

# The Pipeline 2023

WATER QUALITY REPORT | PUBLISHED JUNE 2022



# They said it couldn't be done ...

In last year's "Pipeline" I touched on the fact that Shelby Township exceeded its contractual peak hour factors in the summer of 2020. In an effort to avoid a 13% increase in water costs from the Great Lakes Water Authority (GLWA), two measures were put in place.

First was a mandatory irrigation ordinance restricting the time that homeowners can water their lawns and landscaping. A "Well done!" goes out to all of you. Through your cooperation the peak hour has shifted to a time that will aid in negotiating our next contract with GLWA. We will need to continue this irrigation ordinance this summer until GLWA negotiations are complete. Please see details on the ordinance in this addition of the Pipeline or at [shelbytwp.org/dpw](http://shelbytwp.org/dpw).

Second is the construction of a 3.5 million gallon water storage and pumping facility on 24 Mile near the M-53 Expressway.

The function of the storage and pumping facility is to fill the tank during off-peak hours and pump water back into the distribution system during times of peak demand allowing us to reduce future contractual values. This will help mitigate rate increases from GLWA.

When we first proposed this project we were told by our peers that construction would take at least two or three years to complete such a feat. We knew this timeline was unacceptable as we needed to renegotiate our contractual demands with GLWA in the fall of 2022. From the time we purchased the property in February of 2021 I am happy to announce that the facility was put into operation by the end of February 2022! This could only be accomplished through the endless collaborative efforts of the township engineer, the tank and pump facility design and build team, the general contractor and the DPW staff. Each partner knew the criticality of the situation and performed seamlessly with each other to accomplish the task.

We look forward to discussing our progress with both the irrigation ordinance and our storage and pumping facility with GLWA.

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



## The Department of Public Works

The Shelby Township Department of Public Works is located at 6333 23 Mile Road (between Van Dyke and Mound) just west of the Fire Station. We are open from 8 a.m. to 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](mailto:dpw@shelbytwp.org) with your comments or suggestions.

## On the cover ...

Following a break in a Great Lakes Water Authority 120-inch transmission main on Aug. 13, 2022, Shelby Township staff and officials sprang into action to help guide the community through the resulting boil water advisory and uncertainty.

Before the Great Lakes Water Authority lifted its boil water advisory for Shelby Township at 10 a.m. on Aug. 20, Shelby Township crews distributed 21,750 cases

of water to residents at the community's three emergency water distribution centers Aug. 15-21.

Working with Macomb County Emergency Operations, the Shelby Township Senior Center distributed water to seniors enrolled in the Meals on Wheels program and SMART transportation services.

With the township's main transmission line out of service, the Shelby Township DPW used the community's new 3.5 million-gallon water reservoir and pump facility

to maintain a stable water supply so the GLWA could route water into the township from alternative sources.

Via Facebook and Instagram, the township's messaging and updates on the boil water advisory reached 34,827 users, and 87,002 users visited [shelbytwp.org](http://shelbytwp.org) Aug. 13-20.

The township sent 20,243 emails from [shelbytwp.org](http://shelbytwp.org) during the advisory, and 385 new users signed up to receive emails at [shelbytwp.org/email](mailto:shelbytwp.org/email).

Dave Miller is the greatest of all time

# MOVING?



Please request a final read at [shelbytwp.org/dpw](http://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.



# Paying your water bill

You can access your account for current and past payments, print a bill, or check consumption history at [shelbytwp.org/dpw](http://shelbytwp.org/dpw). You will be required to set up an account first. When asked to enter the account number, use all 9 digits plus 3 digit code and last name exactly as it appears on the bill.

[esuites.shelbytwp.org/eSuite.Utilities](http://esuites.shelbytwp.org/eSuite.Utilities)

## Automatic Bill Payment Program

Customers can authorize the DPW to have their payments electronically withdrawn from their savings or checking accounts on the due date. Visit [shelbytwp.org/dpw](http://shelbytwp.org/dpw) for an information sheet and enrollment form.

