

Pine Bluff Water Authority 2019 Consumer Confidence Report For 2018



Pine Bluff Water Authority
P O Box 89
Locust Fork, AL 35097

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Call Before You Dig.
1-800-292-8525 or visit www.al1call.com

CCR: Government Mandated

The Pine Bluff Water Authority (PBWA), like water utilities across the U.S., is required by the Environmental Protection Agency to send its customers this water quality report of Consumer Confidence Report (CCR) each year.

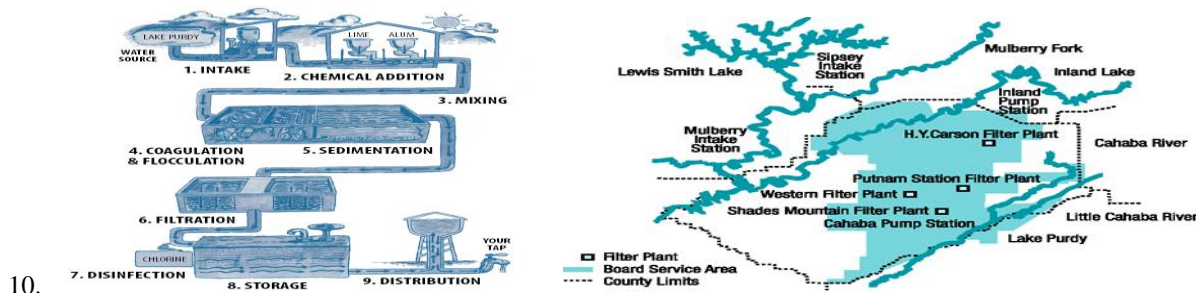
In 1996, Congress amended the Safe Drinking Water Act by adding a provision requiring all community water systems to deliver to their customers an annual water quality report or CCR, which contains information on the water system's source water, the levels of any detected contaminants, compliance with drinking water rules and other educational information.

Every community water system serving at least 25 people year round must prepare and distribute the CCR each year to all of its customers by July 1. Since 1999, the PBWA has provided its customers with this annual water quality report as required by the Safe Drinking Water Act.

In 2018, as in years past, PBWA met all state and federal regulations for water quality. This CCR is available at the PBWA office, 5501 County Highway 15 Cleveland, Al. 35049.

The Water Treatment Process

1. Intake – Water is taken from the source. Logs, fish and plants are screened out and water is drawn into the treatment plant.
2. Chemical Addition – Chemicals are added to kill germs and improve taste and odor.
3. Mixing – Water and chemicals are rapidly mixed.
4. Coagulation & Flocculation – The particles stick together and form larger particles called floc.
5. Sedimentation – The water and floc particles flow into a sedimentation basin. The floc then settles to the bottom and is removed from the water.
6. Filtration – Water Flows through filters. The filters are made of layers of sand and gravel.
7. Disinfection – A small amount of chlorine or other disinfecting chemical is added to kill any remaining germs and keeps the water safe as it travels to your house.
8. Storage – Water is placed in a closed tank or clearwell.
9. Distribution – Water is transported to houses. The Birmingham Water Works delivers on average 100 million gallons of water per day.



SOURCE WATER ASSESSMENT

A source water assessment has been updated on the water system. It is available for review at the BWWB's main office during normal business hours. The following is a list of the sources of raw water along with the susceptibility rate of the contaminant source and the contaminant sources:

- Mulberry fork – moderate susceptibility (septic tanks and propane tanks): high susceptibility (industrial facility, bridge and highway)
- Sipsy Fork – moderate susceptibility (power plant)

The Birmingham Water Works Board is making a maximum effort to physically protect all of our critical assets.

EDUCATIONAL INFORMATION

Some people may be vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplant, people with HIV/AIDS or other immune system disorder, some elderly, and infants can be particularly at risk from infections. These people should seek advice about the drinking water from their health care providers. Environmental Protection Agency and the Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. (1-800-426-4791).

FOR YOUR HEALTH

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly and infants can be particularly at risk from infections.

People at risk should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. For further information, contact the Jefferson County Health Department at 205-933-9110.

ADDITIONAL INFORMATION

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 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.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

DEFINITIONS

Action Level (AL) – Concentration of contaminant which, when exceeded, triggers treatment of other requirements that a water system must follow.

Maximum Contaminant Level Goal (MCLG) – 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 Contaminant Level (MCL) – 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 Residual Disinfectant Level Goal (MRDLG) – The level of 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.

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.

Treatment Technique (TT) – Required process intended to reduce the level of a contaminant in drinking water.

Running Annual Average (RAA) – Compliance period where an average of four consecutive quarterly samples are used.

Contaminant - Any substance other than water. Note that contaminants, as defined, include dissolved minerals, purifying and dental health promotion additives.

Turbidity – Measure of the clarity of water as it relates to its particle content.

