

Water Quality Report

For Period Ending December 2013



Anniston Water Works & Sewer Board

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PWS ID Number AL0000133

Fluoridation of Drinking Water: A Proven Health Benefit

Fluoridation of community drinking water is a major factor responsible for the decline in tooth decay during the second half of the 20th century. Water fluoridation remains the most cost-effective method of delivering fluoride to all members of most communities, regardless of income level.

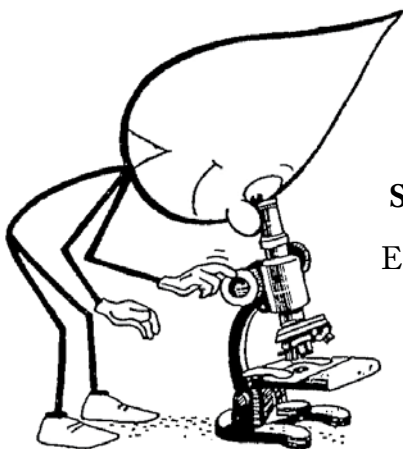
History of Fluoridation

In 1945, Grand Rapids, Michigan, became the first city in the world to fluoridate its drinking water. The Grand Rapids water fluoridation study was originally sponsored by the U.S. Surgeon General. The National Institute of Dental Research took over the study in 1948. During the 15-year project, researchers monitored the rate of tooth decay among Grand Rapids' almost 30,000 schoolchildren. After 11 years the tooth decay rate among Grand Rapids children born after fluoride was added to the water supply dropped more than 60 percent. This finding, considering the thousands of participants in the study, amounted to a giant scientific breakthrough that promised to revolutionize dental care, making tooth decay for the first time in history a preventable disease for most people.

Water fluoridation reduces direct health-care expenditures through primary prevention of tooth decay and the associated care. According to an economic analysis published in *Public Health Reports*, the prevention of tooth decay, largely attributed to fluoridation saved \$39 billion in dental-care expenditures in the United States during 1979-1989.

Safety of Water Fluoridation

Early investigations into the physiologic effects of fluoride in drinking water predated the first community field trials. Since 1950, opponents of water fluoridation have claimed it increased the risk for adverse health effects. The safety and effectiveness of water fluoridation have been re-evaluated frequently, and no credible evidence supports an association between fluoridation and any adverse health effects.



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Este informe contiene la información importante! Si usted no entiende este informe, pida que alguien lo traduzca usted. Para obtener más información y traducción llamada Jesus Castillo 256-504-2558.

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Many health organizations recommend the fluoridation of drinking water. The Center for Disease Control has recognized water fluoridation as one of 10 great public health achievements of the 20th century. The American Dental Association continues to endorse fluoridation of community water supplies as safe and effective for preventing tooth decay.

The Anniston Water Works and Sewer Board for over fifty years have added fluoride to the drinking water of its customers. The fluoridation of water has been proven to be a safe and effective method of preventing tooth decay. The Anniston Water Works will follow the recommendations of numerous health organizations and continue to provide our customers with the protection against tooth decay.



Ed Turner, General Manager

Important Information to Know about Water

- Substances that may be present in source water include: Microbial contaminates, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminates, such as salts and metals, which can be naturally occurring, or as result from urban run-off, industrial or domestic wastewater discharges, oil or gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run-off, and residential uses, organic chemical contaminates, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm run-off, and septic tanks.
- Radioactive contaminates, 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, EPA prescribes regulations which limit the amount of certain contaminates in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminates in bottled water, which must provide the same protection for public health.
- 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. Those 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 (800-426-4791). This information is being provided in addition to other information or notices that may be required by law.

List of Non-Detect Substances (Anniston Water Works tested for the following substances in 2013 but none were detected.)

