

DU Main Office Hours Monday- Friday, 8 a.m.- 4:30 p.m.

Board Members

Chairman: Neal A. Holland Jr. Term: July 1, 2014 - June 30, 2023

Secretary: Tom Counts Term: July 1, 2017 - June 30, 2026

Member: Al Cheatham Term: January 2, 2020 - June 30, 2029

DECATUR UTILITIES WATER SOURCE

Decatur Utilities serves approximately 25,000 customers in all portions of the City of Decatur and routinely provides water to the City of Hartselle, Northeast Morgan County Water District, Limestone County, and the Town of Trinity. West Morgan East Lawrence Water District has the capability to buy water from Decatur Utilities upon request.

We obtain 100% of our water from Wheeler Reservoir on the Tennessee River. Our Water Treatment Plant has the capacity to treat 68 million gallons per day (MGD) of raw water. Chemical treatment consists of sodium permanganate for oxidation, fluoride to promote dental health, polyaluminum chloride for coagulation, lime for pH adjustment, polyorthophosphate for stabilization, and chlorine for disinfection. There are four in-ground water storage tanks and six elevated storage tanks which provide a combined storage capacity of 23,967,000 gallons of water.

SOURCE WATER ASSESSMENT

Our goal is to protect our water supply from any future contamination. The Alabama Department of Environmental Management (ADEM) and the Tennessee Valley Authority (TVA) prepared a Source Water Assessment Program (SWAP) report on our water supply in 2000. The SWAP was last updated in 2021. The SWAP report assessed the susceptibility of our untreated water sources to potential contamination. Our water system was rated as having a moderate risk from contamination. This report is available for review at the DU Main Office during normal business hours or by appointment.

To learn more about Decatur Utilities and your water supply, we encourage you to attend any of our monthly DU Board Meetings held at our Main Office located at 1002 Central Parkway SW. Please call 256-552-1400 to confirm the date and time of upcoming board meetings.

LEAD AND DRINKING WATER

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 private service lines and home plumbing. DU is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Lead is rarely found in source water.

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 two minutes before using the 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 Hot-line (800-426-4791) or at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

DEFINITIONS AND ABBREVIATIONS

Action Level (AL) - the concentration of a contaminant that, if exceeded, triggers some follow-up action.

Alabama Department of Environmental Management (ADEM) - the state environmental regulatory agency.

Alabama Water Pollution Control Association (AWPCA) - a charitable organization to advance knowledge about water supply and treatment .

Coliform Absent (ca) - Laboratory analysis indicates coliform bacteria not present.

Disinfection Byproducts - formed when disinfectants used in water treatment plants react with natural organic matter present in the source water and produce byproducts. **Distribution System Evaluation (DSE)** - a one-year study conducted by water systems to monitor disinfection byproducts.

Environmental Protection Agency (EPA) - the nation's environmental regulatory agency. Maximum Contaminant Level (MCL) - highest level of contaminant allowed in drinking water. Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health.

 $\label{eq:maximum residual Disinfection Level (MRDL) - maximum levels for disinfectants, set as close to the health goals as possible.$

Maximum Residual Disinfection Level Goal (MRDLG) - non-enforceable health goals, based on possible health risks and exposure over a lifetime, with an adequate margin of safety. Microsiemens (1/1,000,000 siemen) per centimeter (μ S/cm) – a measure of Specific Conductance.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body. Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water.

Non- Detects (ND) - laboratory analysis indicates that the contaminant is not present at a detectable level.

Not Required (NR) - laboratory analysis not required due to waiver.

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

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

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

 ${\bf Running}\ {\bf annual}\ {\bf average}\ ({\bf RAA})$ - the required method of calculating compliance on disinfection byproducts, TTHM and HAA5.

Specific Conductance (SC) – A measure of how well water can conduct an electrical current Threshold Odor Number (TON) - the greatest dilution of a sample with odor-free water that yields a barely detectable odor.

Freatment Technique (TT) - a required process to reduce a contaminant.

Unregulated Contaminant Monitoring Rule (UCMR) - EPA program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

2022 ANNUAL WATER QUALITY REPORT

Testing Performed January - December 2021



P.O. Box 2232 (35609) 1002 Central Parkway SW Dectur, AL 35601

Phone 256-552-1400 www.decaturutilities.com

AWARDS OF EXCELLENCE

The Decatur Utilities Water Treatment Plant has been recognized numerous times for outstanding service, and has received multiple awards of excellence over the years.

