

**2011 Annual Drinking Water Quality Report
City of DeFuniak Springs**

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 goal is to provide you, consistently, 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 ground water from five wells. The wells draw from the Floridan Aquifer. Because of the excellent quality of our ground water, the only treatment required is chlorine for disinfection purposes.

If you have any questions about this report or concerning your water utility, please contact Mr. Bill Holloway, Assistant City Manager at 850.892.8500. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regular scheduled meetings. They are held on the second and fourth Monday nights at 6:00 PM at the DeFuniak Springs City Council Chambers located at 71 US Hwy. 90 W., DeFuniak Springs, Florida.

The City of DeFuniak Springs and CH2M HILL routinely monitor 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, 2011. Data obtained before January 1, 2011, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

- **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.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Initial Distribution System Evaluation (IDSE):** 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.
- **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.
- **"ND"** means not detected and 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

2011 WATER QUALITY TESTING RESULTS

Microbiological Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage/ Number	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	January-December 2011	Y	2	0	For systems collecting fewer than 40 samples per month; presence of coliform bacteria in 1 sample	Naturally present in the environment	
Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially, harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.							
Radioactive 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
Radium 226 + 228 or combined radium (pCi/L)	April 2008	N	0.2	ND-0.2	0	5	Erosion of natural deposits

2011 WATER QUALITY TESTING RESULTS

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)	July 2011	N	2.4	ND-2.4	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	July 2011	N	0.044	0.016-0.044	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	July 2011	N	0.08	0.05-0.08	4	4.0	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
Lead (ppb) (entry point)	July 2011	N	5.9	ND – 5.9	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm)	May 2011	N	0.7	Nd – 0.7	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	July 2011	N	3.2	ND-3.2	N/A	160	Salt water intrusion, leaching from soil
Stage 1 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan – Dec 2011	N	0.76	0.68 – 0.85	4	4	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	August 2011	N	3.24	2.4-4.5	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	August 2011	N	2.44	1.09 – 4.56	NA	MCL = 80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90 th Percentile Result	Sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	June – September 2010	N	0.17	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	June – September 2010	N	1	0 of 30	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Coliforms – for further information consult the information on the table of the previous page.

On August 1, 2011 a routine sampling for microbiological contaminants was conducted at various sites throughout the City. We were notified by the lab on August 3, 2011 that two samples had tested positive for coliform bacteria. This resulted in a violation. We immediately retested the sites that had tested positive as well as one site upstream and downstream of the positive sites. All samples taken on August 3, 2011 tested negative for coliform bacteria (none were present). However, all distribution samples taken since the above mentioned samples have tested negative for total coliforms.

Additionally, in September of 2011, we failed to complete the required number of samples for routine microbiological contaminants and therefore were in violation of monitoring and reporting requirements. We are required to take 15 samples each month and we only took 14 samples. Because we did not take the required number of samples, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time. The monitoring period was 9/1/11 through 9/30/11. Sampling data verification has since been updated and reviewed by staff in an attempt to prevent this from occurring in the future. 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 DeFuniak Springs and CH2M HILL 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 <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, 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) 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.
- (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, the 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.

In 2011, 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 eight 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 or it can be obtained from City of DeFuniak Springs City Hall.

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.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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).

We at the City of DeFuniak Springs and CH2M HILL would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.

Conservation Tips

It is easy to conserve water with just a little effort. Below are some tips that reduce your water usage and also save you money.

- Inspect both the inside and outside of your house for leaky faucets.
- Load the dishwasher and washing machine fully before starting them.
- Install low flow shower heads and water efficient toilets.
- If you wash dishes by hand, don't let the water run.
- Adjust your sprinklers so only the lawn is watered; not sidewalks or street.
- Rather than following a set watering schedule, check for soil moisture two to three inches below the surface before watering.

City of DeFuniak Springs
P.O. Box 685
DeFuniak Springs, FL 32435

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FL 32433
Permit #75

P.O. Box 685
DeFuniak Springs, FL 32435
Water Department: 850.892.8536
Wastewater Plant: 850.892.8536



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