



# ANNUAL WATER QUALITY REPORT 2022

WE CARE FROM THE SOURCE TO THE TAP



 BIRMINGHAM  
WATER WORKS

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## CCR: GOVERNMENT MANDATED

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The Birmingham Water Works Board (BWWB), like all water utilities across the U.S., is required by the EPA to send its customers a Consumer Confidence Report (CCR) each year.

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

In 2021, as in years past, the BWWB met all state and federal regulations for water quality.

Currently, the BWWB holds virtual open meetings each month. Meeting dates, times, and instructions for listening to the meetings are posted on our website. The Board welcomes public input. You may submit comments by email to: [PublicRelations@bwwb.org](mailto:PublicRelations@bwwb.org). For questions, please call 205-244-4000 or visit our website at [www.bwwb.org](http://www.bwwb.org).

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Finance & Administration

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EnviroLab, Water Quality, and  
Regulatory Compliance

**Stacy Littleton, REM, CESCO**  
Chief Chemist

**Derrick Felton**  
Water Quality Superintendent

**Jarrod Shotts, MSEM, CESCO**  
Regulatory Compliance Specialist



Dear Customers:

At Birmingham Water Works, we have steadfastly focused on our central mission to deliver exceptional quality water to our customers - all the way from the source to the tap.

There are several ways in which we make water quality a priority. During 2021, our state-of-the-art laboratory conducted over 130,000 analyses, closely monitoring every facet of the water production and delivery process. From our river sources, to our managed reservoirs, throughout each filtration process at our advanced water treatment facilities, to our distribution system, and finally to the tap, we conduct rigorous daily water testing to ensure optimum quality. Our chemists, biologists, and other laboratory professionals also closely monitor new research, technologies and techniques through active participation in numerous water industry associations and in close coordination with regulatory agencies including the U.S. Environmental Protection Agency (US EPA) and the Alabama Department of Environmental Management (ADEM).

Given our long history of industry award recognition and other accolades, one might assume that we would be content with our past successes. On the contrary, at Birmingham Water Works we're constantly striving for even greater quality levels for our customers. In fact, we have a team of PhD water researchers focusing on a variety of innovative technologies to further optimize quality; currently, the primary focus is on proactively planning for emerging contaminants of concern and more stringent standards being scientifically reviewed by the US EPA and ADEM. In addition, our staff partners with the Water Research Foundation and various Universities in Alabama to evaluate cutting-edge technologies like nanobubbles and other processes for future applications.

**“From our river sources, to our managed reservoirs, throughout each filtration process at our advanced water treatment facilities, to our distribution system, and finally to the tap, we conduct rigorous daily water testing to ensure optimum quality.”**

We take our watershed stewardship responsibility very seriously and take great pride in our management of both Inland Lake and Lake Purdy which combined store more than 26 billion gallons of water prior to treatment. We are also constantly evaluating methods to further protect our region’s sources of raw water. For example, baselines are established via high-definition stream surveys of the Cahaba River and Black Warrior River to protect these valuable resources and environmental systems.

In managing the largest water treatment facilities in the state, our team of professional licensed operators is second to none. As active members of the American Water Works Association and its Alabama/Mississippi Section, the Alabama Water Pollution & Control Association, and the Partnership for Safe Water, our plant operators are in a continuous training and optimization mode. This team is constantly pushing the envelope to both exceed regulatory standards and further improve the outstanding water aesthetics for which we have achieved great renown.

Finally, I would like to thank you for taking the time to review this year’s Water Quality Report and seeing the care and effort we put into delivering every precious drop.

Best regards,



Michael Johnson  
General Manager  
Birmingham Water Works



### **What is the Consumer Confidence Report?**

The CCR is an annual report – on the water quality of a particular water system such as the BWWB – required by the Environmental Protection Agency (EPA). The report details and outlines contaminants and their levels in drinking water.

### **Why am I getting this report?**

The BWWB 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 2021 calendar year are provided in the report.

### **Where can I get additional copies of this report?**

You may obtain additional copies of the CCR in person at the BWWB's Customer Service Center, by mail (upon request), or online by visiting [www.bwwb.org](http://www.bwwb.org). For questions concerning the CCR, please call the *Regulatory Compliance Specialist* at 205-244-4206.

### **Why 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.

### **For whom is this report produced?**

The CCR is produced for customers and wholesalers of the BWWB. It provides water quality data that confirms regulatory compliance of our water.



