



The Pipeline 2021

Water Quality Report

Published June 2021



Loving Shelby Township



THE DEPT 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 8:00 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 the Municipal Building at 52700 Van Dyke. Both locations also have 24 hour drop boxes located outside the front entrances.

Water Department policies are set by the Shelby Township Board of Trustees. The Board meets on the first and third Tuesday of each month at 7:00 p.m. at the Township offices. These meetings are open to the public.

The Department of Public Works 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 us at dpw@shelbytpw.org with your comments and/or suggestions.

Making change for the "New Normal"

As we make our way back from the pandemic into the "new normal" things may not look the same as they were before the onset of Covid-19. Even with the lifting of the mask mandates and changes in the social distancing standards many may continue these practices for some time to come.

The "new normal" will exhibit changes for water customers of Shelby Township as well. During the summer of 2020 Shelby Township exceeded its contractual peak hour factors on five occasions. These exceedances resulted in two changes that will affect you as water users. First was the adoption of a mandatory irrigation ordinance restricting the time that homeowners can water their lawns and landscape. This was required by the Great Lakes Water Authority to avoid immediate increases in the water rates. Second is the construction of a 3.5 million gallon water reservoir and pumping facility. This is being constructed to offset future peak demands on the system and mitigate long term rate increases from GLWA.

The one thing that will not change in the "new normal" is our dedication to bringing one of the most life sustaining element into you home – Water.

As you read through this year's edition of the Pipeline more details are provided on the above two items as well as many articles full of useful information regarding your drinking water and other items that may be helpful. Please take the time to read this report and keep it for reference throughout the year. If you have any questions or recommendations, feel free to call our office or email us at dpw@shelbytpw.org.

David G. Miller
Director of Public Works

Set it and forget it

An easy way to ensure your yard is cared for while you adhere to the Mandatory Irrigation Ordinance is by setting your sprinkler timer to the proper day between 11 p.m.- 5 a.m. This step ensures your lawn receives adequate irrigation at the correct time and date.



Contact your irrigation maintenance vendor or search online for instructions to set your sprinkler timer.

Mandatory Irrigation Ordinance

Effective March 10, the Shelby Township Board of Trustees approved ordinance no. 292, the Mandatory Irrigation Ordinance. This ordinance restricts non-essential water usage to decrease the maximum normal water usage at peak hours. Together, we can keep our water and sewer rates stable and help avoid unnecessary rate increases in the future. This action also provides better water pressure for the complete system, ensuring protection to the public's health, welfare and safety.

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.



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



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.

Visit shelbytpw.org/dpw for more information on the Mandatory Irrigation Ordinance or call the Department of Public Works at **586-731-5990**.

Understanding Water Usage

Whether it was the effects of the COVID-19 pandemic, the irregular hot and dry summer, or the stress of lockdowns and business closures, our community will never forget 2020 and will never be quite the same.

One unforeseen consequence of the past year was the impact the summer and pandemic had on our local water usage. Because of a perfect storm of factors, our community exceeded its maximum allowable peak water usage as dictated by the Great Lakes Water Authority. Particularly in July, the township averaged more than our maximum permissible usage by as much as 10 percent. The most significant driver of this was lawn irrigation during peak hours, which the GLWA defines any time outside the 11 p.m.-5 a.m. window.

Because of this significant increase in usage, the GLWA, the township's wholesale municipal water supplier, reviewed our rates and compelled the Shelby Township Department of Public Works to enact certain safeguards to ensure these exceedances do not reoccur.

These GLWA-mandated safeguards included modifying our existing Voluntary Irrigation Ordinance with a Mandatory Irrigation Ordinance. This action took effect on March 10. Under it, we are asking our residents to reduce non-essential water usage such as lawn irrigation to decrease the maximum normal water usage at peak hours.

