

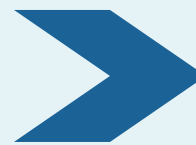
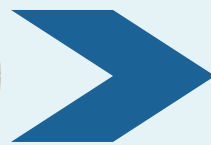
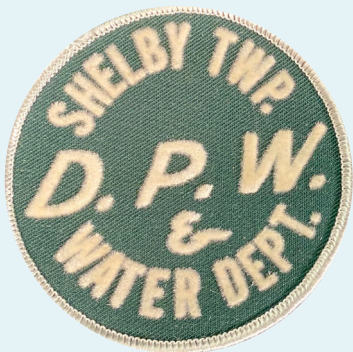
The Pipeline 2024

WATER QUALITY REPORT | PUBLISHED JUNE 2024



David G. Miller II

- Public Works Director 2013-2024
- Asst. Public Works Director 2000-2013
- Maintenance Foreman 1997-2000
- Administrative Asst./Aide 1992-1997
- Maintenance Trainee/Man 1986-1992
- Meter Reader 1983-1986



Phone: 586-731-5990
Email: DPW@SHELBYTWP.ORG
SHELBYTWP.ORG/DPW

LOVING
SHELBY TOWNSHIP

6333 23 MILE ROAD
Shelby Township, MI 48316
8 AM-4:30 PM; Mon-Fri

From the director's desk ...

In 1983, there was a young guy who managed a record store. The economy was in a shambles. Gas prices were about \$1.25 per gallon (imagine that), and home interest rates were around 12-14%.

Ok, this is all interesting enough. What does it have to do with water? Well, that young guy was looking for a new job. Something secure with benefits for his young family.

He heard about an entry-level job opening for the water department in Shelby Township, and after testing with more than 200 other applicants, he interviewed and was selected as the first official Meter Reader for the department.

Shortly after being hired, while reading the meter at a house on 24 Mile Road (I can still remember which one), the director and assistant director stopped me and asked how things were going. Through some casual conversation, the assistant director asked me what I thought my future looked like within the department. I told him that in 10 years I would like to have his job and in 15 years the director's.

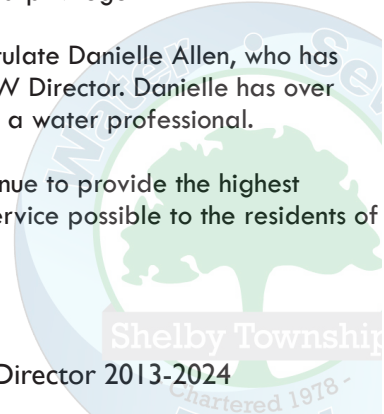
Well, things didn't go quite as I planned. After many years working in both the maintenance side and the administration of the department, I was offered the position of Director of Public Works. For the past 13 years, I have had the pleasure of leading one of the most talented and dedicated teams of water professionals to provide our community with one of life's most sustaining elements, WATER.

Thank you all for the opportunity to serve our community for the past 40 years. It has truly been a privilege.

It is also my privilege to congratulate Danielle Allen, who has been appointed as the next DPW Director. Danielle has over three decades of experience as a water professional.

I am confident that she will continue to provide the highest quality of potable water and service possible to the residents of the township.

Sincerely,
David G. Miller II
Shelby Township Public Works Director 2013-2024



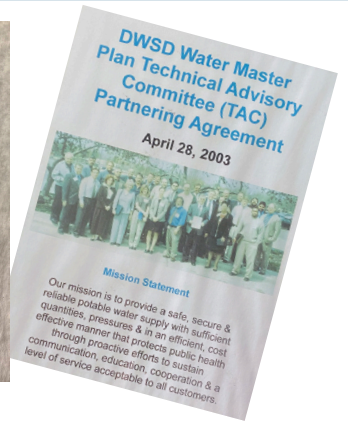
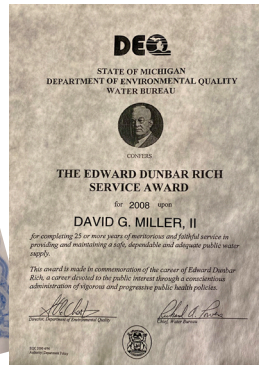
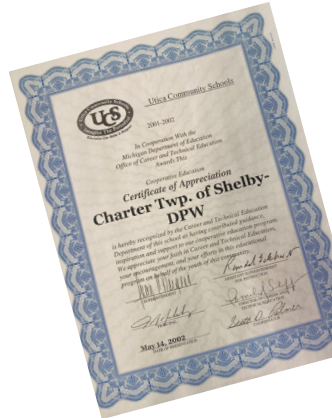
On the cover ...

David G. Miller II, the Shelby Township DPW Director from 2013 to his retirement in spring 2024, culminated a career of remarkable achievements.

Joining as a meter reader in 1983, Miller ascended through the ranks, transitioning from maintenance to administrative roles before assuming the directorship in 2013.

Under his stewardship, the DPW underwent significant modernization, relocating from an antiquated maintenance garage to the cutting-edge headquarters at 6333 23 Mile Road.

Notably, Miller oversaw the construction of a crucial 3.5-million-gallon water reservoir in 2022, fortifying the township's water management infrastructure.



During his career, Miller was recognized by countless local, regional and state groups for his expertise in water system management and dedication to Shelby Township.

