

2016 DRINKING WATER QUALITY REPORT



Where does my water come from?

In 2016, your drinking water came from one of the following wells in Augusta:

- Brookside Well, 110 MG (million gallons)
- Triangle Well, 180 MG
- South Well, 138 MG
- Riverside North, 187 MG
- Riverside South, 24 MG

In 2016, over 639 million gallons of water were supplied from the five wells. The average flow was 1.75 million gallons of water pumped every day.

Testing for the future

The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments are designed to predict the likelihood of our drinking water sources being contaminated by human activities in the future. Assessments examine geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance. Results are available at public water suppliers, town offices, and the DWP. For more information about the SWAP, please contact the DWP at (207) 287-2070.

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(207) 622-3701

ENJOY WITH CONFIDENCE

Greater Augusta Utility District is pleased to present positive results from our 2016 assessment of the public drinking water supply we manage. Levels of potential contaminants in source water were all below the levels we target to safeguard your health. Levels of substances that may affect taste were also well within our standards.

We hope you find this Report informative. Please contact us with any questions at 207-622-3701 or contact@greateraugustautilitydistrict.org

Lead & Copper: Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The primary source is materials and components associated with service lines and home plumbing.

The District's lead and copper tests showed levels that were below the regulatory action levels. While we are responsible for delivering high quality drinking water to each property, we cannot control the variety of materials used in plumbing components on the property. You can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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. For more information, visit **www.epa.gov/safewater/lead/.**

The District tests for lead and copper in accordance with the Safe Drinking Water Act.

WHAT'S IN THE WATER?

All sources of drinking water (both tap water and bottled water) are fed by 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 can pick up substances resulting from human or animal activity.

In order to ensure that tap water is safe to drink, EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems, as well as in bottled water.

Contaminants that may be present in source water include:

- **1.** Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **2.** 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.
- **3.** Pesticides and herbicides, which may come from a variety of sources: agriculture, urban storm water runoff and residential uses.
- **4.** Organic chemical contaminants, 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.
- **5.** Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

Sodium hypochlorite is added to reduce the risk of bacteria and viruses in the distribution system. Sodium fluoride is added to help protect teeth. Carus 8100 is added to reduce lead and copper levels.

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. 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).**

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MAXIMUM

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	MONITORED CONSTITUENT	CONTAMINANT LEVEL GOAL (MCLG)	CONTAMINANT LEVEL (MCL)	RESULTS	SAMPLE DATE	MAJOR SOURCES IN DRINKING WATER	
DISTRIBUTION SYSTEM SAMPLES	Total Coliform Bacteria - Note 1	0	1 Positive Sample/Month	0	2016	Naturally present in the environment.	
	Total Haloacetic Acids - HAA5 (ppb) - Note 2	0	60	3	09/20/16	By-product of drinking water chlorination.	
	Total Trihalomethanes (ppb) - Note 2	0	80	29	09/20/16	By-product of drinking water chlorination.	
	Copper, (ppm) - Note 3	1.3	Action Level = 1.3	0.34	07/01/16-12/31/16	Corrosion of household plumbing systems.	
	Lead, (ppb) - Note 3	0	Action Level = 15	3.8	12/31/16	Corrosion of household plumbing systems.	
	Flouride (ppm) - Note 4	4	4	0.8	03/16/16	Water additive which promotes strong teeth.	
CE WATER SAMPLES	Arsenic (ppb)	0	10	4.1	07/23/15	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.	
	Barium (ppm)	2	2	0.012	07/23/15	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.	
	Chromium (ppb)	100	100	2.2	07/23/15	Discharge from steel and pulp mills. Erosion of natural deposits.	
	Nirate (ppm) - Note 5	10	10	1.3	05/18/15	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.	
SOURCE M	Combined Radium (-226 and -228) pCi/l	0	5	0.767	11/16/15	16/15 Erosion of natural deposits.	
os	Combined Uranium (ppb)	0	30	3.0	11/16/15	Erosion of natural deposits.	
	Radium -226 (pCi/l)	0	5	0.431	11/16/15	Erosion of natural deposits.	
	Radium -228 (pCi/l)	0	5	0.336	11/16/15	Erosion of natural deposits.	
	Radon (pCi/l) - Note 6	4,000	4,000	999	04/28/14	Erosion of natural deposits.	
	Uranium (ppb)	0	30	3.7	04/28/14	Erosion of natural deposits.	

