## The Water We Drink

## BUCKEYE WATER DISTRICT #50 Public Water Supply ID: LA1079004

Buckeye Water District No. 50, Inc. is an equal opportunity provider and employer.

We are pleased to present to you the Annual Water Quality Report for the year 2017. This report is designed to inform you about the quality of your 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. Our water source(s) are listed below:

Source Name	Source Water Type	Source Name	Source Water Type
WELL #1 AT HWY 115 WELL #2 AT HWY 28 East WELL #2 AT HWY 28 East	Ground Water Ground Water Ground Water	WELL #4 AT CRAIG ROAD WELL #5 AT HWY 115	Ground Water Ground Water

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 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. Contaminants that may be present in source water include:

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

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.

Pesticides and Herbicides – which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

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.

Radioactive Contaminants – which can be naturally-occurring or be the result of oil and gas production and mining activities.

A Source Water Assessment Plan (SWAP) is now available from our office. This plan is an assessment of a delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources. According to the Source Water Assessment Plan, our water system had a susceptibility rating of 'MEDIUM'. If you would like to review the Source Water Assessment Plan, please feel free to contact our office.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. We want our valued customers to be informed about their water utility. If you have any questions about this report, want to attend any scheduled meetings, or simply want to learn more about your drinking water, please contact David Richey at 466-5746.

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. Buckeye Water District No. 50 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 Drinking Water Hotline or at *http://www.epa.gov/safewater/lead*.

The Louisiana Department of Health and Hospitals / Office of Public Health routinely monitors for constituents in your drinking water according to Federal and State laws. The tables that follow show the results of our monitoring during the period of January 1<sup>st</sup> to December 31, 2017. Drinking water, including bottled water, may reasonably be expected to contain at least some small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

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

• Parts per million (ppm) or Milligrams per liter (mg/L) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

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

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water

• Treatment Technique (TT) – an enforceable procedure or level of technological performance which public water systems must follow to ensure control of a contaminant.

• Action Level (AL) - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

<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 as close to the MCLG's as feasible using the best available treatment technology.

<u>Maximum contaminant level goal (MCLG)</u> – the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Maximum residual disinfectant level (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 (MRDLG) – the level of a 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.

• Level 1 assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

• Level 2 assessment – A very detailed study of the water system to identify potential problems and determine (if possible) why an E.coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## During the period covered by this report we had the below noted violations.

Compliance Period	Analyte	Туре	
Compliance Period		1,100	
NO VIOLATIONS OCCURRED IN THE	CALENDAR VEAR OF 2017		
NO VIOLATIONS OCCURRED IN THE	CALENDAR TEAR OF 2017		

Our water system tested a minimum of 10 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system disinfectant residuals to ensure control of microbial growth.

Disinfectant	Date	Highest Running Annual Average	Unit	Range	MRDL	MRDLG	Typical Source
Chlorine	2017	0.97	ppm	0.36 - 1.53	4	4	Water additive used to control microbes

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	11/2/2015	0.092	0.0069	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	11/2/2015	1.7	0.36 - 1.7	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE-NITRITE	10/10/2017	0.096	0.038 - 0.096	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	11/2/2015	36	3.5 - 36	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (- 226 & -228)	11/2/2015	0.951	0.951	pCi/l	5	0	Erosion of natural deposits
COMBINED URANIUM	11/2/2015	1	0.54 - 1	μg/l	· 30	0	Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	11/2/2015	4.3	4.3	pCi/I	15	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	11/2/2015	4.3	4.3	PCI/L			
GROSS BETA PARTICLE ACTIVITY	11/2/2015	3.03	2.24 - 3.03	pCi/l	50	0	Decay of natural and man-made deposits. Note: The gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pC/L is used as a screening level.

Lead and Copper	Date	90 <sup>TH</sup> Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2014 - 2016	0.1	0.1	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2014 - 2016	2	1-8	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Period	Highest. LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	112 OLD BEAUBOUEF	2017	22	11.7 - 15.5	ppb	-60	0	By-product of drinking water disinfection
TOTAL HALOACETIC	282 WOODSON LANDING	2017	20	6.4 - 16.6	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	6641 HIGHWAY 28 E	2017	19	10.6 - 15.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	7887 HICKORY GROVE ROAD	2017	20	11.7 - 18.8	ppb	60	0	By-product of drinking water disinfection
ттнм	112 OLD BEAUBOUEF	2017	48	38.2 - 52.4	ppb	80	0	By-product of drinking water chlorination
ттнм	282 WOODSON LANDING	2017	53	43.3 - 51.6	ppb	80	0	By-product of drinking water chlorination
TTHM	6641 HIGHWAY 28 E	2017	40	31.8 - 44.2	ppb	.80	0	By-product of drinking water chlorination
TTHM	7887 HICKORY GROVE ROAD	2017	58	51.7 - 69.5	ppb	80	0	By-product of drinking water chlorination

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL
CHLORIDE	11/2/2015	231	7.3 - 231	MG/L	250
IRON	11/2/2015	0.26	0.025 - 0.26	MG/L	0.3
MANGANESE	11/2/2015	0.027	0.0039 - 0.027	MG/L	0.05
PH	11/2/2015	8.3	7.2 - 8.3	SU	8.5

There are no additional required health effects notices. There are no additional required health effects violation notices.

the sometimes need to make improvements that will benefit all of our customers.

We at BUCKEYE WATER DISTRICT #50 work around the clock to provide top quality drinking water to every tap. We ask that all our customers help us protect and conserve our water sources, which are the heart of our community, our way of life, and our children's future. Please call our office if you have questions.