



Glynn County's 2010 Annual Water Quality Report – St. Simons Island

United Water Glynn County • 161 South Harrington Road, St. Simons Island, GA 31522 • (912) 261-7160

PWSID# 1270001

HOW GOOD IS YOUR DRINKING WATER?

United Water is proud to announce that your drinking water meets the requirements of the Safe Drinking Water Act. The tables in this report show the results of our water quality analysis. Every regulated contaminant detected in the water, even in the minutest traces, is listed. The table contains the name of each highest level allowed by regulation (MCL), the ideal goals for public health, usual sources of such contamination, footnotes explaining our findings, and a key to the units of measurement. This Water Quality Report details where your water comes from, who operated and maintained the system, what the water contains and other important information.

WHO MAINTAINED AND OPERATED YOUR WATER SUPPLY SYSTEM?

During 2010 your water supply system was operated and maintained by United Water with offices at 161 South Harrington Road, St. Simons Island, GA 31522. Further information about your system can be obtained by calling Mr. Todd Zino at (912) 261-7160. This report will also be available on the Glynn County web site at <http://www.glynncounty.org>.

WHERE DOES YOUR WATER COME FROM?

The drinking water for St. Simons Island comes from the Upper Floridian Aquifer between 800 to 1,000 feet underground. The Upper Floridian Aquifer in Glynn County is classified as a confined aquifer by the Georgia Geologic Survey and is not susceptible to contamination from surface pollution. The water is pumped from the Aquifer through wells located at McKinnon Airport, Mallory Street, Hampton Plantation and South Harrington Road. The water is treated by aeration and chlorination before entering the distribution system.

GENERAL DRINKING WATER INFORMATION:

Water Sources

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:

- *Biological* - may come from human, agricultural, or wildlife sources.
- *Inorganic* - can be natural, from storm run-off, or from industrial or domestic wastewater discharges.
- *Pesticides and herbicides* - may come from agricultural, storm run-off or residential use.
- *Organic chemicals* - may come from industrial or domestic processes, storm run-off, and septic systems.
- *Radioactive materials* - can be naturally occurring or the result of mining or other human activities.

Cryptosporidium

Cryptosporidium is a protozoan parasite that is found in surface water courses (reservoirs, lakes, rivers, and streams). It is most common when these waters contain a high amount of sewage or animal waste. Your water supply comes from ground water 800 to 1,000 feet underground and is well protected from the above contaminants including Cryptosporidium.

Bottled Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health as public water systems.

Presence of 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). In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Lead and Copper

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. United Water 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 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>.

Immuno-Compromised Persons

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

WHAT IS IN YOUR WATER?

Over 1,139 tests were conducted on different contaminants during 2010. The following tables list the contaminants, both regulated and unregulated by EPA, that were found in your water system from the most recent testing in accordance with regulations. Some of the data, though more than one year old, are representative of the water quality. In 2010, seven routine samples tested positive for total coliform bacteria. Four of these positive samples were in the month of July which resulted in a Non-Acute Microbiological Violation of the Safe Drinking Water Act. Repeat samples were collected at each positive sample site as well as at upstream and downstream taps in the distribution system.

All repeat samples tested negative for total coliform. In July 2010, three routine samples tested positive for fecal coliform which resulted in an acute microbiological violation. A precautionary boil water notice was issued on 7/30/10 while repeat samples were being collected. Repeat samples were collected at each positive sample site as well at upstream and downstream taps in the distribution system. Each repeat sample tested negative for fecal coliform and the boil water notice was subsequently lifted on 7/31/2010. Further investigation into the cause of the positive samples determined that the samples were contaminated either during sample collection, during sample transport to the laboratory, or at the laboratory itself. As a corrective action further training on sample collection transportation procedures were conducted and an alternate laboratory was contracted for future sample testing. **Test results are all below the levels allowed by the EPA in public drinking water.**

| Substance | Unit | Goal (MCLG) | Highest Level Allowed (MCL) | Highest Result | Range of Results | Is it Safe? (Does it meet standards?) | Probable Source |
|-----------|------|-------------|-----------------------------|----------------|------------------|---------------------------------------|-----------------|
|-----------|------|-------------|-----------------------------|----------------|------------------|---------------------------------------|-----------------|

