



We are pleased to provide you, our customer, our annual Water Quality Report. This report presents our water quality data and other information about drinking water. We are committed to providing our customers with the highest quality drinking water possible.

Water Sources	Purchased surface water from Gadsden Water Works (Middle Coosa Basin)					
Storage Capacity	5 tanks with total capacity 1,000,000 gallons 1 pneumatic tank 1,000 gallons					
Number of Customers	Approximately 1400					
Board Members	Courtney Cole – Chairman Steve Johnson – Vice Chairman Tommy Morgan Gary Pruitt					
Operator Holli Lang						

Our water source comes from the Middle Coosa Basin. This watershed contains 23 rivers and streams and 420 lakes. The basin is fed from the Upper Coosa Basin and multiple aquifers, including Pennsylvania aquifers, Valley and Ridge aquifers, and Valley and Ridge carbonate rock aquifers. You may find more information about the Coosa River watershed on the EPA's website at <u>https://cfpub.epa.gov/surf/huc.cfm?huc\_code=03150106</u>.

## Water Source Protection

In compliance with the Alabama Department of Environmental Management (ADEM), Gadsden Water Works and Sewer Board (GWWSB) developed a Source Water Assessment plan that assists in protecting our water sources. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. The susceptibility analysis identified several contaminant sources that could potentially affect the quality of the source water. To help address these concerns, the GWWSB developed a Contingency Plan. You may request to review a copy during regular business hours, or you may purchase a copy upon request for a nominal reproduction fee.

In addition, the GWWSB monitors numerous sampling points around the lake each month to track the water quality in the lake and to identify contaminant sources. The GWWSB realizes that protection of our water resources is essential to providing highquality drinking water to our community. In further efforts to protect our drinking water source, the GWWSB is an active member of the Coosa River Basin Clean Water Partnership, a group dedicated to protecting and restoring water quality and biological integrity in the Coosa River Basin.

Please help us make these efforts worthwhile by protecting our source of water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil. We ask that all our customers help us protect our valuable water sources, which are the heart of our community, our way of life, and our children's futures.

## **Questions?**

If you have any questions about the information in this report or concerning your water utility, please contact Holli Lang Water Operator, 256-546-1751

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. Highland Water Authority holds regular public meetings monthly at 6 P.M. At our office at 3071 Tabor Road, Gadsden Alabama,35901. All are welcome to attend.

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

#### **General Information about Drinking Water**

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a List of Definitions in this report, 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. 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 radioactive material, and it 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, 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, storm water run-off, and residential uses.

·Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. 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.

Your source water is also tested for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animal or human waste. For people who may be immuno-compromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at <u>www.epa.gov/safewater/crypto.html</u> or from the Safe Drinking Water Hotline at 800-426-4791. This language does not indicate the presence of cryptosporidium in our drinking water.

**Cryptosporidium** is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised individuals, infants and small children, and the elderly are at greater risk of developing life-threatening illnesses. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through other means than drinking water. We currently monitor for Cryptosporidium and have had none detected

**Radon** is a naturally occurring gas present in some groundwater. Inhaled radon has been linked to lung cancer and may pose a health risk when inhaled after the release from water into the air. This inhalation could occur during showering, bathing, washing dishes, or washing clothes. The radon gas release from drinking water is a relatively small part of the total radon found in air. One major source of radon gas is from the soil, where the gas can seep through the foundations of homes. It is not clear whether ingested (i.e. taken through the mouth) radon contributes to cancer or other adverse health conditions. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on home testing contact (insert name of local health department). Note 300 Pci/l proposed MCL.

Some people who drink water contaminated with trihalomethanes (TTHMs) and halocetic acids (HAAA5's) in <u>excess of the</u> <u>MCL</u> over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Since most surface water treatment plants use chlorine for disinfection, TTHMs and HAAA5's has become a national problem. As you can see from the report, we did not exceed the contaminate levels for TTHMS and HAA5s for 2024. We are constantly working at the Highland Water Department to control the amount of TTHMS and HAA5s in our drinking water.

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.

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. People at risk should seek advice about drinking water from their health care providers. More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Highland Water Authority strives to provide a dependable supply of water to all consumers. We ask that you be considerate when accidents or Mother Nature hinder our efforts to supply your water. Regardless of the time, or weather, waterworks personnel are on call and working to keep water flowing. Please help us protect our water sources, which are a vital part of our lives and our children's future.

# Information about Lead

Lead in drinking water is rarely found in source water but is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Use *only* water from the cold-water tap for drinking, cooking, and *especially for making baby formula*. Hot water is more likely to cause leaching of lead from plumbing materials. 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. These recommended actions are very important to the health of your family. 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 <u>www.epa.gov/safewater/lead</u>. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

**Lead Service Line Inventory:** Our Lead Service Line Inventory was completed and submitted by the deadline of October 16, 2024, and a copy of it is in our office as required by EPA. If any would like to review it or have any questions, please feel free to contact our office.

Upon completing the lead service line inventory, Highland Water Authority is pleased to report, that they had 0 – Lead Service Lines, 0 – Galvanize Required Replacement Service Lines, 0 – Unknown, and 1310 Non- Lead Service Lines.



## Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. At times, we may need to flush the distribution mains. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains. Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not themselves pose health concerns, they can affect the taste, clarity, and color of the water. Flushing helps ensure the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell. During flushing operations in your neighborhood, some short-term changes are possible. For instance, the water may run darker for a while due to the flushed sediment from the distribution pipes. Avoid tap water for drinking and washing white clothes at such times. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water, to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

### **Causes of Pink or Gray Stains on Fixtures**

Gray or pink stains are sometimes noticed on moist surfaces of water fixtures. This condition is typically caused by an air borne bacteria that thrives in moist and otherwise favorable locations. These bacteria are generally "*serratia marcescens*" bacteria, although many other airborne bacteria can exist under these moist conditions. These bacteria are generally not hazardous to a healthy person. This discoloration easily wipes from the fixture surface and typically leaves no staining once cleaning is completed. The origin of these bacteria is airborne and NOT from the water in the water plumbing system.

#### Definitions

Action Level- the concentration of a contaminant that, if exceeded, triggers treatment or other requirements. Coliform Absent (ca)- laboratory analysis indicates that the contaminant is not present.

**Disinfection byproducts (DBPs)-** formed when disinfectants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water. Disinfection byproducts for which regulations have been established include trihalomethanes (TTHM), haloacetic acids (HAA5), bromate, and chlorite.

**Distribution System Evaluation (DSE)**- a four-quarter study conducted by water systems to identify distribution system locations with high concentrations of THMs and HAAs.

Level 1 Assessment- a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment-** a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL)**- 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**- 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.

**Maximum Residual Disinfectant Level (MRDL)**- highest level of a disinfectant allowed in drinking water **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.

**Micrograms per liter (ug/L)** – equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.

Milligrams per liter (mg/L) – equivalent to parts per million

Millirems per year (mrem/yr)- a measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit (NTU)**- a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Not Detected (ND)**- laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

**Parts per billion (ppb) or Micrograms per liter (µg/l)**- corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per million (ppm) or Milligrams per liter (mg/l)**- corresponds to one minute in two years or a single penny in \$10,000.

**Parts per quadrillion (ppq) or Picograms per liter (picograms/I)**- corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/I)**- corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Picocuries per liter (pCi/L)- a measure of the radioactivity in water.

**Running Annual Average (RAA)**- yearly average of all the DPB results at each specific sampling site in the distribution system. The RAA, along with a range, is reported in the Table of Detected Contaminants.

**Standard Units (S.U.)**- pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.

**Treatment Technique (TT)**- a required process intended to reduce the level of a contaminant in drinking water. **Variances & Exemptions (V&E)**- State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

## **Monitoring Schedule and Results**

Northeast Etowah County Water and Gadsden Water Works *routinely* monitor for constituents in your drinking water according to Federal and State laws. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituents Monitored	Northeast Etowah	GWWSB
Inorganic Contaminants	Not required	2020
Lead/Copper	2022	2018
Microbiological Contaminants	current	current
Nitrates	Not required	2020
Radioactive Contaminants	Not required	2012
Synthetic Organic Contaminants (including herbicides & pesticides)	Not required	2020
Volatile Organic Contaminants	Not required	2020
Disinfection By-products	Current	2020
Cryptosporidium	Not required	2017
Distribution System Evaluation (DSE)	2024	2017
UCMR4 Contaminants	Not required	2018 <sup>1</sup>
PFAS Contaminants	Not required	2020 <sup>2</sup>
UCMR5 Contaminants	2024	

<sup>1</sup> UCMR4 results are on GWWSB's website www.gadsdenwater.org/files/GWWSB\_CCR\_2020.pdf

<sup>2</sup> GWWSB has been monitoring for PFAS since 2016. For PFAS results, see <u>www.gadsdenwater.org/environmentalreporting.aspx</u>

TABLE OF DETECTED DRINKING WATER CONTAMINANTS Highland Water Authority									
Contaminants Violation Yes/No Level Unit Msmt MCLG MCL Likely Source of Contamination									
Chlorine	NO	Low-0.98 High-2.03 Avg. 2.0	ppm	4	4	water additive used to control microbes			
Copper	NO	0.059 *	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching			
Lead	NO	ND	ppm	0.015	AL=.015	Household plumbing corrosion; erosion; preservative leaching			
TTHM [Total trihalomethanes]	NO	LRAA 30.75 20.0-54.0	ppb	0	80	By-product of drinking water chlorination			
HAA5 [Total haloacetic acids]	NO	LRAA 11.59 5.9-21.0	ppb	0	60	By-product of drinking water chlorination			

# TABLE OF DETECTED DRINKING WATER CONTAMINANTS Gadsden Water Works and Sewer Board

Contaminants	Violation Yes/No	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination	
Chlorine	NO	2.03	ppm	MRDLG=4	MRDL=4	water additive used to control microbes	
Total organic carbon (TOC)	NO	0.54	ppm	n/a	TT	oil runoff	
Turbidity	NO	0.15	NTU	n/a	TT	Soil runoff	
Alpha emitters	NO	ND	PCi/l	0	15	Erosion of natural deposits	
Copper (Consumer's tap)	NO	0.026 *	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching	
Barium	NO	0.05	ppm	2	2	Drilling waste; refinery discharge; erosion of natural deposits	
Nitrate (as Nitrogen)	NO	0.05	ppm	10	10	Erosion; water additive for tooth health; factory discharge	
Fluoride	NO	0.88	ppm	4	4	Fertilizer runoff; septic tank leaching, sewage; erosion	
Nitrite	NO	0.05	ppm	10	10	Fertilizer runoff; septic tank leaching, sewage; erosion	
TTHM [Total trihalomethanes]	NO	18.0	ppb	0	80	By-product of drinking water chlorination	
HAA5 [Total haloacetic acids]	NO	7.0	ppb	0	60	By-product of drinking water chlorination	
Unregulated Contaminants							
Chloroform	NO	12.63	ppb	none	none	Naturally occurring in the environment or from runoff	
Bromodichloromethane	NO	6.18	ppb	none	none	Naturally occurring in the environment or from runoff	
Chlorodibromomethane	NO	3.10	ppb	none	none	Naturally occurring in the environment or from runoff	
Secondary Contaminants							
Aluminum	NO	0.032	ppm	n/a	0.2	Naturally occurring in the environment or from treatment	
Chloride	NO	30.8	ppm	none	250	Naturally occurring in the environment or from runoff	
Hardness	NO	58.4	ppm	none	none	Naturally occurring or from water additives	
Iron	NO	ND	ppm	none	0.3	Erosion of natural deposits	
Manganese	NO	0.0053	su	none	0.5	Erosion of natural deposits	
рН	NO	7.90	S.U.	none	none	Naturally occurring or from water additives	
Sodium	NO	19.3	ppm	none	none	Naturally occurring in the environment	
Sulfate	NO	ND	ppm	none	250	Naturally occurring in the environment; erosion	
Total Alkalinity	NO	56	ppm	none	none	Erosion of natural deposits	
Total Dissolved Solids	NO	110	ppm	none	500	Naturally occurring in the environment or from runoff	

Zinc	NO	0.074	ppm	none	5	Erosion; factory & refinery discharge; runoff from landfills		
* Figure shown is 90 <sup>th</sup> percentile and # of sites above the Action Level (AL) = 0								

# Standard List of Drinking Water Contaminants

Following is a list of *Primary Drinking Water Contaminants* and a list of *Unregulated Contaminants* for which our water system routinely monitors according to the requirements of the Environmental Protection Agency and the Alabama Department of Environmental Management. These contaminants were *not* detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants*.