Failure to reduce our peak hours water usage per the GLWA contractual limits risks

*significant increases to our wholesale costs from the GLWA of \$1.8 million annually. This wholesale increase would result in a mandated increase to our ratepayers of roughly 13% of a household's water bill, and these increases would last through 2027 and likely never be reduced. **Adhering to the Mandatory Irrigation Ordinance is our one chance to avoid these recurring increased rates.***

In addition to the ordinance, the Shelby Township Board of Trustees empowered the DPW to work on an exciting new initiative to minimize future rate increases. The DPW has recently purchased property and finalized plans to build a 3.5 million gallon water storage tank on 24 Mile Road near the M-53 Expressway. This facility will allow the township to store enough water to mitigate future surges in peak water demand. Existing water infrastructure improvement funds will finance this initial investment of \$12 million. Anticipated savings in GLWA wholesale water costs will result in a payback on our initial investment within six years.

Like throughout the COVID-19 pandemic, we can overcome this together and come out better than if it had never happened. We ask our residents and ratepayers to work with us during the coming spring and summer of 2021. By adhering to our Mandatory Irrigation Ordinance and working with us while we build the 24 Mile Road water storage facility, we can ensure we keep our water and sewer rates stable and avoid unnecessary future rate increases.

Adhering to the Mandatory Irrigation Ordinance **is our one chance** to avoid increased rates.

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: <https://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 any questions regarding your account contact DPW@shelbytwp.org.

Water Residential Assistance Program (WRAP)

The Water Residential Assistance Program (WRAP) 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 the Wayne Metro Connect Center.



Spending too much on Irrigation?

Typical water usage in Shelby Township increases by 200% in the summer months. This increase is largely related to lawn irrigation.

Below are a few tips to reduce your spending.

If you are a water and sewer customer you should invest in an AMM.

A second meter will allow you to save substantially on your sewer usage. This meter allow us to bill you for water only (no sewer). Please call our department for details and costs: **586-731-5990**.

All underground irrigation systems are required to have vacuum breakers on them. This device stops non-potable water from reentering the municipal water system. Since this is a mechanical device, it should be tested on a regular basis to verify that it is functioning properly. If you find that your device has not been tested recently or that you do not have a device; call a licensed backflow specialist to test your device or install one if needed. Once a test has been performed or a device is installed, please send a copy of the test information to dpw@shelbytwp.org, or mail to the Shelby Township DPW.

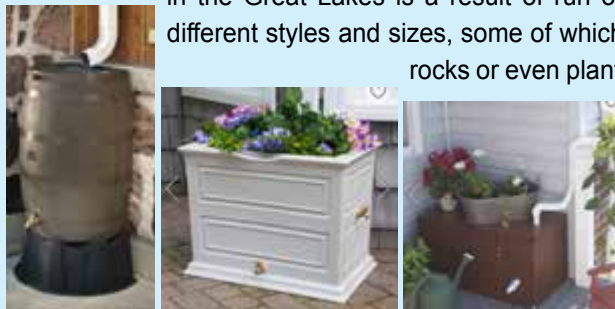
Coordinating lawn irrigation to incorporate NATURAL RAINFALL is a great way to reduce use and decrease cost.

- 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.
- Upgrade to more water-efficient sprinklers. Even replacing heads can cut down on the amount of water wasted. Position your sprinklers appropriately, too. You don't want to pay to water the road.
- 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 us at dpw@shelbytwp.org or call 586-731-5990. View the annual water quality report at shelbytwp.org/waterqualityreport. The DPW is open 8 a.m.-4:30 p.m. on weekdays at 6333 23 Mile Road.

Have you ever considered a Rain Barrel?

Rain barrels not only collect free water, they also help to stop pollution, 70% of pollution in the Great Lakes is a result of run off. Rain barrels come in many different styles and sizes, some of which are very cleverly designed as rocks or even planters. They are available at most of your big box stores as well as online and at your local nursery.



Paying Your Water Bill

ON LINE PAYMENTS

– SHELBY TOWNSHIP WEBSITE

You may pay your water bill through Shelby's online service with Chase Bank's Pay Connexion™. Payments accepted are eChecks, Visa, Mastercard and Discover. The convenience fee for eChecks is \$1.00 and the fee for credit/debit cards is 2 ½% of the payment. Visit Shelbytwp.org/dpw to set up your account and password.

