

CHARTER TOWNSHIP OF BLOOMFIELD ANNUAL CONSUMER CONFIDENCE REPORT ON DRINKING WATER QUALITY

(Issued June 2025)

2024

Dear Water Customer,

Drinking water quality is important to our community and the region. Bloomfield Township and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. With the Great Lakes as our water source, along with proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. Bloomfield Township operates and maintains over 320 miles of water main that carries this water to your home's service line. This year's Water Quality Report highlights the performance of GLWA and Bloomfield Township water professionals in delivering some of the nation's best drinking water. Together we remain committed to protecting public health and maintaining open communication with the public about our drinking water.

Where does Bloomfield Township's drinking water come from?

Your source water comes from the lower Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of potential contamination. The susceptibility rating is a seven-tiered scale ranging from "very low" to "very high" based primarily on geologic sensitivity, water chemistry, and contaminant sources. The Lake Huron source water intake is categorized as having a moderately low susceptibility to potential contaminant sources. The Lake Huron water treatment plant has historically provided satisfactory treatment of this source water to meet drinking water standards.

GLWA has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in the National Pollutant Discharge Elimination System permit discharge program and has an emergency

response management plan. GLWA has a Surface Water Intake Protection plan for the Lake Huron water intake. The plan has seven elements: roles and duties of government units and water supply agencies, delineation of a source water protection areas, identification of potential sources of contamination, management approaches for protection, contingency plans, siting of new water sources, public participation, and public education activities If you would like to know more information about the Source Water Assessment Report. Please, contact GLWA at (313 926-8127).

How do we know our water is safe?

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 *Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791*.

Why do we purchase water from SOCWA?

In July of 2011, Bloomfield Township began purchasing water from Southeast Oakland County Water Authority (SOCWA) instead of directly from Great lakes Water Authority (GLWA-formerly DWSD). The large water storage capacities provided by SOCWA allow them to avoid more costly peak demand charges and provide a more stable rate.

For more information about SOCWA, visit their website at www.socwa.org



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 can dissolve naturally-occurring minerals and, in some cases, radioactive material, and 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, 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 organics, 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, the EPA prescribes regulations which 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, which must provide the same protection for human health.

Some people may be more vulnerable to contaminants in drinking water than is 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 microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

Detected Contamination Tables:

The following pages contain tables and other information pertaining to tests conducted by the GLWA and the Charter Township of Bloomfield of the drinking water supplied by the GLWA through the Lake Huron Water Treatment Plant. GLWA conducts numerous tests throughout the year, but only tests that detect the presence of a contaminant are shown. The Michigan Department of Environment, Great Lakes, and Energy (EGLE – formerly DEQ) allows for monitoring of certain contaminants at a frequency of less than once per year due to the concentrations of these contaminants not expected to vary significantly from year to year. For this reason, while all the data is representative of water quality, some data sets are more than one year old.

2024 Lake Huron Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.	Parameter	Units	Max.	Min	Avg.
Turbidity	N.T.U.	0.10	0.04	0.07	Phosphorus	mg/L	0.68	0.37	0.48
Total Solids	mg/L	156	89	125	Free Carbon Dioxide	mg/L	7.8	4.6	6.2
Total Dissolved Solids	mg/L	140	92	113	Total Hardness	mg/L	106	88	99
Aluminum	mg/L	0.084	0.02	0.043	Total Alkalinity	mg/L	82	74	77
Iron	mg/L	0.3	0.2	0.2	Carbonate Alkalinity	mg/L	6	0	0
Copper	mg/L	0.005	ND	0.001	Bi-Carbonate Alkalinity	mg/L	82	63	76
Magnesium	mg/L	8.0	7.4	7.6	Non-Carbonate Hardness	mg/L	30	6	23
Calcium	mg/L	27.9	23.3	26.2	Chemical Oxygen Demand	mg/L	8.7	2.0	4.4
Sodium	mg/L	5.3	0.5	4.3	Dissolved Oxygen	mg/L	12.9	8.3	10.3
Potassium	mg/L	1.1	1.0	1.0	Nitrite Nitrogen	mg/L	ND	ND	0.0
Manganese	mg/L	0.001	ND	0.000	Nitrate Nitrogen	mg/L	0.40	0.20	0.28
Lead	mg/L	ND	ND	0.000	Fluoride	mg/L	0.80	0.51	0.72
Zinc	mg/L	0.010	ND	0.003	рН		7.50	7.30	7.39
Silica	mg/L	2.4	1.9	2.2	Specific Conductance @ 25 °C	μmhos	222	135	189
Sulfate	mg/L	32.8	18.1	21.4	Temperature	°C	22.8	8.9	16.1
Chloride	mg/L	11.0	9.0	9.9					

