Contaminant	Violation Y/N	Level Detected	Unit Measure- ment	MCLG	MCL	
Aluminum	N	Values Ranged BMDL to 0.0257 ppm	ppm	0.2 ppm	0.2 ppm	
Chloride	N	Values Ranged 5.5 to 9 ppm	ppm	250 ppm	250 ppm	
Color	N	All The Values Were 0 Units	Units	15 Units	15 Units	
Copper	N	Values Ranged BMDL to 0.04 ppm	ppm	l ppm	1 ppm	
Foaming Agents	N	The Single Value Was	ppm	0.5 ppm	0.5 ppm	
Iron	N	All The Values Were 0	ppm	0.3 ppm	0.3 ppm	
Manganese	N	Values Ranged BMDL to 0.02 ppm	ppm	0.05 ppm	0.05 ppm	
Silver	N	The Single Value Was	ppm	0.1 ppm	0.1 ppm	
Zinc	N	Values Ranged BMDL to 0.0069 ppm	ppm	5 ppm	5 ppm	
Sulfate	N	Values Ranged BMDL to 21 ppm	ppm	250 ppm	250 ppm	
otal Dissolved Solids	N	Values Ranged 44 to 216 ppm	ppm	500 ppm	500 ppm	

### **Report Summary**

As you can see by the enclosed tables, our system had no MCL violations. We have learned through our monitoring and testing that some constituents have been detected at levels that are deemed safe by the EPA (Environmental Protection Agency)

#### 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.

## **Additional Monitoring**

As required by EPA's Long Term 2 Surface Water Treatment Rule, The Utilities Board starts a new sampling cycle every 7 years for Cryptosporidium. We started our sampling period in October 2016, and we pulled a raw sample every month for two years. The sampling period ended in September 2018, and we had no detects. We also completed our sampling for the EPA's fourth unregulated containments rule in 2019. This sampling helps the EPA determine if an MCL will be set for a specific contaminant. The detected values are listed under the unregulated detected containments table.

#### **Educational Information**

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 (Environmental Protection Agency)/CDC (Center of Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other micro-

biological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

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.

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.

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 Sylacauga Utilities Board 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.

#### **Source Water Assessment**

The Sylacauga Utilities Board in association with the Alabama Geological Survey has completed an extensive source water assessment to identify potential contaminants sites that could pose a risk to the water supply. With the aid of the Alabama Department Of Environmental Management and The Geological Survey Of Alabama, a susceptibility analysis has been performed. The study concluded that the water supply has a low susceptibility to contamination. The public may review the report during normal business hours at the Utilities Board Operations Center located at 1414 Edwards Street. Copies are available upon request for a fee. To purchase a copy call 256-249-0372.

#### **Water Treatment Process**

Lake Howard surface water is coagulated, flocculated and settled to remove microbial and suspended solids. It is filtered by sand filtration. Fluoride is added for dental health. The PH is adjusted to prevent plumbing corrosion and chlorine is added to prevent microbial contamination.

# Annual Water Quality Report

January 1, 2021— December 31, 2021



Office 301 N. Elm Avenue Sylacauga, Alabama 35150

Operations Center 1414 Edwards Street Sylacauga, Alabama 35150

**Utilities Board Members** 

Dale Baker \* Brad Porch \* Mark Tapley

## **Water Quality Report**

In 1974 the Safe Drinking Water Act (SDWA) was signed into law requiring all water systems that serve the public to meet national standards for water quality. These standards set limits for certain contaminants and require all public water systems to monitor for these contaminants. The Utilities Board routinely tests for these constituents in your drinking water according to federal and state laws. These tests have shown that your water meets and exceeds all state and federal requirements. The tables in this report show the monitoring results beginning January 1, 2021 thru December 31, 2021. If you have any questions concerning water quality please contact Water Quality Supervisor David Green at 256-249-0372. You may also attend the monthly Board meeting held at 9:00 AM on the third Tuesday of each month at the board office located at 301 N. Elm Ave.

#### **Sources Of Water**

Operating under permit by the (ADEM) Alabama Department of Environmental Management, the Utilities Board operated the following facilities during 2021:

- Lake Howard Surface Treatment Plant. This plant is located on Water Plant Road. Lake Howard is an impoundment on Tallasseehatchee Creek, which flows out of the Talladega National Forest.
- Park Well Located on Spring and Norton near the post office.
- Pinegrove Well This well is located on Pine Grove Road in Odena

#### **Definitions**

In the following table you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms, we've provided the following definitions.

- Maximum Contaminant Level Goal 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.
- Maximum Contaminant Level The "Maximum Allowed" (MCL) is 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.
- feasible using the best available treatment technology.

