



The Pipeline 2019

Water Quality Report

Published June 2019



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@shelbytp.org with your comments and/or suggestions.

Water... What a precious resource.

It is hard to believe that the Shelby Township DPW has been bringing *The Pipeline* publication to your home for 20 years. During this time the format of *The Pipeline* has changed, the articles have changed, the delivery method has changed (most of you will be reading a digital copy of this). What hasn't changed is the message:

Water is one of the most important life sustaining elements. It is a limited resource. Water touches almost every facet of our lives. From the food we eat to the clothes we wear. From the vehicles that transport us to the lawns that we sprinkle. We are very fortunate to be surrounded by one of the best fresh water sources in the world; the Great Lakes.

Often times we fail to see the impact that water has on our lives. It is up to us to be good stewards, to use our water wisely and preserve this resource from the start to the finish.

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 at (586) 731-5990 or email us at dpw@shelbytp.org.

David G. Miller
Director of Public Works

STOP Costly Leaks!

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

STOP!

Those annoying little sounds are indications of a leak which can be a costly waste that will be reflected in your water bill.

A leaky faucet or toilet can waste hundreds of gallons of water every day. 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 a little food coloring in the tank (not the bowl). Don't flush for fifteen minutes. If the color begins to appear in the bowl (without flushing), you have a leak that needs to be fixed 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.

Water meters are typically located in the basement, laundry room or utility closet.

...Shelby Township **cannot** adjust your bill for water wasted through leaks!

Understand Your Water Meter



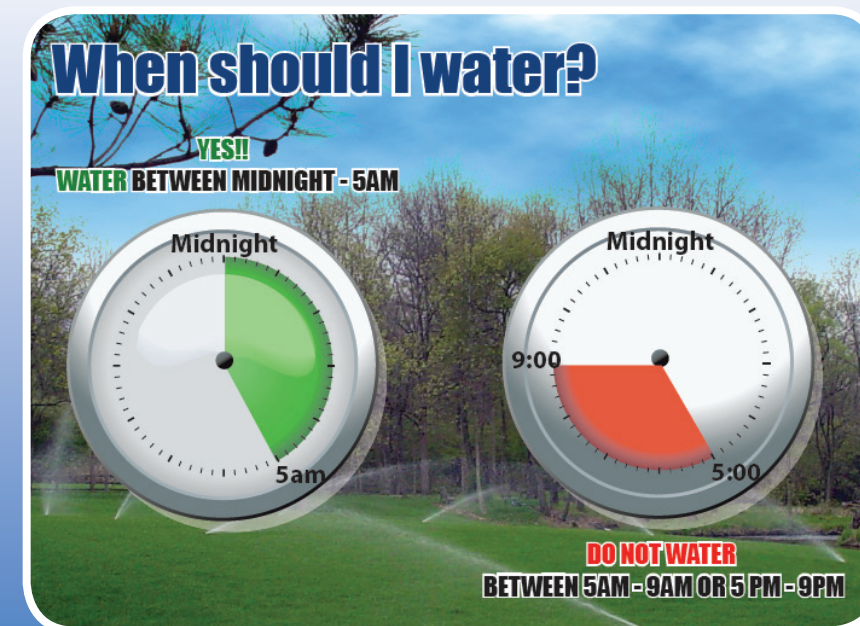
Reading your meter is like reading a car odometer. For billing purposes, we use only the first four digits on the left. The first and easiest method is to use the red diamond, the small dial or triangle-shaped leak detector equipped on most meters. If your meter is not equipped with a leak detector, 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, 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, so now look at the shower heads, water heater, furnace humidifier, ice cube maker, outside faucets, water softener, water purifier and lawn irrigation system.

A leaky faucet or toilet can waste **hundreds of gallons of water** every day.

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, go to the Water Wiser Drip Calculator at: <http://www.awwa.org/advocacy/learn/conserves/dripcalc.cfm>.

If you have a water powered back-up sump pump, make sure it is in good working order. A malfunctioning pump can use an exorbitant amount of water. You may want to exercise the pump periodically to ensure that it is functioning properly.



Are You Watering at the Correct Time?

One of the factors used by Great Lakes Water Authority when setting our rates is peak demand. We request that you do not water your landscaping between the hours of 5:00 am and 9:00 am or between 5:00 pm and 9:00 pm.

