The Water We Drink
2020 Annual Water Quality Report
Of the City of Callaway

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The City of Callaway is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we provide 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 our efforts to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water is safe for consumption.

Although our water is purchased from Bay County Utility Services, our initial water source is surface water drawn from Deer Point Reservoir. The Bay County Water Treatment Plant uses a conventional treatment process consisting of coagulation, flocculation, sedimentation, filtration, pH adjustment, disinfection, fluoridation, and corrosion control. The treatment process includes adding lime occasionally to provide additional alkalinity to the raw water so that it can react with the primary coagulating chemical, ferric sulfate, which is added to remove particles and organics. Polymer is also added to assist in the coagulation process. Sodium Hypochlorite is added to maintain disinfection in the distribution system. The addition of zinc orthophosphate reduces the corrosiveness of the water. Fluoride, in the form of hydrofluosilicic acid, is added as a supplement to prevent tooth decay. Lime is also added at the end of the process to increase the pH. These processes are needed to meet the drinking water standards as set by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

In 2020 the Department of Environmental Protection performed a Source Water Assessment on Bay County's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of Bay County Surface Water intake. The surface water system is considered to be at high risk because of the many potential sources of contamination present in the assessment area. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Bay County Utility Services by calling 850-248-5010.

Water Quality or Content Information

The City of Callaway holds regularly scheduled City Board of Commissioners meetings at 6:00 p.m. on the second and fourth Tuesday of each month at the Callaway Arts and Conference Center located at the Callaway Recreational Complex, 500 Callaway Park Way, Callaway, Florida, to hear citizen's concerns. However, if you have questions about this report or concerning your water utility, please contact Mr. John Franklin, Utilities Superintendent, Public Works Department, 850-871-1033 or feel free to contact any of the numbers listed in this report.

Clearing Things Up

The City of Callaway officially monitors for lead and copper levels, chlorine levels, and bacteriologicals, and performs additional monitoring for D/DBP. The Bay County Water Treatment Plant monitors for all other 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 monitoring for the period of January 1 to December 31, 2020. Data obtained before January 1, 2020, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations. The EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the Water Quality Test Results table are the only ones detected in your drinking water.

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.

In order to ensure that drinking 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.

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.

Terms and Abbreviations

In the table below, you may find unfamiliar terms and abbreviations. 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.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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.

Nephelometric Turbidity Unit (NTU): Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

"ND": Not detected and indicates that the substance was not found by laboratory analysis.

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.

2020 Water Quality Test Results

The table shows detected primary contaminants

Microbiological Contaminants Parameters monitored by Bay County

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Jan-Dec-20	N	0.58	97.2	N/A	TT	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. High turbidity can hinder the effectiveness of disinfectants. The Treatment Technique standard requires that 95% of the turbidity readings be at 0.3 NTU or less.

Inorganic Contaminants Parameters monitored by Bay County

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
Barium (ppm)	April-20	N	0.01	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	April-20	N	0.68	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Nitrate (ppm)	April-20	N	0.075	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (ppm)	April-20	N	3.8	N/A	N/A	160	Salt water intrusion, leaching from soil.

Stage 1 Disinfectant/Disinfection By-Product (D/DBP)

+Parameters monitored by Bay County / ++Parameters monitored by City of Callaway *Range of monthly technique removal ratios

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	TT or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan – Dec 20	N	0.96	.07-1.13	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Contaminant and Unit of Measurement	Dates of Sampling (mo. /yr.)	TT Violation Y/N	Lowest Running Annual Average Computed Quarterly, of Monthly Removal Ratios	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm)	Jan – Dec 20	N	1.5	1.0-2.2	N/A	TT	Naturally present in the environment

Stage 2 Disinfectant/Disinfection By-Product (D/DBP)

Parameters monitored by City of Callaway

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
Haloacetic Acids (five) (HAA5) (ppb)	Jan – Oct 20	N	31.65	4.2-42.8*	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total Trihalomethanes] (ppb)	Jan – Oct 20	N	40.53	8.5-53.2	N/A	MCL = 80	By-product of drinking water disinfection

No MCL violation on HAA5. Compliance determined by average of four consecutive quarters "One sample during 2020 (Heritage Woods Lift Station, 20 July 2019) had a HAA5 result of 77.2 ppb, which exceeds the MCL of 60 ppb. However, the system did not incur an MCL violation because all annual average results at all sites were below the MCL of 60 ppm.

Lead and Copper (Tap Water) Parameters monitored by City of Callaway

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)	Jan- Dec 2020	N	0.48	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

The City of Callaway water system is aware of elevated concern about lead levels in drinking water in the wake of the recent national events. We want to reassure you that our most recent lead and copper testing has shown our levels to be well within Federal limit. 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. Bay County Utilities and the City of Callaway 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.

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, oils 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.
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2020 Cross Connection Control and PBWN

The City of Callaway is in violation of the Cross Connection Control Requirement as specified in the state CCR Rules, FAC Rule 62-555.360 and we have entered into a consent order with the Florida DEP to address these violations. **** What are we doing to meet this requirement?*** Our goal is to enforce our Cross Connection Control Program (CCCP) plan within 4 years. All future City of Callaway water customers with dedicated irrigation service connections will need to install the required pressure vacuum breaker (PVB) or reduced pressure (RP) backflow device. **Please Note**: Some service connections currently have a dual check backflow device that is approved for standard residential connections, however, the device does not meet minimum protection for dedicated irrigation meters as outlined in the 2014 rule. To help customers understand the plan better City of Callaway utilities will have a Q&A sheet available along with definitions to unfamiliar terms and abbreviations found on our website. Handouts of material will also be available at Callaway public works office located at 324 S Berthe Ave.
The City of Callaway issued (7) Precautionary Boil Water Notices (PBWN) during the 2020 calendar year. These were isolated incidents caused by water main breaks, fire hydrant installations, and installation of master meters. The precautionary Boil Water Notices were rescinded after satisfactory test results were received and verified.

Drinking Water Information

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.

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.

Drinking water, including bottled water, may reasonably be expected to contain at least a small amount 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.

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 Callaway 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.