



2019 DRINKING WATER REPORT

The Madison County Commission is pleased to present to you the 2019 Annual Drinking Water Report. We want to inform you about the excellent water and services delivered to you last year. All information provided in this pamphlet has been collected and reported in accordance with the water quality standards established by the United States Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM). This annual report is a requirement of the Safe Drinking Water Act (SDWA), a federal law that sets health and safety standards for public drinking water in the United States. Under the direction of the SDWA, the EPA has established national drinking water standards which limit the amount of certain contaminants in water provided by public water systems. ***We are proud to report to you that the Madison County Water Department has never had a contaminant level violation. Your drinking water meets or exceeds all Federal and State requirements.*** This brochure is a summary of the quality of water provided to you in 2019. It is an excellent record reflecting the hard work by the Water Department's 52 employees to bring you water that is absolutely safe. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The Madison County Commission is committed to providing you with information about your water supply and the many necessary improvements being made in the system to maintain the highest drinking water standard. If you have any additional questions or concerns, please contact Chuck Faulkner at the Madison County Water Department office.



MADISON COUNTY COMMISSION:

(lower - left to right) **Steve Haraway** District Two; **Dale Strong**, Chairman; **JesHenry Malone**, District Six; (upper - left to right) **Phil Riddick**, District Five; **Roger Jones**, District One; **Craig Hill**, District Three; **Phil Vandiver**, District Four

The Madison County Commission encourages public participation at the Commission Board Meetings. The regularly scheduled meetings occur every other Wednesday and are held at 10 am in the Commission Chambers on the 7th floor of the Madison County Courthouse. Please call the county courthouse at 256-532-3492 for more information.



Madison County Water Department
246 Shields Road
Huntsville, Alabama 35811
(256) 746-2888 cfaulkner@madisoncountyal.gov
Office Hours: 7:00 a.m. - 3:30 p.m.



SOURCE WATER PROTECTION

The Alabama Department of Environmental Management (ADEM) requires water systems to conduct Source Water Assessment Programs (SWAP). The assessments must include these major elements:

- Delineating (or mapping) the Source Water Assessment Area (SWAA) - the area of land that most directly contributes the raw water used for drinking water
- Conducting an inventory of potential sources of contamination within the SWAA, and
- Determining the susceptibility of the water supply to those contamination sources.

In 2015, the Madison County Water Department updated the source water assessment. Included in the report are a map and description of the Wellhead Protection Areas, or Source Water Assessment Areas; a list of common sources of contamination and the risks associated with them; the inventory of potential sources of contamination within each well's delineated area and their associated susceptibility ranking of high, medium or low as determined by water department personnel and ADEM; and a map of each well's Source Water Assessment Area classifying each potential contaminant source using its identification number and the following color code: red for highly susceptible, yellow for moderately susceptible, and green for non-susceptible. The report can be reviewed, by appointment, at the water department office.

DRINKING WATER SOURCES

In 2019, the Madison County Water Department used water from seven different sources to provide drinking water to its customers. The three primary sources, shown in the map below as wells 1, 2 and 3, are all groundwater sources. Well 1 – **Bo Howard Well (BHW)**, Well 2 – **Hazel Green Well (HGW)**, and Well 3 – **Cress Well (CW)** all draw water from the Tuscumbia/Fort Payne Aquifer. Four sources are a part of Huntsville Utilities' water system. The Madison County Water Department purchased water from Huntsville's **Lincoln/Dallas Water Treatment Plant (LDWTP)**, a groundwater source pumping water out of the Tuscumbia/Fort Payne Aquifer. Madison County Water Department also purchased water from three Huntsville Utilities' Tennessee River surface water source treatment plants, the **South Parkway Water Treatment Plant (SPWTP)**, **Southwest Water Treatment Plant (SWWTP)** and **Southeast Water Treatment Plant (SEWTP)**.

