

# 2008 Quality Water Report

## City of Frostproof

We're pleased to present the 2008 Annual Quality Water Report for the City of Frostproof informing you about the quality water and services we deliver to you daily. Our goal is to provide you with a safe and dependable supply of drinking water and we want you to understand the efforts made to continually improve the water treatment process, protecting our water resources. Our water source is from three wells that draw water from the Upper Floridan Aquifer. Before delivery to you, the water is aerated to release volatile contaminants and then disinfected with chlorine. We are committed to ensuring the quality of your water.

If you have any questions about this report or would like a copy, please contact James Keene, Public Works Director at (863) 635 7850. We want you, our valued customers, to be informed about the City's water utilities, and if you are interested in learning more about the City's utilities, you may attend any of our regularly scheduled City Council meetings held on the first and third Mondays of the month at 6:00 p.m. at 111 West First Street, Frostproof, Florida 33843.

The City of Frostproof 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, 2008. Also included are test results in earlier years for contaminants sampled less often than annually. For contaminants not required to be tested in 2008, 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).

**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.**

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.

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

**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.**

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:

TERM Appearing in TABLE		DEFINITION
<b>Action Level</b>	<b>AL</b>	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
<b>Not Applicable</b>	<b>n/a</b>	Does not apply
<b>Not-Detected</b>	<b>ND</b>	Indicates that the substance was not found by laboratory analysis
<b>Parts per million</b>	<b>ppm</b>	or <i>Milligrams per liter (mg/l)</i> – one part by weight of contaminant to one million parts by weight of the water sample.
<b>Parts per billion</b>	<b>ppb</b>	or <i>Micrograms per liter (µg/l)</i> – one part by weight of contaminant to one billion parts by weight of the water sample.
<b>Picocuries per liter</b>	<b>pCi/L</b>	- <i>picocuries per liter</i> is a measure of the radioactivity in water
<b>Maximum Contaminant Level</b>	<b>MCL</b>	The "Maximum Allowed" is 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.
<b>Maximum Contaminant Level Goal</b>	<b>MCLG</b>	The "Goal" is 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.
<b>Maximum Residual Disinfectant Level</b>	<b>MRDL</b>	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.
<b>Maximum Residual Disinfectant Level Goal</b>	<b>MRDLG</b>	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.

MCLs 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.

Test Results Table							
**Results in the Level Detected column for radiological and inorganic contaminants are the highest detected level for all sampling points.							
Contaminant and Unit of Measurement	Monitoring Period Month / Year	MCL Violation Yes / No	Level Detected **	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminants</b>							
Gross Alpha (pCi/L)	1/03 to 12/03	No	7.1	2.9 to 7.1	0	15	Erosion of natural deposits
Radium 226, Radium 228, or combined Radium (pCi/L)	1/03 to 12/03	No	4.3	1.5 to 4.3	5	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	1/06 to 12/06	No	0.06	0.05 to 0.06	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	1/06 to 12/06	No	0.30	0.25 to 0.30	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 1.2 ppm
Nitrate (as Nitrogen) (ppm)	1/08 to 12/08	No	0.06	0.02 to 0.06	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Sodium (ppm)	1/08 to 12/08	No	16.5	7.41 to 16.5	n/a	160	Salt water intrusion, leaching from soil
<b>TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Contaminant</b>							
Chlorine (MCL = 4.0) - Level Detected is the annual monthly average result; Range of Results is lowest to highest monthly average result. HAA5 (MCL = 60) + THM (MCL = 80) - Level Detected is the average annual result; Range of Results is lowest to highest individual result.							
Contaminant and Unit of Measurement	Dates 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)	1/08 - 12/08	No	0.9	0.7 – 1.3	MRDLG = 4	MRDL = 4.0	Disinfectant added to water control microbes
Haloacetic Acids ( five) (HAA5) (ppb)	1/08 - 12/08	No	9.4	1 .- 9.4	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total Trihalomethanes] (ppb)	1/08- 12/08	No	20	4.03 – 20.	NA	MCL = 80	By-product of drinking water disinfection
<b>Lead and Copper (Tap Water)</b>							
Contaminant and Unit of Measurement	Action Level Violation Yes/No	90 <sup>th</sup> Percentile Result	Number of Sampling Sites Exceeding the Action Level	MCLG	Action Level	Monitoring Period Month/Year	Likely Source of Contamination
Copper (tap water) (ppm)	No	0.30	0	1.3	AL= 1.3	9/08	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	No	0.008	0	0	AL= 15	9/08	Corrosion of household plumbing systems, erosion of natural deposits

As you can see by the table, our system had no monitoring violations. We're proud that your drinking water quality meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected.

Florida Department of Environmental Protection has conducted a Source Water Assessment (SWA) for all public water systems in Florida to identify and assess any potential sources of contamination in the vicinity of your water supply. A SWA conducted for this system in 2004 found that the system's wells are at High Risk for contamination due to the wells being located within an area of known ground water contamination, designated as a "Delineated Area" within Florida, low risk for domestic wastewater contamination and also near petroleum storage tanks that have a moderate to high potential to leak and contaminate the water supply. A SWA report for this system is available at the DEP SWAPP web site: [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).