2018 Annual Water Quality Report

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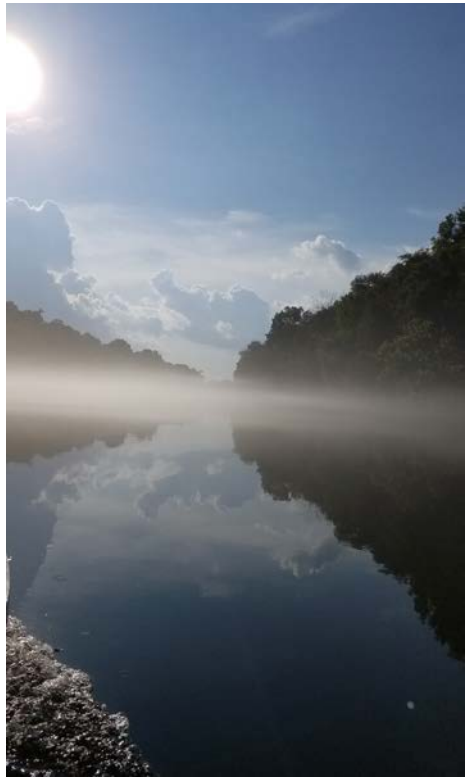


PRESENTED TO OUR CUSTOMERS BY:

Board of Directors

Ron Johnson – Chairman

Fred Braswell – Vice-Chairman

Bill Newton – Director

Robert L. Prince Jr. – General Manager

Tina Stanley – Secretary

Table of Detected Contaminants (2018)

CONTAMINANT	MCLG	MCL	Units	Elmore		Likely Source of Contamination
Bacteriological	**Jan 1, 2018- Dec 31, 2018**			**Highest Detected Level**	**Range of Detected Levels**	
Total Coliform Bacteria	NA	< 5%	Present or Absent	Coliform Absent	Coliform Absent	Naturally present in the environment
Turbidity	NA	TT	NTU	0.117	.013 - .117	Soil runoff
Radiological	**Jan 1, 2018- Dec 31, 2018**			**Highest Detected Level**	**Range of Detected Levels**	
Radium 228	NA	15	PCI/L	ND	ND	Erosion of natural products
Inorganic Chemicals	**Jan 1, 2018- Dec 31, 2018**			**Highest Detected Level**	**Range of Detected Levels**	
Copper	1.3	AL=1.3	ppm	.278= (90th) Percentile	Zero sites above action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	AL=.015	ppm	.002= (90th) Percentile	Zero sites above action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	ppm	0.74	0.74	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	10	10	ppm	0.092	0.092	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	2	2	ppm	0.0120	0.0120	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Antimony	0.001	0.001	ppm	0.0008	0.0008	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	0	0.001	ppm	0.0003	0.0003	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Organic Chemicals	**Jan 1, 2018- Dec 31, 2018**			**Highest Detected Level(Avg)**	**Range of Detected Levels**	
TTHM	NA	0.08	ppm	0.066	.026 - .066	By-product of drinking water chlorination
Haloacetic Acid	NA	0.06	ppm	0.041	.024-.041	By-product of drinking water chlorination
Total Organic Carbon(TOC)	NA	TT	ppm	1.15	.66 - 1.15	Naturally present in the environment
Chlorine Dioxide	0	60	ppm	NA	NA	Water additive used to control microbes
Chlorite	0	60	ppm	NA	NA	By-product of drinking water disinfectant

Un-regulated Contaminant Table

CONTAMINANT	Average Detected Level	Range of Detected Levels
Bromodichloromethane (ppm)	0.0050	.003 - .008
Monochloroacetic acid (ppm)	0.002	ND - .005
Trichloroacetic acid (ppm)	0.044	.007-.015
Dichloroacetic acid (ppm)	0.021	.012-.036
Chloroform(ppm)	0.045	.027 - .074
Dibromochloromethane(ppm)	0.0005	.0003 - .001

UCMR4 Testing 2018

CONTAMINANT	MCL	DETECTED
Total Microcystins	NA	ND
Anatoxin-a	NA	ND
Cylindrospermopsin	NA	ND

Secondary & Physical Contaminants Table

CONTAMINANT	Highest Detected Level	Range of Detected Levels
Calcium (ppm)	2.96	2.96
Carbon Dioxide (ppm)	15.4	4 - 15.4
Chloride (ppm)	8.5	8.5
Copper (ppm)	0.278	ND - .278
Hardness (ppm)	16.3	16.3
Magnesium (ppm)	1.18	1.18
pH (su)	8.9	7.1 - 8.9
Sodium (ppm)	13.4	13.4
Specific Conductance (umhos)	131	131
Total Alkalinity (ppm)	32	14.0 - 32.0
Total Dissolved Solids (ppm)	73	73
Manganese (ppm)	0.016	ND - .016

At CEW&SA, we make it a priority to keep you and your family safe. We test your water for approximately 150 possible contaminants. Of the many contaminants tested, only a few were at levels of detection. They were no where near alert levels.