Key to the Detected Contaminants Table

Symbol	Abbreviation	Definition/Explanation
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
>	Greater than	
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, Dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular monitoring location during the previous four quarters.
MCL	Maximum Contaminant Level	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.
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRLDG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	Below the detection limit of the method
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of analytical results for all samples during the previous four quarters.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.
µmhos	Micromhos	Measure of electrical conductance of water

2024 Special Monitoring										
Contaminant Test		st Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant			
Sodium	um 02-13-2024		ppm	n/a	n/a	5.1	Erosion of natural deposits			
Regulated Contaminan		Treatment Technique								
Total Organic Carbon ppm	The Total actual To quarter a	Erosion of natural deposits								

These tables are based on tests conducted by GLWA in the year 2024 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. The data is representative of the water quality, but some are more than one year old.

2024 Lake Huron Regulated Detected Contaminants Table

2024 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	02-13- 2024	ppm	4	4	0.8	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	02-13- 2024	ppm	10	10	0.35	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper Monitoring at the Customer's Tap in 2024

Regulated Contaminant	Unit	Year Sampled	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Range of Individual Samples Results	Number of Samples Over AL	Major Sources in Drinking Water
Lead	ppb	2024	0	15	0	0 - 6	0	Lead services lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits.
Copper	ppm	2024	1.3	1.3	0.1	0.0 - 0.2	0	Corrosion of household plumbing systems; Erosion of natural deposits

^{*} The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

2024 Disinfection Residual - Monitoring in the Distribution System

2024 ppb

0.2 NTU

(HAA5)

- 1									
	Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
	Total Chlorine Residual	2024	ppm	4	4	0.80	0.68 - 0.87	no	Water additive used to control microbes

2024 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System										
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water		
(TTHM) Total Trihalomethanes	2024	ppb	n/a	80	38.75	29 - 49		By-product of drinking water chlorination		

Haloacetic Acids		PP~				0		water chlorination		
2024 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap										
Highest Single Measurement Lowest Monthly % of Samples Meeting Cannot Exceed 1 NTU Turbidity Limit of 0.3 NTU (minimum 95%)								Major Sources in Drinking Water		

100 %

16.5

11 - 23

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

60

By-product of drinking

Soil Runoff

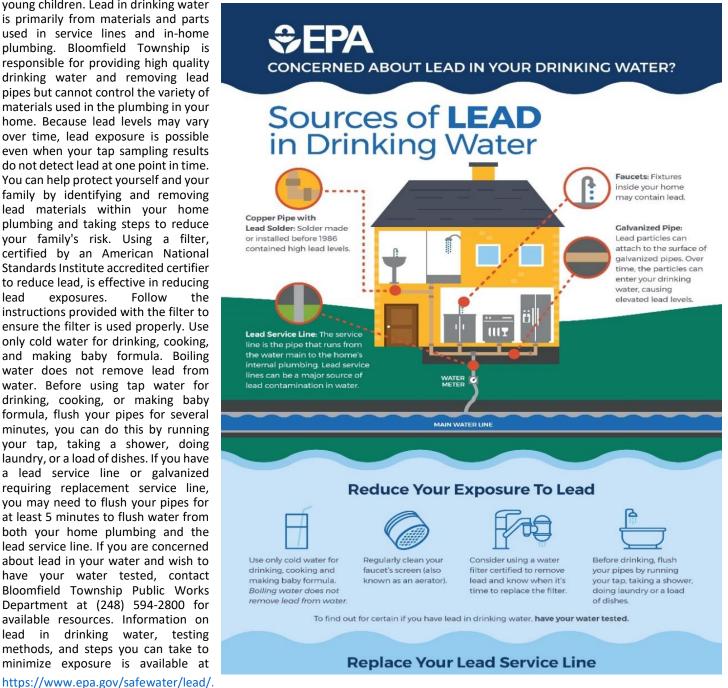
IMPORTANT INFORMATION ABOUT LEAD

Michigan EGLE and the Federal EPA require Bloomfield Township to test our water on a regular basis to ensure its safety. In 2024 we completed our latest round of Lead and Copper testing with results posted on page four. We update this report annually and will also keep you informed of any issues that may occur throughout the year as they happen.

