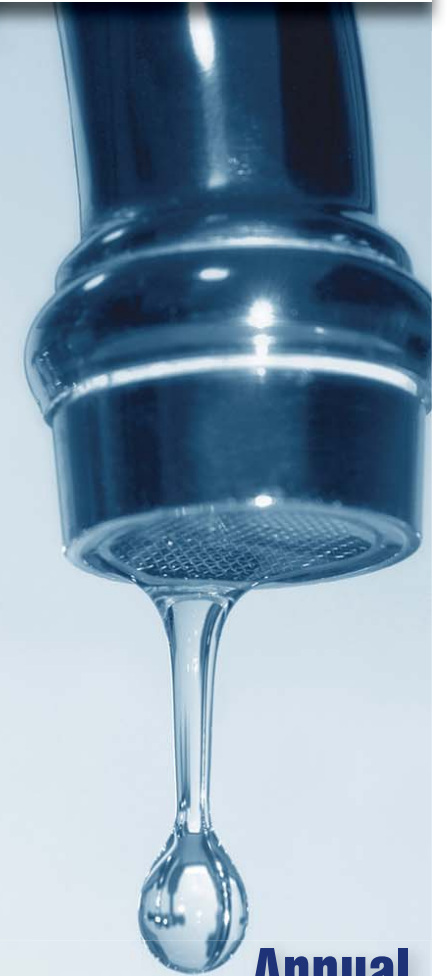


ENVIRONMENTAL SERVICES DEPARTMENT
500 WEST LAKE MARY BLVD
SANFORD, FL 32773-7499



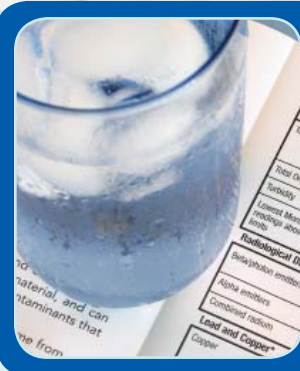
Important Information Concerning Your Drinking Water

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Annual
Water Quality Report
for Seminole County
Water Utility Customers
2010

SEMINOLE COUNTY
ENVIRONMENTAL SERVICES
DEPARTMENT



We are pleased to present 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. Our water source is from ground water wells that draw from the Floridan Aquifer.

If you have any questions about this report or concerning your water utility, please contact the Water Operations office at 407-665-2767 or the Billing office at 407-665-2010.

Why is This Information Important?

Seminole County Environmental Services Department routinely 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 in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Your Water Supply Source

The drinking water for the **Apple Valley Service Area** is obtained from ground water wells and is chlorinated for disinfection purposes. If you have any questions about this report or concerning your water utility, please contact Seminole County Environmental Services at 407-665-2767.



Source Water Assessment and Protection Program (SWAPP)

In 2009 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 four (4) potential sources of contamination identified for this system with moderate 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.

Terms and Abbreviations:

AL - Action Level is the concentration of contaminant that, if exceeded, triggers treatment or other requirements 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.

NA - Not Applicable.

ND - Not Detected, which indicates that the substance was not found by laboratory analysis.

Parts per billion (ppb) or Micrograms per liter (µg/l): One part by weight of analyte to 1 billion parts by weight of the water sample.

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.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

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

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

WATER QUALITY RESULTS (for your Water System)

Apple Valley Water System							
Radioactive Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226+228 (pCi/L)	06/09	N	0.3	0-0.3	0	5	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	06/09	N	3.2	3.2	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	06/09	N	0.0082	0.0082	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	06/09	N	0.14	0.14	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
Nitrate (as Nitrogen) (ppm)	06/10	N	0.018	0.018	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	06/09	N	16	16	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectant/Disinfection By-Product							
Contaminant and Unit of Measurement	Date 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)	01/10-12/10	N	1.19	0.70-1.62	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	07/10-08/10	N	34.79	32.00-37.58	NA	MCL = 60	By-product of drinking water disinfection
THM [Total trihalomethanes] (ppb)	07/10-08/10	N	74.905	70.61-79.20	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	Number of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	08/10	N	0.4	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	08/10	N	10	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits

