2024 Mount St. Mary's Treated Water Quality Report

Important Information About Your Drinking Water
We are pleased to present to you the Annual Water Quality Report (Consumer Confidence Report) for the year, for the period of January 1 to December 31, 2024. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA).

The Mount St. Mary's University (MSMU) water works consists of three drilled wells: well #3 (FR738096), well #5, and well #6 (FR738105) The water is pumped into a storage tank and then distributed. The Maryland Department of the Environment has preformed a assessment of the sources of water the Mount draws upon, a copy of the assessment can be obtained by contacting Mason Lucas, MSMU Facilities Engineer at 240-409-3045 or via e-mail at m.j.lucas@msmary.edu. A copy of the 2024 MSMU water report will not be mailed to consumers but is available upon request. If you have any questions about this report, please contact Mason Lucas.

Definitions
In the table, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Avg: Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- LRAA: Locational Running Annual Average
- ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.
- ppm: milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water
- ppt: One part per trillion is equivalent to one nanogram (ng/L) per liter. A single drop of food coloring in 18 million gallons of water.
- picocuries per liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

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 land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Regulated Contaminantes
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at 800-426-4791. Contaminants that may be present in source water include the following:

- 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, can be naturally-occurring or result from urban stormwater 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 agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants – include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants – can be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact Mason Lucas at 240-409-3045.

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 800-426-4791.

Lead Prevention
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. The Mount St. Mary's University Water Treatment Plant is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, please contact m.j.lucas@msmary.edu for a list of laboratories in your area that provide drinking water testing. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

Our water system tested a minimum of 2 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

What Is PFAS?
The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2024. The results are available on MDE's website: www.mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

PFAS — short for per- and polyfluoroalkyl substances — refers to a large group of more than 4,000 human made chemicals that have been used since the 1940s in a range of products, including stain- and water resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The EPA finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 parts per trillion (ppt). The MCLs for PFNA, PFHxS, and HFPO-DA (GenX chemicals) are each 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1 (unitless) to determine if the combined levels of these PFAS pose a risk and require action. Currently MSMU water does not contain levels of PFAS that are above the EPA Hazard Index.

The table below lists all the drinking water contaminants that were detected during the 2024 calendar year. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2024. The State requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Disinfectant	Date	Highest RAA	Unit	Range	MRDL	MRDLG	Typical Source
Chlorine	2024	1	ppm	-	4	4	Water additive used to control microbes

Lead and Copper	Date Sampled	90th Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
Copper	06/06/2024	.17	ND (<.05) - .52	ppm	1.3	0	Corrosion of household plumbing fixtures and systems
Lead	06/06/2024	< 2	ND (<2) - 2	ppb	15	0	Corrosion of household plumbing fixtures and systems

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	HAA5 @ ARCC	2023 - 2024	0	0 - 0	ppb	60	0	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	THM @ Waldron Stadium	2023 - 2024	7	6.6 - 6.6	ppb	60	0	By-product of drinking water disinfection
TTHM	HAA5 @ ARCC	2023 - 2024	7	6.8 - 6.8	ppb	80	0	By-product of drinking water chlorination
TTHM	THM @ Waldron Stadium	2023 - 2024	26	26.1 - 26.1	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	3/25/2024	5.35	3.56 - 5.35	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2/15/2022	0.63	0.31 - 0.63	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	5/2/2022	9.4	0 - 9.4	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2/15/2022	0.44	0 - 0.44	ppm	4	4	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	4/1/2024	3.11	1.2 - 3.11	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Combined uranium	2/11/2024	10.8	7.4 - 10.8	pCi/L	20.1	0	Erosion of natural deposits
Gross Alpha, Excl. Radon & U	8/25/2024	14	4.8-14	pCi/L	15	0	Erosion of natural deposits
Gross beta particle activity	2/11/2024	4.8	0 - 4.8	pCi/L	50	0	Decay of natural and man-made deposits.

Unregulated Contaminant Well 3 & 5 2024 PFAS	PFOS (ppt)	PFOA (ppt)	PFHxS (ppt)	GenX Chemicals (HFPO-DA) (ppt)	PFNA (ppt)	PFBS (ppt)	Hazard Index (unitless)
Results	18.5	16.77	4.29	0	0	2.47	.43
Range	10.2 – 26.8	8.66 – 24.8	2.3 – 6.29	ND	ND	0 – 4.94	.23 - .63