## **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. The water Talquin Electric provides to your community is acquired from the City of Tallahassee. The groundwater source is 27 deep wells. The wells draw from the Floridan Aquifer. All 27 water well sources are treated with chlorine for disinfection purposes and fluoride for dental health purposes. Six wells provide carbon filtration and one well provides Greensand filtration as additional treatment.

The City of Tallahassee and Talquin Electric routinely monitor for contaminants according to federal and state laws. This table shows the results of our monitoring for the period January 1 to December 31, 2019. 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, are 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.

Falquin Electric Cooperative







**2019 WATER QUALITY REPORT** 

## ANNAWOOD WATER SYSTEM TEST RESULTS TABLE Contaminant and Unit of Measurement Contaminant and Unit of Measurement Contaminant and Unit of Measurement Dates of sampling (mo./yr.) MCL Violation Y/N Detected Results MCLG MCL Likely Source of Contamination

Radioactive Contaminants (sampled by City of Tallahassee)								
Alpha emitters (pCi/l)	01/14 - 10/14, 09/17 & 07/19 - 10/19	N	6.6	ND-6.6	0	15	Erosion of natural deposits	
Radium 226+228 or combined radium (pCi/l)	01/14 - 10/14, 09/17 & 07/19 - 10/19	N	2.1	ND-2.1	0	5	Erosion of natural deposits	

Inorganic Contaminants (sampled by City of Tallahassee)								
Barium (ppm)	01/2017-9/2017 & 07/19	N	0.017	0.005-0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Cadmium (ppb)	01/2017-9/2017 & 07/19	N	1.0	ND-1.0	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge form metal refineries; runoff from waste batteries and paints.	
Chromium (ppb)	01/2017-9/2017 & 07/19	N	2.0	ND-2.0	100	100	Discharge from steel and pulp mills; erosion of natural deposits	
Fluoride (ppm)	01/2017-9/2017 & 07/19	N	0.87	0.17-0.87	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	
Nitrate (as Nitrogen) (ppm)	03/19 - 11/19	N	0.695	0.08-0.695	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Sodium (ppm)	01/2017-9/2017 & 07/19	N	4.25	1.66-4.25	N/A	160	Salt water intrusion, leaching from soil	

Volatile Organic Contaminants (sampled by City of Tallahassee)								
Tetrachloroethylene (ppb)	06/18 - 10/19	N	0.995	ND-1.0	0	3	Discharge from factories and dry cleaners	

Lead and Copper (Tap Water) (sampled by Talquin)									
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90 <sup>th</sup> Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely source of contamination		
Copper (tap water) (ppm)	June-Sept. 2018	N	0.028	0 of 5	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead (tap water) (ppb)	June-Sept. 2018	N	7	0 of 5	0	15	Corrosion of household plumbing systems, erosion of natural deposits		

Stage 2 Disinfectants and Disinfection By-Products (sampled by Talquin)									
Disinfectant or Contamination and Unit of Measurement  Dates of sampling MCL or MRDL Violation Y/N  Detected Range of MCLG or MRDL MRDL  Likely source of contamination MRDL					Likely source of contamination				
Chlorine (ppm) (Stage 1)	Jan Dec. 2019	N	0.7	0.6-0.9	MRDLG=4	MRDL=4.0	Water additive used to control microbes		

Unregulated Contaminants (sampled by City of Tallahassee)									
Contaminant (Unit of Measurement= ppb)	Dates of sampling (mo/yr)	Level Detected (average)	Range	Likely Source of Contamination					
Manganese	06/19 - 08/19	1.37	0 - 22.0	Natural occurrence from soil leaching					
HAA5	06/19 - 08/19	2.21	1.28 - 3.3	By-product of drinking water disinfection					
HAA6Br	06/19 - 08/19	2.30	1.7 - 2.9	Unavailable					
HAA9	06/19 - 08/19	3.87	2.42 - 5.32	Unavailable					
Bromide	06/19 - 08/19	29.89	23.2 - 40.9	Unavailable					

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 ( $\mu g/l$ ) – 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.

The water to your residence is provided from the City of Tallahassee's twenty-seven (27) 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.

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.

The City of Tallahassee are participating in a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence of unregulated contaminants (UCs) in drinking water and whether these contaminants need to be regulated. The City of Tallahassee sampled UCs from June to August 2019. The City of Tallahassee is required to publish the analytical results of our UC monitoring in our annual water quality report. All detections are shown on the table above, including two regulated contaminants (manganese and HAA5). If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426 4791.

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 2019 the Department of Environmental Protection performed a Source Water Assessment on our system. There are forty-eight (48) potential sources of contamination with low to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they may be obtained from John Hallas at (850) 562-2115.