The most recent awards are:



AWPCA Best Operated Plant Award three consecutive years (2018-2020)

AWPCA Best Operated Distribution System (2020)

ADEM Optimized Plant Award eight consecutive years (2013-2020)

MESSAGE FROM THE GENERAL MANAGER

Decatur Utilities is proud to present this year's Annual Water Quality Report. This report is designed to inform you about the source and quality of your drinking water. We have prepared this report using the data from water quality tests conducted for the water system from January through December 2021.

At Decatur Utilities we deliver more than high quality water. We deliver a key resource for public health, fire protection, industry, the economy, and the overall quality of life we enjoy in North Alabama.

We also deliver great value. Our current residential rates continue to be among the lowest in the state. We take great pride in "providing safe, reliable utility service at the lowest possible rates while meeting the needs of customers and employees."

If you have any questions or concerns about this report or your water utility, please contact our Water Treatment Plant at (256) 552-1480. To obtain additional copies of this report, please call Customer Service at (256) 552-1400 or visit us online at www. decaturutilities.com.

More information about contaminants in drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot-line at (800) 426-4791.

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Ray Hardin, General Manager





PLEASE SHARE THIS REPORT

Landlords, businesses, schools, hospitals and other groups are encouraged to share this information water quality information with water users at their location

DRINKING WATER INFORMATION

The sources of drinking water (both tap water and boiled 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.

All drinking water, including boiled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCLs, defined in the **Definitions and Abbreviations** in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Contaminants that may be present in source water include: <u>Microbial</u> <u>contaminants</u>, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic contaminants</u>, such as salts and metals, which can be naturallyoccurring or from urban storm water runoff, wastewater discharges, oil/ gas production, mining, or farming. Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

<u>Organic chemical contaminants</u>, 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.

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

In order to ensure 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 (FDA) regulations establish limits for contaminants in boiled water.

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. People at risk should seek advice about drinking water from their health care providers.

Decatur Utilities also tests your source water for pathogens, such as Cryptosporidium and Giardia. These pathogens can enter the water from animal or human waste. General information for immune-compromised persons is available on the official website of the Center for Disease Control at <u>www.cdc.gov/parasites/crypto/gen info/infect ic.html</u> or from the Safe Drinking Water Hot-line at (800) 426-4791. This language does not indicate the presence of cryptosporidium in our drinking water.

MONITORING SCHEDULE

The Environmental Protection Agency (EPA) Safe Drinking Water Act (SDWA) and the State of Alabama Department of Environmental Management (ADEM) regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals (VOCs), lead and copper, and synthetic organic chemicals (SOCs).



Decatur Utilities has been granted a waiver to reduce sampling for Lead/ Copper and SOCs to once every three years. This is based on prior sampling events not detecting these contaminants. Based on a study conducted by ADEM with EPA approval, a statewide waiver for monitoring of asbestos and dioxin was issued. Therefore, these contaminants were not sampled. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituents Monitored	Date Monitored		
Inorganic Contaminants	2021		
Lead/Copper	2021		
Microbiological Contaminants	2021		
Nitrates	2021		
Radioactive Contaminants	2021		
Synthetic Organic Contaminants	2020		
Volatile Organic Contaminants	2021		
Disinfection Byproducts	2021		
Cryptosporidium	2017		
UCMR4	2019-2020		
DSE Disinfection Byproducts	2017		

The EPA's **Unregulated Contaminant Monitoring Rule 4 (UCMR4)** required some water systems to monitor for 30 unregulated contaminants during 2018-2020. Our system began sampling in 2019 and the results are shown below.

UCMR4 DETECTED UNREGULATED CONTAMINANTS						
Contaminant	Average Amount detected (ug/L)	Range (ug/L)				
Raw Water (Before Water Treatment Plant)						
Bromide	21.1	21.1				
Total Organic Carbon	1,668	1,450 - 1,970				
Entry Point Data (Water Treatment Plant)						
Manganese	1.13	0.46 - 1.8				
Distribution System Data						
HAA5	25.51	14.40 - 42.10				
HAA6Br	7.45	4.90 - 11.40				
HAA9	32.51	20.60 - 49.60				

As shown in the table of **Detected Drinking Water Contaminants** below, our system had no violations. We have determined through our monitoring and testing that some constituents have been detected. For assistance interpreting these tables, reference the Definitions and Abbreviations section on the reverse side.