1,1 - Dichloropropene	Chloromethane	Trichlorofluoromethane	Ethylbenzene	Nickel	Aldicarb Sulfoxide	Carbofuran	Hexachlorocyclopentadiene
1,1,2,2-Tetrachloroethane	Dibromomethane	1,1,1,2-Tetrachloroethane	p-Dichlorobenzene	Nitrate	Aldrin	Chlordane	Lindane
1,1-Dichloroethane	Dichlorodifluoromethane	Trans 1,3 Dichloropropene	Styrene	Nitrite	Butachlor	Dalepon	Methoxychlor
1,2,3 - Trichlorobenzene	Hexachlorobutadiene	O-Dichlorobenzene	Tetrachloroethylene	Selenium	Carbaryl	Di-(2-ethylhexyl)adipate	Oxamyl [Vydate]
1,2,3 - Trichloropropane	Isopropylbenzene	1,1,1-Trichloroethane	Toluene	Thallium	Dicamba	Di-(2-ethylhexyl)phthalates	PCBs
1,2,4 - Trimethylbenzene	M-Dichlorobenzene	1,1,2-Trichloroethane	trans-1,2-Dichloroethylene	Color	Dieldrin	Dibromochloropropane	Pentachlorophenol
1,3 - Dichloropropane	MTBE	1,1-Dichloroethylene	Vinyl Chloride	Foaming Agents	Methomyl	Dinoseb	Picloram
1,3 - Dichloropropene	N - Butylbenzene	1,2,4-Trichlorobenzene	Xylenes	Silver	Metolachlor	Diquet	Simazine
1,3,5 - Trimethylbenzene	Naphthalene	1,2-Dichloroethane	Antimony	Zinc	Metribuzin	Endothall	Toxaphene
2,2 - Dichloropropane	N-Propylbenzene	1,2-Dichloropropane	Beryllium	Arsenic	Propachlor	Endrin	
Bromobenzene	O-Chlorotoluene	Benzene	Cadmium	Dibromoacetic Acid	2,4,5-TP (Silvex)	Ethylene dibromide	
Bromochloromethane	P-Chlorotoluene	Carbon Tetrachloride	Chromium	Monobromoacetic Acid	2,4-D	Glyphosate	
Bromoform	P-Isopropyltoluene	Chlorobenzene	Cyanide	3-Hydroxycarbofuran	Alachlor	Heptachlor	
Bromomethane	Sec - Butylbenzene	cis-1,2-Dichloroethylene	Lead	Aldicarb	Atrazine	Heptachlor epoxide	
Chloroethane	Tert - Butylbenzene	Dichloromethane	Mercury	Aldicarb Sulfone	Benzo(a)pyrene[PAHs]	Hexachlorobenzene	

OUR MISSION IS:

- **SERVICE** — by providing high quality drinking water to our customers on demand while maintaining our plants and equipment to facilitate economic growth and development.
- **PROTECTION OF THE ENVIRONMENT AND PUBLIC HEALTH** — through responsible wastewater treatment and source water protection
- **CONTINUOUS IMPROVEMENT** — of our processes and personnel to achieve the highest standards of customer satisfaction and to meet or exceed all water and wastewater quality standards.