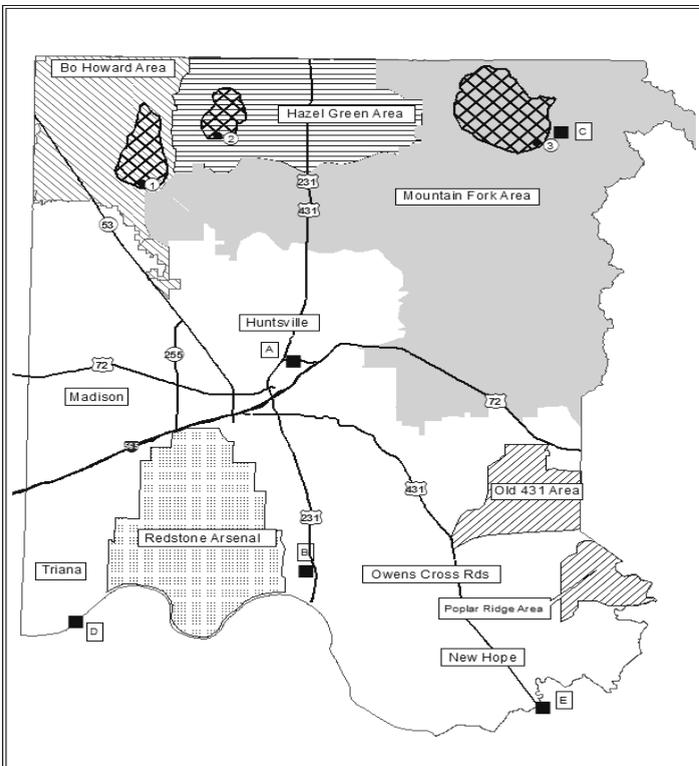
Where your water comes from.....

Bo Howard Area: The northwest corner of the county is primarily served by the Bo Howard Well. A few locations in the southern part of the Bo Howard Area are supplied by water purchased from the Huntsville Utilities Southwest Water Treatment Plant.

Hazel Green Area: The Hazel Green Area is served by the Hazel Green Well.

Mountain Fork Area: Water from the Cress Well is treated at the Mountain Fork Water Treatment Facility and serves the New Market, Meridianville, and Maysville areas. During periods of high demand, some water is also supplied from the Bo Howard Well and purchased from the Huntsville Utilities South Parkway and Lincoln/Dallas Water Treatment Plants.

Poplar Ridge / Old 431 Area: This area is supplied by water obtained from the Huntsville Utilities Southeast Water Treatment Plant. The water is purchased from Huntsville Utilities and New Hope.



If still not sure...
Please contact the Water Department for more information.

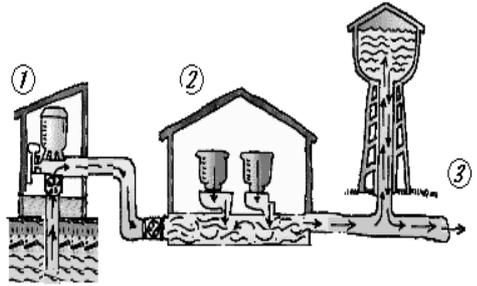
Legend	
●	Wells
①	Bo Howard Well
②	Hazel Green Well
③	Cress Well
⊠	Well Head Protection Area
■	Treatment Facility
A	Lincoln/Dallas Plant
B	South Parkway Plant
C	Mountain Fork Plant
D	Southwest Plant
E	Southeast Plant