ON LINE PAYMENTS

– CUSTOMER'S BANK

• Enter your account number **exactly** as shown on your bill for electronic payment (see your bank for details). You must include all 12 numbers including the dash. Make the payee "Shelby Township DPW".

PAYMENTS BY MAIL

- Mail the bill stub containing the bar code with your payment.
- Fill your check out completely, sign it and include the account number on your check.
- Mail to: Shelby Township DPW 6333 23 Mile, Shelby Township MI 48316

DROPBOX

- A 24- hour drop box is available at our circle driveway at 6333 23 Mile Rd and at the Township main offices at 52700 Van Dyke (the 24 Mile entrance).
- Do not deposit cash in the drop box.

IN PERSON

- Cash/check/money orders can be paid at the DPW at 6333 23 Mile or at the Treasurer's Department at 52700 Van Dyke.



- Credit card/debit card payment can be made in the DPW office (only) using our countertop computer. 2 ½% fee applies.

AUTOMATIC BILL PAYMENTS

- Customers can authorize payments to be withdrawn automatically from their checking or savings accounts.
- Enrollment forms are available at our office or online at www.shelbytwp.org/dpw.
- There is a one-time \$2.00 enrollment fee as well as a charge of \$.35 per quarter transaction.
- A statement indicating the date on which payment will be withdrawn, and a notation "Do Not Pay" will be sent.
- Any changes to banking information need to be submitted in writing.

VIA PHONE

- Call 844-701-5085 to make Visa, or Discover, or MasterCard payments. A convenience fee of 2.5% applies.
- Credit card payments can also be made by calling Official Payments at (800) 272-9829. Use Jurisdiction Code 7006. Visa, MasterCard, Discover and American Express accepted. A convenience fee of \$12.50 (for every \$500) applies.

DELIQUENT WATER BILLS

Unpaid balances which are six months delinquent as of October 31st will be added to the owner's current year's tax roll.

**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 (select option 3)

Residents living in a single family home or business may provide the meter reading(s) 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 3 business days for processing.

ALLOW THREE (3) BUSINESS DAYS TO PROCESS THE FINAL BILL.

IF YOU ARE LIVING IN AN APARTMENT OR MOBILE HOME PARK - CONTACT YOUR LEASING OFFICE - DO NOT FILL OUT THIS FORM.

IF YOU ARE LIVING IN A CONDOMINIUM - FILL OUT THE FOLLOWING INFORMATION - THE DPW WILL GET IT READ:

PLEASE SUPPLY THE FOLLOWING:

DATE THIS METER READ:
METER READING:
NAME:
PHONE NUMBER:
EMAIL ADDRESS:

TYPE OF METER READ: **DATE OF READ:** **METER READ (ALL 8 DIGITS):**

Residential Domestic:
Residential Apartment:
Commercial Domestic:
Commercial Pro Meter:
Commercial Appliance:

SEND BILL TO: **PLEASE CHOOSE ONE**

Email address:
Fax number:
Pick up at DPW office:
(Mail to):

BE ADVISED - THE AUTOMATIC PAYMENT WITHDRAWAL PROGRAM IS CANCELLED WHEN THE FINAL BILL IS PROCESSED.

Send to Finance@shelbytwp.org

Electronics Recycling Day

In 2020, Shelby Township had 826 vehicles participate in this event and collected 68,810 lbs. of electronic material waste!

Shelby Township, in partnership with GFL, has an annual electronics recycling day for Shelby Township GFL customers only. Please check the website at ShelbyTwp.org/waste for a list of acceptable items.

FREE

For Shelby Township Residents Only
Saturday,
October 9, 2021
9AM – 1PM
River Bends Park
5700 22 Mile
Enter off 22 Mile Road,
between Shelby
and Ryan roads
Visit [shelbytwp.org/](http://shelbytwp.org/recycling)
recycling for more
information or updates.