Variance and Exemptions – ADEM or EPA permission not to meet an MCL or treatment technique under certain conditions.

Mg/L – milligrams per liter, or parts per million (ppm).

Ug/L – micrograms per liter, or parts per billion (ppb).

DBP – Disinfection By-Products is a by-product of treatment.

Trihalomethanes – A disinfection By-product

Haloacetic Acids – A disinfection By-product

Waiver

Based on a study conducted by ADEM with the approval of the EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

QUESTIONS AND ANSWERS

What is the Consumer Confidence Report? The Consumer Confidence Report (CCR) is an annual report **required** by the Environmental Protection Agency (EPA) on the water quality of a particular water system such as the PBWA. **The report details and outlines contaminants and their levels in drinking water.**

Why am I getting this report? The PBWA is federally mandated by the EPA to provide this information to you. The Alabama Department of Environmental Management (ADEM) enforces these rules for the EPA. Regulated drinking water substances that were detected during the 2018 calendar year are provided in the chart.

For whom is this report produced? The Consumer Confidence Report is produced for customers and wholesalers of the PBWA and ensures that everyone is provided safe drinking water.

How much does it cost to receive this report? This report is free of charge to all customers and stakeholders of the PBWA.

Where can I get additional copies of this report? You may obtain additional copies of the Consumer Confidence Report at Pine Bluff Water Authority Office, by mail (upon request). For questions concerning the CCR, please call Kim Vaughn at 205-681-8871.

What authorities regulate contaminant levels? In order to ensure that tap water is safe to drink, the EPA and ADEM prescribe regulations that limit the amount of certain substances in water provided by public water systems.

When does the board meet? 3rd Tuesday of each month at 5:30 pm.

Board Members are: Chairperson: Jeff McDonald, Vice Chair: Debra Hicks, Secretary/Treasurer: Milton Faris, Director: Deanna Washburn, Director: Ned Fortenberry.

ABBREVIATIONS

NA: Not Applicable **CDC:** Centers for Disease Control **ND:** Not Detected **NTU:** Nephelometric Turbidity Unit
EPA: Environmental Protection Agency **ADEM:** Alabama Department of Environmental Management

