

# Annual Drinking Water Quality Report

## Town of Thunderbolt, Georgia

### 2010

We're pleased to present to you this year's **Annual Drinking 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 well draws groundwater from the Upper Floridian Aquifer.

**We're pleased to report that our drinking water is safe and meets federal and state requirements.**

If you have any questions about this report or concerning your water utility, please contact Shawn Elmore (912-664-7999) **or** E-mail: [publicworksmgr@thunderboltga.org](mailto:publicworksmgr@thunderboltga.org). We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Council meetings. They are held on the **second Wednesday of each month at 7:00 P.M. at 2821 River Drive**. This report will not be mailed to consumers but copies may be obtained from Town Hall.

**The Town of Thunderbolt Water Department** routinely monitors for constituents in your drinking water according to Federal and State laws. The sources of drinking water (both tap 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, but not limited to the following:

- ◆ *Microbial contaminants*, such as viruses and bacteria that 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 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 and mining activities.

**In order to ensure that tap water is safe to drink**, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The **Test Results** table below lists the contaminants which were detected and the level at which the detection occurred. For brevity, we have only listed the contaminants which were detected within the past year's tests or the latest test for the contaminant. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

**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.

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

**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 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.

**Maximum Residual Disinfectant Level (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 microbiological contaminants.

**Maximum Residual Disinfectant Level Goal (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.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MNR** - Monitoring not required, but recommended.

**As you can see by the table, our system had no violations.** We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

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's **Safe Drinking Water Hotline (1-800-426-4791)**.

**MCLs are set at very stringent levels.** To understand the possible health effects described for many regulated constituents, a person would have to drink two 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.

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 our office if you have questions.

### Lead in Drinking Water

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. Thunderbolt 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 running your tap for 1 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>.

We at the **Town of Thunderbolt Water Department** work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Test Results - Groundwater							
Substance Tested and Detected	AL	MCLG	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
<i>Inorganic Contaminants</i>							
Fluoride (ppm)	4	4	0.44	N/A	June 14, 2010	<b>NO</b>	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<i>Lead and Copper</i>							
Substance Tested and Detected	MCL	MCLG	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
Lead (ppb)	15	0	0 (90 <sup>th</sup> Percentile)	No Sample >AL out of 10 sites sampled	July 2010	<b>NO</b>	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppb)	1300	1300	34 (90 <sup>th</sup> Percentile)	No Sample > AL out of 10 sites sampled	July 2010	<b>NO</b>	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

<i>Organic Contaminants</i>							
Substance Tested and Detected	MCL	MCLG	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
Total Trihalomethanes (TTHMS/ppb)	100	n/a	0.0208	25-135	September 6, 2010	<b>NO</b>	By-product of drinking water chlorination process
Haloacetic Acids (HAA5/ppm)	0.060	n/a	0.002	N/A	September 6, 2010	<b>NO</b>	By-product of drinking water chlorination process
<i>Disinfectants</i>							
Substance Tested and Detected	AL	MCLG	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
*Total Coliform Bacteria	36 samples	0	0	NA	January – December 2010	<b>NO</b>	Coli forms are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria, may be present.

The Thunderbolt Water System conducted Nitrate/Nitrite sampling in March 2010 in accordance with the Georgia Department of Natural Resources Environmental Protection Division and the State Safe Drinking Water Program. The samples were collected March 6, 2010 and sent to the E.P.D. Lab in Atlanta for analysis. The MCL is 10.0 for nitrate/nitrite in drinking water and the results for both the Center Street Well and the River Street Well were none detectable amounts.

<b>Test Results - Groundwater</b>							
Substance Tested and Detected	AL	MCLG	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
<i>Nitrate/ Nitrite</i>							
Nitrate/Nitrite	Well #301	10	Not Detected	N/A	March 6, 2010	<b>No</b>	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrate/Nitrite	Well #302	10	Not Detected	N/A	March 6, 2010	<b>No</b>	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.