A visionary leader, Miller spearheaded technological advancements, establishing the township's first computer network and orchestrating the transition from employee radios to cell phones. His tenure coincided with Shelby Township's substantial population growth, nearly doubling from under 40,000 residents to approximately 80,000.

Concurrently, DPW services expanded dramatically, from serving fewer than 2,000 customers to encompassing 25,405 water service customers.

Miller's legacy is one of innovation, growth and service, leaving an indelible mark on Shelby Township's infrastructure and community.



In his 40 years at the DPW, Miller oversaw the transition from radios to cell phones and upgraded meter reading technology to improve efficiency and cut costs. He also initiated the award-winning tradition of the department's annual water quality report, "The Pipeline."

Little leaks can cost big bucks

We've all heard it. The persistent drip of a leaky faucet or the toilet seems to run on longer than it used to. We tighten up the faucet handle, jiggle the flusher lever and hope that will do the job. STOP!

Those annoying little sounds indicate a leak that can be a costly waste impacting your water bill. A leaky faucet or toilet can waste hundreds of gallons of water daily. If your faucet drips even a little, replace the rubber washer in the faucet head -- a few cents and a few moments will save you money every day.

If you suspect a leaky toilet, put some food coloring in the tank, not the bowl. Don't flush for 15 minutes. If the color begins to appear in the bowl, without flushing, you have a leak that you need to fix right away.

If your faucets and toilets pass the leak tests but you still suspect a leak somewhere, it's time to check your water meter, typically located in the basement, laundry room or utility closet. Your meter is like reading a car odometer. We use only the first four digits on the left for billing purposes.

The first and easiest method is to use the red diamond, the small dial or triangle-shaped leak detector equipped on most meters. If your meter is not equipped with a leak detector, the second method of checking for leaks is to put a piece of tape across the "sweep second hand" on the face of the meter. Make sure all the water is turned off in and outside your house, then mark the location of the hand. After a short time, the movement of this dial indicates a leak.

If your meter indicates a leak, it's time to become a water detective. You have checked the faucets and toilets. Now look at the shower heads, water heater, furnace humidifier, ice cube maker, outside spigots, water softener, water purifier and lawn irrigation system. Having a leak repaired will be less costly in the long run than the amount you will pay for wasted water. Please remember that Shelby Township cannot adjust your bill for water wasted through leaks!

To determine how much water a leak may be wasting, visit the Water Wiser Drip Calculator at drinktap.org/Water-Info/Water-Conservation/Drip-Calculator. If you have a water-powered backup sump pump, make sure it is in good working order. A malfunctioning pump can use an excessive amount of water. Exercise the pump periodically to ensure that it is functioning correctly.



Coordinating irrigation, rainfall reduces water use, costs

Add an automatic rain shut-off device to your sprinklers to keep them from running after it rains to prevent overwatering.

Collect rainwater with rain barrels for watering plants and gardens.

Mow your grass on a high setting at the upper recommended limit of about two inches. This practice allows the soil to receive the water but is short enough to prevent evaporation.

Visit shelbytwp.org/dpw for more water-saving tips and guidelines. You can also email dpw@shelbytwp.org or call 586-731-5990. The DPW is open 8 AM-4:30 PM., weekdays, at 6333 23 Mile Road.



Easy Payments

We now accept credit and debit cards @ the DPW counter for:

- 👉 Water Bills
- 👉 Applications
- 👉 Meter Purchases
- 👉 Engineering Fees

The Department of Public Works accepts credit and debit card payments for water bills, water and sewer applications, engineering fees, and meter purchases at the DPW counter.

Accepted cards include: American Express, Visa, Mastercard and Discover. A convenience fee will apply for all credit and debit payments.

Access & Pay Your Bill Online

You can access your account for current and past payments, print a bill, pay a bill, or check consumption history at shelbytwp.org/dpw under the "Pay your Bill" tab. You will be required to set up an account first. When asked to enter the account number, use all 12 digits including the dash, and enter your name exactly as it appears on the bill.

Automatic Bill Payment Program

Customers can authorize the DPW to have their payment electronically withdrawn from their savings or checking accounts on the due date. Visit shelbytwp.org/dpw for an information sheet and enrollment form.

Online Payments

Pay at shelbytwp.org/payments. Payments accepted are eChecks, Visa, Mastercard, Discover, and AMEX. The convenience fee for credit/debit cards is 2.75% (\$2.50 minimum fee) and the fee for eChecks

is \$1.00. Enter the account number (12 digits including the dash) and the name exactly as it appears on the bill.

Bank Online Payments

Online banking payments made by customers via their own bank's website are accepted. When setting up your account, verify that the account number is exactly as written on your bill (12 digits including the dash).

Phone

Customers can pay via credit card (Visa, Mastercard, Discover, AMEX) by calling 877-565-3139. A convenience charge of 2.75% with a \$2.50 minimum fee applies to payments made at this number.

Mail

Mail payments (include barcode stub) to 6333 23 Mile Road, Shelby Township MI 48316.

In Person

DPW Building
located at 6333 23 Mile Road (between Van Dyke and Mound)
Hours: 8 AM-4:30 PM M-F.

Treasurer's Office

located at 52700 Van Dyke Ave. (south of 24 Mile).
Hours: 8:30 AM-5 PM M-F.
No credit card water bill payments can be made at this location.