DID YOU KNOW?

Latex paint is **NOT** a hazardous waste item and can be disposed of year round. Cans need to be completely dried out and placed curbside (next to your container). Try kitty litter or drying products from home improvement stores to speed up the drying process.

Shelby Township Police Department

Community Shred Day

October 16, 2021 9 am to 2 pm
River Bends Park (5700 22 Mile Rd)

Shelby Township residents are urged to bring documents to River Bends Park to be professionally shredded. All documents will be recycled along with the plastic/ paper bags in which they are brought. The Shelby Township Police department knows that proper document destruction helps provide another level of protection for our citizens against identity theft and financial fraud.

This Community Shred Day is sponsored by:
Shelby Township Police Department
Absolute Shreds
Shelby Township Community Foundation



Household Hazardous Waste Day

In 2020, Shelby Township had 1,685 vehicles participate in this event and collected 113,104 lbs. of hazardous waste!

Shelby Township, in partnership with GFL, has an annual household hazardous waste day for Shelby Township GFL customers only. Please check the website at ShelbyTwp.org/waste for a list of acceptable items.



Saturday, April 30, 2022 9AM-2 PM
River Bends Park 5700 22 Mile

Enter off 22 Mile Road , between Shelby and Ryan Roads
Additional Hazardous Waste Days may be held by the Macomb County Health Department . Visit their website at [Health.MacombGov.org/ Health-Home](http://Health.MacombGov.org/Health-Home) or call **586-466-7923** for more information.

Medications

Unused medications can be taken to the Police Department's lobby 24 hours a day, 7 days a week. Visit ShelbyTwp.org/police for details. **DO NOT FLUSH OR THROW IN TRASH.** Dispose of unwanted medications at the annual Household Hazardous Waste Collection Day held the last Saturday in April at River Bends Park at 5700 River Bends Drive.

Accepted: Prescription Medications, Prescription Patches, Prescription Ointments, Over-the-counter medications, Vitamins, Samples, Medications for pets. Not Accepted: Hydrogen Peroxide, Inhalers, Aerosol Cans, Ointments, Lotions or Liquids, Medication from businesses or clinics, Needles (Sharps), Thermometers. For additional information visit Michigan EGLE Recycling website or call **517-285-5637**.

NIXLE

Nixle is a free community information service which allows messages to be delivered to subscribers instantly via cell phone text message and/or e-mail. Get information regarding:

- Siren Testing
- Local Traffic Alerts (accidents, road closures)
- Police Emergencies
- Water/Sewer Emergencies



There is no spam and no hidden costs. Standard text messaging rates do apply. There is no charge for e-mail. Please use the link on the homepage of the Township website (www.shelbytwp.org) to subscribe.

YOUR TRASH IS IMPORTANT TO US!

Green for Life - GFL continues as Shelby Township's single hauler for trash, yard waste, and recycling collection for single-family residential customers. GFL bills customers directly so contact them at **844-464-3587** to set up billing or for any trash, yard waste or recycling issues.

- Rates will remain the same through July 31, 2025 at \$16.50 / mo. (A 10% discount is available for seniors 60 years of age and older.)
- If a customer prepays for the entire year, he/she receives 1 month free. To be eligible for the annual incentive, GFL must receive advance payment for the eleven month period by the due date of **July 1st**.
- Please place trash, yard waste, bulk waste, and recycling at the curb by **7:00 am**.
- **Yard waste collection begins the first Monday in April and ends the second week in December.** It must contain only organic materials – no bricks, stones, plastic, etc. Extra yard waste can be placed in paper bags (not plastic).
- Please label your carts with your address in permanent marker. Place a sign indicating the purpose on your cart if being used for a different purpose than originally labeled. The DPW has "Compost" and "Trash" stickers if needed.
- When a holiday falls on a weekday, your scheduled service day will be delayed by one day. GFL observes these holidays: New Year's Day – Memorial Day – Independence Day – Labor Day – Thanksgiving – Christmas Day.