BWBB 2018 Chemical Analysis												
Parameters (mg/L)	MCLG	MCL/TT	Regulated Drinking Water Contaminants for CCR								Major Sources in Drinking Water	
			Primary Drinking Water Standards - Limits are set based on public health effects.									
Total Coliform Bacteria	N/A	Presence of Coliform bacteria is < 5% of monthly samples (TT)	The highest percentage of bacteria in the distribution system for one month was 0.57% (2 out of 353 samples). All locations that tested total coliform - positive were tested for <i>E. coli</i> . <i>E. coli</i> was not detected in any of these samples. All locations that tested total coliform - positive were resampled and all resamples were negative.								Naturally present in the environment. Human and animal fecal waste	
<i>E. coli</i>	0	0										
Parameters (mg/L)	MCLG	MCL	Carson		Putnam		Shades Mountain		Western		Major Sources in Drinking Water	
			Highest	Range	Highest	Range	Highest	Range	Highest	Range		
Antimony	0.006	0.006	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	
Arsenic	0	0.01	ND	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	
Barium	2	2	0.015	0.010 - 0.015	0.014	0.010 - 0.014	0.032	0.019 - 0.032	0.021	0.016 - 0.021	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Beryllium	0.004	0.004	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace and defense industries	
Cadmium	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	
Chlorine	MRDLG = 4	MRDL = 4	2.74	1.65 - 2.74	2.12	1.62 - 2.12	2.54	1.57 - 2.54	2.60	1.51 - 2.60	Water additive used to control microbes	
Chromium	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from steel and pulp mills; erosion of natural deposits	
Copper	1.3	AL = 1.3	0.002	0.002	0.002	ND - 0.002	0.046	0.010 - 0.046	0.002	0.001 - 0.002	Corrosion of household plumbing systems; erosion of natural deposits	
Cyanide	0.2	0.2	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from steel/ metal factories; discharge from plastic and fertilizer factories	
Fluoride	4	4	0.51	ND - 0.51	0.65	0.62 - 0.65	0.71	0.68 - 0.71	0.72	0.50 - 0.72	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Gross Alpha (pCi/L)	0	15	ND	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation	
Lead	0	AL = 0.015	ND	ND	ND	ND	ND	ND	ND	ND	Corrosion of household plumbing; erosion of natural deposits	
Mercury	0.002	0.002	ND	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands	
Nitrate as N	10	10	0.26	ND - 0.26	0.29	ND - 0.29	0.56	0.53 - 0.56	0.50	0.29 - 0.50	Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits	
Nitrite as N	1	1	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits	
Radium 226 (pCi/L)	0	5	0.2	0.2	0.3	0.3	ND	ND	ND	ND	Erosion of natural deposits	
Radium 228 (pCi/L)	0	5	ND	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits	
Selenium	0.05	0.05	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines	
Thallium	0.0005	0.002	ND	ND	ND	ND	ND	ND	ND	ND	Leaching from ore-processing sites; discharge from electronics, glass and drug factories	
Total Nitrate/Nitrite	10	10	0.26	ND - 0.26	0.29	ND - 0.29	0.56	0.53 - 0.56	0.50	0.29 - 0.50	Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits	
Turbidity (NTU)	N/A	0.3 (TT)	0.20	0.02 - 0.20	0.21	0.02 - 0.21	0.21	0.01 - 0.21	0.26	0.02 - 0.26	Soil runoff	
Parameters (µg/L)	Regulated Organic Chemicals										Major Sources in Drinking Water	
1,1 Dichloroethylene	7	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,1,1 Trichloroethane	200	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and other factories
1,1,2 Trichloroethane	3	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,2 Dichloroethane	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,2 Dichloropropane	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene	70	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from textile-finishing factories
2,4,5-TP (Silvex)	50	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	Residue of banned herbicide
2,4-D	70	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
Alachlor	0	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
Atrazine	3	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
Benzene	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from factories; leaching from gas storage tanks and landfills
Benzo(a)pyrene	0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Leaching from linings of water storage tanks and distribution lines
Carbofuran	40	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	Leaching of soil fumigant used on rice and alfalfa
Carbon Tetrachloride	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical plants and other industrial activities
Chlordane	0	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide
Chlorobenzene	100	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical and agricultural chemical factories
Cis-1,2 Dichloroethylene	70	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Dalapon	200	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on rights of way
Di (2-Ethylhexyl) Adipate	400	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
Di (2-Ethylhexyl) Phthalate	0	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from rubber and chemical factories
Dibromochloropropane	0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff/ leaching from soil fumigant used on soybeans, cotton, pineapples and orchards
Dichloromethane	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from pharmaceutical and chemical factories
Dinoseb	7	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on soybeans and vegetables
Disquat	20	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide use
Endosulfan	100	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide use
Endrin	2	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide
Ethylbenzene	700	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum refineries
Ethylene Dibromide (EDB)	0	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum refineries
Glyphosate	700	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide use
Heptachlor	0	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide
Heptachlor Epoxide	0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Breakdown of heptachlor
Hexachlorobenzene	0	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	50	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
Lindane	0.2	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff/ leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	40	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff/ leaching from insecticide used on fruits, vegetables, alfalfa, livestock
o-Dichlorobenzene	600	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Oxamyl (Vydate)	200	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff/ leaching from insecticide used on apples, potatoes, and tomatoes
PCB 1016	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1221	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1232	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1242	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1248	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1254	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
PCB 1260	0	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
p-Dichlorobenzene	75	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Pentachlorophenol	0	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from wood preserving factories
Picloram	500	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	Herbicide runoff
Simazine	4	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	Herbicide runoff
Styrene	100	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Leaching from PVC pipes; discharge from factories and dry cleaners
Toluene	1000	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum factories
Total Haloacetic Acids	N/A	60	24.7	20.4 - 24.7	13.6	9.46 - 13.6	29.8	13.3 - 29.8	23.0	17.1 - 23.0	By-product of drinking water chlorination	
Total Trihalomethanes	N/A	80	15.3	13.4 - 15.3	22.0	11.8 - 22.0	25.5	12.5 - 25.5	26.3	18.2 - 26.3	By-product of drinking water chlorination	
Toxaphene	0	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Runoff/ leaching from insecticide used on cotton and cattle
Trans-1,2 Dichloroethylene	100	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Trichloroethylene	0	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and other factories
Vinyl Chloride	0	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	Leaching from PVC piping; discharge from plastic factories
Xylenes	10,000	10,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum factories; discharge from chemical factories
Running Annual Average for System Wide Stage 2 Sites												
Parameters (µg/L)	MCLG	MCL	RAA								Major Sources in Drinking Water	
Total Trihalomethanes (µg/L)	N/A	System-wide Running Annual Average (RAA): 80 µg/L	35.1								By-product of drinking water chlorination	
Total Haloacetic Acids (µg/L)	N/A	System-wide Running Annual Average (RAA): 60 µg/L	26.9								By-product of drinking water chlorination	
TOC Step Removal for Filter Plants												
TOC Percent Removal	MCLG	MCL	RAA	Carson	Putnam	Shades Mountain	Western				Major Sources in Drinking Water	
Total Organic Carbon (TOC)	N/A	4 (TT)	1.00	1.00	1.00	1.00	1.00				Naturally present in the environment	

