

BC WORKS!

The City of Battle Creek's
Department of Public Works Newsletter

Trees for Clean Water



FOREST TO MI FAUCET

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The City of Battle Creek, in partnership with the Kalamazoo River Watershed Council (KRWC), received funding to plant trees to help improve drinking water quality both in the city and for our downstream neighbors. Healthy forests serve to increase infiltration, and minimize stormwater runoff and erosion - all of which are important for good water quality.

Thanks to a grant from the Michigan Department of Natural Resources' (MDNR) "Forest to MI Faucet" program, 93 native trees were planted at the city's wastewater treatment plant property, located along the Kalamazoo River. Native tree species were selected that would do well at the location and provide wildlife benefits, as well as water quality improvements. The species include: bur oak, swamp white oak, black gum, tulip poplar, Kentucky coffee tree, musclewood and pawpaw. The trees were planted with help from community volunteers, the Kalamazoo River Watershed Council and City of Battle Creek staff.



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The "Forest to MI Faucet" program has **five main objectives**:

- Educate people in Michigan about connections between forests and drinking water.
- Help municipal water utilities implement source water protection plans to lower treatment costs.
- Protect forests from land use change with conservation easements to retain important forests in a watershed.
- Manage forests well with landowner education, forest certification, Master Loggers, prescribed fire and other methods.
- Expand forests by planting trees in strategic places - along rivers and lakeshores and in urban and agricultural areas.



For more information on the Michigan Department of Natural Resources' Forest to MI Faucet program, visit: michigan.gov/dnr/ and search "Forest to MI Faucet."



The way we take care of our land above and upstream of our water source has a direct effect on both surface and groundwater quality. Watersheds with forests covering more than half of the land area tend to have better water quality than those with fewer trees. Healthy forests absorb rainfall which helps refill underground aquifers (underground layers of water-bearing material, consisting of permeable or fractured rock, gravel, sand or silt). Forests also help minimize stormwater runoff by absorbing water and reducing erosion and nutrient loading to our surface waters. An estimated 6 million people in our state get their drinking water from one of the Great Lakes, while the other 4 million people rely on city or private wells, supplied by groundwater (riverraisin.org).

Forests provide the best land use for water quality protection. We need to actively protect important forests, manage all forests well, and plant more trees near water in both urban and rural landscapes.

What can you do to protect water quality?

- Plant native wildflowers, shrubs and trees - especially near lakes and rivers. Visit: canr.msu.edu/nativeplants/
- Prevent or minimize the spread of invasive species, which can impact the health of our native plants. Visit: michigan.gov/invasives/id-report
- Pick up and properly dispose of pet waste on your walks - **including on forest trails**.
- Read the City of Battle Creek's *Wellhead Protection Plan*. This includes a variety of actions and activities aimed at safeguarding, maintaining or improving the quality or quantity of our source of drinking water. Visit: bcwater.org/city-efforts/
- Buy less stuff you don't need and recycle what you can. Visit: bcwater.org/recycling/

