

# Annual Drinking Water Quality Report

MD0130007

LUTHERAN VILLAGE AT MILLER'S GRANT

Annual Water Quality Report for the period of January 1 to December 31, 2017

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.

For more information regarding this report contact:

Name Sean Puckett

Phone 410-696-6786

Este informe contiene información muy importante sobre el agua que usted bebe.  
Tradúzcalo ó hable con alguien que lo entienda bien.

LUTHERAN VILLAGE AT MILLER'S GRANT is Purchased Surface Water

## Sources of Drinking 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 the 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.

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:

- Microbial contaminants, such as viruses and bacteria, which 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, 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 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 amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which 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 the system's business office.

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).

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. We 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>.

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. We are responsible for providing high quality drinking water, but we 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>.

**Information about Source Water Assessments**

SWA = Source Water Assessment

Source Water Name

CC\_0130002\_HOWARD COUNTY

Type of Water

SW

Report Status

Location

**Lead and Copper**

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.26	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

**Water Quality Test Results**

Definitions:

The following tables contain scientific terms and measures, some of which may require explanation.

Avg:

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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.

Level 1 Assessment:

A Level 1 assessment is 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.

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.

Level 2 Assessment:

A Level 2 assessment is 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 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.

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.

na:

not applicable.

mrem:

millirems per year (a measure of radiation absorbed by the body)

ppb:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halooacetic Acids (HAA5)	2018	57.6	42.6-57.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	73.0	63.8-73.0	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

**Water Quality Test Results**

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

Violations Table

<b>Haloacetic Acids (HAA5)</b>			
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
None			

<b>Total Trihalomethanes (TTHM)</b>			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
None			

<b>Bacteriological Testing</b>			
Failure to sample water			
Violation Began	Violation End	Violation Explanation	
9/28/2019	10/1/2019	Samples drawn for month were taken to laboratory, but leaked in transit	

# Howard County Department of Public Works



## Annual Water Quality Report

Reporting Period January 1, 2018 to December 31, 2018



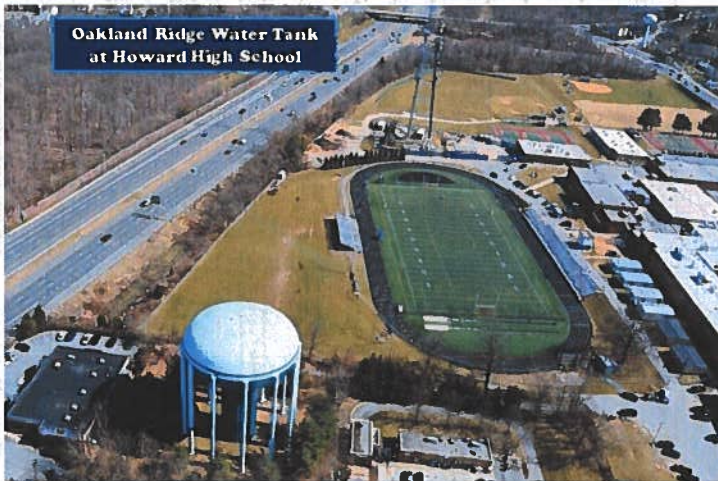
Calvin Ball,  
Howard County Executive

### Howard County Drinking Water

Access to clean water is a necessity and a human right. That is why we work hard to ensure that everyone in Howard County has access to quality drinking water. Our Bureau of Utilities is charged with conducting regular tests and publishing their results for the public.

This Consumer Confidence Report is a detailed summary of our community's drinking water quality. You will be able to learn more about how we make sure our water is clean and safe, and from where it is sourced.

I want to extend my thanks to every Howard County employee who works diligently in all types of weather to protect our water quality and ensure uninterrupted service. They are the reason we have the most reliable water supply in the region so that we can all safely enjoy drinking from the tap.



Oakland Ridge Water Tank  
at Howard High School

Howard county is pleased to present to you this year's Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts our water suppliers make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are surface water from the Liberty Reservoir on the North Branch of the Patapsco River and the Loch Raven Reservoir on the main stream of the Gunpowder Fall purchased from Baltimore City and surface water from the Patuxent River purchased from the Washington