Viewing Your Water Bill

VIEWING BILLS/ ACCOUNT INFORMATION ONLINE

You can view your past and present water bills in the following manner:

- Go to www.shelbytp.org
- Click on “DPW “ under Departments
- Click on “Bill Payment”
- Click on the esuites link under “Check your Water Bill”
- The account number needs to be put in exactly as it appears on the bill
- The last name needs to be put in exactly as it appears on the bill (primary customer only)

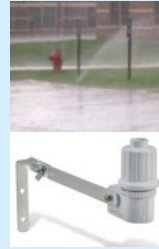
Spending too much on Irrigation?

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.

Are your sprinklers running in the rain?

Our maintenance personnel often see irrigation systems watering the grass during the rain. Investing in a rain sensor for your irrigation system will circumvent this problem. A rain sensor or rain switch will shut down your automatic sprinkling system in the event of rainfall. There are many options available. Check with your local big box store or your local sprinkler supply store for more information.



Are you watering the road or your cement?



If the road and sidewalk in front of your lawn are as wet as your lawn, you might want to readjust the direction your sprinklers are spraying. Excess water running down the curb is another telltale sign that you might be watering too much or your sprinkler heads are incorrectly adjusted.

Do you over water?

Often times, residents water too much for the weather conditions and their soil. Most plants require around an inch of water per week depending on your soil conditions. It is often hard to gauge what an inch looks like. A properly placed rain gauge can be used to measure rain and/or sprinkler output. This will allow you to make adjustments to your system based on current precipitation and soil conditions.



Are you a Water and Sewer customer?

If you answered yes, do you have a separate irrigation meter?

Investing in the installation of an irrigation meter can save you hundreds of dollars per year. This can cut the irrigation portion of your bill by more than 50%. The separate meter also allows you to see the amount of water you are using for your irrigation needs.

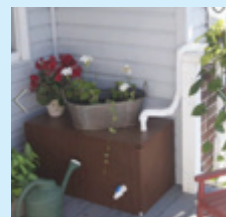
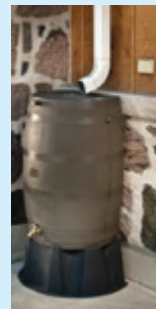
Please call the Shelby Township DPW for more information on Area Maintenance (Irrigation) meters and whether one is right for you.

Are you watering every other day?

The Shelby Twp. Board has approved a voluntary even/odd sprinkling ordinance. Customers with an address which ends in an even number, water on days that end with even numbers and addresses ending with an odd number water on days that end in an odd number.

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 now 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 the DPW Department at www.shelbytp.org to begin!

Official Payments also accepts online payments at www.officialpayments.com. Use Jurisdiction Code 7006. There is a fee of \$6.50 per every \$500.00 in payments.

ON LINE PAYMENTS – CUSTOMER'S BANK

• Enter your account number exactly as shown on your bill for electronic payment (see your bank for details).

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 and 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 and at the



Treasurer's Department at 52700 Van Dyke
• Credit card/debit card payment can be made at the DPW using our countertop computer.

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.shelbytp.org on the DPW page.
- 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

- Credit card payments (Visa, Discover, American Express) can be made by calling Official Payments at (800) 272-9829. Use Jurisdiction Code 7006.
- A convenience fee of \$8.08 per every \$500.00 must be paid to Official Payments for this service.
- Chase bank also offers payments via phone. Call (844)-701-5085.
- A convenience fee of 2 1/2% of the amount of the payment must be paid to Chase for this service.

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 contact the
Shelby Township DPW at
586-731-5990 Ext. 1862
or finalread@shelbytp.org*

Providing us with the meter reading will significantly expedite the final read process. The read needs to be the entire read off the face of the meter (located in the home). Requests submitted with the read can be processed the same day. If our office is obtaining the read, we request 48-72 hours to obtain the read and prepare a final read bill. Final read bills can be emailed, mailed, faxed, or picked up in our office at 6333 23 Mile.

Electronics Recycling

FREE
Electronics Recycling
For Shelby Township

Residents Only

October 26

9AM – 1 PM

New Location

River Bends Park

5700 22 Mile Rd

Enter off of 22 Mile,

between

Shelby and Ryan Roads

Visit:

shelbytwp.org/recycling
for more information.

