

2024 Annual Water Quality Report

Beaver Water District, P.O. Box 400, Lowell, Arkansas 72745-0400.

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Unregulated Constituents - Monitored by ADH and BWD *

Physical and Chemical Parameters	Units	BWD
Alkalinity (Phenolphthalein) *	ppm as CaCO ₃	0
Alkalinity (Total) *	ppm as CaCO ₃	52 (avg)
Calcium *	ppm as Ca	26 (avg)
Range of Results	ppm as Ca	19-33
Conductivity *	µS/cm	196 (avg)
Hardness (Total) *	ppm as CaCO ₃	73 (avg)
Range of Results	ppm as CaCO ₃	53-93
Magnesium	ppm as Mg	2.12
Nickel	ppm	ND
Potassium	ppm	ND
Sodium	ppm	8.72

PRIMARY STANDARDS - Health Related and Mandated by U.S. EPA & ADH

Disinfectant	Units	MRDLG	MRDL	BWD
Total Residual Chlorine* (Average)	ppm	4.0	4.0	1.58
Range of Results	ppm			1.37-1.74
Chlorine Dioxide*	ppm	0.8	0.8	0.05 (avg)
Clarity	Units	MCLG	MCL	BWD
Turbidity * (Treated Finished Water)			>0.3 NTU in	
Highest yearly sample result	NTU	n/a	>5% of samples	0.18
Average NTU	NTU		or any 1	0.07
Lowest % of samples meeting limit	%		sample>1 NTU	100
Microbiological	Units	MCLG	MCL	BWD
Total Coliform Bacteria	P/A	0	5%/month	0
Fecal Coliform or <i>Escherichia coli</i>	P/A	0	0	0
Inorganic Chemicals	Units	MCLG	MCL	BWD
Antimony	ppb	6	6	ND
Arsenic	ppb	0	10	ND
Asbestos	MFL	7	7	Waiver
Barium	ppm	2	2	0.022
Beryllium	ppb	4	4	ND
Cadmium	ppb	5	5	ND
Chlorite*	ppm	0.8	1.0	0.28 (avg)
Chromium	ppb	100	100	ND
Copper	ppm	1.3	AL=1.3	ND
Cyanide	ppb	200	200	ND
Fluoride* (Average)	ppm	4.0	4.0	0.67
Range of Results	ppm			0.48-0.86
Lead	ppb	0	AL=15	ND
Mercury	ppb	2	2	ND
Nitrate (NO ₃ -N) *	ppm	10	10	0.47 (avg)
Selenium	ppb	50	50	ND
Thallium	ppb	0.5	2	ND

There were no violations of the EPA Safe Drinking Water Act by Beaver Water District in 2024.

Definitions

MCLG or Maximum Contaminant Level Goal: 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.

MCL or Maximum Contaminant Level: 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, BAT.

MRDLG or Maximum Residual Disinfectant Goal: The level of a drinking disinfectant below which there is no known or expected risk to health.

MRDL or Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water.

TT or Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

AL or Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

mrem/yr = millirems per year (a unit of absorbed radiation dose)

ND = Non-detected, constituent not present at detection limit

NTU = Nephelometric Turbidity Units

P/A = Presence / Absence or Present / Absent

pCi/L = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (ug/l)

RAA = Running Annual Average

uS/cm = microSiemens per centimeter

Waiver = an exemption to perform monitoring issued by the ADH based on system evaluations

Radionuclides	Units	MCLG	MCL	BWD
Ra-228	pCi/L	0	•5 pCi/L	ND
Ra-226	pCi/L	0	•5 pCi/L	ND
Sr-89 Activity	pCi/L	0	•4 mrem/yr	ND
Sr-90 Activity	pCi/L	0	•4 mrem/yr	ND
Tritium (Average)	pCi/L	0	•4 mrem/yr	ND
Uranium	ppb	0	30	ND

* Tritium and Strontium are Beta particle emitters and fall in the combined 4 mrem/yr MCL of the Gross Beta particles.

SECONDARY STANDARDS - Aesthetic Standards Recommended by EPA & ADH

Physical Parameters	Units	MCLG	BWD
Apparent Color	units	15	0
pH * (Average)	units	6.5 - 8.5	8.4
Inorganic Chemicals	Units	MCLG	BWD
Aluminum	ppm	0.05 - 0.2	ND
Chloride	ppm	250	8.1
Corrosivity * (Average)	SI	Non-corrosive	-0.07
Langelier Saturation Index			
Iron	ppm	0.3	ND
Manganese	ppm	0.05	ND
Silver	ppm	0.1	ND
Sulfate	ppm	250	26.9
Total Dissolved Solids *	ppm	500	111 (avg)
Zinc	ppm	5	ND

* Analyzed and reported by Beaver Water District. All other analyses in this report by ADH.