Herbicides
Pesticides

In 2014, our system was granted a 'Synthetic Organics Waiver.' This is a three-year exemption from the monitoring/reporting requirements for industrial chemical semivolatile organics. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

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CHLORINE RESIDUAL	MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG)	MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL)	RUNNING ANNUAL AVERAGE PPM (RRA)	RANGE PPM	MAJOR SOURCES IN DRINKING WATER
Triangle Station, 2016	4 ppm 4 ppm		1.26	0.76 - 1.52	By-product of drinking water chlorination.
Riverside Station, 2016	4 ppm	4 ppm	1.04	0.45 - 1.43	By-product of drinking water chlorination.

HARDNESS (NOT A CONTAMINANT OR EPA REGULATED)	YOUR WATER	SAMPLE DATE	
Hardness (ppm as Ca)	135	2016	The District's water is classified as "hard" to "very hard" according to USGS guidelines.

	CONTAMINANT	MCL	YOUR WATER	SAMPLE DATE	NOTICEABLE EFFECTS ABOVE THE SECONDARY MCL	
	Chloride (ppm)	250	44	07/23/15	Salty taste.	
TS	Iron (ppm)	0.3	0.28	07/23/15	Rusty color; sediment; metallic taste; reddish or orange staining.	
Z V Z	Magnesium	None	3.4	07/23/15	None.	
SECONDARY CONTAMINANTS	Manganese (ppm)	0.05	0.0056	04/28/14	Black to brown color; black staining; bitter metallic taste.	
	Nickel (ppm)	None	0.00059	07/23/15	None.	
	рН	6.5 - 8.5	7.4 to 7.5	07/07/15	pH is slightly basic.	
	Sodium (ppm)	None	25	07/23/15	Sodium is very low.	
	Sulfate (ppm)	250	10	07/23/15	Salty taste.	
	Zinc (ppm)	5	0.0016	07/23/15	Metallic taste.	

DEFINITIONS

Maximum Contaminant Level (MCL): The highest level of a contaminant that is 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.

Running Annual Average (RAA): The average of all monthly or quarterly samples for the last year at all sample locations.

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

Maximum Residual Disinfectant Level (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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

UNITS

ppm: parts per million or milligrams per liter (mg/L).
 ppb: parts per billon or micrograms per liters (μg/L).
 pps: positive samples.

NOTES

- 1. Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
- 2. TTHM/HAA5: Total Trihalomethanes and Halocetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running annual average.
- 3. Lead/Copper: Action levels I(AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 4. Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 to 1.2 ppm. The optimum level is 0.7 ppm.
- **5. Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than size months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice for your health provider.
- **6. Radon:** The state of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4,000 pCi/l, effective 01-01-07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon.

MORE INFORMATION

This Report is produced for all drinking water customers of the Greater Augusta Utility District.

For more information about the quality of your water or the District, please go to GreaterAugustaUtilityistrict.org/DrinkingWater or call us at (207) 622-3701 (M-F, 7:00 A.M to 4:00 P.M).

ABOUT YOUR WATER DISTRICT

Many people think that the Greater Augusta Utility District is part of the City of Augusta. But, in fact, it is a standalone quasi-municipal entity. Its roots go back to 1903, when the Augusta Water District was formed to take over a private water company.

Today, the District is a regional public utility that owns, operates and maintains four distinct systems to handle your water needs: a system of wells that supply drinking water; a wastewater collection system; a stormwater/catch basin system; and a wastewater treatment plant. We service all systems in Augusta; the drinking water in Manchester, the wastewater system in Hallowell; and wastewater collection and treatment for Monmouth, Winthrop and Manchester.

We are proud to continue our long tradition of supplying our customers with clean, safe and plentiful drinking water. On behalf of all the employees, I thank you for your support!

> -Brian Tarbuck, General Manager BT arbuck @Greater August a Utility District.org



YOUR BOARD OF TRUSTEES

The District is governed by a Board of Trustees, as spelled out by the District's charter, which oversees the operation of the District, approves policies, reviews financial performance, sets rates and enables the District to take out loans for projects.

The Board is made up of nine people, seven with voting rights; and two ex-officio, non-voting members (one each from Hallowell and Augusta). Seven of the Trustees are appointed by the Mayor of Augusta and two by the Mayor of Hallowell.

Trustees are appointed to three-year terms. The Board meets monthly and all meetings are open to the public. For the date and time of each meeting, visit our website, where you can also find minutes and videos of past meetings. You can also watch most meetings live on CTV-7.



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