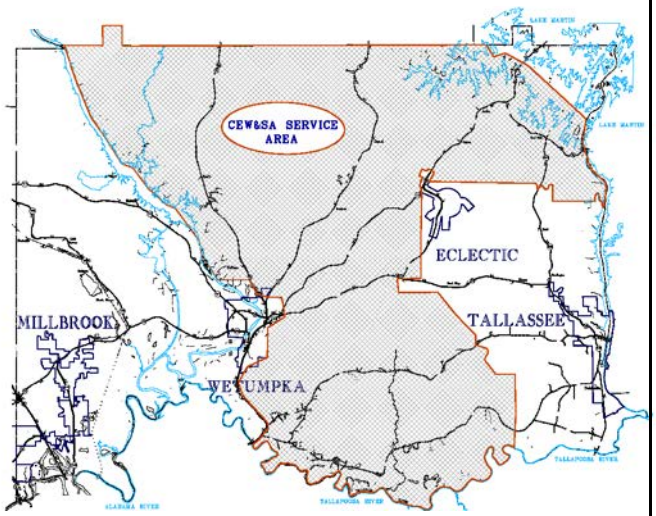
Central Elmore Water And Sewer Authority 2018 Annual Water Quality Report

PWS # 000547

Safety and security have always been our top priorities. Central Elmore Water and Sewer Authority strives to deliver safe drinking water to our customers and to keep the utility secure and protected. The Source Water Assessment was updated in 2018 and no problems were found. It is continually monitored and can be viewed at the main office. We are proud to deliver this annual report covering the year 2018.

Central Elmore Water & Sewer Authority maintains and operates a 12-million gallon per day surface water treatment plant at our primary water source on Lake Martin. Here at Central Elmore Water & Sewer Authority we serve approximately 12,237 customers of our own along with four fulltime neighboring utilities, Rockford (1,275 customers), Friendship (1,309 customers), Eclectic (1,615 customers), and Wetumpka (3,500 customers). Each customer refers to a meter served, which translates into approximately 69,776 persons served by Central Elmore Water & Sewer Authority.

Our territory covers approximately 350 square miles out of the 657 square miles contained in Elmore County. We currently maintain over 750 miles of water lines in our territory along with 12 water storage facilities holding a total of almost 7.7 million gallons.



A Message from Our General Manager

I am honored to present to you our Annual Water Quality Report. This report is an overview of last year's water quality. We are steadfast to providing you with the enclosed information because informed customers are our best partners. The report has been prepared to meet the requirements of the 1996 Safe Drinking Water Act (SDWA) adopted by Congress and to provide our customers with information about their water system. The changing environment of the water industry has continued to keep our Staff focused on the future needs of the system as well as watching the bottom line.

The water provided to you by Central Elmore Water & Sewer Authority (CEW&SA) once again meets or surpasses all state and federal water quality regulations. We are pleased to inform you that CEW&SA has never had a violation of contamination levels in the water we supply you, our valuable customers. During 2018, CEW&SA has experienced an increase in growth within our service territory as well with the communities we provide water to via our wholesale customers. Thanks to the sustained vision of our Board and Management and Staff, we stand ready for the economic upswing in our county. The consistent goal of CEW&SA is to provide customers with a safe, reliable supply of drinking water that can be used with assurance at the lowest possible cost while maintaining the highest quality.

I encourage you to take the time to read this report. If you have any questions concerning this report or CEW&SA, please contact me, Robert L. Prince, Jr., General Manager, at 334-567-6814, Monday - Friday, 7:30 a.m. to 4:30 p.m. and I will be glad to address any concerns you may have. If you would like to learn more about CEW&SA, feel free to attend any of our regularly scheduled board meetings which are held at 12:00 p.m. on the third Tuesday of each month at the main office located at 716 US Hwy 231, in Wetumpka. CEW&SA Board members are as follows: Chairman – Ron Johnson, Vice-Chairman – Fred Braswell and Director – Bill Newton. Again, please feel free to contact me with any questions or concerns you may have involving Central Elmore Water and Sewer Authority.

Sincerely,

Robert L. Prince, Jr.

