2003 Annual Drinking Water Quality Report

City of Winter Haven

We're pleased to present to you this year's Annual Quality Water 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 thirteen wells that draw water from the Floridian aquifer. This water is aerated to release volatile contaminants, chlorinated for disinfection and then fluoridated for dental purposes.

If you have any questions about this report or concerning your water utility, or want to obtain a copy of this report, please contact Steven Warder, Chief Water Plant Operator (863) 291-5767. We want our valued customers to be informed about their water utility.

The City Of Winter Haven 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 1st to December 31st, 2003. Also included are test results in earlier years for contaminants sampled less often than annually. For contaminants not required to be tested for in 2003, test results are for the most recent testing done in accordance with regulations authorized by the state and approved by the United States Environmental Protection Agency (EPA).

As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

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.

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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 storm water 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 storm water 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 storm water runoff, and septic systems.
Radioactive contaminants, which can be naturally occurring, or be the result of oil and gas production or mining activities.

In the data table you will find many terms you might not be familiar with. To help you better understand these terms we've provided the following key to these terms' abbreviations and definitions:

TERMS Appearing in TABLE		DEFINITION
Action Level	**AL**	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
Not Applicable	**N/A**	Does not apply
Not-Detected	**ND**	Means not detected and indicates that the substance was not found by laboratory analysis.
Parts per million *or* **Milligrams per liter**	**ppm mg/l**	One part by weight of analyte to one million parts by weight of the water sample.
Parts per billion *or* **Micrograms per liter**	**ppb** m**g/l**	One part by weight of analyte to one billion parts by weight of the water sample.
Picocuries per liter	**pCi/L**	- *picocuries per liter* is a measure of the radioactivity in water
Maximum Contaminant Level	**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 Levels (MCL)** are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
Maximum Contaminant Level Goal	**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.

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

TEST TABLE RESULTS

****** 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.

Contaminant and Unit of Measurement	Dates of Sampling (MO./YR.)	MCL Violation YES/NO	Level Detected **	Range of Results	MCLG	MCL	Likely Source of Contamination
Radiological Contaminants							
Alpha emitters (pCi/l)	1/1/03-12/31/03	N	2.2	ND-2.2	0	15	Erosion of natural deposits

Inorganic Contaminants

Fluoride (ppm)	1/1/02-12/31/02	N	82	0. 23 to .82	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (point of entry) (ppb)	1/1/02-12/31/02	N	22	ND to 22	N/A	15	Residue from man-made pollution such as auto emissions and paint, lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm)	1/1/03-12/31/03	N	0.11	ND to 0.11	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	1/1/03-12/31/03	N	0.09	ND to 0.09	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	1/1/02-12/31/02	N	17.20	7.23 to 17.20	N/A	160	Salt water intrusion, leaching from soil

The result in the Level Detected column for TTHMs is the highest of the four quarterly running annual averages of results from all sampling sites.

Contaminant and Unit of Measurement	Dates of Sampling MO/YR	MCL Violation YES / NO	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Total Trihalmethanes (TTHMs)							
TTHM [Total trihalomethanes] (ppb)	1/1/03-12/31/03	N	49.4	40-49	N/A	MCL = 80	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation YES / NO	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	6/03-9/03	N	0.32	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6/03-9/03	N	4.0	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

We constantly monitor for various constituents in the water supply to meet all regulatory requirements.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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

Please call Steven Warder, Chief Water Plant Operator (863) 291-5767 if you have questions.