**DETECTED SUBSTANCES TABLE FOR PERIOD
JANUARY -- DECEMBER 2013**

Water Source		Coldwater Spring		Hillabee Reservoir			
Primary Inorganic Substances	Units	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
Barium	ppb	2000	2000	23.9	12.4	No	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits
Fluoride	ppm	4	4	Less than 0.6	Less than 0.6	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sulfate	ppm	500	--	2.06	9.24	No	Erosion of natural deposits
Secondary Inorganic Substances	Units	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
Alkalinity, Total	ppm	--	--	97	48.6	No	Erosion of natural deposits
Aluminum	ppb	200	--	Less than 3.00	34.6	No	Water additive for removing organics; Erosion of natural deposits
Calcium	ppm	--	--	21.2	15.8	No	Erosion of natural deposits
Carbon Dioxide	ppm	--	--	9.03	Less than 1.00	No	Erosion of natural deposits
Chloride	ppm	[250]	--	2.89	5.76	No	An inorganic constituent in water affecting taste
Conductance	umhos/cm	--	--	192	124	No	Erosion of natural deposits
Copper	ppb	1300	1300	17.0	4.01	No	Corrosion of household plumbing systems; Erosion of natural deposits
Hardness, Total (As CaCO ₃)	ppm	--	--	98.7	58.3	No	Erosion of natural deposits
Iron	ppb	300	--	Less than 10.0	10.8	No	Erosion of natural deposits
Magnesium	ppm	--	--	10.7	4.58	No	Erosion of natural deposits
Manganese	ppm	50	--	Less than 1.00	2.12	No	Erosion of natural deposits
pH	ppm	--	--	7.8	9.0	No	An indicator of acidity or alkalinity levels of water
Sodium	ppb	--	--	1.18	1.66	No	Erosion of natural deposits
Total Dissolved Solids	ppm	[500]	--	114	87.5	No	Erosion of natural deposits
Disinfection By-Products (at the Plants)	Units	MCL	MCLG	Annual Average		Violation (Yes/No)	Source of Substance
Total Trihalomethanes (TTHM's)	ppb	N/A	0	Less than 0.5	54.3	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5's)	ppb	N/A	0	Sampling not required in 2013	39.7	No	By-product of drinking water chlorination
Disinfection By-Products (in Distribution System)	Units	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
Total Trihalomethanes (TTHM's)	ppb	80	0	22		No	By-product of drinking water chlorination
Haloacetic Acids (HAA5's)	ppb	60	0	21		No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM's) are the sum of the concentrations of bromoform, bromodichloromethane, chlorodibromomethane, and chloroform MCL equal to or less than 80 ppb. Haloacetic Acids (HAA5's) are the sum of the concentrations of dibromoacetic acid, dichloroacetic acid, monobromacetic acid, and trichloroacetic acid MCL equal to or less than 60 ppb.							
Regulated Volatile Chemicals	Units	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
TCE (Trichloroethylene)	ppb	5	0	1	Less than 0.5	No	Discharge from metal degreasing sites and other factories
cis-1,2-Dichloroethylene	ppb	70	70	Less than 0.5	Less than 0.5	No	Discharge from industrial chemical factories
Non-Regulated Contaminants Table	Units	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
Total Organic Carbon	ppb	Not Regulated		0.45	1.88	No	Natural sources
Radionuclides	Units	MCL	MCLG	Water Sources: Coldwater Spring and Hillabee Reservoir		Violation (Yes/No)	Source of Substance
Gross Alpha	pCi/l	15	0	Sampling not required in 2013		No	Erosion of natural deposits
When gross alpha particle activity exceeds five pCi/l the remaining listed radionuclides would be analyzed.							
Turbidity	Units	MCL	MCLG	Highest Level Last 12 Months	Highest Level Last 12 Months	Violation (Yes/No)	Source of Substance
Turbidity	NTU	2 consecutive >0.3		0.09	0.31	No	Erosion of natural deposits and soil runoff
100% of samples were below the turbidity limits. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.							
Lead & Copper Monitoring	Units	MCL	MCLG	Distribution System Violations		Violation (Yes/No)	Source of Substance
Lead	ppb	15	0	Sampling not required in 2013		No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppb	1300	1300	Sampling not required in 2013		No	Corrosion of household plumbing systems; erosion of natural deposits
Lead and copper are metals found in natural deposits as ores containing other elements. They are sometimes used in household plumbing materials or in water service lines used to bring water from the main to the home. Lead can cause a variety of adverse health effects when people are exposed to it at levels above the action level for relatively short periods of time. These effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in the attention span, hearing, and learning abilities of children, and slight increases in the blood pressure of some adults. Lead has the potential to cause the following effects from a lifetime exposure at levels above the action level: stroke and kidney disease; cancer. Copper is an essential nutrient, required by the body in very small amounts. However, EPA has found copper to potentially cause the following health effects when people are exposed to it at levels above the Action Level. Short periods of exposure can cause gastrointestinal disturbance including nausea and vomiting. Use of water that exceeds the Action Level over many years could cause liver or kidney damage. People with Wilson's disease may be more sensitive than others to the effect of copper contamination and should consult their health care provider. State and local government agencies that can be contacted include: Anniston Water Works at 256-241-2000 can provide you with information about your facility's water supply; and the Calhoun County Health Department at 256-237-7523 can provide you with information about the health effects of lead and how you can have your child's blood tested. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at http://www.epa.gov/lead or contact your health care provider. Federal and State regulations require that 90% of the distribution samples be below the MCL. During the last 12 month period 100% of Anniston's distribution samples were below the MCL.							