Madison County Water Department

TREATMENT PROCESS

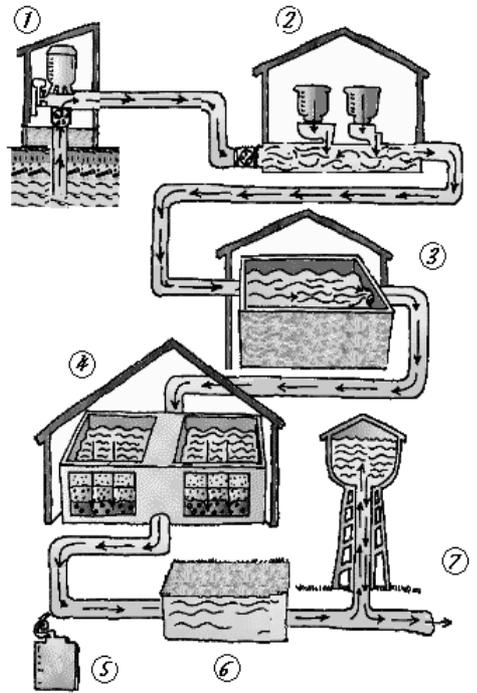
WELLS

As illustrated at the right: water from the Hazel Green and Bo Howard Wells is (1) pumped from underground aquifers, (2) treated with chlorine for disinfection, fluoride to help prevent tooth decay and caustic soda for pH adjustment, then (3) distributed, as needed, to storage tanks and customers in the water system.



TREATMENT PLANT

The Madison County Water Department's treatment plant, named the Mountain Fork Water Treatment Facility, is located in New Market and is capable of treating 8 million gallons of water per day. As illustrated at the right: the water is (1) pumped from the Cress Well, (2) pretreated with chlorine and alum, (3) mixed in a flocculation basin where the chemicals cling to impurities causing them to form larger easier to filter particles, (4) filtered to remove the impurities, (5) treated with fluoride and again with chlorine, (6) collected in a clearwell to allow plenty of time for disinfection, then (7) distributed, as needed, to storage tanks and customers in the water system.



PRESSURE PROBLEMS?

As we continue to make improvements in the water system, changes in water pressure may be noticed. If your pressure increases, you may need to install a pressure regulator.

IT IS THE CUSTOMER'S RESPONSIBILITY TO PURCHASE AND INSTALL PRESSURE REGULATORS.

District Four Handle with Care Collection Day

Madison County District Four Commissioner Phil Vandiver will host a *Handle with Care Collection Day* for residents of Madison County on October 13th. Household hazardous waste items will be collected at the County Shed, located at 6084 Highway 53 in Harvest.

Contact the District 4 Office for more information: 256-852-8351

DO YOU HAVE HOUSEHOLD HAZARDOUS WASTES THAT NEED TO BE DISPOSED OF?

The Handle With Care Household Hazardous Waste Program

gives you a way to dispose of these items safely.

How does the program operate?

Drop off your materials Monday through Friday from 7:00 a.m. to 5:00 p.m. at the drive-thru Handle With Care Collection Center located at 1055A Cleaner Way in Huntsville.

What materials will the center accept?

◆ *Paint & Related Products*

Oil or water based Mineral spirits Thinners
Strippers & removers Stains Aerosols

◆ *Automotive Products*

Transmission fluid Brake fluid Anti-freeze
Car batteries Used motor oil

◆ *Lawn & Garden Poisons*

Weed killers Liquids Powders Sprays Soaps
Herbicides, pesticides, & fungicides Rodent poisons
Roach & flea powder

◆ *Household Cleaners*

Oven cleaners Toilet cleaners Disinfectants
Drain cleaners Rug & upholstery cleaners
Floor & furniture polishes
Ammonia or bleach-based products

◆ *Electronics*

Televisions Computers Cell phones
Computer monitors

◆ *Household Chemicals*

Acids Pool chemicals Photographic chemicals
Solvents Household batteries
Mercury thermometers & thermostats
Fluorescent lights Used sharps Expired medication

Explosives, radioactive, or biological wastes are not accepted. If you are not sure about the acceptability of an item, contact the Household Hazardous Waste Program at 256-880-6054.

This program is for residents only and is provided free of charge. Please have wastes labeled or, if possible, in original containers. Special arrangements can be made for the handicapped and disabled by calling 256-882-0155.

For additional information, please visit swdahsv.org/hazardous.

