

Metcom St. Mary's County Metropolitan Commission

Breton Bay

PWSID # 0180001

2022 Annual Water Quality Report *“Investing in a water secure future for St. Mary's County”*

Once again, we proudly present our Annual Water Quality Report. This edition covers all testing completed from January through December 31, 2022. We are pleased to tell you that our compliance with all State and Federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. 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).

The source of your drinking water is one well in the Patapsco Aquifer. Wells in the Patapsco Aquifer range in depth from 800 to 950 feet beneath the earth's surface. Our water comes from confined Aquifers. The confining units are thick, impervious clay layers that lie above and below the water-bearing sand strata. We are very fortunate that these confining layers naturally protect our aquifers. The only treatment your water receives is the addition of chlorine as a precautionary disinfecting agent prior to entering your water distribution system.

We are pleased to report that our drinking water is safe and meets or exceeds Federal and State requirements. The following report is provided in compliance with Federal regulations and will be provided annually. This report outlines the quality of our drinking water and what that quality means.

For more information regarding your drinking water or water service, call Dwayne Cantrell at St. Mary's County Metropolitan Commission (301)737-7400, Extension 104 Monday through Friday, 7:30 am to 4:30 pm, or visit our website www.metcom.org.

Metcom Mission

Construct, operate and maintain public water supply and public waste water conveyance and treatment systems in a manner that is sustainable, reliable, economical and safe for the Commission's employees, the environment, and the citizens of St. Mary's County; and to ensure that construction is timely and in accordance with the St. Mary's County Comprehensive (Land Use) Plan.

Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA imposes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for the contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The source of drinking water (both tap and bottled water) includes 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, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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, urban storm water runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

How Can I Get Involved?

The public is invited to participate in the Commission meetings and voice concerns about the drinking water or any Commission-related issues. The public meetings are held on the second and fourth Thursday of every month beginning at 3 pm. Meetings are held at the Commission's Main Office, 23121 Camden Way, California, MD 20619.

The Commission members and the election district (ED) that they represent are as follows: Gerald E. Meyerman (ED1); Roy Alvey (ED2/9); Joe Russell Chairman (ED3); Dale Antosh, (ED4/5); Keith S. Dugan (ED6); Robert A. Russell, (ED7); Keith Fairfax, Jr. Co-Chairman (ED8); Captain John Brabazon USN Commanding Officer, Patuxent River NAS; and the Director of the St. Mary's County Metropolitan Commission, George Erichsen.

In this report 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:

DEFINITIONS

ND = Non-Detects

Indicates that substance's was not found by laboratory analysis.

ppm = Parts Per Million or Milligrams Per Liter (mg/l)

One part per million corresponds to one minute in two years or a single penny in \$10,000.00.

ppb = Parts Per Billion or Micrograms Per Liter (ug/l)

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00.

pCi/L = Picocuries Per Liter

Picocuries per liter is a measure of the radioactivity in water.

AL = Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. (Note: Only applies to copper and lead levels)

MCLG = Maximum Contaminant Level Goal

The "Goal" is 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.

MCL = Maximum Contaminant Level

The "Maximum Allowed" is 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.

N/A = Non-Applicable

No minimum levels have been established by the EPA.

Substances That Might Be in Drinking Water

It is important to understand that the EPA has determined that the detection of these substances in the drinking water does not constitute a known threat to public health at levels less than the MCL. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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 St. Mary's County Metropolitan Commission's water has proved to be below those levels for the contaminants listed.

The St. Mary's County Metropolitan Commission found some regulated contaminants present in your water system at levels below the Maximum Contaminant Level (MCL). These levels have been determined by the EPA to be safe. These contaminants are shown below, along with the MCLG and MCL for each one detected.

Although we ran tests for over 75 regulated contaminants, only the following listed substances were found. For a complete list of tested, undetected substances, contact the Water Division at (301) 737 -7400.

Substance	Date Tested	Unit	MCL	MCLG	Running Annual Avg	Level Detected	Possible Sources
Distribution System							
Copper	2020	ppm	AL=1.3	1.3	N/A	.102	Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems.
TTHM's (Total Trihalomethanes)	2022	ppb	80	N/A	N/A	17	By-product of drinking water disinfection.
Halo acetic Acids (HAA5)	2022	ppb	60	N/A	N/A	9	By-product of drinking water disinfection.
Chlorine	2022	ppm	4	4	N/A	1.5	Water additive used to control microbes.
Regulated Inorganic Contaminants							
Fluoride	2021	ppm	4.0	4.0	N/A	0.84	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium	2020	ppm	2	2	N/A	0.013	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.

UNREGULATED CONTAMINANTS							
PFOA/PFOS	2021	ppt	N/A	N/A	N/A	N/D	By-product of man-made substance

Polyfluoroalkyl substances

"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

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were below the detection limits for both compounds. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

Fluoride

No fluoride has been added to any of our water systems. However, small amounts of fluoride exist naturally in our water source. These levels may not meet the recommended amounts for dental protection. You may wish to consult with your dental care provider to discuss fluoride supplements. To inquire about the amount of fluoride detected in the water system, please call the Water Division at (301) 737-7400 between the hours of 8:00 a.m. and 4:30 p.m.

Additional Information for Lead

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. MetCom 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, contact MetCom Dwayne Cantrell EXT.104 Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Source Water Assessment

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the thirty-five community water systems in St. Mary's County, including the Breton Bay community supply. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The water supply sources of the community systems in St. Mary's County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Breton Bay water system is currently using two wells that pump water from the Aquia and Patapsco Formations respectively. The Wellhead Protection areas were delineated by the WSP using U.S. EPA's approved methods specifically designed for each source.

Potential point sources of contamination within and near the assessment areas were noted from field inspections and contaminant inventory databases. Well information and water quality data were also reviewed.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Breton Bay water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring arsenic (based on the new EPA standard).