The BWWB is committed to providing the highest quality water and service to our customers and our entire service area. As a concerned corporate citizen, we are responsive to the needs of the entire community and strive to maintain, preserve, and conserve our precious water resources in order to ensure adequate water quality and supply for future generations.

## AWARDS

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### SHADES MOUNTAIN FILTER PLANT

ADEM Area-Wide Optimization Program 10-Year Optimized Plant Award  
Partnership for Safe Water Directors Award (4 Years)  
Water Quality Fluoridation Award from the CDC

### WESTERN FILTER PLANT

ADEM Area-Wide Optimization Program Optimized Plant Award  
AWPCA Award of Excellence for Surface Water 50 to 60 MGD  
Partnership for Safe Water Award of Excellence (8 Years)  
Partnership for Safe Water Directors Award (13 Years)  
Water Quality Fluoridation Award from the CDC

### PUTNAM FILTER PLANT

ADEM Area-Wide Optimization Program 10-Year Optimized Plant Award  
AWPCA Award of Excellence for Surface Water Plant Category 20.1 to 30 MGD  
AWWA Alabama/Mississippi Section Operator of the Year Award: Rodney Richardson  
AWWA Alabama/Mississippi Section Water Treatment Plant of the Year Award  
Partnership for Safe Water Presidents Award (5 Years)  
Partnership for Safe Water Directors Award (16 Years)  
Water Quality Fluoridation Award from the CDC



*Pictured: Award-Winning Carson Filter Plant*

### CARSON FILTER PLANT

AWPCA Best Operated Plant Award 20.1 – 30.0 MGD  
Partnership for Safe Water Presidents Award (5 Years)  
Partnership for Safe Water Directors Award (15 Years)  
Water Quality Fluoridation Award from the CDC

### TRAINING DEPARTMENT

Training Top 100 Award – Placed #8

### FINANCE DEPARTMENT

Government Finance Officers Association Distinguished Budget Presentation Award

## FOR YOUR HEALTH

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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.

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 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** (1-800-426-4791). For further information, contact the **Jefferson County Department of Health** at 205-933-9110.

## CUSTOMER RESOURCES

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### **CUSTOMER SERVICE, BILLING & LEAKS:**

205-244-4000

### **WATER QUALITY:**

205-244-4381

### **H2O FOUNDATION:**

205-244-4390

### **BIRMINGHAM WATER WORKS BOARD WEBSITE:**

[WWW.BWWB.ORG](http://WWW.BWWB.ORG)



Cover emergency home repairs with HomeServe. Plumbing repair plans include:

Exterior Water Service Line Coverage, Exterior Sewer/Septic Line Coverage, as well as Interior Plumbing and Draining System Coverage.

[www.bwwbcoverageplans.com](http://www.bwwbcoverageplans.com)

1-855-709-6268



## BWWB WATER SOURCES

- Black Warrior Basin
  - Sipsey Fork
  - Mulberry Fork
  - Inland Lake/Blackburn Fork
- Cahaba Basin
  - Big Cahaba River
  - Little Cahaba River
  - Lake Purdy

## SYSTEM INFORMATION

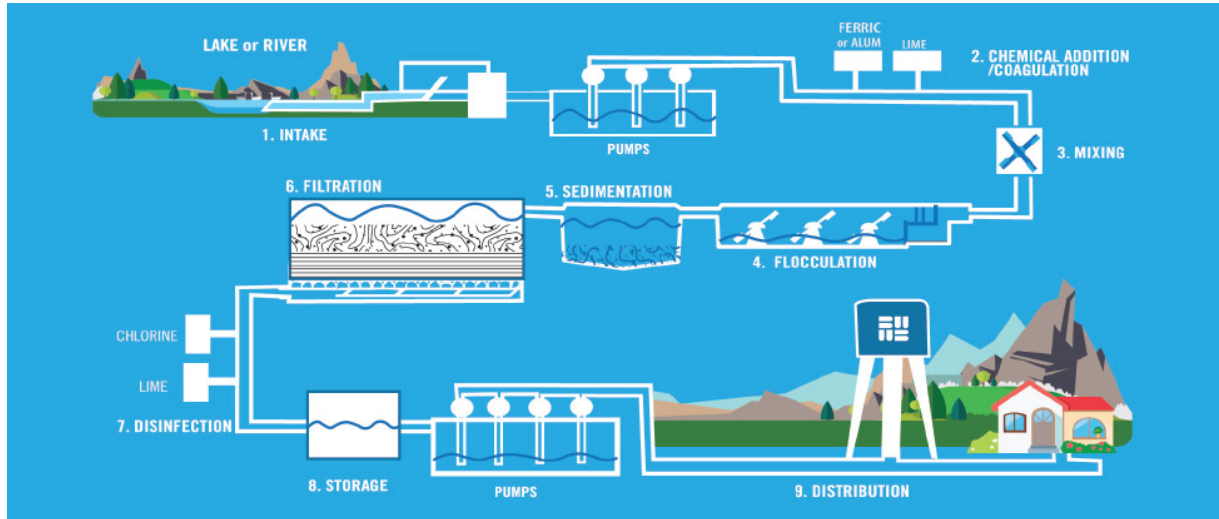
- Average gallons of water delivered in 2021: 110.9 MGD
- People Served: 650,000\*
- Square miles in service area: 759\*
- Miles of water main (pipes) in system: 4,000\*