  3. 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 contamination.
- Maximum Residual Disinfectant Level MRDL The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of disinfectant is necessary to control microbial contamination.
- Treatment Technique (TT) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
   Action Level (AL) The concentration of a contaminant which, if exceeded, triggers
- treatment or other requirements which a water system must follow
- 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 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) a measure of radiation absorbed by the body.
- Nephelometric Turbidity Unit (NTU) Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Variances and Exemptions The department or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- 12. ND = Not Detected
- 3. **DBP** = Disinfection Byproducts
- . PPT = Parts per trillion or nanograms per liter
- 15. PPO = Parts per quadrillion or pictograms per liter
- 16. DSE = Distribution System Evaluation
- 7. CASRN = Chemical Abstracts Service Registry Number
- 18. MRL = Minimum Reporting Level
- 9. ASTM = ASTM International; SM Standard Methods 9. BMDL = Below Minimum Detection Limit
- 21. N/A = Not Applicable
- 22. UCMR 4 = Fourth Unregulated Containments Rule
- 3. MFL = Million Fibers / Liter

		Amount	g Water Contaminar		Amount
Contaminant	MCL	Detected	Contaminant	MCL	Detected
<u>Bacteriological</u>		Т	o-Dichlorobenzene	600 ppb	ND
Total Coliform Bacteria	< 5 %	1 detect	p-Dichlorobenzene	75 ppb	ND
Turbidity	TT	0.01 to 0.18 NTU	1,2-Dichloroethane	5 ppb	ND
Fecal coliform and E. coli	0	ND	1,1-Dichloroethylene	7 ppb	ND
Fecal Indicators					
(enterococci or coliphage) Beta/photon emitters	0	ND	cis-1,2-Dichloroethylene	70 ppb	0.63 ppb
(mrem/yr)	4 mrem/yr	ND 1.8 to 2.1	trans-1,2-Dichloroethylene	100 ppb	ND
Alpha emitters (Pci/I)	15 Pci/l	pCi/l 0.67 to 0.69	Dichloromethane	5 ppb	ND
Combined radium (Pci/I)	5 Pci/I	pCi/l	1,2-Dichloropropane	5 ppb	ND
Uranium	30 Pci/l	ND	Di (2-ethylhexyl) adipate	400 ppb	ND
Inorganic Chemic	als	T	Di (2-ethylhexyl) phthalates	6 ppb	ND
Antimony	6 ppb	ND	Dinoseb	7 ppb	ND
Arsenic	10 ppb	BMDL to 0.67 ppb	Dioxin [2,3,7,8-TCDD]	30 ppq	ND
Asbestos (MFL)	7 MFL	ND	Diquat	20 ppb	ND
Barium	2 ppm	0.01 to 0.025 ppm	Endothall	100 ppb	ND
Beryllium	4 ppb	ND	Endrin	2 ppb	ND
Bromate	10 ppb	ND	Epichlorohydrin	TT	ND
Cadmium	5 ppb	ND	Ethylbenzene	700 ppb	ND
Chloramines					
	4 ppm	ND 1.6 to 2.4	Ethylene dibromide	50 ppt	ND
Chlorine	4 ppm	ppm	Glyphosate	700 ppb 60 ppb	ND
Chlorine dioxide	800 ppb	ND	HAA5 (haloacetic acids 5)	running average	0 to 54.7 ppb
Chlorite dioxide	1 ppm	ND	Heptachlor	400 ppt	ND
Chromium	100 ppb	ND See Lead and	Heptachlor epoxide	200 ppt	ND
Copper	AL=1.3 ppm	Copper Monitoring Table	Hexachlorobenzene	1 ppb	ND
Cyanide	200 ppb	ND 0.65 to 1.0	Hexachlorocyclopentadiene	50 ppb	ND
Fluoride	4 ppm	ppm See Lead and	Lindane	200 ppt	ND
	AL=15	Copper Monitoring			
Lead	ppb	Table	Methoxychlor	40 ppb	ND
Mercury	2 ppb	ND BMDL to	Oxamyl [Vydate]	200 ppb	ND
Nitrate	10 ppm	1.38 ppm	Pentachlorophenol	1 ppb	ND
Nitrite	1 ppm	ND	Picloram	500 ppb	ND
Total Nitrate and Nitrite	10 ppm	BMDL to 1.29 ppm	Polychlorinated biphenyls (PCBs)	500 ppt	ND
Selenium	50 ppb	BMDL to 0.77 ppb	Simazine	4 ppb	ND
Thallium	2 ppb	ND	Styrene	100 ppb	ND
Organic Chemica	ls		Tetrachloroethylene	5 ppb	BMDL to 3.82 ppb
		ND		1 ppm	
Acrylamide	П	ND	Toluene		ND 0.73 to 1.7
Alachlor	2 ppb	ND	TOC (Total Organic Carbon)	TT 80 ppb	ppm
Atrazine	3 ppb	ND	TTHMs [Total trihalomethanes]	running average	0 to 46.6 ppb
Benzene	5 ppb	ND 	Toxaphene	3 ppb	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	2,4,5-TP (Silvex)	50 ppb	ND
Carbofuran	40 ppb	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Carbon tetrachloride	5 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Chlordane	2 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Chlorobenzene	100 ppb	ND	Trichloroethylene	5 ppb	1 ppb
2,4-D	70 ppb	ND	Vinyl Chloride	2 ppb	ND
Dalapon	200 ppb	ND	Xylenes	10 ppm	ND