WHAT & HOW



TO RECYCLE

Curbside services are available to all Madison County residents. As of August 1, 2019, residential curbside collection is operated by The Recycling Alliance of North Alabama (RANA), a newly formed division of the Solid Waste Disposal Authority. RANA is a free, opt-in service available to all single-family homes located within Madison County. To participate, residents must register/sign up at <https://selectmycart.com/rana/> or by calling (256) 801-CART. A complimentary 95-gallon rolling cart will be delivered to your home. Collection will occur on a monthly basis. Please place your cart on the curb by 7 a.m. on your pickup day and leave 5 feet of clearance around the cart.

WHAT GOES IN MY CURBSIDE CART?

METAL: aluminum or steel bi-metal cans (lids and labels can remain on); empty and rinse before placing in cart.

PAPER PRODUCTS: newspapers and inserts, magazines and catalogs, junk mail and stationary, computer and printer paper, school and office paper, paperback books and phone books, and paper bags; ensure products are dry when placed in cart. Shredded paper can be bagged in paper bags (not plastic).

CARDBOARD: cardboard excluding pizza boxes; break down to fit in cart and ensure cardboard is clean and dry.

PLASTIC: #1 and #2 narrow-necked plastic bottles (caps can remain on) except bottles that contained poison or oil; empty and rinse before placing in cart.

CARTONS (PAPER ONLY): tissue boxes, cereal and pasta boxes, and cardboard egg crates; ensure cartons are clean and dry.

DO NOT PLACE IN YOUR CART: glass, pizza boxes, yard waste, wood, food waste, paint cans and chemicals, aerosol cans, aluminum foil, tin pie pans, deli trays or fruit containers/baskets, Styrofoam, electronics, plastic wrap or plastic bags, tangles (hoses, wires, hangers, chains), and wide-mouth plastic such as sour cream, yogurt and margarine containers.

Batteries, used motor oil, and other household hazardous waste can be dropped off at the Household Hazardous Waste facility at 1055A Cleaner Way in Huntsville – see article in this report for more information.

Clean Water Is Everybody's Business

Polluted runoff is the nation's greatest threat to clean water. Therefore, be mindful of any polluting agent left exposed to natural rainfall since it has the potential to be picked up by stormwater runoff and carried directly to a nearby stream, lake or river. These pollutants can seriously harm water quality and create harmful effects on drinking water supplies, recreation, fisheries and wildlife.

Pollution sources include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas
- Debris, oil, grease and toxic chemicals from urban runoff
- Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks
- Bacteria and nutrients from livestock, pet wastes and faulty septic systems

To keep the stormwater leaving your home or workplace clean, follow these simple guidelines:

- Use pesticides and fertilizers sparingly.
- Repair auto leaks.
- Dispose of household hazardous waste, used auto fluids, and batteries at designated collection locations.
- Clean up after your pet.
- Use a commercial car wash or wash your car on a lawn or other unpaved surface.
- Sweep up yard debris rather than hosing down areas. Compost or recycle yard waste when possible.
- Clean paint brushes in a sink. Properly dispose of excess paints through a hazardous waste collection program.
- Sweep up and properly dispose of construction debris like concrete and mortar.
- Direct downspouts away from paved surfaces.
- Have your septic tank pumped and system inspected regularly.
- Never dump anything down storm drains.

For more information:

FEDERAL ~ U.S. Environmental Protection Agency www.epa.gov/nps
www.epa.gov/npdes/stormwater

STATE ~ Alabama Department of Environmental Management Water Division
(334) 271-7700
www.adem.state.al.us/programs/water

MADISON COUNTY ~ Public Works Department
(unincorporated areas) **(256) 746-2900**

DO YOUR PART, BE SEPTIC SMART!

If you have a septic system, it is extremely important to keep up with its proper care and maintenance. Maintaining your septic system will protect you and the environment...

Household wastewater contains disease causing bacteria and viruses and high levels of nitrogen and phosphorous. If a septic system is well-maintained and working properly, it will remove most of these pollutants. Insufficiently treated sewage from septic systems risk the contamination of nearby waters by releasing bacteria, viruses and chemicals to local waterways.