STAN	IDARD LIST	OF PRIMARY DR	RINKING WATER CONTAMINANTS	S			
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt		
Bacteriological Contaminants			trans-1,2-Dichloroethylene	100	ppb		
Total Coliform Bacteria	<5%	present/absent	Dichloromethane	5	ppb		
Fecal Coliform and E. coli	0	present/absent	1,2-Dichloropropane	5	ppb		
Fecal Indicators	0	present/absent	Di (2-ethylhexyl)adipate	400	ppb		
Turbidity	TT	NTU	Di (2-ethylhexyl)phthalate	6	ppb		
Cryptosporidium	TT	Calc.organisms/l	Dinoseb	7	ppb		
Radiological Contaminants			Dioxin [2,3,7,8-TCDD]	30	ppq		
Beta/photon emitters	4	mrem/yr	Diquat	20	ppb		
Alpha emitters	15	pCi/l	Endothall	100	ppb		
Combined radium	5	pCi/l	Endrin	2	ppb		
Uranium	30	pCi/l	Epichlorohydrin	TT	TT		
Inorganic Chemicals			Ethylbenzene	700	ppb		
Antimony	6	ppb	Ethylene dibromide	50	ppt		
Arsenic	10	ppb	Glyphosate	700	ppb		
Asbestos	7	MFL	Heptachlor	400	ppt		
Barium	2	ppm	Heptachlor epoxide	200	ppt		
Beryllium	4	ppb	Hexachlorobenzene	1	ppb		
Cadmium	5	ppb	Hexachlorocyclopentadiene	50	ppb		
Chromium	100	ppb	Lindane	200	ppt		
Copper	AL=1.3	ppm	Methoxychlor	40	ppb		
Cyanide	200	ppb	Oxamyl [Vydate]	200	ppb		
Fluoride	4	ppm	Polychlorinated biphenyls	0.5	ppb		
Lead	AL=15	ppb	Pentachlorophenol	1	ppb		
Mercury	2	ppb	Picloram	500	ppb		
Nitrate	10	ppm	Simazine	4	ppb		
Nitrite	1	ppm	Styrene	100	ppb		
Selenium	.05	ppm	Tetrachloroethylene	5	ppb		
Thallium	.002	ppm	Toluene	1	ppm		
Organic Contaminants			Toxaphene	3	ppb		
2,4-D	70	ppb	2,4,5-TP(Silvex)	50	ppb		
Acrylamide	TT	TT	1,2,4-Trichlorobenzene	.07	ppm		
Alachlor	2	ppb	1,1,1-Trichloroethane	200	ppb		
Benzene	5	ppb	1,1,2-Trichloroethane	5	ppb		
Benzo(a)pyrene [PAHs]	200	ppt	Trichloroethylene	5	ppb		
Carbofuran	40	ppb	Vinyl Chloride	2	ppb		
Carbon tetrachloride	5	ppb	Xylenes	10	ppm		
Chlordane	2	ppb	Disinfectants & Disinfection Byp	roducts			
Chlorobenzene	100	ppb	Chlorine	4	ppm		
Dalapon	200	ppb	Chlorine Dioxide	800	ppb		
Dibromochloropropane	200	ppt	Chloramines	4	ppm		
o-Dichlorobenzene	600	ppb	Bromate	10	ppb		
p-Dichlorobenzene	75	ppb	Chlorite	1	ppm		
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb		
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb		
cis-1,2-Dichloroethylene	70	ppb					
		UNREGULATED	CONTAMINANTS				
1,1 – Dichloropropene	Aldicarb		Chloroform	Metolach	Metolachlor		
1,1,1,2-Tetrachloroethane	Aldicarb	Sulfone	Chloromethane	Metribuzi	n		
1,1,2,2-Tetrachloroethane	Aldicarb	Sulfoxide	Dibromochloromethane	N - Butylk	benzene		
1,1-Dichloroethane	Aldrin		Dibromomethane	Naphthal			
1,2,3 - Trichlorobenzene	Bromobe	nzene	Dicamba	N-Propylt	benzene		
1,2,3 - Trichloropropane	Bromoch	loromethane	Dichlorodifluoromethane	O-Chloro			
1,2,4 - Trimethylbenzene		chloromethane	Dieldrin	P-Chlorot	oluene		
1,3 – Dichloropropane	Bromofor		Hexachlorobutadiene		yltoluene		
1,3 – Dichloropropene	Bromome		Isoprpylbenzene	Propachle			
1,3,5 - Trimethylbenzene	Butachlo	r	M-Dichlorobenzene	ylbenzene			
2,2 – Dichloropropane	Carbaryl		Methomyl		Tert - Butylbenzene		
3-Hydroxycarbofuran	Chloroeth	nane	МТВЕ		Trichlorfluoromethane		
			1	1	menioriuororitettiarie		

# UCMR5

The Safe Drinking Water Act (SDWA) requires that once every five years the EPA issues a list of unregulated contaminants to be monitored by public water systems (PWSs).