Safe drinking water is a shared responsibility. The water that GLWA delivers to our community does not contain lead. Lead can leach into drinking water through home plumbing fixtures, and in some cases, customer service lines. Corrosion control reduces the risk of lead and copper from leaching into your water. Orthophosphates are added during the treatment process as a corrosion control method to create a protective coating in service pipes throughout the system, including in your home or business. Bloomfield Township performs required lead and copper sampling and testing in our community. Water consumers also have a responsibility to maintain the plumbing in their homes and businesses and can take steps to limit their exposure to lead.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and

young children. Lead in drinking water is primarily from materials and parts used in service lines and in-home plumbing. Bloomfield Township is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. **Follow** instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes, you can do this by running your tap, taking a shower, doing laundry, or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact Bloomfield Township Public Works Department at (248) 594-2800 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at



The Most Common Places for Leaks In Homes





Kitchen and Bathroom Faucets

Faucets are a very common source of leaks. While seeming minor, these leaks can add up in bills and damage to bathtubs and sinks.

Ten percent of homes have leaks that waste 90 gallons or more per day.



Shower Hose

Shower hoses can corrode quickly due to constant use. That corrosion can lead to leaks



Fixing easily corrected household water leaks can save homeowners about 10 percent on their water bills.



10%



Toilet Flapper Valve

Toilet valves leak frequently. Experts estimate 20 - 30% of toilets in America leak water.

Household leaks can waste more than 1 trillion gallons annually nationwide.

1,000,000,000,000

Hot Water Tank

Without the help of a plumber, a hot water tank leak could turn into a rupture. Yearly inspection or maintenance is recommended.



A showerhead leaking at 10 drips per minute wastes more than 500 gallons per year.









Supply Line

Leaks can happen outside of the home. When they occur at your home, they can create puddles or worse. Call your plumber quickly!

www.ezflowplumbingaz.com/plumbing/leak-detection/

Things to Know

What is the hardness of my water?

Depending on the manufacturer of your appliance, you need to know the ppm (parts per million) of your water or the "grains of hardness". SOCWA water runs consistently at 100 ppm or 6 grains of hardness.

My drinking water looks cloudy when taken from the faucet. Should I be concerned?

No. The cloudy water is caused by tiny air bubbles in the water similar to the gas bubbles in carbonated soft drinks. After a while, the bubbles rise to the top and are gone. This type of cloudiness occurs more often in the winter, when the drinking water is cold.

Is water with chlorine in it safe to drink?

Yes. Many tests have shown that the amount of chlorine found in treated water is safe to drink, although some people object to the taste.

Should I buy bottled water?

Remember that US bottled water is less regulated than municipal drinking water. You don't need to buy bottled water for health reasons if your drinking water meets all of the federal or state drinking water standards. (Bloomfield Township's water meets those standards). If you want a drink with a different taste, you can buy bottled water, but it costs up to 1,000 times more than municipal drinking water.

How much water does one person use each day?

The US average is nearly 50 gallons used each day by each person. Toilet flushing is by far the largest single use of water in a home. Most toilets use from 4 to 6 gallons of water for each flush. The average five-minute shower uses between 15-25 gallons.

How much water is wasted if a person has a dripping faucet?

A dripping faucet can waste up to 2,000 gallons of water a year. A leaky toilet can waste as much as 200 gallons of water a day.

I have a sewer backup in my basement, what do I do? Call the Bloomfield Township Public Works department first. In compliance with Public Act 222, any resident experiencing an overflow or backup should immediately upon discovery, or in the exercise of reasonable diligence should have discovered, contact the Public Works department at 248-594-2800. If after normal business hours, contact the Emergency hotline at 248-433-7730 and they will contact our on-call staff with your problem and location. This allows our staff to confirm whether the blockage is in your lateral line or in the main sewer line.