2018 Chemical Analysis

Unregulated Organic Substances Substances Not Detected

Parameters (µg/L)	MCLG	MCL	Carson		Putnam		Shades Mountain		Western	
			Highest	Range	Highest	Range	Highest	Range	Highest	Range
1,1,1,2-Tetrachloroethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
3-Hydroxycarbofuran	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Aldicarb	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Aldicarb Sulfone	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Aldicarb Sulfoxide	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Butachlor	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Carbaryl	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Dibromoacetic Acid	N/A	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Dicamba	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Fluorotrichloromethane	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Methiocarb	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Methomyl	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Tertiary Butyl Ether	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Metolachlor	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Metribuzin	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
o-Chlorotoluene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
p-Chlorotoluene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Propachlor	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Propoxur	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0	Monitored	ND	ND	ND	ND	ND	ND	ND	ND
Unregulated Organic Substances Detected										
Bromodichloromethane	0	Monitored	3.29	2.83 - 3.29	4.00	2.76 - 4.00	7.23	3.47 - 7.23	5.95	3.78 - 5.95
Chloroform	70	Monitored	12.0	10.4 - 12.0	18.0	8.78 - 18.0	16.5	8.05 - 16.5	19.4	13.9 - 19.4
Dibromochloromethane	60	Monitored	ND	ND	ND	ND	2.03	ND - 2.03	1.66	ND - 1.66
Dichloroacetic Acid	0	Monitored	13.6	7.41 - 13.6	8.15	5.20 - 8.15	13.1	6.26 - 13.1	13.1	8.17 - 13.1
Monobromoacetic Acid	N/A	Monitored	4.91	ND - 4.91	2.62	ND - 2.62	7.70	ND - 7.70	4.75	ND - 4.75
Monochloroacetic Acid	70	Monitored	1.29	ND - 1.29	ND	ND	ND	ND	ND	ND
Trichloroacetic Acid	20	Monitored	9.27	7.52 - 9.27	3.64	2.80 - 3.64	9.02	4.97 - 9.02	9.02	6.12 - 9.02

Secondary Drinking Water Standards

Limits are set based on cosmetic or aesthetic effects.

Parameters (mg/L)	MCLG	MCL	Carson		Putnam		Shades Mountain		Western		Major Sources in Drinking Water
			Highest	Range	Highest	Range	Highest	Range	Highest	Range	
Aluminum	N/A	0.05 - 0.2	0.016	0.009 - 0.016	0.014	0.007 - 0.014	0.032	0.026 - 0.032	0.024	0.016 - 0.024	By-product of drinking water treatment
Bromide	N/A	Monitored	ND	ND	ND	ND	ND	ND	ND	ND	
Calcium	N/A	Monitored	16.7	13.9 - 16.7	18.7	16.4 - 18.7	42.8	23.5 - 42.8	27.0	21.3 - 27.0	
Carbon Dioxide	N/A	Monitored	ND	ND	ND	ND	ND	ND	ND	ND	
Chloride	N/A	250	4.82	3.90 - 4.82	4.47	4.22 - 4.47	10.0	6.30 - 10.0	5.85	5.01 - 5.85	
Copper	N/A	1	0.002	0.002	0.002	ND - 0.002	0.046	0.010 - 0.046	0.002	0.001 - 0.002	
Foaming Agent	N/A	0.5	ND	ND	ND	ND	ND	ND	ND	ND	
Iron	N/A	0.3	ND	ND	ND	ND	ND	ND	ND	ND	
Langlier Index (LSI)	N/A	Non-corrosive	-1.06	-1.28 to -1.06	0.077	-0.442 to 0.077	-0.382	-0.779 to -0.382	-0.383	-0.411 to -0.383	
Magnesium	N/A	Monitored	3.67	3.31 - 3.67	3.63	3.18 - 3.63	7.95	4.70 - 7.95	5.99	3.39 - 5.99	
Manganese	N/A	0.05	ND	ND	ND	ND	0.002	ND - 0.002	0.002	ND - 0.002	
pH (SU)	N/A	6.5 - 8.5	8.11	7.66 - 8.11	8.97	8.40 - 8.97	7.95	7.52 - 7.95	8.45	8.14 - 8.45	
Potassium	N/A	Monitored	1.95	1.64 - 1.95	1.95	1.66 - 1.95	2.39	1.43 - 2.39	2.02	1.92 - 2.02	
Silver	N/A	0.1	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	N/A	Monitored	1.89	1.73 - 1.89	1.86	1.70 - 1.86	11.6	6.81 - 11.6	4.29	2.89 - 4.29	
Specific Conductivity (µS/cm)	N/A	Monitored	160	124 - 160	174	135 - 174	360	195 - 360	262	180 - 262	
Sulfate	N/A	250	25.1	23.3 - 25.1	29.5	26.4 - 29.5	67.3	37.8 - 67.3	52.4	35.4 - 52.4	
TDS	N/A	500	87.5	75.0 - 87.5	90.0	87.5 - 90.0	203	123 - 203	128	115 - 128	
Temperature (°F)	N/A	Monitored	57	48 - 57	57	48 - 57	81	53 - 81	69	53 - 69	
Total Alkalinity	N/A	Monitored	32	26 - 32	32	28 - 32	78	44 - 78	46	32 - 46	
Total Hardness	N/A	Monitored	68	40 - 68	72	52 - 72	140	76 - 140	104	64 - 104	
Zinc	N/A	5	0.006	ND - 0.006	0.011	ND - 0.011	0.006	ND - 0.006	ND	ND	
Color, APHA (color units)	N/A	15 color units	ND	ND	ND	ND	ND	ND	ND	ND	
Odor (TON)	N/A	3 TON	ND	ND	ND	ND	ND	ND	ND	ND	
Monitoring											
Nickel	N/A	0.1	ND	ND	0.001	ND - 0.001	0.003	0.002 - 0.003	ND	ND	Discharge from nickel smelting/refining and steelworks industries