There are 24-hour drop boxes located at the DPW building (outside the circle drive) and at the 24 Mile entrance to the Shelby Township Municipal Campus.

Payments with barcode stubs may be placed in these drop boxes, and will be posted the following business day. Please do not put cash in the drop box.

PLEASE ALLOW ENOUGH TIME FOR YOUR PAYMENT TO REACH OUR OFFICE BY THE DUE DATE.

MOVING?



Please request a final read at shelbytwp.org/dpw or call 586-731-5990 option 3.

Residents living in a single-family home or business may provide meter readings using the final read form on our website.

If you are a resident living in an apartment or manufactured home, please contact your leasing office.

Residents living in a multi-unit condominium that do not have access to their meter can fill out the form or call and the DPW will obtain a reading for you.

Final bills can be emailed, mailed, faxed or picked up at our office. Please allow up to three business days for processing.

Water Residential Assistance Program

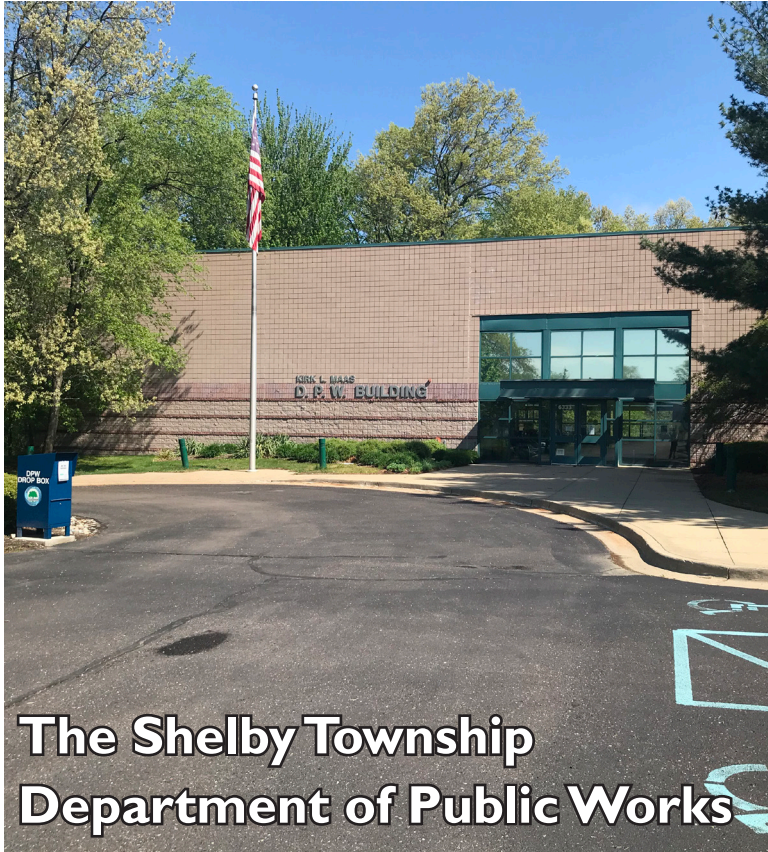
The Water Residential Assistance Program is a two-year program that provides funding to eligible, low-income homeowners to assist with water bills, water conservation, and self-sufficiency initiatives.

For more information and to see if you qualify for WRAP, please call Macomb Community Action at 586-469-6464.

Public Act 222

In compliance with Public Act 222 of 2001, please be advised of the following: Please contact the Shelby Township Department of Public Works at 586-731-5990 immediately upon discovery of an overflow or backup. After normal business hours, contact the Shelby Township Police Department at 586-731-2121.

If you experience an overflow or backup of a sewage disposal system or storm water system, you must file a written claim with the Shelby Township Department of Public Works within 45 days after the overflow or backup was discovered. Failure to do so will prevent the recovery of any damages that may be due to you under the provisions of Act 222. To receive a Notice of Claim form, contact the DPW at 586-731-5990.



The Shelby Township Department of Public Works

The Shelby Township Department of Public Works is located at 6333 23 Mile Road just west of the Fire Station. We are open 8 a.m.-4:30 p.m., Monday through Friday.

You may pay your bill at our office or at the Township Treasurer's Office in Township Hall at 52700 Van Dyke. Both locations also have 24-hour drop boxes located outside the front entrances.

DPW policies are set by the Shelby Township Board of Trustees. The Board meets on the first and third Tuesday of each month at 7 p.m. at Township Hall. These meetings are open to the public.

The DPW is here to serve you and answer your questions. If you have any concerns about your water or sewer service, please contact us at 586-731-5990.

Drinking water regulations require that Shelby Township produce and distribute the information in this report each year because Congress and the EPA want to be sure that you know what is in your drinking water.

Once you have read this booklet, we would appreciate your feedback. Please call us at 586-731-5990 or e-mail dpw@shelbytwp.org with your comments or suggestions.

STREETLIGHTS

If you are a DTE Energy residential or business customer, you can now report a streetlight problem online at outage.dteenergy.com/outdoor-lights. Reporting an outage and getting it fixed is easier and faster than ever. Fill in the address of the outage and your contact information – it only takes a minute but can make a big difference in getting repairs done quickly.

In addition, customers can report streetlight problems by calling DTE Energy toll free at 800-477-4747. If you are unable to make the report using these methods, the Shelby Township DPW, as always, will be happy to assist you.

