## BALDWIN COUNTY WATER QUALITY REPORT

Baldwin County Water and Sewer Department is pleased to present to you the 2018 Water Quality Report. This report is designed to inform you about the quality of the water. The Baldwin County Water Department purchases treated water from Sinclair Water Authority. Baldwin County Water Department is committed to ensuring the quality of the water meets or exceeds the expectations of our customers and state and federal regulators and to protecting the environment.

Your water comes from Lake Sinclair. Sinclair Water Authority has a copy of the source assessment plan, showing that the water is within acceptable limits and can be used as a source of public water supply. The Sinclair Water Authority plant is a 6 million gallon per day ultrafiltration membrane plant, filtering down to approximately 0.002 to 0.1 microns. It is preceded by a coagulation/sedimentation process.

The following is a list of contaminants that may be present in source water before it is treated.

<u>Microbial Contaminants</u> such as viruses and bacteria which may come from the sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

<u>Pesticides and Herbicides</u> which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

<u>Inorganic Contaminants</u> such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Organic Chemical Contaminants</u> including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.

<u>Radioactive Contaminants</u> which can be naturally occurring or be the result of oil and gas production and mining activities

In order to ensure tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose 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).

MCL's are set at very stringent levels. The MCL's are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

Some people may be vulnerable to contaminants in drinking water than the general population. Immuno-comprised persons such as persons with cancer undergoing chemotherapy, persons who have 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 infections by cryptosporidium are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. We strive to provide 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

In the following table you will find many terms and abbreviation you might not be familiar with. To help you better understand these terms we've provided the following definitions:

 $\underline{Non-Detects(N/D)}$  – laboratory analysis indicates that the constituent is not present.

<u>Parts per million (ppm) or Milligrams per liter (tns/1)</u> – one part per million corresponds to one minute in two years or a single penny in \$10,000,000.

<u>Parts per billion (ppb) or Micrograms per liter</u> - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

<u>Nephelometric Turbidity Unit (NTU)</u> - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

<u>Action Level</u> - the concentration of a contaminant which , if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{Treatment\ Technique(TT)}$  – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

<u>Maximum Contaminant Level(MCL)</u> – The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set ass close to the MCLGs as feasible using the best available treatment technology.

<u>Maximum Contaminant Level Goal (MCLG)</u> – The 'Goal(MCLG) is 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.

<u>Maximum Residual Disinfectant Level(MRDL)</u> - 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.

<u>Maximum Residual Disinfectant Level Goal(MRDLG)</u> – 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.

CONTAMINANT	MCL	MCLG	SWA PLANT RESULTS	DATE	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Fluoride (ppm)	4	4	.90	2018	No	Erosion of Natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories;
Sodium(ug/l)	N/A	N/A	7600	2018	No	N/A
Chlorine(ppm)	4	4	1.61 – 2.76	2018	No	Water additive used to control microbes
Total Coliform Bacteria	1 positive monthly sample	0	1 positive out of 27 samples	2018	No	Naturally present in the environment
Turbidity(NTU)	TT=95% of sample results 0.10 NTU or less	0	Less than 0.1	2018	No	Soil Runoff
Total Organic Carbon(ppm)	Т	N/A	1.23	2018	No	Naturally present in the environment
CONTAMINANT	MRDL	MRDLG	SWA PLANT RESULTS	DATE	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Chlorine Dioxide (ppb)	800	800	630	2018	No	Water Additive Used to control microbes

If you have any questions about this report or concerning your water utility, please contact Jason Kidd at the Baldwin County Water and Sewer Department at 478-445-4237 or Joseph Witcher at the Sinclair Water Authority at 706-485-8993. If you want to learn more, please attend any of the regularly scheduled meetings. The Baldwin County Board of Commissioners' meets the first and third Tuesday of each month at the Baldwin County Courthouse at 6:00 PM. The Sinclair Water Authority meetings are held the third Monday of every other month at 5:00 PM at the Sinclair Water Authority water treatment plant.

							LIKELY SOURCE OF
CONTAMINANT	MCL	MCLG	AVERAGE	RANGE	DATE	VIOLATION	CONTAMINATION
			*		100 Sec 2005		By-product of
Chlorite (ppm)	1.0	0.80	0.325	0.00 - 0.440	2018	No	drinking
							water
							chlorination
				6			LIKELY SOURCE
							OF
CONTAMINANT	MCL	MCLG	AVERAGE	RANGE	DATE	VIOLATION	CONTAMINATION
							By-product of
Trihalomethanes(ppm)	80	N/A	35.325 (Locational Running Annual Average)	15.0 – 34.4 (Individual sample site test results – 2018)	2018	No	drinking water chlorination
			10 X				By-product of
Haloacetic Acids(ppm)	60	N/A	34.425	11.9 – 17.7	2018	No	drinking
			(Locational	(Individual			
			Running	sample site			
			Annual	test results -		7 1 7 2	water
			Average)	2018)			chlorination

As you can see by the above tables, the Sinclair Water Authority had no violations. Not only do we monitor our water according to state and federal regulations, we also run our own water quality monitoring on a continual basis during plant operations and run tests at least every three hours to ensure that we are producing safe and reliable drinking water.

On December 1, 2016 Georgia EPD issued Sinclair Water Authority a Chemical Monitoring Waiver Certificate for reduced monitoring of the following Synthetic Organic Chemicals. Alachlor, Aldicarb Sulfone, Aldicarb Sulfoxide, Atrazine, Benzo (A) Pyrene, Carbofuran, Chlordane, Dalapon, Di (2-Ethylhexyl) Adipate, Dibromochloropropane (DBCP), Dinoseb, Diquat, DI (2-Ethylhexyl) Phthalate, Endothall, Endrin, Ethylene Dibromide (EDB), Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxymyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated Biphenyls (PCBs), Simazine; 2,4-D; Toxaphene; 2,4,5-TP and (silvex; 2,3,7,8 – TCDD (Dioxin). Also the following Inorganic Chemicals was included in the list. Asbestos and Cyanide. Baseline monitoring demonstrates that the systems drinking water complies with the chemical monitoring standards of the Georgia Rules for Safe Drinking Water. The Chemical Monitoring Waiver is valid from January 1, 2017 to December 31, 2019.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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.

MCL's are set at very stringent levels. The MCL's are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

In order to ensure the 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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.