MICROBIOLOGICAL SUBSTANCES TABLE FOR PERIOD JANUARY -- DECEMBER 2013

Water Source		Coldwater Spring		Hillabee Reservoir			
Total Coliforms	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance	
Not more than 5% of the 70 monthly bacteriological samples taken during the month can test positive for total coliform. No sample can test positive for fecal coliform or E. Coli.	Less than 5%	0	1.40%		No	Human and animal fecal waste	



Remember **GREASE** the musical?

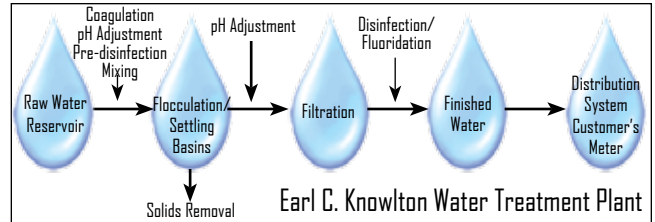
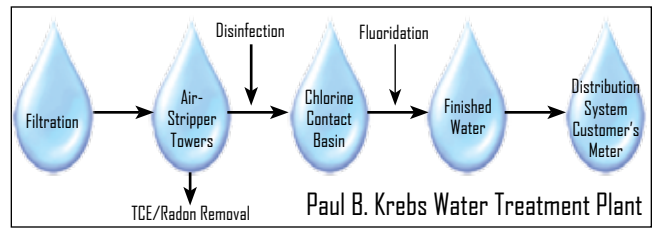
Remember that **GREASE** you poured down the drain?

It's not a tune to remember but one you won't likely forget!
Dispose of household grease in a proper manner -
not in the sanitary sewer!

A Public Information Message from The Water Works and Sewer Board of the City of Anniston.
For more information contact the Engineering Department at 256-241-5007.



Water Treatment Process



NLC Service Line Warranty Program

The Water Works and Sewer Board of the City of Anniston is notifying residents of a program provided through the National League of Cities (NLC) Service Line Warranty Program administered by Service Line Warranties of America (SLWA). This program offers a warranty to homeowners that covers repairs or replacements on the outside sewer line that runs from the home to the point of utility responsibility. Property owners are accountable for these repairs, not the utility.

For more information on this program or to enroll, please visit SLWA's web site at www.SLWofA.com



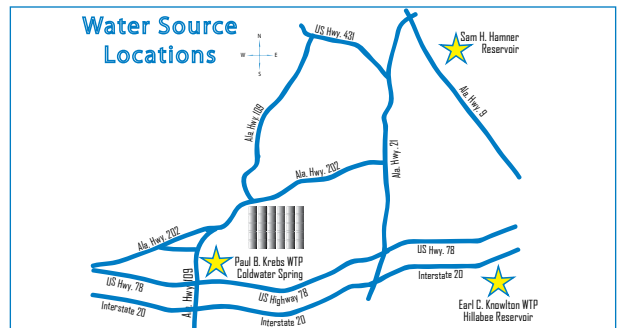
Definitions/Abbreviations Used in this Report