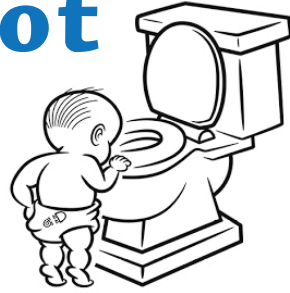
SIMPLE RECYCLING

Shelby residents can recycle reusable clothing, shoes, and housewares with free, curbside pick-up on their regular recycling collection day. Simply place your orange bags provided by Simple Recycling beside your recycling bin before 7:00 AM and they will take care of the rest, leaving behind replacement bags for your continued convenience. For a list of acceptable items, you can visit their website at www.simplerecycling.com

To request additional bags you can email Simple Recycling at info@simplerecycling.com, visit their website at www.simplerecycling.com or you can reach Simple Recycling at 1-866-835-5068. Bags can also be picked in the DPW office.



Please Do Not Use Your Toilet As A Trash Can!



Flushing inappropriate items can cause plumbing problems and harm the environment.

Things NOT to flush:

- Medications, vitamins
- Hypodermic needles
- Cloth, rags, towels
- Dental floss
- Feminine products
- Plastic bags & bottles
- Chemicals, solvents
- Grease
- Baby wipes
- Fats, cooking oil
- Condoms
- Diapers
- Cigar tips, cigarette butts
- Paper towels
- Butane lighters

Did you know that the water you flush goes through the pipes and sewers, to our wastewater treatment plants, and then into our lake and river? **Protect our environment.** Please dispose of diapers, paper towels, and other non-flushable items in the waste bins, not in the toilets. For more information go to: https://outreach.glwater.org/homer/news/ocw_flushables_1/tabid/211/deflout.aspx

Household Hazardous Waste Day



Shelby Township in conjunction with GFL has an annual household hazardous waste day in April. Please watch the website for the date.

Macomb County Health Department holds a regularly scheduled household hazard waste event. Please call 586-466-7923 for dates or visit www.health.macombgov.org/Health-Home

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 of 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" 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.

Shelby Township Police Department

Community Shred Day

October 19, 2019 -- 9:00 a.m. - 1:00 p.m.

River Bends Park, 5700 22 Mile Rd. Shelby Twp., MI 48317

Shelby Township residents are urged to bring documents to River Bends Park to be professionally shredded. All shredded documents will be recycled, along with the plastic/paper bags in which they are brought. We do not dispose of boxes; all boxes will be returned to the individual who brought them.

Businesses located in Shelby Township are urged to bring only **two boxes** of documents to be shredded, residents are urged to bring no more than **four boxes**.

This program is being presented in conjunction with a community educational program on Identity Theft. For more information, please call the Shelby Township Police Department at 586-731-2121 Ext. 307. The Community Shred Day is sponsored by: the Shelby Township Police Department, the Shelby Township Community Foundation and Rapid Shred of Auburn Hills

The Community Shred Day is sponsored by:

1. Shelby Township Police Department
2. Shelby Township Community Foundation
3. Rapid Shred of Auburn Hills



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.

STREETLIGHTS



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

OVER THE LAST DECADE WE HAVE BECOME MORE AWARE OF OUR WORLD, THE ENVIRONMENT AND OUR IMPACT ON IT. THERE ARE SMALL CHANGES WE CAN MAKE IN OUR EVERYDAY ACTIVITIES THAT WILL HELP ENSURE WE ARE DOING OUR PART TO CONSERVE OUR BEAUTIFUL TOWNSHIP AND THE RESOURCES WE ALL ENJOY IN IT.

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 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.