Unregulated Contaminant Monitoring Rule Phase IV (UCMR4)		
Detected Contaminants		
Contaminants (ppb)	Average Level Detected	Range of Detections
Haloacetic Acids (HAA ₆ Br)	4.82	2.39 - 8.56
Haloacetic Acids (HAA ₉)	25.2	15.1 - 38.4
Manganese	1.02	ND - 4.36
Quinoline	0.003	ND - 0.042
Non-Detected Contaminants		
1-butanol	Ethoprop	O-toluidine
2-methoxyethanol	Germanium	Oxyfluorfen
2-propen-1-ol	Microcystin-LA	Profenofos
Alpha-hexachlorocyclohexane	Microcystin-LF	Tebuconazole
Anatoxin-a	Microcystin-LR	Total Microcystin
Butylated hydroxyanisole	Microcystin-LY	Total Permethrin (cis- & trans-)
Chlorpyrifos	Microcystin-RR	Tribufos
Cylindrospermopsin	Microcystin-YR	
Dimethipin	Nodularin	

In 2018, BWB participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Oneonta Utilities Board Table of UCMR 4 Contaminants						
Contaminant	Minimum Reporting Level (MRL/ug/L)	Reference Concentration (ug/L)	Range Detected			Additional Information
Manganese	0.4	300	13.7	-	13.7	Naturally-occurring element; commercially available in combination with other elements and materials; a byproduct of zinc ore processing; used in infrared optics, fiber optic systems, electronics and solar applications
Bromochloroacetic Acid	NA	NA	2.2	-	4.0	By-products of drinking water chlorination
Bromodichloroacetic Acid	NA	NA	2.9	-	4.1	By-products of drinking water chlorination
Chlorodibromoacetic Acid	NA	NA	ND	-	0.37	By-products of drinking water chlorination
Dichloroacetic Acid	NA	NA	12	-	20	By-products of drinking water chlorination
Monobromoacetic Acid	NA	NA	ND	-	0.34	By-products of drinking water chlorination
Monochloroacetic Acid	NA	NA	ND	-	2.1	By-products of drinking water chlorination
Trichloroacetic Acid	NA	NA	13	-	29	By-products of drinking water chlorination

Oneonta Utilities Board - Contaminants Monitored	Date Monitored
Inorganic Compounds	2018
Lead and Copper	2016
Microbiological Contaminants	Current
Nitrates	2018
Radioactive Contaminants	2017
Synthetic Organic Contaminants (including herbicides and pesticides)	2018
Volatile Organic Contaminants	2018
Disinfection By-products (TTHM and HAA5)	2018