If you are a Detroit Edison residential or business customer, you can now report a streetlight problem online at 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 Detroit Edison 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 1850 at (586) 731-5990 or email dpw@shelbytp.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.

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.



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, issues regarding snowplowing and/or road maintenance, contact the Department of Roads at (586) 463-8671 or email geninfo@rcmcweb.org.

Eco-friendly Tips Can Help Save Our Environment



Spring 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 eventually into Lake St. Clair, covers 760 square miles including over 1,000 miles of streams as well as the 80 mile long main branch.

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.

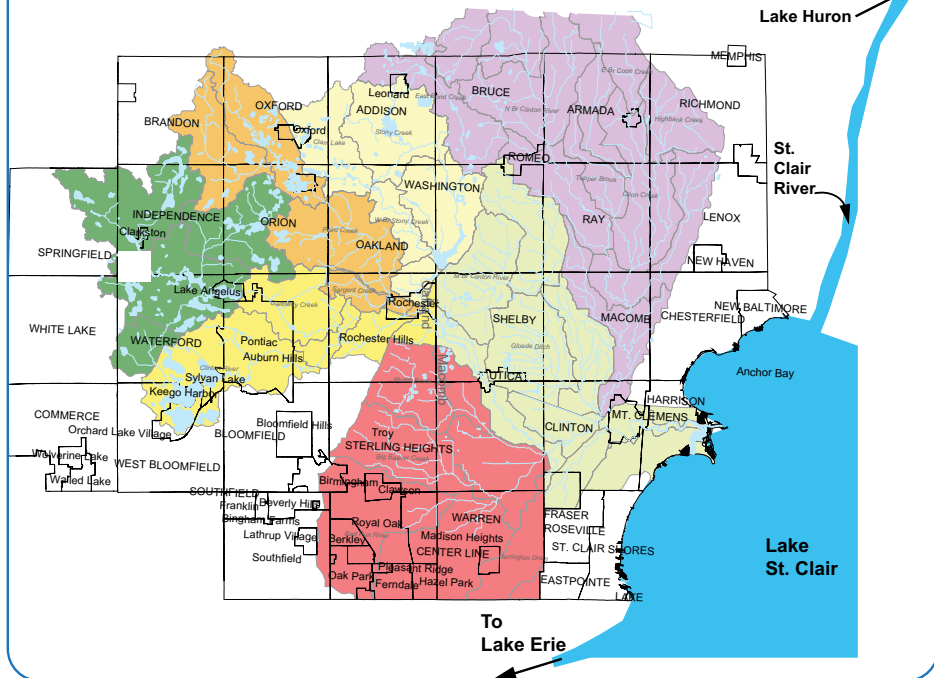
Storm drains are the openings you see along curbs, in streets and in parking lots. Water and debris which enter the

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.

The Clinton River Watershed

A watershed is another word for a river or lake basin. It is the area of land that drains into a body of water. Rain and snowmelt within this area flows down the rivers and streams and into the lake below. The Clinton River Watershed is an area over 760 square miles in four southeastern Michigan counties (Lapeer, Macomb, Oakland, and St. Clair) that flows into the Clinton River. More than 1.4 million people in 60 communities inhabit the watershed area. The Clinton River stretches more than 80 miles from its headwaters in Brandon, Springfield and Independence Townships to its mouth in Harrison Township, where it enters Lake St. Clair.



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 type of storage including garbage, natural debris, or rubbish.

Limit use of 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 in response to flooding.

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

Permission required to install.

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

DRAINS - Do's and Dont's

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

When it rains, water that drains from buildings, roads or other hard surfaces deposits directly into our local storm drains that ultimately ends in 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 IS A COUNTY DRAIN?

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

For a map of county drains in your area, visit <https://publicworks.macombgov.org/PublicWorks-drainmaps>



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 is 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!



Do not build a permanent structure on the drain. e.g.: shed, garage, or pool. If you want to build any permanent structures, it needs to be out of the drain easement.