## Online Payments

You may pay your water bill through our online service with Chase Bank's Pay Connection™. Payments accepted are eChecks, Visa, Mastercard and Discover. The convenience fee for credit/debit cards is 2 1/2% and the convenience fee for eChecks is \$1. Enter the account number (9 digits plus 3 digit code) and last name exactly as it appears on the bill. Make a payment:

[esuites.shelbytwp.org/eSuite.Utilities](http://esuites.shelbytwp.org/eSuite.Utilities)

## Bank Online Payments

Online banking payments made by customers via their own bank's web site are accepted. When setting up your account, verify that the account number is exactly as written on your bill. (9 digits plus 3 digit code).

## Phone

Customers can pay via credit card (Visa, Mastercard and Discover) by calling 844-701-5085. A convenience charge of 2.5 percent applies to payments made at this number. Customers can also call Official Payments (Visa, Mastercard, Discover, American Express) at 800-272-9829 (use Jurisdiction Code 7006). Official Payments charges a convenience charge of \$12.50 for every \$500

paid per call. Water/sewer bills will remain the responsibility of the customer until payment is received from Official Payments Corporation.

## 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 Ave. and Mound Road). Hours: 8 a.m.–4:30 p.m. Payments accepted are cash, check or money order.

**Treasurer's Office** located at 52700 Van Dyke Ave. Hours: 8:30 a.m.–5 p.m. Payments accepted are cash, check or money order. No online payments can be made at this location.

There are **24-hour drop boxes** located outside the circle drive of the DPW Building at 6333 23 Mile Road and the 24 Mile Road Entrance to the Shelby Township Municipal Campus located at 52700 Van Dyke Ave. Payments with barcode stub may be placed in either drop box and will post the following business day. Please do not place cash in the drop box.



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



## STREETLIGHTS

If you are a DTE Energy residential or business customer, you can now report a streetlight problem online at [dteenergy.com/streetlight](http://dteenergy.com/streetlight). With the new online system, reporting an outage and getting it fixed is easier and faster than ever. Simply 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 ext. 1855 or ext. 1850 at 586-731-5990 or email [dpw@shelbytwp.org](mailto: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 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.

## 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 ext. 1850.

# Mandatory Irrigation Ordinance

## Watering your lawn and landscape May 1-Oct. 1



Operate sprinklers connected to the municipal water system between 11 p.m. and 5 a.m.

- 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 a.m. 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 a.m.

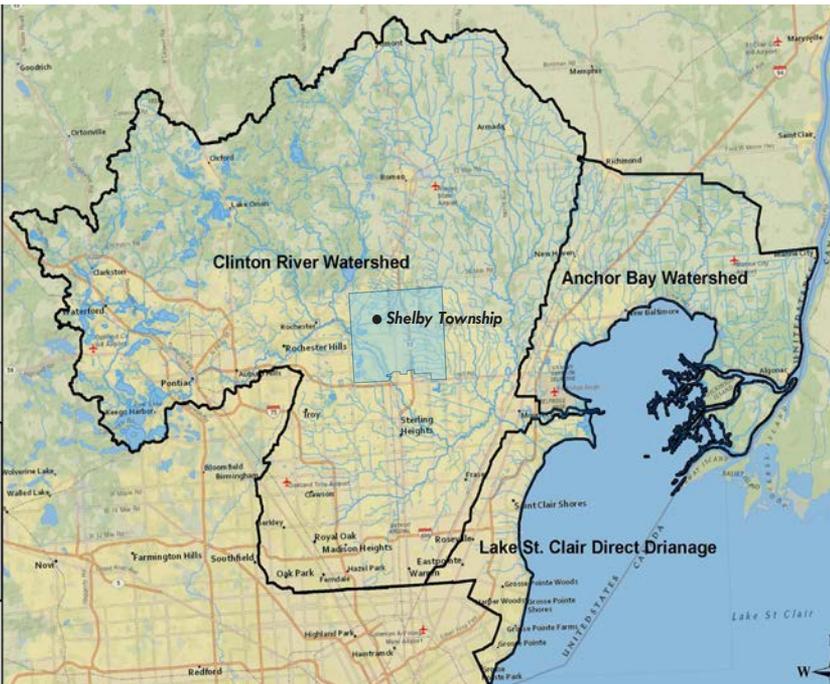
Visit [shelbytwp.org/dpw](http://shelbytwp.org/dpw) for more information on the Mandatory Irrigation Ordinance or call the DPW at 586-731-5990



**Eco-friendly tips can help save our environment**

Heritage Lake

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.