<u>Volatile Organic Contaminants (VOCs) - Regulated</u>	<u>Units</u>	<u>MCLG</u>	<u>MCL</u>	<u>BWD</u>
Total Trihalomethanes (TTHMs)				
Highest Running 12 Month Average	ppb	N/A	80	41
Range of quarterly samples				10.6 - 52.2
Haloacetic Acids 5 (HAA5)				
Highest Running 12 Month Average	ppb	N/A	60	37
Range of quarterly samples				12.8 - 51.8
Benzene	ppb	0	5	ND
Carbon Tetrachloride	ppb	0	5	ND
Chlorobenzene	ppb	100	100	ND
o-Dichlorobenzene (1,2-Dichlorobenzene)	ppb	600	600	ND
p-Dichlorobenzene (1,4-Dichlorobenzene)	ppb	75	75	ND
1,2-Dichloroethane	ppb	0	5	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	ppb	7	7	ND
cis-1,2-Dichloroethene (c-1,2-Dichloroethylene)	ppb	70	70	ND
trans-1,2-Dichloroethene (t 1,2-Dichloroethylene)	ppb	100	100	ND
Dichloromethane (Methylene Chloride)	ppb	0	5	ND
1,2-Dichloropropane	ppb	0	5	ND
Ethylbenzene	ppb	700	700	ND
Styrene	ppb	100	100	ND
Tetrachloroethene (Tetrachloroethylene)	ppb	0	5	ND
Toluene	ppm	1	1	ND
1,2,4-Trichlorobenzene	ppb	70	70	ND
1,1,1-Trichloroethane	ppb	200	200	ND
1,1,2-Trichloroethane	ppb	3	5	ND
Trichloroethene (Trichloroethylene)	ppb	0	5	ND
Vinyl Chloride	ppb	0	2	ND
Xylenes, Total	ppm	10	10	ND

Disinfection By-Product Precursors - Monitored by ADH

<u>Parameter</u>	<u>Removal Ratio Required</u>	<u>BWD</u>
Total Organic Carbon (TOC)	≥1.00	1.40

<u>Synthetic Organic Contaminants (SOCs) - Unregulated</u>	<u>Units</u>	<u>BWD</u>
2,4,5-T	ppb	ND
3-Hydroxycarbofuran	ppb	ND
Baygon	ppb	ND
Carbaryl	ppb	ND
Dicamba	ppb	ND
Methiocarb	ppb	ND
Methomyl	ppb	ND
Paraquat	ppb	ND

<u>Synthetic Organic Contaminants (SOCs) - Regulated</u>	<u>Units</u>	<u>MCLG</u>	<u>MCL</u>	<u>BWD</u>
2,4-D	ppb	70	70	ND
2,4,5-TP (Silvex)	ppb	50	50	ND
Alachlor	ppb	0	2	ND
Aldicarb	ppb	1	3	ND
Aldicarb Sulfone	ppb	1	3	ND
Aldicarb Sulfoxide	ppb	1	4	ND
Atrazine	ppb	3	3	ND
Benzo(a)pyrene (PAH)	ppb	0	0.2	ND
Bis (2-ethylhexyl) adipate	ppb	400	400	ND
Bis (2-ethylhexyl) phthalate	ppb	0	6	ND
Carbofuran	ppb	40	40	ND
Chlordane	ppb	0	2	ND
Dalapon	ppb	200	200	ND
Dibromochloropropane (1,2-Dibromo-3-chloropropane, DBCP)	ppb	0	0.2	ND
Dinoseb	ppb	7	7	ND
Diquat	ppb	20	20	ND
Endothall	ppb	100	100	ND
Endrin	ppb	2	2	ND
Ethylene dibromide (1,2-Dibromoethane, EDB)	ppb	0	0.05	ND
Glyphosate	ppb	700	700	ND
Heptachlor	ppb	0	0.4	ND
Heptachlor epoxide	ppb	0	0.2	ND
Hexachlorobenzene	ppb	0	1	ND
Hexachlorocyclopentadiene (HEX)	ppb	50	50	ND
Lindane	ppb	0.2	0.2	ND
Methoxychlor	ppb	40	40	ND
Oxamyl (Vydate)	ppb	200	200	ND
PCBs (Polychlorinated biphenyls)	ppb	0	0.5	ND
Pentachlorophenol (PCP)	ppb	0	1	ND
Picloram	ppb	500	500	ND
Simazine	ppb	4	4	ND
Toxaphene	ppb	0	3	ND