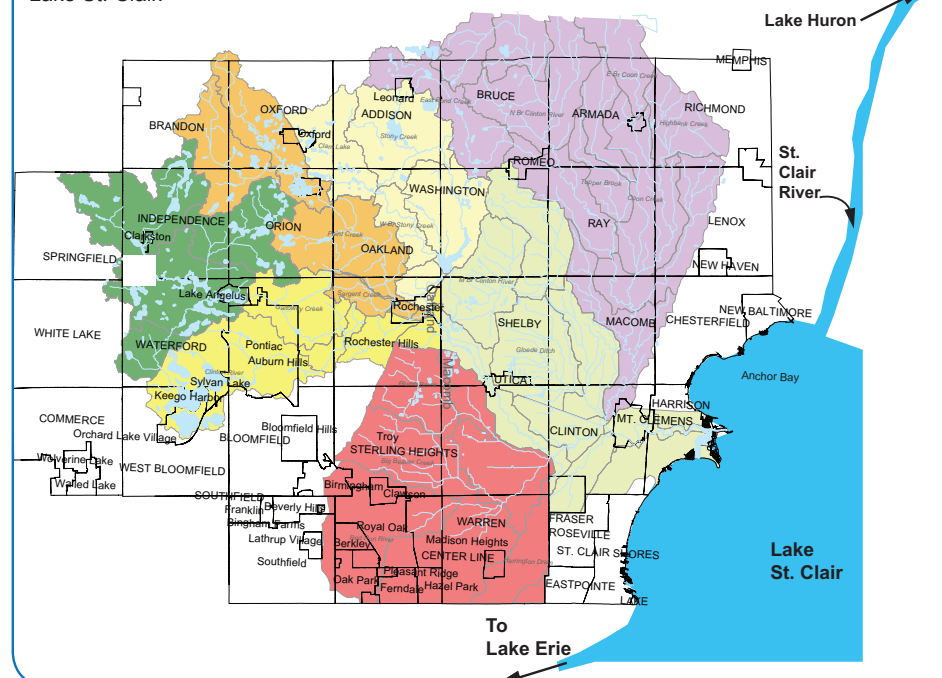
Storm drains are the openings you see along curbs, in streets and in parking lots. Water and debris which enter the

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.



DID YOU KNOW THAT 4.9 MILLION PEOPLE LIVE IN SOUTHEAST MICHIGAN?

The actions of each and every one of us affects the quality of life in our watershed. We can all pitch in and do our part to protect our precious water supply. The Southeast Michigan Council of Governments has developed some suggestions we can follow to help keep our water clean.



HELP KEEP POLLUTION OUT OF STORM DRAINS

Storm drains lead directly to our lakes and streams. Don't dump oil, pet waste, leaves, dirty water or anything else down a storm drain.

Remember, only rain in the drain!

CLEAN UP AFTER YOUR PET

Whether on a walk or in your yard, promptly clean up after your pet. Not only will you be a good neighbor, you will also protect our water from harmful bacteria.



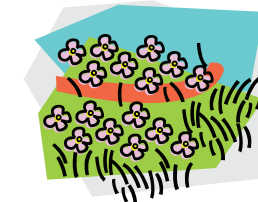
FERTILIZE CARINGLY AND SPARINGLY

Excess fertilizer that gets into storm drains pollutes our lakes by causing algae blooms and using up oxygen fish need to survive. If you think you need fertilizer, have your soil tested, then follow the manufacturer's instructions. **Remember, the use of phosphorous fertilizer is banned in Michigan.** Blow excess fertilizer off your driveway and walkway and back onto the lawn to KEEP IT OUT OF THE DRAINS!



CAREFULLY STORE AND DISPOSE OF HOUSEHOLD CLEANERS, CHEMICALS AND OIL

Instead of putting hazardous products like antifreeze, motor oil, and pesticides in the trash, down the storm drain, or on the ground, take them to a local hazardous waste collection day (See shelbytwp.org/recycle for the next scheduled date and for alternative disposal information).



CHOOSE EARTH FRIENDLY LANDSCAPING

Protect your pets, kids, and the environment by using pesticides sparingly. Also, water your lawn only when it needs it and choose plants native to Michigan.

PRACTICE GOOD CAR CARE

Consider taking your car to a car wash or washing your car on the grass.



SAVE WATER

Over watering our lawns can easily carry pollution to the storm drains and to our lakes and streams. Consider using a broom instead of a hose to clean sidewalks and driveways. Direct hoses and sprinklers on the lawn, not the driveway. This will help save our lakes and streams and save you money.

For more information visit www.semco.org, or www.crw.org.