Please call 586-731-5990 or email dpw@shelbytwp.org and we will report the problem to DTE on your behalf. Please provide us with the address where the light in question is located, or the

nearest intersection. There is a tag on each light post with a streetlight number, it will be very helpful if you can provide that number as well.



MACOMB COUNTY DEPARTMENT OF ROADS

All public roads and road right-of-ways within Shelby Township fall under the jurisdiction of the Macomb County Department of Roads. This department is responsible for issues regarding road repairs, ditches, snow plowing, street signs, etc.

To request a replacement street sign or for issues regarding snowplowing or road maintenance, contact the Department of Roads at 586-463-8671, or fill out a service request at shelbytwp.org/roads.

Know what's below.
Call MISSDIG at 811
before you dig.



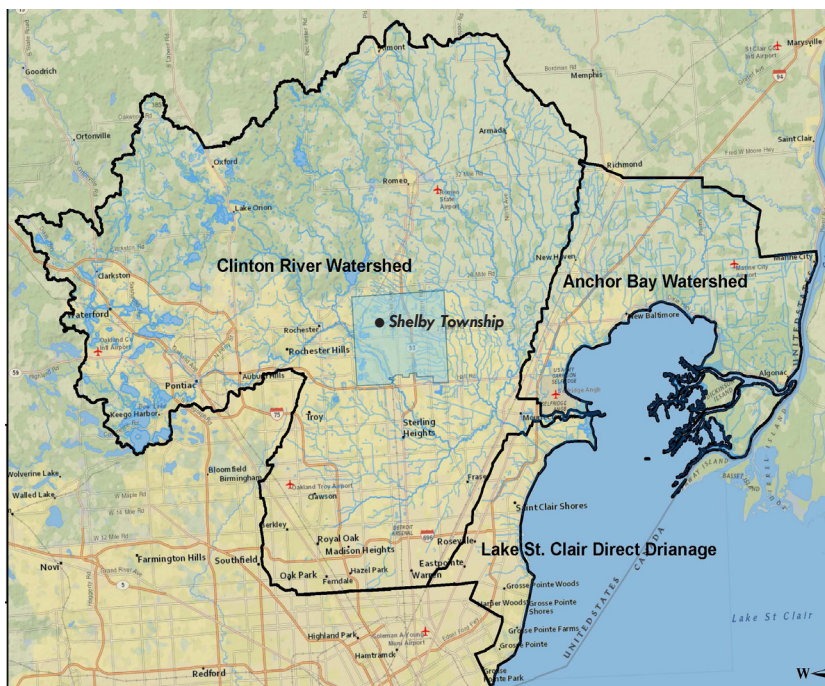
Eco-friendly tips can help save our environment

We reside in the Clinton River watershed. A watershed is an area of land that drains into a common body of water. The area of southeastern Michigan which flows into the Clinton River and Lake St. Clair, covers 760 square miles with over 1,000 miles of streams and the 80-mile main branch. More than 1.4 million people in 60 communities inhabit the watershed area

Storm water runoff, which is the water that enters the storm drains from your property and street, is the largest source of pollution in our watershed.

Storm drains are the openings you see along curbs, in streets and in parking lots. Water and debris which enter the storm system do not go to a treatment facility; instead, they flow directly to our lakes and streams.

Under the National Pollutant Discharge Elimination System Phase II, communities in southeastern Michigan have banded together to plan for and accomplish storm water management.



If I live near a drain, WHAT CAN I DO?

Use the drain easement

Landowners with a drain easement on their property may use the easement, but they may not build anything permanent on the property or use it for any storage including garbage, natural debris or rubbish.

Remove blockages

Prevent backup and maintain flow of the drain by cleaning out debris such as limbs, phragmites or anything naturally not belonging in the drain.

Limit fertilizer/pesticides

Read and follow the manufacturer's application instructions and make sure fertilizers/pesticides do not enter the drain.

Get permission

Prior to installing a fence or bridge on the drain, you need to receive permission from the drain owner.

Wash my car

Wash your car on the grass. Washing your car on pavement sends polluted water into the drains. Washing your car on the lawn allows the ground to filter water naturally.



Newland Drain on the Shelby Metro Bike Trail

WHAT IS A COUNTY DRAIN?

Drains come in various forms, including natural that carry storm-water, as well as streams. Some drains, such as roadside ditches, may be the responsibility of the Macomb County Department of Roads or private landowners.

For a map of county drains, visit macombgov.org/departments/public-works/public-works-resources/macomb-county-drain-maps

WHAT CAN YOU DO?

It is important to keep our waterways free of trash, natural debris and any other harmful waste or chemicals that could compromise the water quality of our local waterways. If bacteria and chemicals enter the waterways it can create a health hazard and even close down beaches. The drinking water supply can also be adversely affected by polluted water from the drain system.

DRAINS DO'S AND DON'TS

When it rains, water that drains from buildings, roads or other hard surfaces deposits directly into our local storm drains which run into Lake St. Clair. It is critical that we eliminate pollution and other contaminants before they enter our streams, rivers and lakes. Clean water is vital not only to the quality of life in Macomb County, but can serve as a critical component of economic development in our communities.



Photo from the Clinton River Watershed Council

PHRAGMITES

Phragmites are a type of grass with a rigid stem and a fluffy/feather-like flower that can reach heights from 6-15 feet. This plant is invasive and can be found commonly in ditches, wetlands, and stream banks. For more information about phragmites control and what you can do, please check out the resources tab on our website.