Detected Inorganic Contaminants Table

| | | | | | | | |
|----------|-----|---|---|------|-----------------|-----|---------------------|
| Fluoride | ppm | 4 | 4 | 0.59 | 0.55 – 0.59 (a) | YES | Naturally occurring |
|----------|-----|---|---|------|-----------------|-----|---------------------|

Radionuclides

| | | | | | | | |
|-----------------------|-------|---|----|-----|-------------|-----|-----------------------------|
| Alpha emitters (2006) | pCi/l | 0 | 15 | 5.0 | 3.00 – 5.00 | YES | Erosion of natural deposits |
|-----------------------|-------|---|----|-----|-------------|-----|-----------------------------|

Lead and Copper Monitoring Results

| Substance | Unit | 90th Percentile | Action Limit | Number Above AL | Is it Safe? (Does it meet standards?) | Probable Source |
|-----------|------|-----------------|--------------|-----------------|---------------------------------------|---|
| Lead | ppb | 2.5 | AL 15 | 0 (b) | YES | Corrosion of household plumbing systems |
| Copper | ppb | 110 | AL 1300 | 0 (b) | YES | |

Detected Organic Contaminants Table

| Disinfection Byproducts | Unit | MCL | Highest Result | Range | Meets Standards | Probable Source |
|-------------------------|------|-----|----------------|-------------|-----------------|--|
| Total Trihalomethanes | ppb | 80 | 28.2 | 17.5 - 28.2 | YES | Byproduct of drinking water chlorination |
| Haloacetic Acids | ppb | 60 | 2.3 | ND - 2.3 | YES | Byproduct of drinking water chlorination |

Results based on a single sample.

| Substance | MRDLG | MRDL | Average Result | Highest Result | Range of Results |
|---|-------|------|----------------|----------------|------------------|
| Distribution Disinfectant Residuals (ppm) | N/A | 4 | 1.29 | 1.5 (c) | 0.6 - 2.2 (d) |

Secondary Standards – Related to the aesthetic quality of drinking water

| Secondary Standard | Guideline | Average Result | Source |
|--|-----------|---------------------------------|---------------------|
| Zinc (ppb) | 5000 | 40 | Naturally occurring |
| Chloride (ppm) | 250 | 20.5 | Naturally occurring |
| Hardness (as CaCO ₃) (ppm) | 250 | 145.8 | Naturally occurring |
| Iron (ppb) | 300 | 296 | Naturally occurring |
| pH | 6.5 – 8.5 | Avg. =7.94 (Range =7.68 - 8.09) | Naturally occurring |
| Sodium (ppm) | 50 | 19.75 | Naturally occurring |

HOW TO READ THE REPORT

| Word, Acronym, Symbol or Note | Definition |
|-------------------------------|---|
| (a) | Fluoride is not added to the water, but rather is naturally occurring. |
| (b) | Under EPA test protocol, water is tested at the customers tap. Water from the well source does not contain lead or copper. |
| (c) | Reported as highest running annual average. |
| (d) | The range of results represents the highest and lowest results from individual samples. |
| AL | Action Level. The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow. |
| EPA | United States Environmental Protection Agency. |
| MCL | Maximum Contaminant Level. 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. |
| MCLG | Maximum Contaminant Level Goal. 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. |
| MRDL | Maximum Residual Disinfectant Level – The highest level of a disinfectant allowed in drinking water. |
| MRDLG | Maximum Residual Disinfectant Level Goal – 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. |
| n/a | Not applicable. |
| nd | Not detectable. |
| ppb | Parts per billion. Means 1 part per 1,000,000,000 (same as micrograms per liter) and correspond to 1 penny in \$10 million. |
| ppm | Parts per million. Means 1 part per 1,000,000 parts (same as milligrams per liter) and corresponds to 1 penny in \$10,000. |

Web sites with information about water quality:

- <http://www.epa.gov/ow>
- <http://www.dnr.state.ga.us/epd>
- <http://www.awwa.org>
- <http://www.amwa-water.org>