CEW&SA
QUALITY • INTEGRITY • SERVICE

Happening at the Plant…

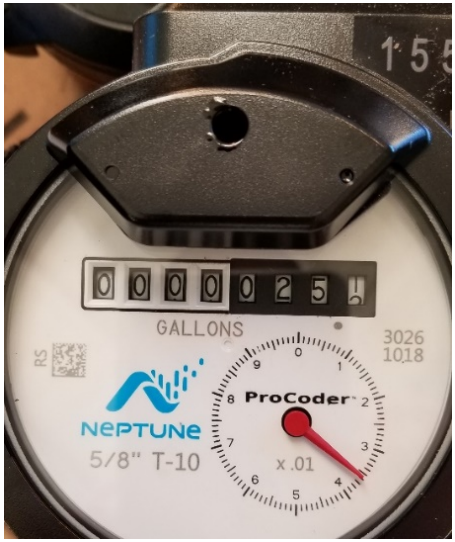
We have had a very busy and productive year. To further maintain our commitment to provide our customers with water of the highest quality we made two chemical additions at the plant. One was chlorine dioxide, which is fed to reduce Disinfection Byproducts. The second is orthophosphate, a corrosion inhibitor. It will limit corrosion and protect the piping throughout the system, including the customers piping. You will find in this report that we exceed the regulatory standards set by EPA and ADEM. Please take the time to read the report and if you have any questions, I can be contacted at 334-512-0480.

Sincerely,
Patrick Morgan
Plant Manager

System Flushing

You may on occasions see hydrants that flush slowly for several days. Any time there is a leak air enters the mains. This air must be removed and flushing slowly at certain locations relieves the mains of the air. Air can cause the water to be milky, but it is safe to drink. There are also times when we must flush for ADEM requirements. We usually try to have a small yellow sign on the hydrant while flushing. Call us at the office if you suspect the hydrant is flowing unintentionally. Call us with any suspicious activity as well. Thank you.

Reading Your New Meter



5/8" Meters – This is the standard meter for residential customers. Note the last digit is 1/10 of a gallon. It reads 0000025.1 gallons. CEW&SA reads all the white numbers and one black number for billing. These new meters read very similar to the old meters. Both ¾" and 1" meters read the same way. The red needle is the leak indicator. 1 full rotation = 0.1 gallon of water. The 10-digit meter number is on the top right of the meter starting with 155 or 156. Visit www.cewsa.com for more information.

Special Health Information:

Some people may be more vulnerable to contaminates 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/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 (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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline.

General Information about Drinking Water Contaminants:

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

Contaminants that may be present in source water include:

**Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. **Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. **Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. **Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems. **Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. CEW&SA 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 the water for drinking or cooking. If you are concerned about lead in your water, you may want 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.eps.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.

Definitions:

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.

90th Percentile: 90% of samples are equal to or less than the number in the chart.

Maximum Residual Disinfectant Level Goal (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 contaminants.

Maximum Residual Disinfectant Level or (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.

NA: Not applicable.

ND: Not detectable at testing limits.

PPB or parts per billion: micrograms per liter (ug/l).

PPM or parts per million: milligrams per liter (mg/l).

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

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

NTU or Nephelometric Turbidity Units: A measure of clarity.

Table of Primary Contaminants (2018)

At high levels some primary contaminates are known to pose a health risk to humans. This table provides a glance of any primary contaminant detections. ADEM now requires us to place all that are tested for on here even though most were not detected. ND = Not Detected

CONTAMINANT	MCL	AMOUNT DETECTED Elmore	CONTAMINANT	MCL	AMOUNT DETECTED Elmore
Bacteriological			Endothall	100	ND
Total Coliform Bacteria	< 5%	0	Endrin	2	ND
Total Carbon (TOC)	TT	1.15	Epichlorohydrin	TT	ND
Turbidity	TT	0.117	Glyphosate	700	ND
Radiological			Haloacetic Acid(ppm)	0.06	0.041
Beta/photon emitters (mrem/yr	4	ND	Heptachlor	400	ND
Alpha emitters (pci/l)	15	ND	Heptachlor epoxide	200	ND
Combined radium (pci/l)	5	ND	Hexachlorobenzene	1	ND
Inorganic			Hexachloropentadiene	1	ND
Antimony (ppm)	0.001	0.0008	Lindane	200	ND
Arsenic (ppm)	0.001	0.0003	Methoxychlor	40	ND
Asbestos (MFL)	7	NA	Oxamyl [Vydate]	200	ND
Barium (ppm)	2	0.012	PCBs	500	ND
Beryllium (ppm)	0.004	ND	Pentachlorophenol	1	ND
Cadmium (ppm)	0.005	ND	Picloram	500	ND
Chromium (ppm)	0.1	ND	Simazine	4	ND
Copper (ppm)	AL=1.3	0.278	Toxaphene	3	ND
Cyanide (ppm)	0.2	ND	Benzene	5	ND
Fluoride (ppm)	4	0.74	Carbon Tetrachloride	5	ND
Lead (ppm)	AL=.015	0.002	Chlorobenzene	100	ND
Mercury (ppm)	0.002	ND	Dibromochloropropane	200	ND
Nitrate (ppm)	10	0.092	0-Dichlorobenzene	600	ND
Nitrite (ppm)	1	ND	p-Dichlorobenzene	75	ND
Selenium(ppm)	0.05	ND	1,2-Dichloroethane	5	ND
Thallium(ppm)	0.001	0.001	1,1-Dichloroethylene	7	ND
Chlorine(ppm)	4	2.3	Cis-1,2-Dichloroethylen	70	ND
Organic Chemicals			trans-1,2-Dichloroethylene	100	ND
2,4-D	70	ND	Dichloromethane	5	ND
2,4,5-TP (Silvex)	50	ND	1,2-Dichloropropane	5	ND
Acrylamide	TT	ND	Ethylbenzene	700	ND
Alachlor	2	ND	Ethylene dibromide	50	ND
Atrazine	3	ND	Styrene	100	ND
Benzo(a)pyrene[PHAs]	200	ND	Tetrachloroethylene	5	ND
Carbofuran	40	ND	1,2,4-Trichlorobenzene	0.07	ND
Chlordane	2	ND	1,1,1-Trichloroethane	200	ND
Dalapon	200	ND	1,1,2-Trichloroethane	5	ND
Di-(2-ethylhexyl)adipate	400	ND	Trichloroethylene	5	ND
Di(2-ethylhexyl)phthlates(ppb)	6	ND	TTHM(ppm)	0.08	0.066
Dinoseb	7	ND	Toluene	1	ND
Diquat	20	ND	Vinyl Chloride	2	ND
Dioxin[2,3,7,8-TCDD]	30	ND	Xylenes(ppm)	10	ND
Chlorine Dioxide(ppm)	800	N/A			
Chlorite(ppm)	1	N/A			