Heritage Gardens at the Shelby Township Offices



h₂O 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 2015, GLWA received a grant from the Michigan Department of Environmental Quality to develop a source water protection program for the Lake Huron water treatment plant intake. The program includes seven elements that include the following: roles

and duties of government units and water supply agencies, delineation of a source water protection area, identification of potential of source water protection area, management approaches for protection, contingency plans, siting of new sources and public participation and education. If you would like to know more information about the Source Water Assessment report please, contact your water department (586)731-5990.

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.



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 2018.

GLWA PFAS testing for drinking water system

Department of Environmental, Great Lakes, and Energy (EGLE) is currently conducting statewide testing for Per- and Polyfluoroalkyl Substances (PFAS). These are man-made compounds used in the manufacturing of carpets, clothing, fabrics for furniture, paper packages for food and other materials that are resistant to water, grease or stains. They are also found in products such as firefighting foams, cleaners, cosmetics, paints, adhesives and insecticides.

The Great Lakes Water Authority (GLWA) has been monitoring PFAS since 2009. In our 2017-2019 round of drinking water system screenings, GLWA is pleased to assure the public that these chemicals were not detected. This means that PFAS levels were below that which is measurable under the EPA's standard analytical methodology for the detection of the compounds.

PFAS are unregulated contaminants. Unregulated contaminants require that GLWA collect data and report that data to the EGLE

and EPA. They then combine that data with other research to make a determination about potential future drinking water regulations regarding the contaminants.

We take our responsibility to public health and safety seriously, and are in full support of EGLE's statewide PFAS sampling effort. Additionally, GLWA can confirm that its water remains of unquestionable quality.

— Cheryl Porter, Chief Operating Officer,
Water and Field Services, GLWA

Residential Cross Connection Survey

In an effort to maintain safe drinking water, Shelby Township has an ongoing Cross Connection and Backflow Prevention program in place to prevent non-potable water from entering into the drinking water system. Recently the Michigan Department of Environmental, Great Lakes, and Energy (EGLE) has expanded the requirements to include the testing of residential backflow devices.

In an effort to update our current data base, the Shelby Township DPW will be sending out information sheets and surveys to our residential customers to assist us in meeting these requirements.

We look forward to your assistance to insure a safe drinking water supply for the residents of our community.

If you have any questions or wish for further information, please call our office or email us at DPW@shelbytwp.org.

Lead was not detected in Shelby Township's Water Sources



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 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 or at <http://www.epa.gov/safewater/lead>.

Key to Detected Contaminants Tables

> - Greater than

°C - Celsius A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.

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

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.

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.

umhos - Micromhos

Measure of electrical conductance of water.

In 2014 and 2018 Shelby Twp. DPW was directed by the U.S. Environmental Protection Agency to monitor for Unregulated Contaminants.

Unregulated Contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. We monitor for these contaminants and the results of monitoring are available on request.

2014 Special Monitoring	Unregulated Contaminant Monitoring Rule 3			
	MCLG	MCL	Level Detected 2014	Source of Contamination
Sodium(ppm)	n/a	n/a	4.78	Erosion of natural deposits
Strontium (ppm)	n/a	n/a	94.2	Naturally present in the environment
Chromium (ppm)	n/a	n/a	0.2	Naturally found in rocks, plants, soils, and volcanic dust, and animals
Chromium (VI) (ppm)	n/a	n/a	0.11	Erosion of natural chromium deposits
4-Androstene-3, 17-dione (PPM)	n/a	n/a	0.0006	Steroidal hormone naturally produced in the human body

2018 Special Monitoring	Unregulated Contaminants UCMR4					
Un-Regulated Contaminant	Test Date	Unit	Health Goal	Average	Range of Detection	Major Sources in Drinking Water
HAA5	2018	ppb	NA	14.67	12-18	By-product of drinking water disinfection
HAA6Br	2018	ppb	NA	7.32	6-9.3	By-product of drinking water disinfection
HAA9	2018	ppb	NA	21.33	18-25	By-product of drinking water disinfection

Lake Huron Water Treatment Plant 2018 Regulated Detected Contaminants Tables

2018 Inorganic Chemicals – Monitoring at the Plant Finished Water Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Fluoride	6-12-2018	ppm	4	4	0.76	n/a	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	6-12-2018	ppm	10	10	0.33	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

2018 Disinfection By-Products – Monitoring in Distribution System, Stage 2 Disinfection By-Products								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest LRAA	Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Trihalomethanes TTHM	2018	ppb	n/a	80	23	13-30	no	By-product of drinking water chlorination
Haloacetic Acids HAA5	2018	ppb	n/a	60	14.25	8.8-18	no	By-product of drinking water disinfection

Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest RAA	Quarterly Range of Detection	Violation yes/no	Major Sources in Drinking Water
Total Chlorine Residual	Jan-Dec 2018	ppm	4	4	0.83	0.79-0.87	no	Water additive used to control microbes

2018 Turbidity – Monitored every 4 hours at Plant Finished Water			
Highest Single Measurement Cannot exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation yes/no	Major Sources in Drinking Water
0.17 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.