DETECTED DRINKING WATER CONTAMINATES									
Contaminant Type	Violation YES/NO	Level Detected	Range	Unit Msmt	MCLG	MCL	Likely Source of Contamination		
Primary Contaminants									
							Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural		
Barium	NO	0.019	0.019	ppm	2.0	2.0	deposits		
Chlorine	NO	RAA 2.61	2.31-2.85	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes		
Total Organic Carbon	NO	RAA 1.1	0.8-1.3	ppm	n/a	TT	Soil runoff		
Turbidity (filtered)	NO	Highest 0.109	0.022-0.109	NTU	n/a	TT	Soil runoff		
							Corrosion of household plumbing systems; erosion of natural deposits; leaching from		
Copper***	NO	0.31*	0.020-0.64	ppm	1.3	AL=1.3	preservatives;		
							Erosion of natural deposits; water additive which promotes strong teeth; discharge		
Fluoride - WTP	NO	0.89	0.07-0.89	ppm	4	4	from factories		
Lead***	NO	ND**	ND-2.5	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits		
							Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural		
Nitrate (as Nitrogen)	NO	0.35	0.35	ppm	10	10	deposits		
TTHM [Total trihalomethanes]	NO	HRRA 33.6	11.3 - 49.0	ppb	0	80	By-product of drinking water chlorination		
HAA5 [Total haloacetic acids]	NO	HRRA 25.6	7.3 - 42.9	ppb	0	60	By-product of drinking water chlorination		
Gross Alpha	NO	0.114	0.114	pCi/L	0	15	Erosion of natural deposits		
Radium-228	NO	0.62	0.62	pCi/L	0	5	Erosion of natural deposits		
Unregulated Contaminants									
Chloroform	NO	0.013	0.013	ppm	n/a	n/a	Naturally occurring in the environment or from runoff		
Bromodichloromethane	NO	0.004	0.004	ppm	n/a	n/a	Naturally occurring in the environment or from runoff		
Chlorodibromomethane	NO	ND	ND	ppm	n/a	n/a	Naturally occurring in the environment or from runoff		
Secondary Contaminants									
Alkalinity, Total (as CA, Co3)	NO	60	34-66	ppm	n/a	none	Caused by carbonates, bicarbonates, hydroxides, phosphates, silicates		
Aluminum	NO	0.021	0.021	ppm	n/a	0.2	Erosion of natural deposits: treatment with additives		
Calcium, as Ca	NO	21.1	21.1	ppm	n/a	none	Naturally occurring in the environment; dissolved minerals		
Carbon Dioxide	NO	10.9	10.9	ppm	n/a	none	Naturally occurring in the environment		
Chloride	NO	15.8	15.8	ppm	n/a	250	Naturally occurring in the environment or from runoff		
Color	NO	9	ND-9.0	units	none	15	Naturally occurring in the environment or water treatment		
Hardness, as CaCO3	NO	69.0	69.0	ppm	n/a	n/a	Naturally occurring in the environment or from runoff		
Iron	NO	0.1	ND-0.10	ppm	none	0.3	Naturally occurring in the environment; erosion; leaching from pipes		
Magnesium, as Mg	NO	4.0	4.0	mqq	none	none	Naturally occurring in the environment: dissolved minerals		
Manganese, as Mn	NO	0.029	ND-0.029	mag	none	0.05	Naturally occurring in the environment		
H	NO	7.19	6.80-7.30	S.U	n/a	n/a	Naturally occurring in the environment or from runoff		
Sodium	NO	4.7	4.7	mqq	n/a	n/a	Naturally occurring in the environment		
Specific Conductance	NO	156	156	umhos/cm	n/a	n/a	Measure of how well water can conduct an electrical current		
Sulfate	NO	8.5	8.5	ppm	n/a	250	Naturally occurring in the environment or from runoff		
Total Dissolved Solid	NO	105	105	ppm	n/a	500	Naturally occurring in the environment or from runoff		
Distribution System Evaluation (DS	E) Contamir	ants (2017)							
TTHM [Total trihalomethanes]	NO	Avg. 20.1	5.1 - 56.0	ppb	0	80	By-product of drinking water chlorination		
HAA5 [Total haloacetic acids]	NO	Avg 18.0	9 2 - 36 1	nnh	0	60	By-product of drinking water chlorination		
	110		5.2 50.1	646	0	00	by produce of annual water enformation		

