

# Annual Drinking Water Quality Report

Talquin Electric Cooperative, Inc. is pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide you a safe and dependable supply of drinking water. Our groundwater source is deep wells which draw from the Floridan Aquifer System. The Floridan Aquifer is the source of drinking water for the majority of the water systems in Florida. Because of the excellent quality of our water, the only treatment required is chlorine for disinfection purposes.

All Talquin Electric's water systems are routinely monitored for contaminants according to federal and state laws. This table shows the results of our monitoring for the period January 1 to December 31, 2016. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, may be more than one year old.

The source of drinking water (both tap water and bottled water) includes 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. We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, contact John Hallas, Talquin Electric's Manager of Water Services, at 850-562-2115. There are no regularly scheduled public meetings related to water services; however, if you wish to meet with a Talquin Electric representative, please call Talquin Electric's water services at the number above to schedule an appointment.



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**TALQUIN**  
ELECTRIC COOPERATIVE, INC.  
WATER & WASTEWATER, INC.

**GADSDEN COUNTY**

**2016 WATER QUALITY REPORT**

# GADSDEN COUNTY WATER SYSTEM TEST RESULTS TABLE

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
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Radioactive Contaminants							
Alpha emitters (pCi/l)	May 2008-Nov 2014	N	1.8	ND-1.8	0	15	Erosion of natural deposits
Radium 226 or combined radium (pCi/l)	May 2008-Nov 2014	N	1.9	ND-1.9	0	5	Erosion of natural deposits

Inorganic Contamint							
Antimony (ppb)	Sep-Oct 2014	N	0.6	ND-0.6	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	Sep-Oct 2014	N	4.6	ND-4.6	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Sep-Oct 2014	N	0.1	0.01-0.1	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	Sep-Oct 2014	N	0.2	ND-0.2	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	Sep-Oct 2014	N	1.9	ND-1.9	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	Sep-Oct 2014	N	0.54	ND-0.54	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level 0.7 ppm
Lead (point of entry) (ppb)	Sep-Oct 2014	N	4.3	ND-4.3	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	Sep-Oct 2014	N	1.0	ND-1.0	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	Aug 2016	N	0.43	ND-0.43	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	Sep-Oct 2014	N	3.7	ND-3.7	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	Sep-Oct 2014	N	52	2.3-52	N/A	160	Salt water intrusion, leaching from soil
Thallium (ppb)	Sep-Oct 2014	N	0.9	ND-0.9	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely source of contamination
Copper (tap water) (ppm)	June-Sept. 2014	N	0.13	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-Sept. 2014	N	4.0	1 of 30	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Stage 2 Disinfectants and Disinfection By-Products							
Disinfectant or Contamination 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) (Stage 1)	Jan.-Dec. 2016	N	0.9	0.8-0.9	MRDLG=4	MRDL=4.0	Water additive used to control microbes
Haloacetic Acids (five)(HAA5)(ppb)	Sep 2016	N	6.4	3.93-6.4	N/A	MCL=60	By-product of drinking water disinfection
TTHM [total trihalomethanes](ppb)	Sep 2016	N	40.02	26.94-40.02	N/A	MCL=80	By-product of drinking water disinfection

Microbiological Contaminants						
Contaminant	Dates of sampling (mo./yr.)	Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely source of contamination
E. coli (at the ground water source)*	Jan-Dec 2016	No	1 positive sample	0	0	Human or fecal waste

\*On May 24, 2016, we sampled the source (Well 17) for the fecal-indicator, E. coli. We were notified on May 26 that Well 17 tested positive for E. coli. We immediately took Well 17 off-line at that time. On May 26, we took five additional samples and were notified on May 27 that none of the five samples were positive for E. Coli. Our system was in contact with FDEP, and determined no further action was required. Health Effects: Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we have 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.

**Maximum residual disinfectant level or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum residual disinfectant level goal or MRDLG:** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-detect or "ND" means not detected and indicates that the substance was not found by laboratory analysis.

Non applicable (n/a). Does not apply.

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

**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.

**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.

**Picocurie per liter (pCi/l)** - measure of the radioactivity in water.

Many of our systems have a natural occurring trace of fluoride in the source water. No additional fluoride is added.

The Gadsden County Water System is provided water from 8 wells.

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements.

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 agricultural, 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.

While your drinking water meets USEPA's standard for arsenic, it does contain low levels of arsenic. USEPA's standard balances the current understandings of arsenic's possible health effects against the cost of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. Talquin Electric 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 Water Hotline or <http://www.epa.gov/safewater/lead>.

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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 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 2 liters of water every day at the MCL 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 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 at 1-800-426-4791.**

As you have reviewed the test results, you have seen the excellent quality of drinking water Talquin Electric has provided you in the past year. Talquin Electric's Board of Directors, Management and employees will continue to strive to provide an excellent quality of drinking water and service in the future.

In 2016 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 two potential sources of contamination identified for this system with a low susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they may be obtained from John Hallas at (850) 562-2115.