My Water bill went WAY UP! What happened? The 2 biggest reasons for a highwater bill are summer watering and leaky toilets. Summer watering can use a unit or more per hour. This adds up when watering lawns daily. The number one reason for an unexpected large water bill is a leaking toilet. If the flapper is sticking open, or you hear the toilet filling periodically when not in use, you have a leak. A toilet leak can be undetectable to the naked eye or human ear. Undetectable leaks can be verified by adding a few drops of food coloring in the back tank and letting the toilet sit for a few hours without flushing. If colored water ends up in your toilet bowl, you have a leak. Fix toilet leaks immediately!!! When left unfixed, these leaks can lead to bills in the Hundreds of Dollars! If handy, these repair DYI's can be found on the internet. If not comfortable doing it yourself, a number of local professional plumbers are more than capable.

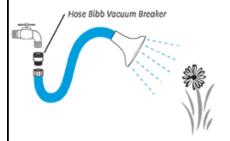
Cross Connection Program

Exterior Property Survey/Inspections to Continue in 2024

Michigan Public Act 399, Part 14A requires all public water supply systems in Michigan to develop and implement a comprehensive control program for the elimination of all existing cross—connections and prevention of all future cross—connections. The Bloomfield Township Public Water Utility system delivers safe, high-quality drinking water every day. To continue to protect the public health and keep the water system safe from contaminants and pollutants, Bloomfield Township is required to begin implementing cross connection surveys/inspections for all residential water customers. The purpose of these surveys is to identify potential unsafe interconnections to the public water supply. Although State and local regulations apply, this is an important safety program of the local public water system. The Township has contracted with HydroCorp of Troy, Michigan to assist in managing our Cross-Connection Control Program. HydroCorp is a consulting firm that specializes in backflow prevention education, cross-connection control program management and inspections/surveys. They have been managing the Township's current Cross Connection Program for commercial properties since 2003.

Hose bibbs

Hose bibbs are part of our everyday life. They allow us to hook up a garden hose to water the plants, wash the car, clean out the gutters, fill the swimming pool, etc. However, every time you connect a garden hose to a hose bibb, you are extending the end of the water line. To make



sure that no harmful materials are drawn back into the garden hose, a vacuum breaker should be installed on each hose bibb. When the hose bibb is exposed to freezing conditions, make sure to use a self draining, frost-proof vacuum breaker.

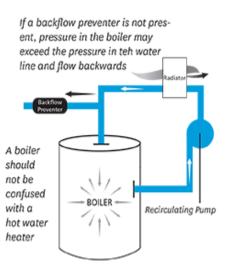
Self Draining, Frost Proof Vacuum Breaker

NOTE: Make sure to use only listed or approved products acceptable to your water or health agency. Should you have any questions check with your local water agency, health agency, or building and safety department.

2012 © University of Southern California

Boilers

Due to the pressure that may build up inside of a boiler, the pressure of the boiler water may exceed that of the water feeding the boiler. The boiler water (which may be chemically treated with poisonous anti-corrosion compounds, etc.) may be pushed, or backpressured, into the make-up water line. This chemically contami-



nated water may be forced back into your home's drinking water system, unless there is an appropriate backflow preventer that is designed for backpressure.

Cross-Connections in Household Plumbing

A cross-connection is a connection between the drinking water plumbing system and any other source, which may contribute to the degradation of the quality of the drinking water.

Your local water agency, health agency, and building and safety department work hard to provide the safest water possible to your home. However, once this water enters your property, there are common problems that may arise due to improper changes in, or misuse of, your plumbing system.