Ways to be a Good Septic Owner

- Have your system inspected and pumped, when necessary, generally every three to five years
- Avoid pouring harsh products (oils, grease, chemicals, paint, medications) down the drain
- Discard non-degradable products in the trash (floss, wipes, cat litter) instead of flushing them
- Keep cars and heavy vehicles parked away from the drain field and tank
- Follow the system manufacturer's directions when using septic tank cleaners and additives
- Use water efficiently - repair leaks and use water efficient fixtures
- Maintain plants and vegetation near the system to ensure roots do not block drains
- Use soaps and detergents that are low-suds, biodegradable, and low- or phosphate - free

Warning Signs of a Failing System

- Wastewater backing up into household drains
- Bright green, spongy grass on the drain field, even during dry weather
- Pooling water or muddy soil around your septic system or in your basement
- A strong odor around the septic tank and drain field

If you have problems with your septic system, contact Huntsville– Madison County Health Department at 256-533-8726 (www.adph.org/madison).

TABLE OF PRIMARY CONTAMINANTS
At high levels, some primary contaminants are known to pose health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT (units of measurement)	MCL	BHW Results	HGW Results	CW/MFWTF Results	HU Results
BACTERIOLOGICAL - regulated at wells and treatment plants					
Turbidity (NTU) - groundwater	5	0.692	0.432	0.262	0.12
Turbidity - surface water	TT	-	-	-	
RADIOLOGICAL - regulated at wells and treatment plants					
Beta/Photon emitters (mrem/yr)	4	NT	NT	NT	NT
Alpha emitters (pci/l)	15	1.04 +/- 1.1	0.1 +/- 0.5	1.3 +/- 1.4	1.2 +/- 0.8
Combined radium (pci/l)	5	NT	NT	NT	NT
INORGANIC - regulated at wells and treatment plants					
Antimony (ppb)	6	ND	ND	ND	ND
Arsenic (ppb)	10	ND	ND	ND	ND
Asbestos (MFL)	7	NT	NT	NT	ND
Barium (ppm)	2	ND	ND	ND	ND
Beryllium (ppb)	4	ND	ND	ND	ND
Cadmium (ppb)	5	ND	ND	ND	ND
Chromium (ppb)	100	ND	ND	ND	ND
Cyanide (ppb)	200	ND	ND	ND	ND
Fluoride (ppm)	4	0.02 - 0.78	0.00 - 0.87	0.12 - 1.10	0.51 - 0.63