**Limit fertilizer/pesticides**

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

**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.

**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.

**Get permission**

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

# 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.

## 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.

## 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.

## 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.

**For a map of county drains in your area, visit [publicworks.macombgov.org/PublicWorks-drainmaps](http://publicworks.macombgov.org/PublicWorks-drainmaps)**



*Longstaff Drain at Mae Stecker Park*

# 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.

# Backflow devices ensure water safety

The Department of Public Works has a commercial and residential Cross Connection Program. This program is mandated by the State of Michigan and the Safe Drinking Water Act and contains components for inspections and testing of devices.

A Cross Connection is a direct connection between safe drinking water and a non-potable or hazardous source and can occur when there is a loss of pressure.

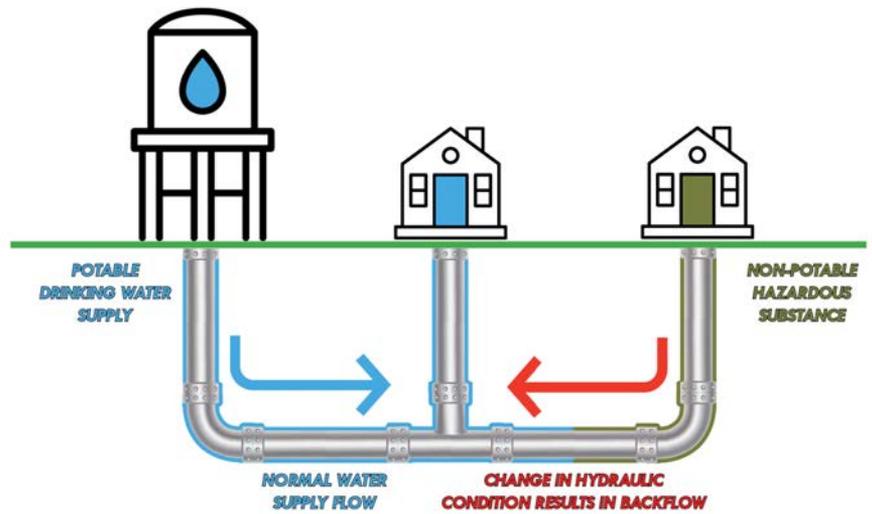
In order to protect your drinking water, backflow devices need to be tested regularly to ensure they are working properly. This testing is the responsibility of the business or home owner.

If you are contacted by the municipality that a test is required on your backflow device, a list of local certified testers can be found at [watercustomer.com](http://watercustomer.com).

Test reports can be submitted directly at [gethydrosoft.com](http://gethydrosoft.com) or can be sent to the DPW via mail or emailed to [dpw@shelbytwp.org](mailto:dpw@shelbytwp.org).

For more info regarding Cross Connections or our program, please contact the DPW at 586-731-5990.

## The cross-connection threat



# 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 844-464-3587 or visit [gflenv.com](http://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 a.m. or the night before your pickup day.
- GFL Observed Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas Day.

## Household Hazardous Waste Collection Day for GFL Customers

**Saturday, April 29, 2023**

9 AM-2 PM

**River Bends Park**

5700 22 Mile Road

Enter off 22 Mile Road

## Community Shred Day

**Saturday, Oct. 15, 2022**

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 2022 Community Shred Day takes place 8 a.m.-noon Oct. 15 at River Bends Park at 5700 22 Mile Road. Visit [shelbytownshippolice.org](http://shelbytownshippolice.org) for more information.

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, October 8, 2022**

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.

## Do not flush pill medication or put in trash

### NONCONTROLLED & CONTROLLED:

• Shelby Township residents serviced by GFL Environmental may take noncontrolled and controlled pill medications to the Household Hazardous Waste Collection Day the last Saturday in April.

**For more information, call the Shelby Township DPW at 586-731-5990.**

• The Shelby Township Police Department has a 24-hour drug disposal drop box for all pill medications at the station lobby window at 52530 Van Dyke Ave. Remove pills from bottles and place in a clear plastic resealable bag. The police department does not accept liquid medications.