\*Approximations

## SOURCE WATER ASSESSMENT

A source water assessment has been updated for the water system. It is available for review at the BWWB's main office during normal business hours.





# The Water Treatment Process:

1. **Intake** - Water is taken from the source. Fish, plants, and other debris are screened out and water is drawn into the treatment plant.
2. **Chemical Addition/Coagulation** - Chemicals are added to cause particles in the water to stick together.
3. **Mixing** - Water and chemicals are rapidly mixed.
4. **Flocculation** - The larger particles are 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 anthracite, sand, and gravel.
7. **Disinfection** - A small amount of chlorine is added to kill any remaining germs and keep 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 your home. The BWWB delivered an average of 110.9 million gallons of water per day in 2021.

# DEFINITIONS & ABBREVIATIONS

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**Action Level (AL)** - The concentration of a contaminant that triggers treatment or other requirement a water system shall follow.

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

**Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Maximum Contaminant Level (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 (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.

**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 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.

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

**Total Haloacetic Acids (HAA)** - By-product of drinking water chlorination.

**Total Trihalomethanes (TTHM)** - By-product of drinking water chlorination.

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

**Turbidity (NTU)** - Measure of the clarity of water as it relates to its particle content. Turbidity is measured to determine the amount of particulate matter present in water.

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

**ADEM** - Alabama Department of Environmental Management

**CDC** - Centers for Disease Control

**EPA** - Environmental Protection Agency

**°F** - Degrees Fahrenheit

**MGD** - Million Gallons per Day

**mg/L** - Milligrams per liter or parts per million (ppm)

**µS/cm** - Microsiemens per centimeter

**N/A** - Not Applicable

**ND** - Not Detected

**NTU** - Nephelometric Turbidity Unit

**pCi/L** - Picocuries per liter

**SU** - Standard Unit

**TOC** - Total Organic Carbon

**TON** - Threshold Odor Number

**µg/L** - Micrograms per liter or parts per billion (ppb)

2021 Chemical Analysis											
Standard List Of Primary Drinking Water Contaminants for CCR											
Primary Drinking Water Standards - Limits are set based on public health effects.											
Bacteriological											
MCL						Distribution System Microbiological Substance (Regulated)					
Total Coliform Bacteria						TT					
<i>E. coli</i>						The highest percentage of bacteria in the distribution system for one month was <b>0.55%</b> ( 2 out 363 of 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.					
Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .											
Primary Contaminants											
Inorganic Chemicals and Radiologicals			Regulated Organic Chemicals			Regulated Organic Chemicals			Regulated Organic Chemicals		
Parameters (mg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest	Parameters (µg/L)	MCL	Highest
Antimony	0.006	ND	1,1 Dichloroethylene	7	ND	Dichloromethane	5	ND	PCB, 1254	0.5	ND
Arsenic	0.01	ND	1,1,1 Trichloroethane	200	ND	Dinoseb	7	ND	PCB, 1260	0.5	ND
Barium	2	0.024	1,1,2 Trichloroethane	5	ND	Diquat	20	ND	p-Dichlorobenzene	75	ND