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by the EPA and consensus organizations. This action provides the agency and other interested parties with scientifically valid data on the national occurrence of these contaminants in drinking water. Below is a list of the contaminants that are being tested for during the UCMR5 along with their results.

Highland Water Authority Unregulated Contaminant Rule 5 (UCMR5) Contaminants									
Contaminants	Unit Msmt	Level Detected	Contaminant	Unit Msmt	Level Detected				
lithium	ppt	<9	PFHxA	ppt	20.27				
11CI-PF3OUdS	ppt	<mrl< td=""><td>PFHxS</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFHxS	ppt	<mrl< td=""></mrl<>				
4:2 FTS	ppt	<mrl< td=""><td>PFMBA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFMBA	ppt	<mrl< td=""></mrl<>				
6:2 FTS	ppt	<mrl< td=""><td>PFMPA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFMPA	ppt	<mrl< td=""></mrl<>				
8:2 FTS	ppt	<mrl< td=""><td>PFNA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFNA	ppt	<mrl< td=""></mrl<>				
9CI-PF3ONS	ppt	<mrl< td=""><td>PFOA</td><td>ppt</td><td>16.47</td></mrl<>	PFOA	ppt	16.47				
ADONA	ppt	<mrl< td=""><td>PFOS</td><td>ppt</td><td>13.37</td></mrl<>	PFOS	ppt	13.37				
HFPO-DA	ppt	<mrl< td=""><td>PFPeA</td><td>ppt</td><td>35.5</td></mrl<>	PFPeA	ppt	35.5				
NFDHA	ppt	<mrl< td=""><td>PFPeS</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFPeS	ppt	<mrl< td=""></mrl<>				
PFBA	ppt	15.7	PFUnA	ppt	<mrl< td=""></mrl<>				
PFBS	ppt	82.33	NEtFOSAA	ppt	<mrl< td=""></mrl<>				
PFDA	ppt	<mrl< td=""><td>NMeFOSAA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	NMeFOSAA	ppt	<mrl< td=""></mrl<>				
PFDoA	ppt	<mrl< td=""><td>PFTA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFTA	ppt	<mrl< td=""></mrl<>				
PFEESA	ppt	<mrl< td=""><td>PFTrDA</td><td>ppt</td><td><mrl< td=""></mrl<></td></mrl<>	PFTrDA	ppt	<mrl< td=""></mrl<>				
PFHpA	ppt	7.0							
PFHpS	ppt	<mrl< td=""><td></td><td></td><td></td></mrl<>							

## UCMR Definitions:

<u>UCMR Minimum Reporting Level (MRL)</u>: The minimum concentration that may be reported by a laboratory as a quantified value for a method analyte following analysis. The MRLs were established based on the capability of the analytical method, not based on a level established as "significant" or "harmful". **UCMR Reference Concentration:** The reference concentrations are based on publicly available health information found in the following EPA resources: 2018 Edition of the Drinking Water Standards and Health Advisories Tables [i.e., Health advisories (HA)] and the CCL 4 Contaminant Information Sheets {i.e., **Health Reference Levels (HRLs)]**. The primary sources of the health information used to derive the guideline values in the resources referenced above are peer-reviewed assessments from EPA or other governmental agencies. The reference concentrations are subject to change as new health assessments are completed. Reference Concentrations are not legally enforceable federal standards.

<u>Health Reference Levels (HRL)</u>: The CCL process derives HRLs for screening purposes using available data and can be used in the Regulatory Determination process as risk-derived concentrations against which to evaluate the occurrence data to determine if contaminants may occur at levels of public health concern. HRLs are not final determinations about the level of a contaminant in drinking water that is necessary to protect any particular population and, in some cases, are derived prior to development of a complete exposure assessment using the best available data. HRLs are not legally enforceable federal standards

Health Advisories (HA): Has provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to State agencies and other public health officials on health effects, analytical methodologies and treatment technologies to assist with risk management decisions.