If I live near a drain, WHAT CAN'T I DO?

Do not build
If you want to build any permanent structures, it needs to be out of the drain easement.

Do not dump yard waste
Debris can clog a drain. Natural debris causes algae problems, which impact water quality and increases chance of flooding,

Do not dig, alter grade
If alterations are made to the drain, it will be at risk of erosion.

Do not dump pet waste
Always dispose of pet waste in the trash to avoid polluting water with E. coli. Pick up waste before watering your lawn. Scoop it, bag it, trash it.

Do not dump household waste
Household products such as car fluids, oil-based products and pesticides contain toxic chemicals and must be taken to a household hazardous waste collection.

Residential Cross Connection Program

Maintaining public drinking water system integrity

Under the direction of the Michigan Department of Environment, Great Lakes, and Energy, all municipalities need to perform inspections on residential properties for cross connections.

What is a cross connection and why is it important to our customers?

A cross-connection is an actual or potential connection between the safe drinking water (potable) supply and a source of contamination or pollution. State plumbing codes require approved backflow prevention methods to be installed at every point of potable water connection and use. Cross-Connections must be properly protected or eliminated.

Examples of potential cross connections that may be found in your residence include:

- Lawn irrigation systems
- Water assisted back up sump pumps
- Unprotected hose bibbs
- Hard piped pool or pond fills
- Boiler used for heating

Program Information

In compliance with EGLE's requirements, the Shelby Township Department of Public Works Cross Connection Control Program has the following residential requirements:

Inspection

Inspections are conducted to ensure compliance with federal, state regulations and/or local ordinances to maintain the safety of your drinking water. Some inspections will be conducted outside the home. If an internal inspection is needed or the inspector has further questions an additional inspection will be required. During the inspection, a Shelby Township Department of Public Works Cross Connection Control Inspector ensures that the proper backflow prevention devices are in place to protect the public water supply.

Testing

Just like any other mechanical device, backflow prevention assemblies are prone to wear and tear, and do break down from time to time. Regular testing is required to ensure that your device remains in proper working order. Assemblies must be tested initially upon installation, immediately after repair or relocation, and at regular intervals thereafter.

How do I have my backflow tested?

Property owners are responsible for hiring a licensed plumber with backflow certification to test any backflow preventor. Test reports need to be entered directly into HydroSoft or emailed to DPW@shelbytwp.org.

Required repairs and Corrections.

If a device needs repaired or replaced, the property owners are responsible for hiring a licensed plumber.

Please Keep a Record

Please keep a record of all devices and their test reports including backflow model, serial # and install date.

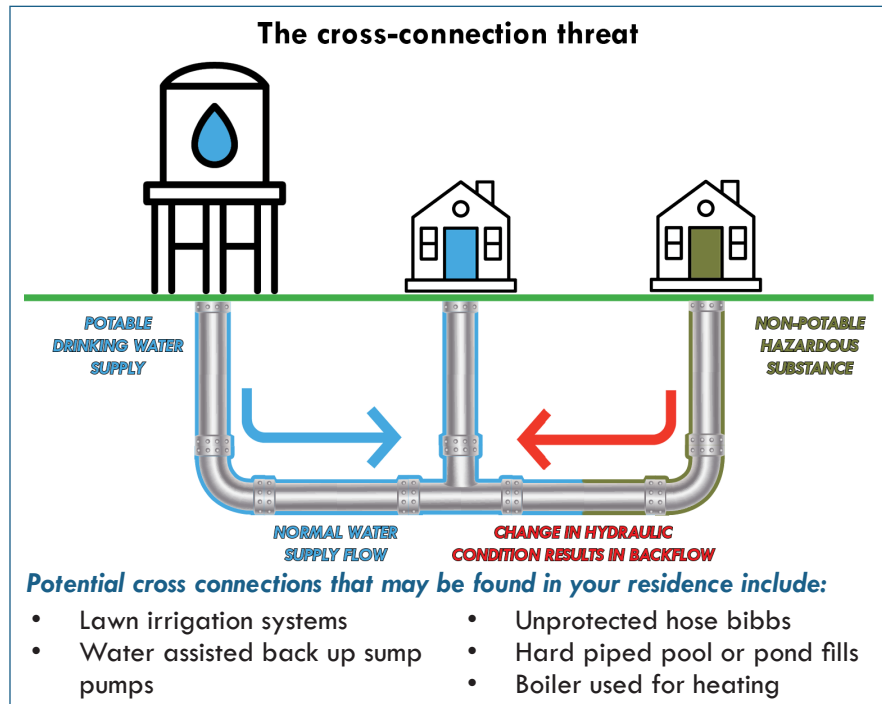
Below are some items you can do to protect your drinking water:

Do.....

- Ensure lawn irrigation systems have proper backflow protection.
- Keep the ends of hoses clear of all possible contaminants.
- Verify and install a simple hose bibb vacuum breaker on all threaded faucets around your home.
- Make sure water treatment devices such as water softeners have the proper "air gap", which is a minimum of one inch above any drain.
- Ensure water back-up sump pump has backflow protection.
- Keep a physical disconnection between municipal water and wells or lakes used for irrigation.

Don't.....

