

2018 TOWN OF WILLIAMSBURG

DRINKING WATER QUALITY REPORT

To our customers,

We are pleased to provide this report, covering information about your drinking water supplied by the Williamsburg Water Department in calendar year 2018.

The report provides details about where your water comes from, how it is treated, and the quality of the water you receive.

We encourage you to contact the Water Department with questions, comments or suggestions about any aspect of the Town of Williamsburg's drinking water.

Sincerely,
William Turner, Chairman

TOWN OF WILLIAMSBURG

PWS#1340000

DISTRIBUTED: JUNE 2019

Where Does My Water Come From and How Is It Protected?

Our water supply comes from ground water at the South Street pumping station. At our South Street site, we have two wells, treatment facilities, and storage tanks. Treatment processes include disinfection by chlorination. Additionally, we treat water with sodium hydroxide to adjust the pH to help make the water less corrosive to the distribution system and to the plumbing in the homes. We own all the land in the Zone #1 area and a large portion in Zone #2. This helps to protect your water supply from contaminants. The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program (SWAP) Report for water supply source(s) serving this water system. The SWAP Report notes the key issues of the activities in the Zone 1, Residential uses, transportation corridors, agricultural activities and Comprehensive Wellhead Protection Planning in the water supply protection area. The SWAP Report recommends beaver control, prohibiting all non-water supply activities, ensuring that all residents upstream are aware of Best Management practices with respect to household hazardous materials and lawn chemicals, and no storage of pesticides, fertilizer or road salt within Zone 1. Williamsburg Water & Sewer Commission plans to address the protection recommendations by working on educating the residents to BMP, monitoring the beaver activity, monitoring the livestock on neighboring properties, and working on a Comprehensive Wellhead Protection Plan. Residents can help protect sources by: practicing good septic system maintenance, supporting water supply protection initiatives at the next Town Meeting, taking hazardous household chemicals to hazardous materials collection days, limiting pesticide and fertilizer use and using buffer strips to prevent animals from accessing Unquom Brook and prevent pasture runoff. The complete SWAP Report is available at the Town Clerk's Office or online at www.burgy.org. If you have any health concerns relating to the information in this report, we encourage you to contact your health care provider. For more information about this report, or for any other questions relating to your drinking water, please call William Turner, Chairman, at (413) 268-8405 or (413) 268-8430.

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. The Town of Williamsburg Water Commission 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 two minutes before using water for cooking or drinking. 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>



Substances That Could Be in Water

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

The sources of drinking water (both tap 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 mineral, and in some cases, radioactive material. It can pick up substances resulting in the presence of animals or from human activity. 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 agricultural, 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.

THINGS YOU CAN DO TO PROTECT YOUR WATER SUPPLY

- ◆ Reduce the amount of trash you create-reuse containers, recycle plastics, aluminum and glass.
- ◆ Do not litter-and yes, this includes cigarette butts
- ◆ Dispose of waste oil properly, never in drains or on the ground
- ◆ Check your car for oil leaks-repair leaks quickly
- ◆ Plant drought tolerant native plants in your yard in place of grass
- ◆ Apply pesticides and fertilizers minimally and properly
- ◆ If you walk your pet near any water supply area, pick up their waste
- ◆ Do not flush old medication
- ◆ Use alternative deicers such as calcium magnesium acetate and avoid table or rock salt.

Regulated Contaminants (Units)	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Sources of Contamination
Iron	04/24/2018	ND	ND	0.051	n/a	N	Minerals, pipes
Manganese	04/24/2018	ND	ND	0.0020	n/a	N	Minerals, Under-ground Pollution
Perchlorate	08/22/2018	ND	ND	2.0	n/a	N	Rocket Propellants, Fireworks, Flares

ACTION LEVEL		90TH	NUMBER OF SAMPLES	NUMBER OVER LIMIT	TEST DATE	
LEAD	0.0085 mg/L	14 ppb	10	0	09/20/2017	
COPPER	0.951 ppm	15 ppb	10	0	09/20/2017	
Bacteria (Tested)	Number of Tests Done 2018	Total # Positive	MCL	MCLG	Violation (Y/N)	Possible Sources of Contamination
Total Coliform	48	0	No more than 1 positive in a month	0	N	Naturally Present in the environment

TABLE DEFINITIONS

Maximum Contaminant Level (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 (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.

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

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

Total Coliform - Five (5) bacteria samples were taken each month.

90th Percentile - Out of ten (10) homes sampled, nine (9) were at or below this level

ppm - parts per million

ppb - parts per billion

Specific Educational Statement on Cross-Connections

A cross connection is a connection between a drinking water pipe and a potential source of contamination.

Cross connections can occur even in your own home. For instance, you hook up a water hose to a sprayer containing fertilizer to spray for your lawn. If the water pressure drops (perhaps because a nearby fire hydrant is used to fight a fire), the fertilizer may be sucked back through the hose into the drinking water pipes. To guard against this, owners need to use a backflow prevention device. The Williamsburg Water Department recommends the installation of devices such as a "hose bib vacuum breaker" on all outside hose connections. The devices can be purchased at most hardware or plumbing supply stores.

When installed correctly, this is a great way to protect the water in your home and the Town's drinking water system. For additional information on these devices, please contact the Water Department @ 413-268-8430.