Mercury (ppb)	2	ND	ND	ND	ND
Nitrate (ppm)	10	4.43	1.97	2.42	0.52 - 1.90
Nitrite (ppm)	1	ND	ND	ND	ND
Selenium (ppb)	50	ND	ND	ND	ND
Thallium (ppb)	2	ND	ND	ND	ND
ORGANIC - regulated at wells and treatment plants					
2,4-D (ppb)	70	ND	ND	ND	ND
2,4,5-TP (Silvex) (ppb)	50	ND	ND	ND	ND
Acrylamide (ppm)	TT	NT	NT	NT	ND
Alachlor (ppb)	2	ND	ND	ND	ND
Atrazine (ppb)	3	ND	ND	ND	ND
Benzo(a)pyrene[PHAs] (ppt)	200	ND	ND	ND	ND
Carbofuran (ppb)	40	ND	ND	ND	ND
Chlordane (ppb)	2	ND	ND	ND	ND
Dalapon (ppb)	200	ND	ND	ND	ND
Di-(2-ethylhexyl)adipate (ppb)	400	ND	ND	ND	ND
Di(2-ethylhexyl)phthalates (ppb)	6	ND	ND	ND	ND
Dinoseb (ppb)	7	ND	ND	ND	ND
Diquat (ppb)	20	ND	ND	ND	ND
Dioxin[2,3,7,8-TCDD] (ppq)	30	NT	NT	NT	ND
Endothal (ppb)	100	ND	ND	ND	ND
Endrin (ppb)	2	ND	ND	ND	ND
Epichlorohydrin (ppb)	TT	NT	NT	NT	ND
Glyphosate (ppb)	700	ND	ND	ND	ND
Heptachlor (ppt)	400	ND	ND	ND	ND
Heptachlor epoxide (ppt)	200	ND	ND	ND	ND
Hexachlorobenzene (ppb)	1	ND	ND	ND	ND
Hexachlorocyclopentadiene (ppb)	50	ND	ND	ND	ND
Lindane (ppt)	200	ND	ND	ND	ND
Methoxychlor (ppb)	40	ND	ND	ND	ND
Oxamyl [Vydate] (ppb)	200	ND	ND	ND	ND
PCBs (ppt)	500	ND	ND	ND	ND
Pentachlorophenol (ppb)	1	ND	ND	ND	ND
Picloram (ppb)	500	ND	ND	ND	ND
Simazine (ppb)	4	ND	ND	ND	ND
Toxaphene (ppb)	3	ND	ND	ND	ND
Benzene (ppb)	5	ND	ND	ND	ND
Carbon tetrachloride (ppb)	5	ND	ND	ND	ND
Chlorobenzene (ppb)	100	ND	ND	ND	ND
Dibromochloropropane (ppt)	200	ND	ND	ND	ND
o-Dichlorobenzene (ppb)	600	ND	ND	ND	ND
p-Dichlorobenzene (ppb)	75	ND	ND	ND	ND
1,2-Dichloroethane (ppb)	5	ND	ND	ND	ND
1,1-Dichloroethylene (ppb)	7	ND	ND	ND	ND
cis-1,2-Dichloroethylene (ppb)	70	ND	ND	ND	ND
trans-1,2-Dichloroethylene (ppb)	100	ND	ND	ND	ND
Dichloromethane (ppb)	5	ND	ND	ND	ND
1,2-Dichloropropane (ppb)	5	ND	ND	ND	ND
Ethylbenzene (ppb)	700	ND	ND	ND	ND
Ethylene dibromide (ppt)	50	ND	ND	ND	ND
Styrene (ppb)	100	ND	ND	ND	ND
Tetrachloroethylene (ppb)	5	ND	ND	ND	ND
1,2,4-Trichlorobenzene (ppb)	70	ND	ND	ND	ND
1,1,1-Trichloroethane (ppb)	200	ND	ND	ND	ND
1,1,2-Trichloroethane (ppb)	5	ND	ND	ND	ND
Trichloroethylene (ppb)	5	ND	ND	ND	ND
Toluene (ppm)	1	ND	ND	ND	ND
Vinyl Chloride (ppb)	2	ND	ND	ND	ND
Xylenes (ppm)	10	ND	ND	ND	ND