- Submerge hoses in buckets, pools, tubs, sinks or ponds
- Use spray attachments on hoses without a backflow prevention device.
- Connect waste pipes from water softeners or other treatment systems directly to the sewer or submerged drain pipe. Always be sure there is a one inch "air gap" separation.



Why should I be concerned?

An unprotected or inadequately protected cross connection on your premises could contaminate the drinking water, not only to your home or business, but in the line that supplies neighboring homes and businesses. Cross connections with potable piping systems have resulted in numerous cases of illness and even death. Historically, cross connections have been one of the most serious public health threats to a drinking water supply system and many times are present in a residential water system.

Solid Waste & Recycling Committee Waste Disposal Guide

To serve Shelby Township citizens and the Board of Trustees in the areas of solid waste and recycling.

Shelby Township waste collection services for single-family residences is contracted to GFL Environmental. The contract with GFL Environmental Services is negotiated by the Board of Trustees and the township's Solid Waste and Recycling Committee. Call GFL Environmental at 586-210-0754 or visit gflenv.com.

Trash Tips for GFL Customers

- Yard waste begins the first week of April and ends the second week in December.
- Cardboard boxes need to be flattened and put in your recycling bin or bound and placed next to your container.
- Mattresses and box springs must be wrapped in plastic before you put them curbside.
- Large items can be placed curbside on your pickup day.
- Place all trash at the curb by 7 AM or the night before your pickup day.
- GFL Observed Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving; Christmas Day.

Community Shred Day

Saturday, Oct. 19, 2024

8 AM - 12 PM

River Bends Park

5700 22 Mile Road

Enter off 22 Mile Road

The Shelby Township Police Department Community Shred Day allows residents and businesses to securely destroy documents for another level of protection against identity theft and financial fraud. After shredding, we recycle all documents and paper bags. The 2024 Community Shred Day takes place 8 a.m.-noon Oct. 21 at River Bends Park at 5700 22 Mile Road. Visit shelbytownshippolice.org for more information.

Household Hazardous Waste Collection Day for GFL Customers

Saturday, April 26, 2025

9 AM-2 PM

River Bends Park

5700 22 Mile Road

Enter off 22 Mile Road

ITEMS ACCEPTED: fire extinguishers, smoke detectors, propane cylinders, household and car batteries, tube and compact fluorescent light bulbs, pesticides, herbicides, used motor oil, gasoline, kerosene, antifreeze, household cleaners, paint thinner, deck sealer, cooking oil, adhesives, aerosol cans, pool chlorine, mercury containing devices, and OIL-BASED as well as LATEX paints and stains. Sharps will be accepted only in sealed coffee can or rigid plastic container. Medications will be collected as part of the hazardous waste event. Pills and Patches (both non-controlled and controlled) - Remove pills from bottles and place in a clear plastic zip lock bag. Keep the bag of pills handy to hand to a police officer at the collection site.

Used eyeglasses will be collected for the Shelby Lions Club – please have these handy to hand to a volunteer.

ITEMS NOT ACCEPTED: ANY TYPE OF ELECTRONICS, ammunition, liquid medications, tires, trash, appliances, medical and business waste.

Electronics Recycling for GFL Customers

Saturday, Oct. 12, 2024

9 AM - 1 PM

River Bends Park

5700 22 Mile Road

Enter off 22 Mile Road

- Accepted items: all televisions, monitors, computers, laptops, printers, fax machines, copier combos, VCRs, keyboards, mice, DVD & CD players, microwaves, stereos, speakers, cables, computer parts, telephones, cell phones, game consoles, handheld electronics, vacuums, small appliances, and holiday lights.
- No hazardous waste or batteries.
- Open to Shelby Township residents serviced by GFL Environmental only.

Mandatory Irrigation Ordinance Watering your lawn and landscape May 1-Oct. 1



Operate sprinklers connected to the municipal water system between 11 PM and 5 AM.

- Even-numbered addresses must sprinkle on even-numbered calendar dates.
- Odd-numbered addresses must sprinkle on odd-numbered calendar dates.



Manual watering is only allowed daily after 9 AM. This practice includes hand watering gardens or potted plants and car washing with a shut-off nozzle.



Irrigate newly seeded or sodded lawns as often as required for 21 days following planting. Do not water 5-9 AM.

Visit shelbytwp.org/dpw for more information on the Mandatory Irrigation Ordinance or call the DPW at 586-731-5990



Solid Waste & Recycling Committee Curbside Recycling Guide



Newspaper

Remove bags, strings & rubber bands



Cardboard & Paper Bags

Flatten cardboard & cut into pieces. Remove wax-coated cardboard



Office Paper

All types & sizes



Mail

Envelopes, flyers, phone books, brochures, postcards, magazines & catalogs



Paperboard

No wax-coated paperboard



Plastic Jugs & Bottles

#1 -#7



Paper Beverage Cups & Paper Cartons

Empty, clean cups & cartons only. Remove lids & straws.