Do not dump grass clippings, leaves and other debris. Debris can clog a drain. Natural debris causes algae problems which impacts water quality, and increases chance of flooding.



Do not dispose of pet waste in the drain. Always dispose of pet waste in the trash to avoid polluting our water with E. coli. Pick up waste before watering your lawn. Scoop it, Bag it, Trash it!



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



Do not dispose of household products in the drain. Household products can contain toxic chemicals and must be taken to a household hazardous waste collection. e.g.: car fluids, oil-based products, & pesticides.

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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 Environmental Protection Agency'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.



Beautiful Lily Pads are abundant at Holland Ponds

Contaminants that may be present in source water include:

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

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

“Some people may be more vulnerable to contaminants in drinking water than is the



general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).”

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



Holland Ponds is home to a flourishing Heron population

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 2016, the Michigan Department of Environmental, Great Lakes and Energy approved GLWA's Surface Water Intake Protection plans 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. GLWA is in the process of updating the plan which should be completed by September 2021. 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. 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 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.

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.

Doing Any DIY Projects This Season?



- Fountains
- Tents
- Fences
- Mailbox Posts

- Decks & Patios
- Trees or Shrubs
- Swing Sets
- Signs



- Room Additions
- Gardens
- Swimming Pools
- Landscaping



Know What's Below Before You Dig!

Even hand digging can cause damage.

Over 25% of damage is from homeowners.

Become part of the solution!

Contact

MISSDIG811



It's the LAW! It's fast and it's FREE!!!

What do you mean FREE?

When you contact **MISS DIG 811**, the public facility companies are notified to mark the location of their underground lines.

Public facilities are marked for **FREE** by facility company representatives known as Locators. The Locators paint lines and/or place flags to mark the approximate location of underground public lines.

TO PLACE A DIG NOTICE

- Visit elocate.missdig811.org
- In the e-Locate box click Start.
- Complete the e-Locate Request.
- Click Submit. (Ticket # emailed to you).
- Check your dig status before you dig @ status.missdig811.org.
- Enter your ticket #. Click Inquire.

These painted lines usually run from the main facility to the meter on your house.

Not everything gets marked when you call. Private facility lines are **NOT** marked.

The unmarked private facility lines usually run from the house to any other building or object with service in your yard, like a garage or lamp post. A private locator may be hired to mark them.

And often, water and sewer lines are only marked in the right-of-way not all the way to the meter on the house.

It's the LAW?

Yes, the MISS DIG 811 Law was first created in 1974 and most recently updated in 2013. Be smart and contact MISS DIG 811 before you dig.

Why so many flags? What do they mean?

Can I remove them?

Do **NOT** remove the flags until the work is completed or after 21 days.

COLOR KEY:



White	Area of Proposed Excavation
Pink	Temporary Survey Markings
Red	Electric
Yellow	Gas, Oil, Steam, Propane
Orange	Phone and Cable
Blue	Water
Purple	Reclaimed water, irrigation
Green	Sewer
Gray	Used to Erase Marks

5 Steps to Safe Digging

- 1 Call **MISSDIG811** at 811 or go online to elocate.missdig811.org
- 2 Wait for utilities to be marked
- 3 Check status @ status.missdig811.org
- 4 Respect the marks
- 5 Dig with care

"It's Really Simple..."



Lead was not detected in Shelby Township's Water Sources

Shelby Township has 24,978 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. Shelby 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 the water for drinking or cooking. If you have a lead service line it is recommended that you run your water for 5 minutes to flush water from both your home plumbing and the lead service line. 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- 800-462-4791 or at <http://www.epa.gov/safewater/lead>.

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.

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 2020.