	gulated Contaminal		Amount
Contaminant	CASRN	MRL	Detected
Metals: EPA Method 200.	8, ASTM D5673-10,SM 3	125	
Germanium	7440-56-4	0.3 ppb	ND BMDL to 5
Manganese	7439-96-5	0.4 ppb	ppb
Pesticides and a Pesticid	e Manufacturing Byprod	duct: EPA Method 525.3	
Alpha-hexachlorocyclohexane	319-84-6	0.01 ppb	ND
Chlorpyrifos	2921-88-2	0.03 ppb	ND
Dimethipin	55290-64-7	0.2 ppb	ND
Ethoprop	13194-48-4	0.03 ppb	ND
Oxyfluorfen	42874-03-3	0.05 ppb	ND
Profenofos	41198-08-7	0.3 ppb	ND
Tebuconazole	107534-96-3	0.2 ppb	ND
Total Permethrin (cis- & trans-)	52645-53-1	0.04 ppb	ND
Tribfos	78-48-8	0.07 ppb	ND
Alcohols and Semivolatil	e Chemicals: EPA Metho	od 541 & 530	
1-Butanol	71-36-3	2.0 ppb	ND
2-Methoxyethanol	109-86-4	0.4 ppb	ND
2-Propen-1-ol	107-18-6	0.5 ppb	ND
Butylated Hydroxyanisole	25013-16-5	0.03 ppb	ND
O-Toluidine	95-53-4	0.007	ND
Quinoline	91-22-5	0.02	ND
Brominated haleoacetic a	cid (HAA) disinfection t	by products groups	
HAA5 (haloacetic acids 5)	552.3	N/A	0 to 106.4 ppb
HAA6 (haloacetic acids 6)	552.3	N/A	0 to 108.7 ppb
HAA9 (haloacetic acids 9)	552.3	N/A	0 to 108.7 ppb
(Indicators) TOC	5310 C	1000 ppb	BMDL to 2760 ppb
(Indicators) Bromide			BMDL to
	300.0	20 ppb	44.7 ppb
Organic Chemicals			BMDL to
Bromodichloromthane	524.2	0.2 ppb	3.97 ppb BMDL to
Chloroform	524.2	0.4 ppb	0.131 ppm
Cynatoxins Total Microcystins & Nodu-			
larins	546	0.300 ppb	ND
Anatoxin-a	545	0.0300 ppb	ND
Cylindrospermopsin	545	0.0900 ppb	ND
			1
		-	1