2017 Lead and Copper Monitoring at Customers' Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples over AL	Violation yes/no	Major Sources in Drinking Water
Lead	2017	ppb	0	15	0.0	0	no	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2017	ppm	1.3	1.3	0.1	0	no	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.

*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.

Regulated Contaminant	Treatment Technique 2018	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 was measured each quarter and because the level was low, there is no TOC removal requirement	Erosion of natural deposits

Radionuclides 2014							
Regulated contaminant	Test date	Unit	Health Goal MCLG	Allowed Level	Level detected	Violation Yes/no	Major Sources in Drinking water
Combined Radium 226 and 228	5-13-14	pCi/L	0	5	0.86 + or - 0.55	no	Erosion of natural deposits

Contaminant	MCLG	MCL	Level Detected 2018	Source of Contamination
Sodium (ppm)	n/a	n/a	5.21	Erosion of natural deposits

Regulated contaminant	Test date	Unit	Health Goal MCLG	Allowed Level	Level detected	Violation Yes/no	Major Sources in Drinking water
Combined Radium 226 and 228	5-13-14	pCi/L	0	5	0.86 + or - 0.55	no	Erosion of natural deposits

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.



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
 Mike Flynn, Treasurer
 John Vermeulen, Trustee
 Vince Viviano, Trustee
 Lynn Wilhelm, Trustee
 Lisa Casali, Trustee

What is MISS DIG 811?

MISS DIG System, Inc. is the Utility Safety Notification System for the state of Michigan, and is a not-for-profit corporation made up by Member Facility Owners.

MISS DIG 811 is a FREE service that homeowners and contractors use to notify facility owners of their intent to dig.



ITS THE LAW.

Why & When to Place a Location Request

Why to Place:

You may be surprised by what's buried in your yard. That's because most electric, gas, water, sewer and telecommunications companies are delivering utility services to you underground. To avoid personal injury and damage to those underground lines, state law requires you to contact MISS DIG 811 before starting a digging project, regardless of the project size or depth. MISS DIG 811's services are free, there are no fees associated with web access and if by phone, the call is free.

You can prevent injury and avoid damage by following these four important steps:

- Call or Click before you dig
- Wait the required amount of time (three business days after your request is placed)
- Respect the marks
- Dig with care

When to Place:

A locate request needs to be placed at least 3 business days prior to but no more than 14 days before conducting excavation on your property. Contact MISS DIG 811 at 1-800-482-7171, 248-370-6400, or 8-1-1 or by using e-Locate to place a locate request online.

Make sure you notify MISS DIG 811 if you are doing any of the following projects:

- Decks & Patios
- Trees or Shrubs
- Swing Sets
- Signs
- Fountains
- Tents
- Fences
- Mailbox Posts
- Room Additions
- Gardens
- Swimming Pools
- Landscaping

A REMINDER TO PARENTS



The colorful flags used to mark underground utility lines can be very attractive to young children. Remind your children not to remove the utility flag markings. If your child happens to pull out the utility flags, do not attempt to place the flags back in the ground. Never assume you remember where the flags were located. ***If the flags are accidentally removed, call the MISS DIG System at 811 or 800-482-7171, or the contractor you have hired to do work if they called MISS DIG 811 to have the flags placed, and indicate you need the utility lines in your yard marked again.***

State of Michigan Utility Color Code



RED
Electric



YELLOW
Gas, Oil, Steam or Petroleum



ORANGE
Communications Systems



BLUE
Potable Water



PURPLE
Reclaimed Water Irrigation



GREEN
Sewer and Drain Lines



WHITE
Proposed Excavation



PINK
Temporary Surveying