HOW TO DETECT A WATER LEAK

If your water usage is higher than you believe it should be, please check the following steps:

1. Check all toilets for leaks by putting household blueing, found in the laundry section of the supermarket, or food coloring in the back of the toilet storage tank. This should be done the last thing in the night. If any color appears in the bowl in the morning, you have a leak. Check the rubber stop in the back of the storage tank for cracks and replace. A leaking toilet can waste up to 3000 gallons a day.
2. Check all faucets for drips or leaks
3. Check any hoses (washing machine, dishwasher, outdoor) for leaks
4. If you have any outbuildings connected to your water make sure you do not have a leak or a broken underground pipe.
5. If your home uses a hot water type heat, check for leaks around lines and furnace.
6. Call a plumber



Working Together We Can Cease the Grease!

WHAT IS "FOG" ?

FOG is fats, oils and grease that can build up in sewer lines. When grease is washed down the sink, toilet, or drain, it coats and sticks to the inside of sewer pipes. FOG is a major cause of sanitary sewer clogs and overflows.



WHERE DOES "FOG" COME FROM?

Meat Fats (beef, bacon, sausage, etc...)
Grease / Lard
Cooking Oil
Butter / Margarine
Food Scraps
Baking Products
Milk, Ice Cream, Yogurt, Sour Cream
Cream Based Sauces
Salad Dressing, Cheese, Mayonnaise
Motor Oil & Grease
Keep these foods out of all drains!



Best Management Practices for Home Owners

Never pour grease or oil down sinks, drains or toilets.

Dispose of cooled cooking fats, oils and grease into a waxed food container such as a milk carton or container with a lid and dispose of it in the garbage.

Use baskets or strainers in sinks to catch food scraps. Empty scraps into the trash can.

Scrape food scraps from dishes and pans into the trash can for disposal, before washing.

DO NOT use the toilet for disposing of: food scraps, sanitary items, rags, cloths, diapers, paper towels, napkins, face tissues, cat litter, 'Flushable' wipes, dental floss, medicines.

Did you know?

Liquid dish detergents that claim to dissolve grease, actually pass grease farther down the sewer line, & cause blockages there. Grease causes the majority of sewer backups. It is very important to scrape greasy foods off all dishes!



WHY IS "FOG" A PROBLEM?

Sewer pipes can become clogged by FOG and cause backups into basements, roadways and waterways and water bodies. Sewer backups create health hazards, can result in expensive property damage, and threaten the environment.



You Can Curb Water Pollution by Starting in Your Own Back Yard

Stormwater runoff, rain or snow-melt that either soaks into exposed soil or remains on top of impervious surfaces such as pavement and rooftops, eventually flows into our local streams, rivers and ponds. Stormwater runoff has become a major and fast growing source of pollution that affects every watershed.

When lawn clippings, fertilizers, soil, leaves, or animal wastes are picked up by stormwater runoff, they are carried directly to our local waterways. All of these material, including grass clippings, contain nitrogen and phosphorus. According to the U.S. EPA, nitrogen and phosphorus are two of the most troublesome pollutants in storm water runoff and are considered the primary cause of water quality problems in our lakes, ponds and streams. Although nitrogen and phosphorus are nutrients that are natural parts of the ecosystem, too much in the water causes algae to grow faster than ecosystems can handle, harming the water quality.

What can you do to protect water quality while keeping your yard maintained?

- ◆ Mow your lawn often enough so no more than one-third the length of the grass is removed. Taller grass has deeper roots—preventing erosion, suppressing weeds and helping the rain soak into the ground.
- ◆ Leave grass clippings on the lawn or compost them. A mulch-mower is ideal for retaining and spreading clippings on your lawn. Clippings decompose quickly, providing important nutrients for your lawn and reducing the need for nitrogen fertilizers.
- ◆ Keep clippings and chopped leaves out of the street and storm drains. Use a broom or leaf blower to blow clippings back into the lawn. Do not use a hose to wash them into the street or storm drains. Keeping clippings out of the streets and storm drains will have significant benefits for our local water ways.
- ◆ Fertilize only when necessary. Consider testing your soil to determine how much, if any, fertilizer your lawn needs. Identifying the needs of your lawn will reduce unnecessary applications that may harm your lawn or pollute surface water.
- ◆ Visit the University of Massachusetts Amherst website for additional information. <http://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory>
- ◆ Maximize the slow-release nitrogen in your fertilizer. Slow-release nitrogen limits nutrient runoff. This should be applied in the spring, not autumn, to provide a steady source of nutrients throughout the growing season.
- ◆ Do not fertilize or use pesticides within 15-20 feet of a stream or waterway. Maintaining this distance will help keep chemicals out of the water. Consider establishing a natural riparian buffer. Sweep any granulated chemicals off hard surfaces and back into your lawn immediately. Your walkway, driveway, patio, or road is a quick route to drainage pipes that discharge into local streams, so make sure they are kept clean of chemicals.
- ◆ Consider organic alternatives to chemicals, such as compost or manure.
- ◆ Be certain to identify pests and research options before applying pesticides. Many insects are harmless to people and play an important role in maintaining a healthy lawn or garden ecosystem.
- ◆ Direct roof drains to a rain garden to significantly reduce stormwater runoff from your property.

Little actions, such as taking a stormwater-friendly approach to your garden and lawn, will have a big impact as all of us work together to protect our water's quality.