Aluminum Cans

Empty, clean cans only



Steel & Tin Cans

Empty, clean cans only



Clear & Colored Glass

Empty, clean containers only



YES

- Empty & rinse containers
- Clean pizza box tops
- Flatten & bundle cardboard boxes
- Cut cardboard larger than 2-feet-by-2-feet to size and place in bin
- Leave caps on plastic bottles
- OK to leave staples, clips, labels, stamps, spiral bindings and metal fasteners on paper products



NO

- Plastic bags
- Foam containers or products
- Wire hangers
- Window panes, mirrors, ceramics & Pyrex dishware
- Organic material & food waste
- Batteries, cell phones, computers & other electronic waste
- Paint, pesticides, oil & cleaners
- Waxed cardboard
- Needles & syringes
- Hazardous waste
- Clothing
- Plastic straws, lids or stirrers



For more information, contact GFL Environmental at 844-464-3587 or at gflusa.com

The water we drink

Shelby Township's water is purchased from the Great Lakes Water Authority and is surface water from Lake Huron which has been treated at the Lake Huron Treatment Plant.

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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 discharge, 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 the water provided by public water systems. 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 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).

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).



The water GLWA delivers

Drinking water quality is important to our community and the region. The Shelby Township Department of Public Works 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 and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. The Shelby Township Department of Public Works operates the system of water mains that carry this water to your home's service line. This year's Water Quality Report highlights the

performance of GLWA and the Shelby Township Department of Public Works 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. The Shelby Township Department of Public Works and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality drinking water to protect public health. Please contact us with any questions or concerns about your water.

Lead not detected in Shelby Township

Shelby Twp has 25,589 water service lines. All service lines are copper or plastic material.

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 Shelby Township DPW 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 have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line.

Infants and children who drink water containing lead could experience delays

in their physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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 1-800-426-4791 or at epa.gov/safewater/lead.

2023 Lake Huron Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.
Turbidity	N.T.U.	0.09	0.05	0.07
Total Solids	mg/L	146	61	122
Total Dissolved Solids	mg/L	153	103	123
Aluminum	mg/L	0.071	0.018	0.042
Iron	mg/L	0.4	0.2	0.3
Copper	mg/L	0.001	ND	ND
Magnesium	mg/L	7.9	7.0	7.7
Calcium	mg/L	27.2	25.0	25.9
Sodium	mg/L	5.5	4.5	4.9
Potassium	mg/L	1.1	0.9	1.0
Manganese	mg/L	ND	ND	ND
Lead	mg/L	ND	ND	ND
Zinc	mg/L	0.008	ND	0.002
Silica	mg/L	2.5	2.0	2.2
Sulfate	mg/L	21.0	17.9	19.2
Chloride	mg/L	10.0	8.5	9.3

Parameter	Units	Max.	Min.	Avg.
Phosphorus	mg/L	0.56	0.40	0.45
Free Carbon Dioxide	mg/L	8.4	4.4	6.2
Total Hardness (3), (4), (5)	mg/L	140	96	113
Total Alkalinity (3)	mg/L	92	74	81
Carbonate Alkalinity (3)	mg/L	ND	ND	ND
Bi-Carbonate Alkalinity (3)	mg/L	92	74	81
Non-Carbonate Hardness(3)	mg/L	58	16	31
Chemical Oxygen Demand	mg/L	12.8	ND	4.7
Dissolved Oxygen	mg/L	13.3	8.5	10.8
Nitrite Nitrogen	mg/L	ND	ND	ND
Nitrate Nitrogen	mg/L	0.55	0.33	0.38
Fluoride	mg/L	0.79	0.59	0.73
pH		7.56	7.34	7.43
Specific Conductance @ 25 °C	µmhos	210	166	197
Temperature	°C	23.7	2.7	15.1

Key to the Detected Contaminants Table

<i>Symbol</i>	<i>Abbreviation</i>	<i>Definition/Explanation</i>
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
>	Greater than	
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, Dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
Level 1	Level 1 Assessment	A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
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.
pCi/L	Picocuries Per Liter	A measure of radioactivity
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.
SMCL	Secondary Maximum Contaminant Level	An MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may thereby affect public confidence or acceptance of the drinking water.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
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

We are proud that your drinking water currently meets or exceeds all Federal and State requirements. The EPA has determined that our water IS SAFE at these levels.

Safe drinking water is a shared responsibility

The water 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. The Shelby Township Department of Public Works performs required lead and copper sampling and testing in our community. Water consumers also have a responsibility to maintain the plumbing in their home and business, and can take steps to limit their exposure to lead.

2023 Lake Huron Regulated Detected Contaminants Table

2023 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	04-11-2023	ppm	4	4	0.70	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	04-11-2023	ppm	10	10	0.38	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 2023								
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	2023	0	15	0	0-62	1	Lead services lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits.
Copper	ppm	2023	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.

2023 Disinfection Residual - Monitoring in the Distribution System								
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	2023	ppm	4	4	0.76	0.68 – 0.84	no	Water additive used to control microbes

2023 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	2023	ppb	n/a	80	25.5	11-32	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2023	ppb	n/a	60	14	8.2-21	no	By-product of drinking water chlorination

2023 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap				
Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)		Violation	Major Sources in Drinking Water
0.14 NTU	100 %		no	Soil Runoff

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.

Regulated Contaminant	Treatment Technique	Typical Source of Contaminant
Total Organic Carbon ppm	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured each quarter and because the level is low, there is no requirement for TOC removal.	Erosion of natural deposits

2023 Special Monitoring						
Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	04-11-2023	ppm	n/a	n/a	4.8	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2023 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.

Water Testing

The Great Lakes Water Authority monitors approximately 200 regulated and unregulated contaminants in drinking water, including pesticides and radioactive contaminants. All monitoring data in this report is from 2023.