CONTAMINANT (units of measurement)	MCL	AMOUNT DETECTED in Madison County Water System
BACTERIOLOGICAL - regulated in distribution system		
Total Coliform Bacteria	≤5% positive	0%
Fecal Coliform and E.coli	0 positive	0
INORGANIC - regulated at customers' tap 90th percentile		
Copper (ppm)	AL = 1.3	0.260
Lead (ppb)	AL = 15	ND
DISINFECTION AND DISINFECTION BY-PRODUCTS - regulated in distribution system		
Chlorine (ppm)	MRDL = 4	1.2 - 2.4
TTM (ppb)	80	29.3
HAAS (ppb)	60	29.5

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.

More information about the contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791

TABLE OF DETECTED CONTAMINANTS
All levels detected by analyses performed in 2019, unless otherwise noted.

DETECTED SUBSTANCE (units of measurement)	MCLG	MCL	BHW Results	HGW Results	CW/MFWTF Results	HU Results	Violation (yes/no)	Possible Source of Contaminant
REGULATED AT THE WELLS AND TREATMENT PLANTS – regulated and unregulated								
Turbidity (NTU)	0	5 TT	0.692	0.432	0.262	0.12	NO	Soil runoff
Fluoride (ppm)	4	4	0.64 Range 0.02 - 0.78	0.66 Range 0.00 - 0.87	0.62 Range 0.12 - 1.10	Range 0.51 - 0.63	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Nitrates (ppm)	10	10	4.43	1.97	2.42	Range 0.52 - 1.90	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alpha emitters (pCi/l)	0	15	(1.04+/-1.1)	(0.1+/-0.5)	(1.3+/-1.4)	1.0+/-0.8	NO	Erosion of natural deposits
Radium 228 (pCi/l)			(0.3+/-0.3)	(0.1+/-0.3)	(0.2+/-0.3)			
SECONDARY CONTAMINANTS								
Chloride (ppm)	NS	250	7.35	4.62	4.94	7.03 - 7.83	NO	Erosion of natural deposits
Sulfate (ppm)	NS	250	1.67	0.81	4.54	23.9 - 28.2	NO	Erosion of natural deposits
Total Dissolved Solids (ppm)	NS	500	100	28	140	72.0 - 140	NO	Erosion of natural deposits; runoff
pH	NS	NS	6.99	6.98	6.90	7.68 - 7.73	NO	Erosion of natural deposits; algae blooms
Total Alkalinity (ppm)	NS	NS	63.8	55	112	n/a	NO	Erosion of natural deposits
Carbon Dioxide (ppm)	NS	NS	4.24	3.17	6.61	n/a	NO	Erosion of natural deposits
Sodium (ppm)	NS	NS	18.7	23.3	2.36	7.04 - 16.6	NO	Erosion of natural deposits
Calcium (ppm)	NS	NS	16.1	6.36	39.7	n/a	NO	Erosion of natural deposits
Magnesium (ppm)	NS	NS	3.65	1.41	6.25	n/a	NO	Erosion of natural deposits
Hardness as CaCO ₃ (ppm)	NS	NS	55.3	21.7	125	62.8 - 69.6	NO	Erosion of natural deposits
UNREGULATED CONTAMINANTS								
Chloroform (ppb)	NS	NS	ND	ND	ND	ND - 14.0	NO	By-product of drinking water chlorination
Bromodichloromethane (ppb)	NS	NS	ND	ND	ND	ND - 3.67	NO	By-product of drinking water chlorination
Chlorodibromomethane (ppb)	NS	NS	ND	ND	ND	ND - 0.54	NO	By-product of drinking water chlorination

DETECTED SUBSTANCE (units of measurement)	MCLG	MCL	Madison County Results	Range	Violation (yes/no)	Possible Source of Contaminant
REGULATED IN DISTRIBUTION SYSTEM						
HAAS (ppb) [Total Haloacetic Acids]	0	60	29.3	16.7 - 51.3	NO	By-product of drinking water chlorination
TTM (ppb) [Total Trihalomethanes]	0	80	29.5	20.3 - 41.9	NO	By-product of drinking water chlorination
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.9	1.2 - 2.4	NO	Water additive used to control microbes

DETECTED SUBSTANCE (units of measurement)	Results	Violation (yes/no)	Possible Source of Contamination
Unregulated Contaminant Monitoring Rule 4 (UCMR4) Contaminants - EPA mandated 2019-2020 testing in progress			
Manganese (ppb)	ND - 0.75	NO	Naturally occurring or as a result of industrial discharge
HAA9 (ppb)	29.9 - 58.0	NO	By-product of drinking water chlorination
HAA6Br (ppb)	4.0 - 10.7	NO	By-product of drinking water chlorination
HAA5 (ppb)	25.9 - 52.6	NO	By-product of drinking water chlorination

As you can see by the table, our system had no contaminant level violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. However, the EPA has determined that your water is **SAFE at these levels.**