Unregulated Contaminants Table (2018)

In addition to the primary drinking water contaminants,the utility monitors regularly for some of the following unregulated and secondary contaminants as regulated by the Alabama Department of Enviromental Management. The ADEM has proposed regulations under consideration at the time of this publication to require any detects to be reported in all subsequent water quality reports. The requirement of this additional monitoring and reporting will further insure the safety of your drinking water and will keep you, as a utility customer, more informed. ADEM now requires us to place all that are tested for on here even though, as you can see, most were not detected. ND = Not Detected

CONTAMINANT	Elmore Average Detected Level	CONTAMINANT	Elmore Average Detected Level
1,1 - Dichloropropene	ND	Chloroform	0.045 ppm
1,1,1,2-Tetrachloroethane	ND	Chloromethane	ND
1,1,2,2-Tetrachloroethane	ND	Dibromochloromethane	0.0005 ppm
1,1-Dichloroethane	ND	Dibromomethane(ppb)	ND
1,2,3 - Trichlorobenzene	ND	Dicamba	ND
1,2,3 - Trichloropropane	ND	Dichlorodifluoromethane	ND
1,2,4 - Trimethylbenzene	ND	Dieldrin	ND
1,3 - Dichloropropane	ND	Hexachlorobutadiene	ND
1,3 - Dichloropropene	ND	Isoprpylbenzene	ND
1,3,5 - Trimethylbenzene	ND	M-Dichlorobenzene	ND
2,2 - Dichloropropane	ND	Methomyl	ND
3-Hydroxycarbofuran	ND	MTBE	ND
Aldicarb	ND	Metolachlor	ND
Aldicarb Sulfone	ND	Metribuzin	ND
Aldicarb Sulfoxide	ND	N - Butylbenzene	ND
Aldrin	ND	Naphthalene	ND
Bromobenzene	ND	N-Propylbenzene	ND
Bromochloromethane	ND	O-Chlorotoluene	ND
Bromodichloromethane	0.005	P-Chlorotoluene	ND
Bromoform	ND	P-Isopropyltoluene	ND
Bromomethane	ND	Propachlor	ND
Butachlor	ND	Sec - Butylbenzene	ND
Carbaryl	ND	Tert - Butylbenzene	ND
Chloroethane	ND	Trichlorfluoromethane	ND

Seconday & Physical Contaminants Table

CONTAMINANT	Elmore Highest Detected	CONTAMINANT	Elmore Highest Detected
Aluminum	ND	Total Alkalinity (ppm)	32
Calcium (ppm)	2.96	Chloride (ppm)	8.5
Magnesium (ppm)	1.18	Sulfate (ppm)	ND
Manganese (ppm)	ND	Total Disolved Solids (ppm)	73
Nickel	ND	pH (su)	8.7
Silver	ND	Odor	None
Zinc (ppm)	ND	Iron (ppm)	ND
Hardness (ppm)	16.3	Sodium (ppm)	13.4
Color (units)	ND	Potassium (ppm)	NA
Copper (ppm)	0.278	Carbon Dioxide (ppm)	15.4
Specific Conductance	131	Foaming Agents(ppm)	ND