TOWNSHIP DIRECTORY



Macomb County's
Lowest-cost, full-service
Community

Assessing Department

Phone: 586-731-5910

Email: assessing@shelbytwp.org

Building Department

Phone: 586-731-5969

Email: building@shelbytwp.org

Burgess-Shadbush Nature Center

Phone: 586-323-2478

Email: naturecenter@shelbytwp.org

Clerk's Office

Phone: 586-731-5102

Email: clerk@shelbytwp.org

Code Enforcement

Phone: 586-726-7248

Email: ordenf@shelbytwp.org

Community Relations/Shelby TV

Phone: 586-254-7130

Email: info@shelbytwp.org

41A District Court

Phone: 586-739-7325

Web: shelbytwp.org/court

Fire Department

Phone: 586-731-3476

For emergencies dial 911

GFL Environmental Waste Hauler

Phone: 586-210-0754

Web: gflenv.com

Human Resources

Phone: 586-726-7241

E-mail: hr@shelbytwp.org

Library

Phone: 586-739-7414

Email: shelbylib@libcoop.net

Parks, Recreation and Maintenance

Phone: 586-731-0300

E-mail: shelbyprm@shelbytwp.org

Planning Department

Phone: 586-726-7243

Email: planning@shelbytwp.org

Police Department

Phone: 586-731-2121

For emergencies dial 911

Public Works

Phone: 586-731-5990

Email: dpw@shelbytwp.org

Shelby Township Senior Center

Phone: 586-739-7540

Email: seniors@shelbytwp.org

Supervisor's Office

Phone: 586-731-5154

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Treasurer's Office

Phone: 586-731-5145

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shelbytwp.org





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Rick Stathakis, Supervisor
Stanley T. Grot, Clerk
James Carabelli, Treasurer
Lisa Casali, Trustee
Lucia G. Di Cicco, Trustee
John Vermeulen, Trustee
Vince Viviano, Trustee

Do not flush wipes, keep bills low, avoid costly plumber calls

The demand for convenience has turned the nonwoven wipes industry into a multi-billion dollar enterprise, contributing to challenges in our sewer system as more end up being flushed down toilets.

GLWA's Wastewater Treatment Facility in Detroit is the final destination for sewage flowing through an intricate network of pipes managed by various entities. Residents must recognize their responsibility in maintaining the system and avoid flushing items that can obstruct pipes in homes, the sewer system, pump stations, and equipment at the Water Resource Recovery Facility.

Problems extend from the residential level, affecting pipes within homes, to larger issues in the regional shared sewer infrastructure. Clogged pipes lead to toilet overflows, basement sewer backups, and the necessity for main drain cleaning, often requiring the expertise of a plumber. Such problems and expenses can be mitigated by remembering to only flush human waste and toilet paper.

At the regional sewerage system level, the GLWA and its customers bear the cost of flushed wipes. Interceptors, managed by Macomb County or GLWA, transport sewage to a final set connecting to the WRRF. Sewage is conveyed through community sewers to a substantial interceptor sewer at the community boundary, eventually reaching the WRRF.

The treatment process involves discharging effluent into the Detroit and Rouge Rivers. However, the influx

of nonwoven wipes poses a challenge, clogging sewers and equipment in pump stations and wastewater treatment plants. These wipes do not disintegrate in water, necessitating additional maintenance efforts and substantial costs for all sewer system users.

Southeast Michigan communities grapple with the repercussions of wipes clogging critical sewer system facilities, escalating maintenance requirements. Staff is dedicated to cleaning and maintaining pump stations and sewers, with the removal of wipes being a priority task to ensure the system's smooth operation.

The GLWA's Water Resource Recovery Facility in Detroit treats sewage from 77 communities. The facility, equipped with hundreds of pieces of machinery, faces increased cleaning times due to the accumulation of wipes, translating into higher operating expenses.

Communities nationwide share this frustration as wipes wreak havoc on sewer pipes, pump and lift stations, and wastewater treatment facilities. The equipment was not designed to handle wipes, resulting in rising costs attributed to increased labor for their removal.

The characteristic that makes wipes effective for cleaning – their wet strength – becomes a challenge in the sewer system. Most wipes do not break apart in water, and the term “flushable” does not guarantee safety for the sewer system. Wipes retain their strength, attach to each other, and cling

to equipment, forming clumps that grow into hard masses, causing blockages and equipment damage. High-pressure water jet equipment is required to clean sewers and pumps, as messy clumps need to be detangled and cut away.

To mitigate these issues, it is essential never to flush items such as personal and baby wipes, tampons, paper towels, cleaning wipes, and various other products listed by GLWA. Understanding and adhering to proper disposal practices contribute to the overall health and functionality of the sewer system. Understanding and adhering to proper disposal practices contribute to the overall health and functionality of the sewer system.

SAVE OUR SEWER SYSTEM FROM “FLUSHABLE” WIPES

THEY CLOG OUR PIPES

NEVER FLUSH

- Baby wipes
- or cleaning wipes
- Tampons and sanitary products
- Condoms
- Tissues
- Paper towels
- Dental floss
- Cotton balls and swabs
- Cat litter
- Prescription drugs
- Over-the-counter medicines
- Cigarette butts



Scan here to view a video from the Great Lakes Water Authority outlining the hazards posed by “flushable” wipes.