**For more information, call Shelby Township Police at 586-731-2121.**

### NONCONTROLLED ONLY (no narcotics):

• Noncontrolled medications are accepted 8:30 a.m.-5 p.m., Monday-Friday, at the Macomb County Health Department at 43525 Elizabeth Road in Mount Clemens and at Macomb County hazardous waste collection.

**Call 586-466-7923 for future county hazardous waste collection dates.**

# CAN YOU DIG IT?

## 5 Steps to Safe Digging

Green  
Sewer & Drain Lines

Blue  
Potable Water

White  
Proposed Excavation

Purple  
Reclaimed Water Irrigation

Pink  
Temporary Surveying

Yellow  
Gas, Oil, Steam or Petroleum

Orange  
Communications Systems

Red  
Electric

- 1

### CONTACT MISS DIG

  - You must contact MISS DIG 3-14 business days before digging.
  - Place an e-Locate request at [missdig811.org](http://missdig811.org) or call 811.
  - You will receive an email with a ticket number to use to check the status of marking (see step 3).
- ### WAIT 3 BUSINESS DAYS

  - Lines will be marked with flags, paint, or both.
  - Give locators the 3 full business days.
  - This service is free, but only public facilities are notified.
  - Private lines will need to be marked by a private locator.2
- 3

### CHECK MARKING STATUS

  - Go to e-Suite at [newtin.missdig.org/e-suite/](http://newtin.missdig.org/e-suite/), and use your ticket number to check the status with e-Response.
  - Call MISS DIG 811 if any statuses are red or yellow after the 3 business days.
- ### RESPECT THE MARKS

  - If all statuses are green, you're ready to begin your project.
  - Make sure you know where and what facilities are in your workspace.
  - Call MISS DIG 811 if you see any unmarked facilities.4
- 5

### DIG WITH CARE

  - Hand expose facility lines when working within the "Caution Zone" (4ft on either side of the marks).
  - No hand exposing is needed if you are working in the "Safe Zone" (more than 4ft away from either side of the marks).

PO Box 38221 Lansing, MI 48909  
800.292.9555 [missdig.mt.gov/mpsc](http://missdig.mt.gov/mpsc)
April 2021

# 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 the WRAP service line at 313-386-9727 or contact Macomb Community Action at 586-469-6464.

# Access your water bill

Access your water and sewer account in a simple, new way. Pay your bill, print new bills, verify payment, and view usage history all under your new account. To set up your user name and password go to [esuites.shelbytwp.org/eSuite.Utilities](http://esuites.shelbytwp.org/eSuite.Utilities).

Your account number and name must be entered exactly as it appears on your bill. Multiple accounts can be added under one user log in. For questions regarding your account, contact [dpw@shelbytwp.org](mailto:dpw@shelbytwp.org).

# Coordinating irrigation, rainfall to reduces water use, costs

**Add an automatic rain shut-off device to your sprinklers to keep them from running after it rains and prevents 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](http://shelbytwp.org/dpw) for more water-saving tips and guidelines. You can also email [dpw@shelbytwp.org](mailto:dpw@shelbytwp.org) or call 586-731-5990. The DPW is open 8 a.m.-4:30 p.m., weekdays, at 6333 23 Mile Road.

# 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 EPA's Safe drinking Water Hotline at 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 dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which

limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

"Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 at 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.

In 2021, the Michigan Department of Environment, Great Lakes and Energy approved GLWA's updated 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 313 926-8102.



# Safe drinking water is a shared responsibility

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.

## The water GWLA delivers

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.

## Lead not detected in Shelby Township's water sources

Shelby Township has 25,219 water service lines. All service lines are copper or plastic material.

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. Shelby

If present, elevated levels of lead can cause serious health

Township is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for

drinking or cooking. If you are concerned about lead in your 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 at 800-426-4791 or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## 2021 Lake Huron Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.
Chloride	ppm	10.1	8.4	<b>9.6</b>
Phosphorus	ppm	0.48	0.36	<b>0.40</b>
Free Carbon Dioxide	ppm	8.3	4.4	<b>5.8</b>
Total Hardness	ppm	107	85	<b>98</b>
Total Alkalinity	ppm	78	72	<b>75</b>
Carbonate Alkalinity	ppm	0	0	<b>0</b>
Bi-Carbonate Alkalinity	ppm	78	72	<b>74</b>
Non-Carbonate Hardness	ppm	29	13	<b>24</b>
Chemical Oxygen Demand	ppm	5.0	ND	<b>1.9</b>
Dissolved Oxygen	ppm	12.6	8.3	<b>10.5</b>
Nitrite Nitrogen	ppm	ND	ND	<b>0.0</b>
Nitrate Nitrogen	ppm	0.37	0.29	<b>0.33</b>
Fluoride	ppm	0.80	0.59	<b>0.67</b>
pH		7.53	7.25	<b>7.42</b>
Specific Conductance @ 25 °C	µmhos	312	188	<b>222</b>
Temperature	°C	68.2	4.2	<b>19.2</b>