Suburban Sanitary Commission

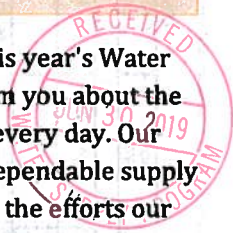
DEAR VALUED CUSTOMER,

Howard County residents, businesses, and guests continue to enjoy the highest quality drinking water in the region. In response to the moderate winter weather along with historic amount of rainfall experienced this past year by the region our motivated and well-trained staff were on continuous duty, promptly repairing broken water mains, and addressing damaged service lines. Our core responsibility is to proactively work each day to ensure critical water services are reliably provided on a 24/7 basis. Our mission is to provide high quality, safe and dependable drinking water to each of our valued customers. We hope you find this report informative and reassuring. In coordination with our regional water suppliers, the City of Baltimore and the Washington Suburban Sanitary Commission, we constantly strive to deliver the highest quality water supply service. The heightened national focus on the state of critical infrastructure is taken seriously and in Howard County our drinking water systems are expertly assessed for physical condition, proactively maintained to the highest standards, and considered for efficient rehabilitation or replacement in our long term capital improvement programming. Please do not hesitate in contacting your Howard County Bureau of Utilities team at 410-313-4900 for more information, or visit our updated web page at:

<https://www.howardcountymd.gov/Departments/Public-Works/Bureau-Of-Utilities>

Art Shapiro, PE, PMP  
Chief, Bureau of Utilities

"Reliable Professionals delivering customer-focused water services."



**WHY WATER IS TESTED:**

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, as well as radioactive substances, resulting from the presence of animals or from human activity. 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 the water poses a health risk.

**Contaminants 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, 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, 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 can also come from gas stations, urban storm water runoff, and septic systems.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) sets regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations set limits for contaminants in bottled water that must provide the same protection for public health.

The Maryland Department of the Environment (MDE) has completed a Source Water Assessment of the water supplies that serve the City of Baltimore. The Source Water Assessment Program may be viewed at the MDE web site, [http://www.mde.state.md.us/programs/Water/Water\\_Supply/ConsumerConfidenceReports/Documents/CCR2005Howard/0130002\\_Howard\\_County.pdf](http://www.mde.state.md.us/programs/Water/Water_Supply/ConsumerConfidenceReports/Documents/CCR2005Howard/0130002_Howard_County.pdf)

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

**FOR MORE INFORMATION**

If you have any questions about this report or concerning your water utility, please contact Howard County Utilities at 410-313-4900. 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 Department of Public Works Board meetings. Please call 410-313-2330 for further information about these meetings.

Employees at Howard County Utilities work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

**TEST RESULTS - HOWARD COUNTY - PSWID 0130002**

Contaminant	Violation Y/N	Total Sample Collected	Total Coliform* Positive	E-coli** Positive	E-coli MCLG
Microbiological Contaminants					
Routine Samples	N	1804	8	0	0
Repeat Sample	N	24	0	0	0

\*Coliform bacteria—naturally present in the environment  
\*\* E-coli—pathogen from human and animal fecal waste