KEY TO TABLES
BHW - Bo Howard Well HGW - Hazel Green Well CW - Cress Well MFWTF - Mountain Fork Water Treatment Facility HU - Huntsville Utilities
ppm (parts per million) - the equivalent of a single penny in \$10,000 ppb (parts per billion) - the equivalent of a single penny in \$10,000,000 ppt (parts per trillion) - the equivalent of a single penny in \$10,000,000,000 ppq (parts per quadrillion) - the equivalent of a single penny in \$10,000,000,000,000 NTU (Nephelometric Turbidity Unit) - measure of water clarity; turbidity in excess of 5 NTU is just noticeable to the average person pCi/l (Picocuries per liter) - measure of radioactivity in water mrem/yr (millirems per year) - a measure of radiation absorbed by the body MFL - million fibers per liter
AL (Action Level) - the concentrations of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow TT (Treatment Technique) - a required process intended to reduce the level of a contaminant in drinking water
ND - constituent not detected in water NT - constituent not required to be tested at this site per ADEM NS - no standard set by regulations
MCL (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
MCLG (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
MRDL (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.
MRDLG (Maximum Residual Disinfectant Level Goal) - 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.

The sources of drinking water (both tap 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. Therefore, all drinking water, including bottled water, may be reasonably 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.

- Contaminants that may be present in source water include the following:**
- **Microbiological** – such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
 - **Inorganic** – such as salts and metals, can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming
 - **Pesticides and Herbicides** – may come from a variety of sources such as agricultural and residential uses, and stormwater runoff
 - **Organic** – including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can also come from gas stations, urban stormwater runoff, and septic systems
 - **Radioactive** – can be naturally occurring or be the result of oil and gas production and mining

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised 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. People 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 (1-800-426-4791).

MCL'S 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.

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. Madison County Water Department 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>.

Fees for Services (as of May 1, 2020)

Service call to check customer side, 7:00 am – 3:30 pm.....	\$30.00
Service call to check customer side, after hour.....	\$60.00
Broken or cut locks	\$75.00
Lower or raise meter for landscaping.....	\$500.00
Replace broken curb-stop.....	\$150.00
Replace broken or missing dual check valv.....	\$100.00
Relocate meter.....	cost plus
Locate missing service line	\$500.00
Dig up service for non-payment.....	\$500.00
Meter box and lid (regular).....	\$150.00
Meter box and lid (jumbo).....	\$250.00
Meter box lid oly.....	\$60.00
Repair or replace damaged or missing meters.....	\$200.00
Unauthorized Water Use (Fire Hydrant or Service Line).....	\$500.00
Meter taming.....	\$500.00
Meter drop-in (with existing service line and box).....	\$400.00
5/8" x 3/4" Meter w/ bacflow.....	\$900.00
1" Meter w/bacflow.....	\$1,000.00
2" Meter w/bacflow.....	\$2,750.00

**Contact the Madison County Water Department at (256) 746-2888
for current buidler fees and fees not listed above.**

METER INFORMATION:

Water meters are the property of the Madison County Water Department (MCWD). Payment for a water meter is a non-refundable fee for meter placement. For an account to remain active, a base rate (or minimum bill) must be paid monthly to cover the continuous maintenance of the water meter. If an account is inactive, the meter is subject to being removed by the MCWD. In the event of a lost/missing or damaged water meter or the need for replacing a meter that has been removed, due to customer neglect, the cost of the necessary repairs or replacement shall be paid by the customer.

Residential Rates	2019	2020
	Effective September 1, 2019	Effective September 1, 2020
Base Rate for 1" and smaller	\$ 14.00	\$14.00
First 2,500 gallons	\$2.55 per 1,000 gallons	\$2.60 per 1,000 gallons
Next 2,500 gallons	\$4.39 per 1,000 gallons	\$4.48 per 1,000 gallons
Next 5,000 gallons	\$4.39 per 1,000 gallons	\$4.48 per 1,000 gallons
Next 40,000 gallons	\$4.39 per 1,000 gallons	\$4.48 per 1,000 gallons
All Additional	\$6.99 per 1,000 gallons	\$7.13 per 1,000 gallons

If you experience problems or an interruption in your service, please contact our office at 256-746-2888. Also, visit us on Facebook for updated information concerning outages related to repairs and upgrades that may temporarily affect your service.



Madison County Water Department

246 Shields Road
Huntsville, Alabama
35811



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IMPORTANT INFORMATION – 2019 Drinking Water Report