		Detecte	ed Co	ontan	ninates	Table
Contaminant	Violation Y/N	Level Detected	Unit Measure- ment	MCLG	MCL	Possible Source Of Contamination
		Micr			Contamina	
Turbidity *	N	Values ranged from 0.01 To 0.18 NTU 100 % Of All Samples Met Turbidity Requirements	NTU	N/A	TT Less Than 5% Of All Filter Samples May Exceed .3 NTU	Soil runoff
Total Coliform Bacteria (including fecal coliform and E. coli)	N	378 samples were collected with 1 detect. (All repeat samples had no detects)	Colonies	of coliform of monthly routine san up repeat s coliform po	MCL - presence a bacteria in < 5% samples or if a aple and a follow ample are total ositive and one is soliform or e-coli	Human and animal fecal waste
* Turbidity is	s the 1	turbidity can	hinder	the effect	itor it becausiveness of dis	
Arsenic	N	Values ranged from	ppb	10 ppb	10 ppb	Discharge from petroleum refiners; fire
Barium	N	BMDL to 0.67ppb Values ranged from 0.0122 to 0.025 ppm	ppm	2 ppm	2 ppm	retardants; ceramics; electronics; solder  Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine	N	Values ranged from 1.6 to 2.4 ppm Highest Running Annual Average is 2.1 ppm	ppm	MRDLG 4 ppm	MRDL 4 ppm	Water Additive To Control Microbes
Fluoride	N	Values ranged from 0.65 to 1.0 ppm	ppm	4 ppm	4 ppm	Erosion Of Natural Deposits; Water Additive Which Promotes Strong Teeth; Discharge From Fertilizer And Aluminum Factories
Nitrates	N	Values ranged from BMDL to 1.38 ppm	ppm	10 ppm	10 ppm	Runoff From fertilizer Use; Leaching From Septic Tanks, Sewage; Erosion Of Natural Deposits
Nitrite and total Nitrates	N	Values ranged from BMDL to 1.38 ppm	ppm	10 ppm	10 ppm	Runoff From fertilizer Use; Leaching From Septic Tanks, Sewage; Erosion Of Natural Deposits
Selenium	N	Values ranged from BMDL to 0.77 ppb	ppb	50 ppb	50 ppb	Discharge from petroleum and metal refiners; Erosion of natural deposits; Discharge from minerals
		Synthetic Or				
Gross Alpha	N	Values ranged from 1.8 to 2.9	Pci/l	adiolog	15 Pci/l	Erosion of natural deposits
Radium-228	N	Pci/l  Values ranged from 0.67 to	Pci/I	0	5 Pci/l	-
Kaululli-228	IN	0.69 Pci/l				Erosion of natural deposits
Cis-1,2	N	Vola Values ranged from 0 to 0.63	tile Or	ganic (	Contamina 70	Discharge from industrial chemical factories
Dichloroeth- ylene HAA5	N	ppb  Values ranged from 0 to 54.7	ppb	0	60 ppb	By Product Of Drinking Water
		ppb Running averages ranged from 0 to 42.5 ppb	PP-		Running Annual Average	Chlorination
Tetrachloro- ethylene	N	Values ranged from BMDL to 8.63 ppb with The Highest Running Average Of 3.82 ppb	ppb	0	5 ppb Running Annual Average	Leaching From PVC Pipes; Discharge From Factories And Dry Cleaners
Total Organic Carbons	N	Values ranged from 0.73 to 1.73 ppm and Treat- ment 35% removal was obtained	ppm	N/A	TT	Naturally Present In The Environment
Total Trihalome- thanes	N	Values ranged from 0 to 46.6 ppb	ppb	0	80 ppb Running Annual	By Product Of Drinking Water Chlorination
TTHMs		Running averages ranged from 0 to 38.5 ppb	CLAA	nd MCI	Average	not been established for these
Unite	yuıa	ted Contaminants - M		nd MCI ontamii		not been established for these
Bromodi- chlorometha ne	N	Values ranged from BMDL to 3.15 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA5 groups	N	Values ranged from 0 to 20.31 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA6 groups	N	Values ranged from 0 to 31.1 ppb	ppb	N/A	N/A	Byproduct of chlorination
HAA9 groups	N	Values ranged from 0 to 32.44 ppb	ppb	N/A	N/A	Byproduct of chlorination
Chloroform	N	Values ranged from BMDL to 0.131 ppm	ppm	N/A	N/A	Byproduct of chlorination
Manganese	N	Values ranged from BMDL to 5 ppb	ppb	N/A	N/A	Naturally-occurring element; commercially available in combination with other elements an minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrie
		Lead : The most recent			onitoring T	
Lead	N	Values ranged from Below Detection Limits To 4.8 ppb The 90th	ppb	0	AL = 15 ppb	Corrosion Of Household Plumbing Systems; Erosion Of Natural Deposits
Copper	N	Percentile Was 1.7 ppb Values ranged from From 0.0056 to 0.343 ppm The 90th Percentile Was 0.166 ppm	ppm	1.3 ppm	AL=1.3 ppm	Corrosion Of Household Plumbing Systems; Erosion Of Natural Deposits; Leaching From Wood Preservatives



The Utilities Board of the City of Sylacauga ("the Board") owns, maintains and operates a water system consisting of two wells, two water supply reservoirs (Lake Howard and Lake Virginia), a conventional surface water treatment plant, water transmission and distribution mains, six (6) water booster pumping stations and ten (10) water storage tanks.

The Board currently supplies an average of 3.2 million gallons of potable water per day to 7,550 residential, commercial and industrial customers in and contiguous to the City of Sylacauga. The maximum peak demand for potable water during 2021 was 4.98 million gallons per day.

The primary source of potable water is the Pine Grove Well. This well was constructed in 2009 and placed in service on January 12, 2010. The Pine Grove Well has a capacity of 2.16 million gallons per day or 1500 gallons per minute. Park Well located behind the Chamber of Commerce near the tennis courts has a capacity of .5 million gallons per day or 300 gallons per minute.

The Lake Howard Water Treatment Plant is now operated as a peaking plant and is used when the water demand exceeds the capacity of the wells.

Lake Howard has a water storage capacity of 1,075 million gallons while Lake Virginia has a storage capacity of 552 million gallons. The "safe" combined yield of Lake Howard and Lake Virginia is approximately 9.944 million gallons per day during extreme 120-days drought conditions.

The ten storage tanks in the system have a combined storage capacity of 7.68 million gallons. The distribution system consists of approximately 258 miles of pipe ranging in size from 2 inch to 24 inch in diameter. There are 763 fire hydrants located within the system.