* Fig. shown is 90th percentile. **Fig. shown is 90th percentile ***No sites above action level. Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing. These contaminants were not detected in your drinking water unless they are also listed in the **Detected Drinking Water Contaminants** table.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of
Bacteriological Contamir	ants		trans-1.2-Dichloroethylene	100	ppb
		present/	trans-1,2-Dichloroethylene	5	hhn
Total Coliform Bacteria	<5%	absent present/	Dichloromethane		ppb
Fecal Coliform and E. coli	0	absent	1,2-Dichloropropane	5	ppb
Turbidity	тт	NTU	Di (2-ethylhexyl)adipate	400	ppb
Cruptosporidium	TT	Calc. organ- isms/l	Di (2-ethylhexyl)phthalate	6	ppb
Radiological Contaminan	ts		Dinoseb	7	ppb
Beta/photon emitters	4	mrem/yr	Dioxin [2,3,7,8-TCDD]	30	ppq
Alpha emitters	15	pCi/l	Diquat	20	ppb
Combined radium	5	pCi/l	Endothall	100	ppb
Uranium	30	pCi/l	Endrin	2	ppb
Inorganic Chemicals			Epichlorohydrin	тт	TT
Antimony	6	ppb	Ethylbenzene	700	ppb
Arsenic	10	ppb	Ethylene dibromide	50	ppt
Asbestos	7	MFL	Glyphosate	700	ppb
Barium	2	ppm	Heptachlor	400	ppt
Beryllium	4	ppb	Heptachlor epoxide	200	ppt
Cadmium	5	ppb	Hexachlorobenzene	1	ppb
Chromium	100	ppb	Hexachlorocyclopentadiene	50	ppb
Copper	AL=1.3	ppm	Lindane	200	ppt
Cyanide	200	ppb	Methoxychlor	40	ppb
Fluoride	4	ppm	Oxamyl [Vydate]	200	ppb
Lead	AL=15	ppb	Polychlorinated biphenyls	0.5	ppb
Mercury	2	ppb	Pentachlorophenol	1	ppb
Nitrate	10	ppm	Picloram	500	ppb
Nitrite	1	ppm	Simazine	4	ppb
Selenium	0.05	ppm	Styrene	100	ppb
Thallium	0.002	ppm	Tetrachloroethylene	5	ppb
Organic Contaminants			Toluene	1	ppm
2, 4-D	70	ppb	Toxaphene	3	ppb
Acrylamide	TT	т	2,4,5-TP(Silvex)	50	ppb
Alachlor	2	ppb	1,2,4-Trichlorobenzene	0.07	ppm
Atrazine	3	ppb	1,1,1-Trichloroethane	200	ppb
Benzene	5	dad	1.1.2-Trichloroethane	5	daa
Benzo(a)pyrene (PAHs)	200	ppt	Trichloroethylene	5	ppb
Carbofuran	40	ppb	Vinyl Chloride	2	ppb
Carbon tetrachloride	5	ppb	Xylenes	10	ppm
Chlordane	2	ppb	Disinfectants & Disinfectio	n Byproc	lucts
Chlorobenzene	100	ppb	Chlorine	4	ppm
Dalapon	200	ppb	Chlorine Dioxide	800	ddd
Dibromochloropropane	200	ppt	Chloramines	4	maa
o-Dichlorobenzene	600	dad	Bromate	10	daa
p-Dichlorbenzene	75	dad	Chlorite	1	maa
1.2-Dichlorethane	5	dad	HAA5 [Total haloacetic acids]	60	daa
1.1-Dichlorethane	7	dad	TTHM [Total trihalomethanes]	80	daa
cis-1.2-Dichlorethylene	70	dad	Total Organic Carbon	Π	maa
Unregulated Contaminar	nts	- 19 F		<u> </u>	- PP
1,1 – Dichloropropene	Aldicarb		Chloroform	Metolachlo	r
1,1,1,2-Tetrachloroethane	Aldicarb Sulfone		Chlorodibromomethane Chloromethane	Metribuzin N - Butylbenzene	
1,1-Dichloroethane	Aldrin		Dibromomethane	Naphthalene	
1,2,3 - Trichlorobenzene	Bromobenzene		Dicamba Dichlorodifluoromethane	N-Propylbenzene O-Chlorotoluene	
1,2,4 - Trimethylbenzene	Bromodichloromethane		Dieldrin	P-Chlorotoluene	
1,3 – Dichloropropane	Bromoform		Hexachlorobutadiene	P-Isopropyltoluene Propachlor	
1,3,5 - Trimethylbenzene	Butachlor		M-Dichlorobenzene	Sec - Butylbenzene	
2,2 – Dichloropropane	Carbaryl		Methomyl	Tert - Butylbenzene Trichlorfluoromethano	
Secondary Contaminants		memornuo	omediane		
Alkalinity, Total (CA, Co3)	Corrosivity	1	Magnesium	Sodium	
Aluminum	Foaming agents		Manganese	Sulfate	
Calcium, as Ca Chlorido	(MBAS) Hardness		Odor	Total Dissolved Solids	
Color	Hardness Iron		Nickel	Zinc Zinc	
Copper	Langelier Index		Silver		
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