Beryllium	0.004	ND	1,2 Dichloroethane	5	ND	Endothall	100	ND	Pentachlorophenol	1	ND
Cadmium	0.005	ND	1,2 Dichloropropane	5	ND	Endrin	2	ND	Picloram	500	ND
Chlorine	MRDL = 4	3.15	1,2,4-Trichlorobenzene	70	ND	Ethylbenzene	700	ND	Simazine	4	ND
Chromium	0.1	ND	2,4,5-TP (Silvex)	50	ND	Ethylene Dibromide (EDB)	0.05	ND	Styrene	100	ND
Copper	AL = 1.3	0.020	2,4-D	70	ND	Glyphosate	700	ND	Tetrachloroethylene	5	ND
Cyanide	0.2	ND	Alachlor	2	ND	Heptachlor	0.4	ND	Toluene	1000	ND
Fluoride	4	0.98	Atrazine	3	ND	Heptachlor Epoxide	0.2	ND	Total Haloacetic Acids	60	32.3
Gross Alpha (pCi/L)	15	ND	Benzene	5	ND	Hexachlorobenzene	1	ND	Total Trihalomethanes	80	27.3
Lead	AL = 0.015	ND	Benzo(a)pyrene	0.2	ND	Hexachlorocyclopentadiene	50	ND	Toxaphene	3	ND
Mercury	0.002	ND	Carbofuran	40	ND	Lindane	0.2	ND	Trans-1,2 Dichloroethylene	100	ND
Nitrate as N	10	0.36	Carbon Tetrachloride	5	ND	Methoxychlor	40	ND	Trichloroethylene	5	ND
Nitrite as N	1	ND	Chlordane	2	ND	o-Dichlorobenzene	600	ND	Vinyl Chloride	2	ND
Radium 226 (pCi/L)	5	0.6	Chlorobenzene	100	ND	Oxamyl (Vydate)	200	ND	Xylenes	10,000	ND
Radium 228 (pCi/L)	5	ND	Cis-1,2 Dichloroethylene	70	ND	PCB, 1016	0.5	ND	TOC Step Removal for Filter Plants		
Selenium	0.05	ND	Dalapon	200	ND	PCB, 1221	0.5	ND	Total Organic Carbon (TOC)	TT	2
Thallium	0.002	ND	Di (2-Ethylhexyl) Adipate	400	ND	PCB, 1232	0.5	ND	System Wide Stage 2 Sites		
Total Nitrate/Nitrite	10	0.36	Di (2-Ethylhexyl) Phthalate	6	ND	PCB, 1242	0.5	ND	Total Haloacetic Acids	60	32.6
Turbidity (NTU)	0.3 (TT)	0.72	Dibromochloropropane	0.2	ND	PCB, 1248	0.5	ND	Total Trihalomethanes	80	42.1

2021 Chemical Analysis					
Detected Regulated Drinking Water Contaminants for CCR					
Primary Drinking Water Standards - Limits are set based on public health effects.					
Bacteriological					
	MCLG	MCL			Major Sources in Drinking Water
Total Coliform Bacteria	N/A	TT			Naturally present in the environment
<i>E. coli</i>	0	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .	The highest percentage of bacteria in the distribution system for one month was 0.55% ( 2 out of 363 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.		Human and animal fecal waste
Inorganic Chemicals and Radiological					
Parameters (mg/L)	MCLG	MCL	Highest	Range	Major Sources in Drinking Water
Barium	2	2	0.024	0.012 - 0.024	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDLG = 4	MRDL = 4	3.15	1.06 - 3.15	Water additive used to control microbes
Copper	1.3	AL = 1.3	0.020	ND - 0.020	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	4	4	0.98	ND - 0.98	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N	10	10	0.36	ND - 0.36	Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits
Radium 226 (pCi/L)	0	5	0.6	0.4 - 0.6	Erosion of natural deposits
Total Nitrate/Nitrite	10	10	0.36	ND - 0.36	Runoff from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits
Turbidity (NTU)	N/A	0.3 (TT)	0.72	0.011 - 0.72	Soil runoff
Regulated Organic Chemicals					
Parameters (µg/L)	MCLG	MCL	Highest	Range	Major Sources in Drinking Water
Total Haloacetic Acids	N/A	60	32.3	10.2 - 32.3	By-product of drinking water chlorination
Total Trihalomethanes	N/A	80	27.3	8.46 - 27.3	By-product of drinking water chlorination
Running Annual Average (RAA) for System Wide Stage 2 Sites					
Parameters (µg/L)	MCLG	MCL	RAA	Range	Major Sources in Drinking Water
Total Haloacetic Acids	N/A	System-wide RAA: 60 µg/L	32.6	11.3 - 46.5	By-product of drinking water chlorination
Total Trihalomethanes	N/A	System-wide RAA: 80 µg/L	42.1	17.0 - 79.3	By-product of drinking water chlorination
TOC Step Removal for Filter Plants					
TOC Percent Removal	MCLG	MCL	Highest	Range	Major Sources in Drinking Water
Total Organic Carbon (TOC)	N/A	TT	2	1 - 2	Naturally present in the environment