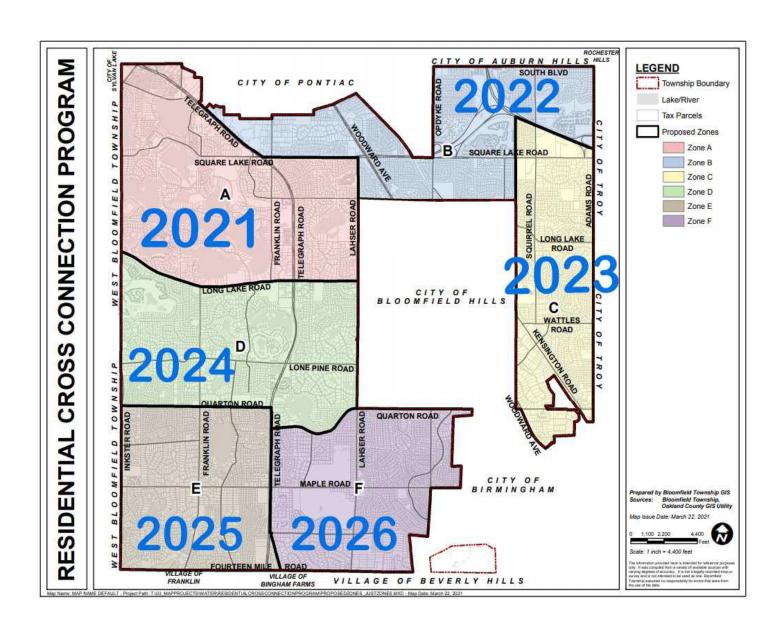
In a home there are several areas where cross-connections may exist. The items listed in this brochure are typical areas where cross-connections may be found in a home. However, this is not an all inclusive list.



Cross Connection Q&A

What is a Cross Connection Survey/Inspection?

A Cross-Connection survey will be a visual survey/inspection of the exterior residential properties to detect actual and potential cross connections. A digital record will be made of each inspection, existing backflow devises/ assemblies and any corrective actions, if necessary. This program will help ensure that contaminated or polluted water cannot backflow into clean drinking within buildings and the public water system. Inspection notices will be mailed to water customers approximately two weeks before the scheduled inspection date. There is no fee for the cross-connection inspection and the homeowner will not be required to be home at the time of inspection. HydroCorp will perform these surveys during the summer seasons, through 2026. The Township has been divided into six zones and only one zone per year will undergo these surveys. You can reference the map below to determine which year your property will be subject to inspection.





"Flushable" Wipes are NOT Flushable

It takes years not hours, for a flushable wipe to breakdown. They **WILL** clog the main sewer and/ or your own sewer line!

The desire for greater convenience in our lives has made nonwoven wipes a multi-billion-dollar industry. Wipes are available for just about any bathroom cleaning task – wiping, removing makeup, washing the counter or cleaning the floor. The industry continues to grow and so do the problems in our sewer system as more wipes are flushed down the toilet. Communities throughout the country are becoming increasingly frustrated as wipes create havoc in their sewer pipes, pump and lift stations and wastewater treatment facilities. This equipment was not designed to handle wipes and maintenance costs are rising due to increased labor to remove them, and Bloomfield Township is not immune to the problems these wipes cause when flushed down the toilet. Wastewater collected from our community is transported to the Great Lakes Water Authority's (GLWA) Water Resource Recovery Facility (WRRF) in Detroit that treats sewage from 77 communities. There are hundreds of pieces of equipment where wipes can accumulate. The cleaning time needed to address this issue has increased significantly translating into greater operating expenses.





FOGs are fats, oils and greases that can build up in your drains and cause sewer backups. If do have a backup because of this, it can cost thousands of dollars to repair. The buildup of fats, oils and greases put into the drains from homes and businesses can also cause the Townships sanitary sewer main to backup. Below are some steps you can take to prevent blockage due to **F.O.G.**

- **DO NOT** pour liquid fats, oils or grease into sink drains or toilets. This includes dairy fats, cosmetic oils and any other type of grease.
- **DO NOT** flush wipes, wrappers, cat litter, medicine and other garbage in toilets. Just because it says it is disposable does not make it flushable.
- **DO NOT** flush wipes, wrappers, cat litter, medicine and other garbage in toilets. Just because it says it is disposable does not make it flushable.
- Scrape food scraps from dirty dishes and pans into the trash before washing.
- Use a paper towel or scraper to remove residual grease from dishes and pans prior to washing.
- Your garbage disposal does not eliminate grease. Keep drains clean by using vinegar and warm water or appropriate commercial products to dissolve grease.

Who is responsible? The property owner is responsible for the condition of all the drains in the home or business, and the sewer line that is from the house or building all the way to where it connects to the Township's sanitary sewer main.

SOMPRO DE LA CONTRACTION DEL CONTRACTION DE LA C

Department of Public Works



Bloomfield Township and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality water to protect public health. Please contact us with any questions or concerns about your water.