Table of Primary Drinking Water Contaminants

CONTAMINANT	MCL	Amount Detected	CONTAMINANT	MCL	Amount Detected
Bacteriological			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5%	ND	Endrin	2 ppb	ND
Turbidity	TT	1.61	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700 ppb	ND
Beta/pton emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/L)	15	ND	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/L)	5	ND	Hexachlorobenzene	1 ppb	ND
Inorganic			Lindane	200 ppt	ND
Antimony	6 ppb	ND	Methoxychlor	40 ppb	ND
Arsenic	10 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Barium	2 ppm	0.035	PCBs	500 ppt	ND
Beryllium	4 ppb	ND	Pentachlorophenol	1 ppb	ND
Cadmium	5 ppb	ND	Picloram	500 ppb	ND
Chromium	100 ppb	ND	Simazine	4 ppb	ND
Copper *	AL=1.3 ppm	0.24	Toxaphene	3 ppb	ND
Cyanide	200 ppb	ND	Benzene	5 ppb	ND
Fluoride	4 ppm	ND	Carbon Tetrachloride	5 ppb	ND
Lead *	AL=15 ppb	ND	Chlorobenzene	100 ppb	ND
Mercury	2 ppb	ND	Dibromochloropropane	200 ppt	ND
Nitrate	10 ppm	1.47	0-Dichlorobenzene	600 ppb	ND
Nitrite	1 ppm	ND	p-Dichlorobenzene	75 ppb	ND
Selenium	50 ppb	ND	1,2-Dichloroethane	5 ppb	ND
Thallium	2 ppb	ND	1,1-Dichloroethylene	7 ppb	ND
*90th percentile of the most recent sampling event.			Cis-1,2-Dichloroethylene	70 ppb	ND
Organic Chemicals			trans-1,2-Dichloroethylene	100 ppb	ND
2,4-D	70 ppb	ND	Dichloromethane	5 ppb	ND
2,4,5-TP (Silvex)	50 ppb	ND	1,2-Dichloropropane	5 ppb	ND
Acrylamide	TT	ND	Ethylbenzene	700 ppb	ND
Alachlor	2 ppb	ND	Ethylene dibromide	50 ppt	ND
Atrazine	3 ppb	ND	Styrene	100 ppb	ND
Benzo(a)pyrene[PAHs]	200 ppt	ND	Tetrachloroethylene	5 ppb	ND
Carbofuran	40 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Chlordane	2 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Dalapon	200 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Di-(2-ethylhexyl)adipate	400 ppb	ND	Trichloroethylene	5 ppb	ND
Di-(2-ethylhexyl)phthalates	6 ppb	ND	TTHM	80 ppb	76.4
Dinoseb	7 ppb	ND	Toluene	1 ppm	ND
Diquat	20 ppb	ND	Vinyl Chloride	2 ppb	ND
Chloramines	4 ppm	ND	Xylenes	10 ppm	ND
Chlorite	1 ppm	ND	TOC	TT	2.7
HAA5	60 ppb	28	Chlorine	4 ppm	2.3

Table of Unregulated Drinking Water Contaminants

CONTAMINANT	Low Result, PPM	High Result, PPM	CONTAMINANT, PPM	Low Result, PPM	High Result, PPM
1,1 - Dichloropropene	ND	ND	Chloroform	ND	0.0037
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	ND	ND
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 - Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,3 - Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND
1,2,4 - Trimethylbenzene	ND	ND	Dieldrin	ND	ND
1,3 - Dichloropropane	ND	ND	Hexachlorobutadiene	ND	ND
1,3 - Dichloropropene	ND	ND	p-Isoprpylbenzene	ND	ND
1,3,5 - Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND
2,2 - Dichloropropane	ND	ND	Methomyl	ND	ND
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND
Aldicarb	ND	ND	Metolachlor	ND	ND
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND
Aldrin	ND	ND	Naphthalene	ND	ND
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND
Bromodichloromethane	ND	0.0013	P-Chlorotoluene	ND	ND
Bromoform	ND	ND	P-Isopropyltoluene	ND	ND
Bromomethane	ND	ND	Propachlor	ND	ND
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND

Table of Secondary Drinking Water Contaminants

Parameters	MCLG	MCL	Low Result	High Result	Parameters (mg/L)	MCLG	MCL	Low Result	High Result
pH	7	Monitored	7.21	8.03	Aluminum	0	0.2	ND	0.11
Color, APHA (units)	N/A	15	ND	ND	Copper	N/A	1	ND	0.071
Odor	N/A	3	ND	ND	Iron	0	0.3	ND	ND
Foaming Agents	N/A	0.5	ND	ND	Manganese	0	0.05	ND	ND
TDS	0	500	140	182	Silver	0	0.1	ND	ND
Fluoride	N/A	2.0	ND	ND	Zinc	0	5	ND	ND
Sulfate	0	250	4.15	29.38	Total Hardness	0	Monitored	74	157
Chloride	N/A	250	3.46	17.72	Corrosivity	N/A	N/A	Non Corrosive	Non Corrosive

Table of Detected Primary Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range Detected			Likely Source of Contamination and Health Affects
Turbidity	N/A	TT	0.02	-	1.61	Soil Runoff.
Barium	2	2 ppm	0.006	-	0.035	Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits.
Nitrate	10	10 ppm	0.47	-	1.47	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper	1.3	AL=1.3 ppm	ND	-	0.79	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives (90 th Percentile Value)
HAA5	N/A	60 ppb	ND	-	28	By-product of drinking water chlorination
TTHM	N/A	80 ppb	ND	-	76.4	By-product of drinking water chlorination
TOC	N/A	TT	0.2	-	2.7	Runoff from industrial, urban and natural soils; Decomposition of plant material in surface water
Chlorine	MRDLG=4	MRDL=4 ppm	1.05	-	2.3	Drinking water additive for bacterial disinfection

Blount County Water - Table of Detected Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	No	.05	NTU	n/a	TT	Soil runoff
Radioactive Contaminants						
Alpha emitters	No	2.0	pCi/l	0	15	Erosion of natural deposits
Combined radium	No	.6	pCi/l	0	5	Erosion of natural deposits
Inorganic Contaminants						
Barium	No	.019	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	No	.032	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate	No	1.14	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
TTHM [Total trihalomethanes]	No	12.4	ppb	0	80	By-product of drinking water chlorination
Total Organic Carbon (TOC)	No	.4	ppb	n/a	TT	Naturally present in the environment
Chlorine	No	1.4	ppm	4	4	Water additive used to control microbes.

