

2018 Annual Drinking Water Quality Report

Inlet Beach Water System, Inc.

We're pleased to present to you this year's Annual 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. This year, to decrease the amount of water drawn from our own wells, we supplemented our primary water supply with water from Regional Utilities. **In 2018, about 0.9% of our water came from Inlet Beach's Well #2; 53.3% from Well #3; 40.7% from Well #4 and 5.1% from Regional/Freeport Utilities.**

All of the water distributed in our system is groundwater drawn through deep wells from the pristine Floridan Aquifer. The Floridan Aquifer is the primary source for drinking water in Florida. Because of the excellent quality of our water, the only treatments required are chlorine for disinfection purposes and hydrogen peroxide for oxidation of sulfur.

This report combines test data from our primary source, (Inlet Beach Wells #2, #3, and #4), and our supplemental source (Regional Utilities). Regional Utilities' water source is ground water from nine wells with one interconnection with the City of Freeport.

In 2018 the Department of Environmental Protection performed a Source Water Assessment on the Inlet Beach Water System, Freeport, and Regional Utilities' systems. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the drinking water wells. There are two potential sources of contamination identified for the Inlet Beach Water system with low to moderate susceptibility levels, and there are four for the Freeport Water System, all of which have low to high susceptibility levels. No potential sources of contamination were identified near Regional Utilities' wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

If you have any questions about this report or concerning your water utility, please contact Robin Haynes or Carol Anderson at (850) 231-4498. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend our annual meeting in Inlet Beach which will be held on Saturday, August 17, 2019 (unless otherwise notified). The date and location will be announced again by mail at a later date.

Inlet Beach Water System routinely monitors for 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 our monitoring for the period of January 1 to December 31, 2018. Data obtained before January 1, 2018, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've 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.

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.

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

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g}/\text{l}$) – one part by weight of analyte to 1 billion parts by weight of the water sample.

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.

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

2018 CONTAMINANTS 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
Radioactive Contaminants *							
Alpha emitters (pCi/L)	Aug 2014 – Jul 2018	N	4.28 (avg)	ND – 5.7	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Aug 2014 – Jul 2018	N	2.13 (avg)	ND – 2.7	0	5	Erosion of natural deposits
Inorganic Contaminants *							
Barium (ppm)	Mar 2017 – Aug 2018	N	0.26	0.0012 – 0.26	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Mar 2017– Aug 2018	N	0.45	ND – 0.45	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (point of entry) (ppb)	Mar 2017–Aug 2018	N	2.7	ND – 2.7	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Sodium (ppm)	Mar 2017–Aug 2018	N	38	1.6 – 38	N/A	160	Salt water intrusion, leaching from soil
Cadmium (ppb)	Mar 2017–Aug 2018	N	1.2	ND – 1.2	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Arsenic (ppb)	Mar 2017–Aug 2018	N	2.3	ND – 2.3	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Cyanide (ppb)	Mar 2017–Aug 2018	N	5	ND – 5	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Mercury (inorganic) (ppb)	Mar 2017–Aug 2018	Y	14.5 (avg)	ND – 29	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland

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
Lead and Copper (Tap Water) Inlet Beach Water System data only.							
Copper (tap water) (ppm)	Jun–Sept 2017	N	0.43	0 of 10	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun–Sept 2017	N	4.6	0 of 10	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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
Stage 2 Disinfectants and Disinfection By-Products Inlet Beach Water System data only.							
Chlorine (ppm) (Stage 1)	Jan –Dec 2018	N	2.4	1.3 – 2.4	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Aug 2018	N	11.7	7.8 – 11.7	NA	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Aug 2018	N	47	30.7 – 47	NA	MCL = 80	By-product of drinking water disinfection

Unregulated Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected (average)	Range	Likely Source of Contamination
Manganese (ppb)	Jun–Dec 2018 Mar–Sep 2018	2.08 (avg) 1.5 (avg)	0.44–5.8 ND–1.8	Unavailable
HAA5 (ppb)	Jun–Dec 2018 Mar–Sep 2018	6.2 (avg) 1.98 (avg)	ND–41.05 ND–2.64	Unavailable
HAA6Br (ppb)	Jun–Dec 2018 Mar–Sep 2018	5.26 (avg) 0.77 (avg)	ND–47.1 ND–1.9	Unavailable
HAA9 (ppb)	Jun–Dec 2018 Mar–Sep 2018	9.79 (avg) 2.67 (avg)	ND–63.35 ND–3.5	Unavailable
Total Organic Carbon (TOC) (ppb)	Jun–Dec 2018 Mar–Sep 2018	81.1 (avg) ND	ND–200 ND	Unavailable

Inlet Beach data in bold type

Regional data in normal type

Secondary Contaminants *

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Iron (ppm)	Mar 2017–Sep 2018	Y	0.82	ND–0.82	N/A	0.3	Natural occurrence from soil leaching

* Compilation of three systems unless otherwise indicated: Inlet Beach, Regional Utilities, and City of Freeport

Inlet Beach Water System monitored for Unregulated Contaminants (UC's) in 2018 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. 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.

Regional Utilities monitored for Unregulated Contaminants (UCs) in 2018 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. 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

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.

The State of Florida Department of Environmental Protection (FDEP) sets drinking water standard for secondary contaminants and has determined that Iron is an aesthetic concern at certain levels of exposure. Inlet Beach Water System sampled Well #2 in July and September 2018 and Iron was found in higher levels than are allowed by the State (an MCL violation). Less than 1% of our water came from Well #2 in 2018. Iron, as a secondary drinking water contaminant, does not pose a health risk and in small amounts is essential to human health. We will continue to sample as required by rule and work with the Department as needed.

On August 1st Inlet Beach Water System collected a sample from Well #4 with a mercury level of 29 parts per billion (ppb). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage. A second sample was collected August 23rd with a Non Detectable (ND) level of mercury. The average of the two samples is 14.5 (ppb) which was above the Maximum Contaminant Level (MCL) causing us to begin quarterly sampling. However, due to the severity of Hurricane Michael, we failed to sample the 4th quarter of 2018 as is required by rule. This monitoring violation has no impact on the quality of the water our customers received, but the risk to public health is unknown. However, since the average with the original sample is still above the MCL, we incurred an MCL violation and are required to issue a Public Notice. We would like to emphasize that all samples since the original have had no mercury contamination identified (all samples ND on August 23rd 2018, February 4th 2019 and April 2nd 2019). We will continue quarterly sampling and report further should this prove necessary.

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. Inlet Beach Water System 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 two 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 storm water 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 storm water 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 storm water runoff, and septic systems.
- (E) 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, 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 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.

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).

Inlet Beach Water System would like for you to know that we work around the clock to provide top quality water to every tap. Conservation of our quality drinking water is of utmost importance at Inlet Beach. We ask that all our customers help us protect our water sources, by limiting unnecessary water use, keeping plumbing repairs up to date and by using shallow wells for all outside and agriculture water needs. We are committed to insuring the quality of your water. If you have any questions or concerns about our drinking water or the information provided, please feel free to contact the water company office at (850) 231-4498.