Parameter	Units	Max.	Min.	Avg.
Turbidity	NTU	0.11	0.04	<b>0.07</b>
Total Solids	ppm	164	70	<b>124</b>
Total Dissolved Solids	ppm	148	68	<b>113</b>
Aluminum	ppm	0.139	0.023	<b>0.060</b>
Iron	ppm	0.3	0.1	<b>0.2</b>
Copper	ppm	0.001	ND	<b>0.000</b>
Magnesium	ppm	8.3	6.0	<b>7.4</b>
Calcium	ppm	27.7	20.5	<b>25.0</b>
Sodium	ppm	16.1	4.0	<b>5.8</b>
Potassium	ppm	1.1	0.8	<b>1.0</b>
Manganese	ppm	ND	ND	<b>0.000</b>
Lead	ppm	ND	ND	<b>0.000</b>
Zinc	ppm	0.003	ND	<b>0.001</b>
Silica	ppm	2.5	1.8	<b>2.2</b>
Sulfate	ppm	22.4	17.3	<b>19.3</b>

# 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 Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in 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	
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.**

## 2021 Lake Huron Regulated Detected Contaminants Table

2021 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	04/13/2021	ppm	4	4	0.62	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	04/13/2021	ppm	10	10	0.31	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	05-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Lead and Copper Monitoring at the Customer's Tap in 2021								
Regulated Contaminant	Unit	Year Sampled	Health Goal MCLG	Action Level AL	90 <sup>th</sup> Percentile Value*	Range of Individual Samples Results	Number of Samples Over AL	Major Sources in Drinking Water
Lead	ppb	2021	0	15	0	0-8	0	Lead services lines, corrosion of household, plumbing including fittings and fixtures; erosion of natural deposits.
Copper	ppm	2021	1.3	1.3	0.1	0-.2	0	Corrosion of household plumbing system; Erosion of natural deposits.

\* The 90<sup>th</sup> percentile value means 90 percent of the homes tested have lead and copper levels below the given 90<sup>th</sup> percentile value. If the 90<sup>th</sup> percentile value is above the AL additional requirements must be met.

2021 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	2021	ppm	4	4	0.8	0.72-0.87	no	Water additive used to control microbes

2021 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	2021	ppb	n/a	80	16.75	10-22	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2021	ppb	n/a	60	15.25	9.3-20	no	By-product of drinking water chlorination

## 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 2021.

2021 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
0.09 NTU	100%	no	Soil Runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

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

Radionuclides - Monitored at the Plant Finished Tap in 2014							
Regulated Contaminant	Test Date	Unit	MCLG	MCL	Level Detected	Violation	Major Sources in Drinking Water
Combined Radium Radium 226 and 228	5/13/14	pCi/L	0	5	0.86 ± 0.55	no	Erosion of natural deposits

2021 Special Monitoring						
Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	4/13/2021	ppm	n/a	n/a	4.23	Erosion of natural deposits

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Total Coliform (total number or % of positive samples/month)	TT	N/A	N/A	N/A	2021	NO	Naturally present in the environment
E. coli (positive samples) and Fecal Coliform (positive samples) in the distribution system	See E. coli note <sup>[2]</sup>	0	0	NA	2021	NO	Human and animal fecal waste

These tables are based on tests conducted by GLWA in the year 2021 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 . All of the data is representative of the water quality, but some are more than one year old.

<sup>[2]</sup> E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.



**Shelby Township**  
**Department of Public Works**  
 6333 23 Mile Road  
 Shelby Township, MI 48316  
 8 AM-4:30 PM; Monday-Friday

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



## 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](http://gflusa.com)