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risk to humans.

This table provides a quick glance of any primary contaminant detections.

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
Bacteriological			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5 %	ND	Endrin	2 ppb	ND
Turbidity	TT	.05	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700 ppb	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/l)	15	2.0	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/l)	5	.6	Hexachlorobenzene	1 ppb	ND
Uranium	30 ppb	ND	Lindane	200 ppt	ND
Inorganic Chemicals			Methoxychlor	40 ppb	ND
Antimony	6 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Arsenic	10 ppb	ND	PCBs	500 ppt	ND
Asbestos (MFL)	7	ND	Pentachlorophenol	1 ppb	ND
Barium	2 ppm	.019	Picloram	500 ppb	ND
Beryllium	4 ppb	ND	Simazine	4 ppb	ND
Cadmium	5 ppb	ND	Toxaphene	3 ppb	ND
Chromium	100 ppb	ND	Benzene	5 ppb	ND
Copper	AL=1.3 ppm	.032	Carbon tetrachloride	5 ppb	ND
Cyanide	200 ppb	ND	Chlorobenzene	100 ppb	ND
Fluoride	4 ppm	ND	Dibromochloropropane	200 ppt	ND
Lead	AL=15 ppb	ND	o-Dichlorobenzene	600 ppb	ND
Mercury	2 ppb	ND	p-Dichlorobenzene	75 ppb	ND
Nitrate	10 ppm	1.42	1,2-Dichloroethane	5 ppb	ND
Nitrite	1 ppm	ND	1,1-Dichloroethylene	7 ppb	ND
Selenium	50 ppb	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Thallium	2 ppb	ND	trans-1,2-Dichloroethylene	100 ppb	ND
Organic Chemicals			Dichloromethane	5 ppb	ND
2,4-D	70 ppb	ND	1,2-Dichloropropane	5 ppb	ND
2,4,5-TP(Silvex)	50 ppb	ND	Ethylbenzene	700 ppb	ND
Acrylamide	TT	ND	Ethylene dibromide	50 ppt	ND
Alachlor	2 ppb	ND	Styrene	100 ppb	ND
Atrazine	3 ppb	ND	Tetrachloroethylene	5 ppb	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Carbofuran	40 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Chlordane	2 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Dalapon	200 ppb	ND	Trichloroethylene	5 ppb	ND
Di (2-ethylhexyl)adipate	400 ppb	ND	TTHM	80 ppb	12.5
Di (2-ethylhexyl) phthlates	6 ppb	ND	Toluene	1	ND
Dinoseb	7 ppb	ND	Vinyl Chloride	2 ppb	ND
Diquat	20 ppb	ND	Xylenes	10 ppm	ND
Dioxin [2,3,7,8-TCDD]	30 ppq	ND	TOC	TT	.4
Chloramines	4 ppm	ND	Chlorine	4 ppm	1.4
Chlorite	1 ppm	ND	Chlorine dioxide	800 ppb	ND
HAA5	60 ppb	ND	Bromate	10 ppb	ND

Test Results - Unregulated Contaminant Table					
Monitoring results in ppm					
CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result
1,1 - Dichloropropene	ND	ND	Chloroform	.06	4.4
1,1,1,2-Tetrachloroethane	ND	ND	Chloromethane	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Dibromochloromethane	.1	5.8
1,1-Dichloroethane	ND	ND	Dibromomethane	ND	ND
1,2,3 - Trichlorobenzene	ND	ND	Dicamba	ND	ND
1,2,3 - Trichloropropane	ND	ND	Dichlorodifluoromethane	ND	ND
1,2,4 - Trimethylbenzene	ND	ND	Dieldrin	ND	ND
1,3 - Dichloropropene	ND	ND	Hexachlorobutadiene	ND	ND
1,3 - Dichloropropene	ND	ND	Isopropylbenzene	ND	ND
1,3,5 - Trimethylbenzene	ND	ND	M-Dichlorobenzene	ND	ND
2,2 - Dichloropropene	ND	ND	Methomyl	ND	ND
3-Hydroxycarbofuran	ND	ND	MTBE	ND	ND
Aldicarb	ND	ND	Metolachlor	ND	ND
Aldicarb Sulfone	ND	ND	Metribuzin	ND	ND
Aldicarb Sulfoxide	ND	ND	N - Butylbenzene	ND	ND
Aldrin	ND	ND	Naphthalene	ND	ND
Bromobenzene	ND	ND	N-Propylbenzene	ND	ND
Bromochloromethane	ND	ND	O-Chlorotoluene	ND	ND
Bromodichloromethane	.06	2.3	P-Chlorotoluene	ND	ND
Bromoform	<.0005	.05	P-Isopropyltoluene	ND	ND
Bromomethane	ND	ND	Propachlor	ND	ND
Butachlor	ND	ND	Sec - Butylbenzene	ND	ND
Carbaryl	ND	ND	Tert - Butylbenzene	ND	ND
Chloroethane	ND	ND	Trichlorfluoromethane	ND	ND