AL	Action Level	The concentration of a contaminant which triggers treatment or other requirements which a water system must follow.
MCL	Maximum Contaminant Level	The highest level of a contaminant that is allowed in drinking water.
MCLG	Maximum Contaminant Level Goal	The level of a contaminant in drinking water below which there is no known or expected health risk.
MRODL	Maximum Residual Disinfectant Level	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.
MRODLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRODLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
NS	None Set	No MCL has been set.
NTU	Nephelometric Turbidity Units	A measure of turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
pCi/L	Picocuries Per Liter	A measure of radioactivity.
PPM	Parts per Million or milligrams per liter (mg/L)	What is a PPM? Compares to 8 hours and 45 seconds out of a millennium (1000 years).
PPB	Parts per Billion or micrograms per liter (mg/L)	What is a PPB? Compares to 31 seconds out of a millennium (1000 years).
SU	Standard Unit	A measure of pH or acidity.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
umhos/cm	Micromhos/centimeter	A measure of conductivity or the ability of water to conduct an electrical current.

Drinking water supplied to customers of the Anniston System comes from two sources. Our primary water source is the Coldwater Spring located 7 miles west of Anniston on Tom Burkhart Drive. The Alabama Department of Environmental Management classifies Coldwater Spring as groundwater under the influence of surface water. Water from the spring is treated at the Paul B. Krebs Water Treatment Plant. The statement "under the influence," in this case, refers to the uncovered spring pool, which is almost two acres in size.

Our secondary source of water is the Hillabee Creek Reservoir located 7 miles southeast of Anniston on Jennifer Lane. Hillabee Reservoir is classified as a surface water source. Water from the reservoir is treated at the Earl C. Knowlton Water Treatment Plant located just to the north of the reservoir.

The Sam H. Hamner Reservoir is located 7 miles east of Anniston near the White Plains Community. Although no water is currently taken from Hamner it is included with Coldwater Spring and Hillabee Reservoir in our Source Water Protection Plan. The current ranking of our source waters by the Alabama Department of Environmental Management is "Low Susceptibility", meaning our water sources are well protected from elements likely to cause contamination. Anniston Water Works completed an update of the plan for Hillabee Reservoir in 2007.



The Alabama Department of Environmental Management (ADEM), with the approval of the United States Environmental Protection Agency (EPA), issued a statewide waiver on monitoring for asbestos and dioxin. Accordingly, Anniston Water Works was not required to monitor for these during the reporting period. Due to the exceptional quality of raw water at Coldwater Spring, the treatment technique at the Paul B. Krebs Water Treatment Plant employs a variance of the filtration rule which was granted by ADEM.

Because of optimal corrosion control, Anniston Water Works was granted a three-year waiver by ADEM for lead and copper sampling beginning in 2012.

This report is being furnished to you as required by the Safe Drinking Water Act. We are proud to report that your drinking water is safe and meets all requirements of state and federal regulations.

The United States Environmental Protection Agency maintains a Safe Drinking Water Hotline, 800-426-4791, where you can obtain more information about drinking water.

Anniston Water Works Board of Directors and Management Personnel

Ed Turner, General Manager/CEO	Rodney Owens, Assistant General Manager
Del Ferguson, Assistant General Manager Admin	Jimmy O'Dell, Chairman
Betty Merriweather, Director	Jerome Freeman, Vice Chairman
Sam Phillips, Director	William Robison, Secretary-Treasurer
Ann Welch, Director	Melvin Womack, Director

The Board of Directors of the Anniston Water Works consists of four directors appointed by the City of Anniston and three directors appointed by the Calhoun County legislative delegation. The Directors serve for a period of six years with reappointments being made on a staggered basis so all of the members are not replaced during the same year. Board meetings are held on the third Thursday of each month at eleven o'clock in the morning at the Main Office located at 931 Noble Street, Suite 200, Anniston, Alabama. Questions concerning meetings or requests for additional information should be directed to the General Manager and/or Assistant General Manager during normal business hours (Monday-Friday, 7:30 a.m. to 4:30 p.m.) by calling 256-241-2000.