**TEST RESULTS - OUR SUPPLIERS**

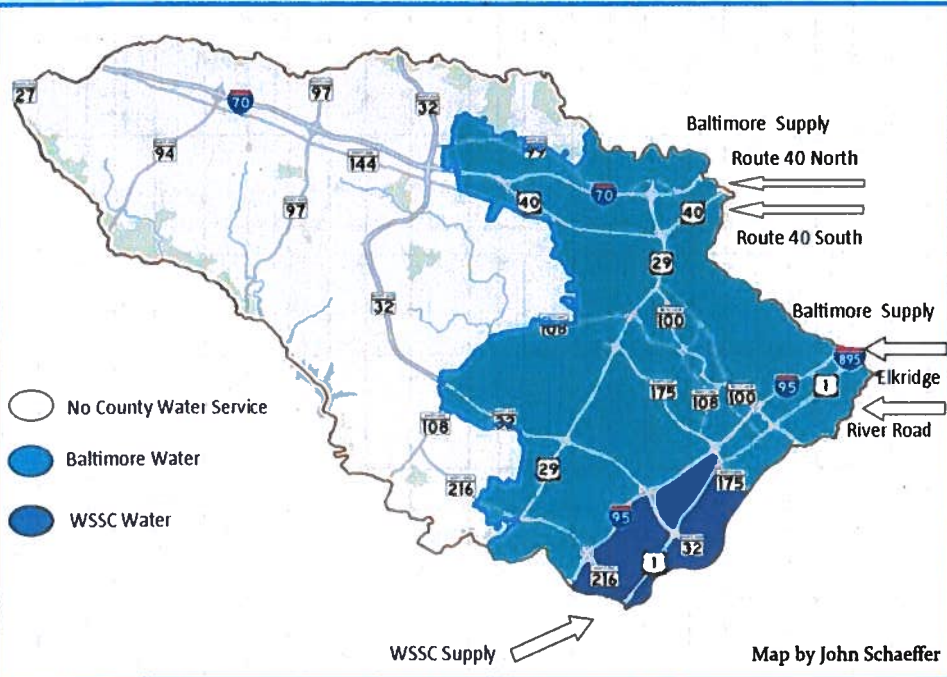
Contaminant - Units	Baltimore City Supply		Washington Suburban Sanitary Commission Supply		MCL	Likely Source of Contamination
	Ashburton Plant Violation Y/N	Level Detected	Montebello Plant Violation Y/N	Level Detected		
<b>Microbiological Contaminants</b>						
Turbidity - NTU	N	0.08	N	0.62	1.00	TT= Filtration
<b>Radioactive Contaminants</b>						
Beta/alpha emitters pCi/l	N	<1.5	N	<4	0	Decay of natural and man-made deposits
Alpha emitters pCi/l	N	<1	N	<2	0	Erosion of natural deposits
<b>Inorganic Contaminants</b>						
Antimony - ppb	N	<5	N	<5	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic - ppb	N	<2	N	<2	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium - ppm	N	0.02	N	0.036	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium - ppb	N	<0.5	N	<0.5	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	N	<0.5	N	<0.5	5	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
Chromium - ppb	N	<2	N	<2	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper - ppm	N	<.002	N	<.002	1.3	AL=1.3 Corrosion of household plumbing systems; erosion of natural deposit; leaching from wood preservatives
Fluoride - ppm	N	0.68	N	0.73	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead - ppb	N	<2	N	<2	0	AL=15 Corrosion of household plumbing systems; erosion of natural deposits
Mercury (inorganic) Ppb	N	<0.5	N	<0.5	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen) Ppm	N	1.31	N	1.23	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite (as Nitrogen) Ppm	N	<0.01	N	<0.01	1	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Selenium - ppb	N	<5	N	<5	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium - ppb	N	<1	N	<1	0.5	2 Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>						
2,4-D - ppb	N	<1.0	N	<1.0	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) - ppb	N	<1.0	N	<1.0	50	Residue of banned herbicide
Atrazine - ppb	N	<2	N	<2	0	2 Runoff from herbicide used on row crops
Atrazine - ppb	N	<3	N	<3	3	Runoff from herbicide used on row crops
Benz(a)pyrene - ppb	N	<0.2	N	<0.2	0	0.2 Leaching from linings of water storage tanks and distribution lines
Carbofuran - ppb	N	<1.0	N	<1.0	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane - ppb	N	<2	N	<2	0	2 Residue of banned termiticide
Dalapon - ppb	N	<4.0	N	<4.0	200	Runoff from herbicide used on rights of way
D(2-ethylhexyl) Adipate - ppb	N	<0.5	N	<0.5	400	400 Discharge from chemical factories



**TEST RESULTS - HOWARD COUNTY—PSWID 0130002**

**Volatile Organic Chemicals**

Substance	MCLG	MCL	Range (LRAA)	Average	Violation	Major Sources
Total THM's	n/a	<b>80ppb</b>	27.4 - 99.2ppb	47ppb	No	Byproduct of drinking water chlorination
HAA(5)	n/a	<b>60ppb</b>	23.9 - 45.9 ppb	34ppb	No	Byproduct of drinking water chlorination



**WHERE YOUR WATER COMES FROM**

If you live in the North Laurel area, east of Interstate 95 and south of Patuxent Range Road, your water originates from the Washington Suburban Sanitary Commission in Laurel. If you live anywhere else in Howard County and are connected to the public water supply, your water originates from Baltimore City. As a "Consecutive Water System", Howard County purchases water from Baltimore City and the Washington Suburban Sanitary Commission. Most of the analyses are performed at their water quality laboratories. The table inside this brochure shows the results of monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2016.

**LEAD AND COPPER TESTING - HOWARD COUNTY**

Water is below detection levels when it leaves the water treatment plant for lead and copper, but lead and copper can be released when the water comes in contact with pipes and plumbing fixtures in homes and buildings that contain lead and/or copper. The USEPA requires testing of the water distribution system for lead and copper at the tap. Howard County is required to sample 51 sites and of these 51 sites, 90% of the samples must have lead and copper levels less than the Action Level set by EPA, 0.015 mg/l or 15 parts per billion for lead and 1.3 mg/l or 1.3 parts per million for copper. The results of the sampling in 2014 are shown below. Howard County's lead and copper levels are consistently below the Action Level set by EPA. The next scheduled sampling for Lead and Copper will be performed during the summer of 2020. Check out our web page specific to lead in drinking water at: <https://www.howardcountymd.gov/Departments/Public-Works/Bureau-Of-Utilities/Customer-Service-Division/Lead-in-Drinking-Water>

Contaminant	Action Level	90 <sup>th</sup> Percentile Value
Lead	15 ppb	0.11 ppb
Copper	1.3 ppm	0 ppm

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. Howard County's Bureau of Utilities 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 drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead/>.

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 microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

**Waivers**

The Maryland Department of the Environment has granted the City of Baltimore monitoring waivers for the following compounds: 2,3,7,8-TCDD (Dioxin), Endothall, Diquat, Glyphosphate, Asbestos and Cyanide.