Third Unregulated Contaminant Monitoring (UCMR 3)			
Monitoring results in ppb			
	Detected		Detected
1,2,3 -trichloropropane	ND	cobalt	ND
1,3-butadiene	ND	strontium	78.2
chloromethane (methyl chloride)	ND	chromium ⁵	ND
1,1-dichloroethane	ND	chromium-6 ⁶	.42
bromomethane	ND	chlorate	130
chlorodifluoromethane (HCFC-22)	ND	perfluorooctanesulfonic acid (PFOS)	ND
bromochloromethane (Halon 1011)	ND	perfluorooctanoic acid (PFOA)	ND
1,4-dioxane	ND	perfluorononanoic acid (PFNA)	ND
vanadium	.22	perfluorohexanesulfonic acid PFHxS)	ND
molybdenum	ND	perfluorobutanesulfonic acid (PFBS)	ND
17-β-estradiol	ND	perfluoroheptanoic acid (PFHpA)	ND
17-α-ethynylestradiol	ND	estrone	ND
estriol	ND	testosterone	ND
equilin	ND	4-anadrostene-3,17dione	ND
noroviruses	ND	enteroviruses	ND

2018 Stage 2 Disinfection Byproducts						
Total Trihalomethane Monitoring (TTHM)						
		950 County Hwy 13		426 Sand Valley Road		LRAA TTHM
Quarter	Sample Date	ppb	Sample Date	ppb		
First	2/15/18	6.6	2/15/18	49.2	27.9	
Second	5/18/17	10.0	5/17/18	79.7	44.9	
Third	8/14/18	6.7	8/14/18	77.0	41.9	
Fourth	11/15/18	5.0	11/15/18	57.20	31.1	
	Local Running Average:	7.1	Local Running Average:	65.8	36.5	
Haloacetic Acid Monitoring (HAA5)						
		950 County Hwy 13		426 Sand Valley Road		LRAA HAA5
Quarter	Sample Date	ppb	Sample Date	ppb		
First	2/15/18	0.0	2/15/18	23.0	11.5	
Second	5/17/18	0.0	5/17/18	20.0	10.0	
Third	8/14/18	0.0	8/14/18	16.0	8.0	
Fourth	11/15/18	0.0	11/15/18	29.00	14.5	
	Local Running Average:	0.0	Local Running Average:	22.0	11.0	

The most recent testing for lead and copper compliance within the distribution system was from July 2018 – August 2018. This testing was done in accordance with applicable regulations. The 90th percentile lead sample was <0.01mg/L. No lead samples exceeded the action level. The 90th percentile copper sample was 0.058 mg/L. No copper samples exceeded the action level. The BWWB voluntarily monitors for the organisms Cryptosporidium and Giardia quarterly at our raw water sites. **Distribution System Evaluation Sites (DSE)** 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. Pine Bluff Water Authority 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 it 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>.

Fun Facts

- Water is made up of two elements, **hydrogen** and **oxygen**. Its chemical formula is H₂O.
- Each molecule of water is made up of two hydrogen atoms bonded to a single oxygen atom.
- The existence of water is essential for life on Earth.
- Water has three different states, liquid, solid and gas.
- The word water usually refers to water in its liquid state. The solid state of water is known as ice while the gas state of water is known as steam or water vapor.
- Water covers around 70% of the Earth's surface.
- The three largest oceans on Earth are the Pacific Ocean (largest), the Atlantic Ocean (second largest) and the Indian Ocean (third largest). More [ocean facts](#).
- Found in the Pacific Ocean, the Mariana Trench is the deepest known point in the world's oceans.
- Ocean tides are caused by the rotation of the Earth and the **gravitational** pull of the Moon and Sun acting on ocean water.
- The freezing point of water lowers as the amount of salt dissolved in it increases. With average levels of salt, seawater freezes at -2 °C (28.4 °F).
- The longest river in the USA is the Missouri River. At around 2,340 miles (3,770 km) in length it is slightly longer than the Mississippi River (2,320 miles). The two combine to form the longest river system in North America.