2020 Lake Huron Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.	Parameter	Units	Max.	Min.	Avg.
Turbidity	NTU	0.11	0.05	0.07	Chloride	ppm	11.9	7.9	9.4
Total Solids	ppm	164	53	128	Phosphorus	ppm	1.23	0.12	0.51
Total Dissolved Solids	ppm	138	56	117	Free Carbon Dioxide	ppm	8.2	4.2	5.5
Aluminum	ppm	0.242	0.057	0.182	Total Hardness	ppm	106	96	100
Iron	ppm	0.192	ND	0.112	Total Alkalinity	ppm	82	70	75
Copper	ppm	ND	ND	ND	Carbonate Alkalinity	ppm	ND	ND	ND
Magnesium	ppm	8.22	6.88	7.50	Bi-Carbonate Alkalinity	ppm	82	70	75
Calcium	ppm	30.6	24.7	27.3	Non-Carbonate Hardness	ppm	30	22	25
Sodium	ppm	5.94	4.39	4.92	Chemical Oxygen Demand	ppm	4.1	ND	1.5
Potassium	ppm	1.11	0.91	1.00	Dissolved Oxygen	ppm	13.0	8.2	10.5
Manganese	ppm	ND	ND	ND	Nitrite Nitrogen	ppm	ND	ND	ND
Lead	ppm	ND	ND	ND	Fluoride	ppm	0.87	0.60	0.71
Zinc	ppm	ND	ND	ND	pH		7.57	7.30	7.44
Silica	ppm	2.4	1.7	2.1	Specific Conductance @ 25 °C.	µohms	265	201	221
Sulfate	ppm	24.3	17.9	19.9	Temperature	°C	23.9	5.5	13.9

Key to Detected Contaminants Tables

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.

Level 2 - Level 2 Assessment

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

LRAA - Location 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. MRDLG'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.

µohms - Microohms

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.

2020 Lake Huron Regulated Detected Contaminants Table

2020 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	3-10-2020	ppm	4	4	0.72	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	3-10-2020	ppm	10	10	0.30	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-17	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

2020 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	2020	ppm	4	4	0.77	0.70-0.85	no	Water additive used to control microbes

2020 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
(THM) Total Trihalomethanes	2020	ppb	n/a	80	17.625	11-31	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2020	ppb	n/a	60	16.875	13-22	no	By-product of drinking water chlorination

2020 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
0.10 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

Lead and Copper Monitoring at the Customer's Tap in 2020									
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples Over AL	Range of Individual Samples Results	Violation	Major Sources in Drinking Water
Lead	2020	ppb	0	15	0	1	0-23	no	Lead services lines, corrosion of household, plumbing including fittings and fixtures; erosion of natural deposits
Copper	2020	ppm	1.3	1.3	0.1	0	0.0-0.2	no	Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives.
* The 90 th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90 th percentile value. If the 90 th percentile value is above the AL additional requirements must be met.									

2020 Special Monitoring						
Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	3-10-2020	ppm	n/a	n/a	4.91	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2020 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.



Charter Township of Shelby
Department of Public Works
 6333 23 Mile Road
 Shelby Township, MI 48316
 Monday - Friday 8:00 am - 4:30 pm

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

SAVE OUR SEWER SYSTEM FROM "FLUSHABLE" WIPES

"Flushable" wipes are a growing hazard to public health, causing sewer backups and overflows. These so-called "flushable" wipes are not biodegradable!

THEY CLOG OUR PIPES

Don't flush wipes or other items that can clog pipes in your home, the sewer system, pump stations and equipment at the Water Resources Recovery Facility (WRRF).

Clogged pipes can lead to overflowing toilets and basement sewer backups. When this happens, you'll need to call a plumber to clear the blockage.



NEVER FLUSH

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



STICK TO THE 3 Ps

Only three things go in your toilet: pee, poo and (toilet) paper! If you really want to use wipes, throw them in the garbage, not your toilet.



A COSTLY MAINTENANCE MESS

"Flushable" wipes wreak havoc in sewer systems across the region. In 2018, workers in Macomb County removed a 19-ton, 100-foot fatberg, a deposit of fat and grease, mixed with wipes. The process cost about \$100,000.



Used "flushable" wipes and other items removed from a sewer in Clinton Township by the Macomb County Public Works Office.