2021 Chemical Analysis				
Secondary Drinking Water Standards				
Limits are set based on cosmetic or aesthetic effects.				
Parameters (mg/L)	MCL	Highest	Range	Major Sources in Drinking Water
Aluminum	0.05 - 0.2	0.024	0.007 - 0.024	By-product of drinking water treatment
Calcium	Monitored	41.6	12.9 - 41.6	
Chloride	250	10.5	3.72 - 10.5	
Copper	1	0.020	ND - 0.020	
Iron	0.3	0.087	ND - 0.087	
Langlier Index (LSI)	Non-corrosive	0.129	-1.55 to 0.129	
Magnesium	Monitored	8.15	2.58 - 8.15	
Manganese	0.05	0.002	ND - 0.002	
pH (SU)	6.5 - 8.5	8.73	7.71 - 8.73	
Potassium	Monitored	1.75	1.23 - 1.75	
Sodium	Monitored	11.3	1.43 - 11.3	
Specific Conductivity (µS/cm)	Monitored	344	113 - 344	
Sulfate	250	73.0	20.1 - 73.0	
Total Dissolved Solids (TDS)	500	183	30.0 - 183	
Temperature (°F)	Monitored	79	48 - 79	
Total Alkalinity	Monitored	78	20 - 78	
Total Hardness	Monitored	134	42 - 134	
Monitoring				
Nickel	0.1	0.002	ND - 0.002	Discharge from nickel smelting/refining and steelworks industries
Unregulated Organic Contaminants Detected				
Parameters (µg/L)	MCL	Highest	Range	MCLG
Bromodichloromethane	Monitored	6.51	1.94 - 6.51	0
Chloroform	Monitored	23.4	5.74 - 23.4	70
Dibromochloromethane	Monitored	1.68	ND - 1.68	60
Dichloroacetic Acid	Monitored	20.0	7.64 - 20.0	0
Monochloroacetic Acid	Monitored	1.81	ND - 1.81	70
Trichloroacetic Acid	Monitored	10.9	2.55 - 10.9	20

2021 Chemical Analysis					
Not Detected Contaminants					
Unregulated Organic					
Parameters (µg/L)	MCLG	Parameters (µg/L)	MCLG	Parameters (µg/L)	MCLG
1,1,1,2-Tetrachloroethane	0	Bromoform	0	Monobromoacetic Acid	N/A
1,1,2,2-Tetrachloroethane	0	Bromomethane	0	Naphthalene	0
1,1-Dichloroethane	0	Butachlor	0	n-Butylbenzene	0
1,1-Dichloropropene	0	Carbaryl	0	n-Propylbenzene	0
1,2,3-Trichlorobenzene	0	Chloroethane	0	o-Chlorotoluene	0
1,2,3-Trichloropropane	0	Chloromethane	0	p-Chlorotoluene	0
1,2,4-Trimethylbenzene	0	Dibromoacetic Acid	N/A	p-Isopropyltoluene	0
1,3,5-Trimethylbenzene	0	Dibromomethane	0	Propachlor	0
1,3-Dichlorobenzene	0	Dicamba	0	Propoxur	0
1,3-Dichloropropane	0	Dichlorodifluoromethane	0	sec-Butylbenzene	0
1,3-Dichloropropene	0	Dieldrin	0	tert-Butylbenzene	0
2,2-Dichloropropane	0	Fluorotrichloromethane	0	<b>Secondary Standards - Parameters (mg/L)</b>	<b>MCL</b>
3-Hydroxycarbofuran	0	Hexachlorobutadiene	0	Bromide	Monitored
Aldicarb	0	Isopropylbenzene	0	Carbon Dioxide	Monitored
Aldicarb Sulfone	0	Methiocarb	0	Foaming Agent	0.5
Aldicarb Sulfoxide	0	Methomyl	0	Silver	0.1
Aldrin	0	Methyl Tertiary Butyl Ether	0	Zinc	5
Bromobenzene	0	Metolachlor	0	Color, APHA (color units)	15
Bromochloromethane	0	Metribuzin	0	Odor (TON)	3

<b>Unregulated Contaminant Monitoring Rule Phase IV (UCMR4)</b>		
<b>Detected Contaminants</b>		
<b>Contaminants (µg/L)</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>
<b>Haloacetic Acids (HAA<sub>6</sub>Br)</b>	<b>4.82</b>	<b>2.39 - 8.56</b>
<b>Haloacetic Acids (HAA<sub>9</sub>)</b>	<b>25.2</b>	<b>15.1 - 38.4</b>
<b>Manganese</b>	<b>1.02</b>	<b>ND - 4.36</b>
<b>Quinoline</b>	<b>0.003</b>	<b>ND - 0.042</b>
<b>Non-Detected Contaminants</b>		
<b>1-Butanol</b>	<b>Ethoprop</b>	<b>o-Toluidine</b>
<b>2-Methoxyethanol</b>	<b>Germanium</b>	<b>Oxyfluorfen</b>
<b>2-Propen-1-ol</b>	<b>Microcystin-LA</b>	<b>Profenofos</b>
<b>Alpha-hexachlorocyclohexane</b>	<b>Microcystin-LF</b>	<b>Tebuconazole</b>
<b>Anatoxin-a</b>	<b>Microcystin-LR</b>	<b>Total Microcystin</b>
<b>Butylated hydroxyanisole</b>	<b>Microcystin-LY</b>	<b>Total Permethrin (cis- &amp; trans-)</b>
<b>Chlorpyrifos</b>	<b>Microcystin-RR</b>	<b>Tribufos</b>
<b>Cylindrospermopsin</b>	<b>Microcystin-YR</b>	
<b>Dimethipin</b>	<b>Nodularin</b>	



## 2021 Chemical Analysis

### Consecutive System Meters

Meters	Total Haloacetic Acids (HAA <sub>5</sub> ) (µg/L)		LRAA Total Haloacetic Acids (HAA <sub>5</sub> ) (µg/L)	Total Trihalomethanes (TTHM) (µg/L)		LRAA Total Trihalomethanes (TTHM) (µg/L)
	Highest	Range	Average per Site	Highest	Range	Average per Site
	West Jefferson - 4251 Flat Top Road, 35073	20.9	18.1 - 20.9	19.6	30.1	20.8 - 30.1
Brookside #1 - 1298 Brookside Coalburg Road, 35181	27.9	19.5 - 27.9	22.2	25.0	15.3 - 25.0	22.1
Brookside #2 - 2299 Roberta Road, 35214	23.9	17.9 - 23.9	21.1	27.9	13.5 - 27.9	21.6
Pine Bluff #1 - 22495 State Highway 79, 35172	37.1	32.8 - 37.1	34.9	33.5	17.3 - 33.5	25.5
Pine Bluff #2 - 9 Good News Road, 35172	36.1	31.9 - 36.1	33.7	30.7	17.0 - 30.7	24.2
SCO - 3535 Colonnade Parkway, 35243	29.9	17.6 - 29.9	24.9	28.5	13.6 - 28.5	20.8
Mulga #1 - 316 Templeton Road, 35218	22.9	17.9 - 22.9	20.9	21.4	11.7 - 21.4	18.0
Mulga #2 - 601 Pleasant Grove Road, 35127	26.4	19.2 - 26.4	22.4	43.0	18.4 - 43.0	32.9
Graysville #1 - 2395 Forestdale Blvd, 35214	23.4	16.8 - 23.4	20.3	53.5	12.1 - 53.5	26.7
Graysville #2 - 4251 Flattop Road, 35073	24.6	18.9 - 24.6	21.3	36.8	20.5 - 36.8	29.7
UAB/VA - 1813 6th Avenue South, 35233	30.7	15.5 - 30.7	24.0	31.6	14.0 - 31.6	22.6

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. The Birmingham Water Works Board (BWVB) 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>.

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 any of these contaminants was not required.

The most recent testing for Lead and Copper Compliance within the distribution system was from January – June 2020. This testing was performed in accordance with applicable regulations. The 90th percentile lead sample was 0.002 mg/L. There was one sample that exceeded the action level. The 90th percentile copper sample was 0.058 mg/L. No copper samples exceeded the action level.

**Lead Service Line Lookup - Check to see if your service line is lead: <https://www.bwwbinfo.com/lead.php>**



**BU**



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BIRMINGHAM, AL 35222

An electronic, as well as a Spanish version of this document is available at [www.bwwb.org](http://www.bwwb.org). Click Water Quality Report to see the reports available for download.

Una versión electrónica, así como en español, de este documento está disponible en [www.bwwb.org](http://www.bwwb.org). Haga clic en la Calidad del Agua para ver los informes disponibles para su descargar.

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