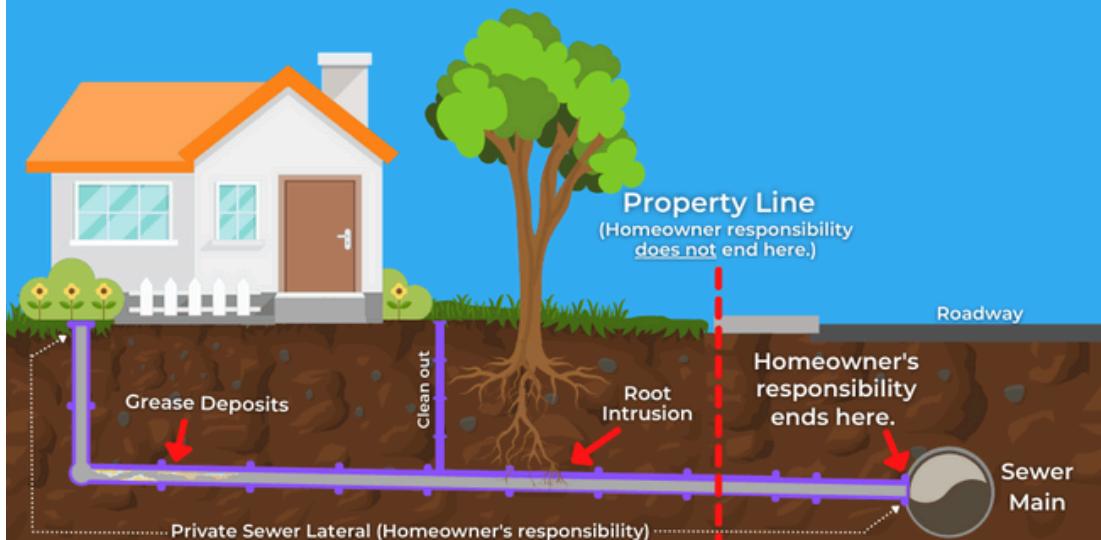


Sewer Laterals - What you need to know

All properties that are connected to the city's sanitary sewer system (pipes that carry wastewater from your sinks, drains and toilets) have a **private sewer lateral**. This is the pipe that extends from your private property to the sewer main. The sewer main is a publicly-owned pipeline that transports wastewater from individual properties to the city's wastewater treatment plant for treatment. This is different from the storm sewer system which collects rain water and snowmelt, and transports it to rivers, lakes and wetlands - untreated.

If a private sewer lateral is not maintained properly, blockages may occur which can cause raw sewage to back up and cause damage to the interior of the property. Failing private sewer laterals can also cause a sanitary sewer overflow, which can become a public health hazard when raw, untreated sewage flows into the environment.

Understanding Your Private Sewer Lateral



sbmwd.org/382/Private-Sewer-Lateral

It is important for property owners to know they are responsible for the maintenance and repair of their sewer lateral up to the sewer main connection. There are certain conditions where the city would be responsible for maintenance within the Right of Way, but those conditions would need to meet specific criteria and would need to be reviewed by city staff. Proper maintenance involves keeping the line free of debris, such as tree roots and grease build up.

City Ordinance Chapter 1040, Water and Sewer, provides more information on sewer lateral maintenance responsibilities. To find Michigan Municipal Codes, visit: codelibrary.amlegal.com/regions/mi.

Prevent Clogged Sewer Pipes

The City of Battle Creek is asking for your help to keep the city's sanitary sewer system working properly. The drains in your home - and the sewer laterals connecting to the sewer main (see above) - are designed to handle **ONLY** used water, human waste and toilet paper. Dispose of other items in the trash - to stop the clog.

FROG - Fats, Rags, Oils and Grease are the leading causes of sanitary sewer clogs, backups and overflows. These materials stick to the inside of the pipes and can eventually block the entire flow of water. Backups can be costly and messy! Damage to private property is often the responsibility of the property owner. Increased operation and maintenance on the public sewer can also result in increased costs to the customer.



Tips to avoid clogged sewer pipes:

- Scrape grease and food scraps into garbage, and wipe pans with a paper towel before washing.
- Do not use hot water and soap to try to wash grease down the drain. It will eventually cool and harden in your sewer lateral or municipal sewer line.
- Use strainers in the sink drains to catch food scraps and other solids.
- Dispose of diapers, wipes and personal hygiene products in the trash.
- Don't flush paper towels, napkins or wipes of any kind - **none are actually "flushable."**

Water Tower Maintenance

You've seen them around the city - the tall, blue towers and tanks that hold the city's drinking water. Did you know the City of Battle Creek maintains water towers in six locations to store drinking water for our customers? We have one in Urbandale, the east and west Brigden twin tanks on Eldred Street, a tower on Gethings Road, a tank on Beckley Road, a tower in the Fort Custer Industrial Park, and a tower in Emmett Township. These tanks are elevated to create adequate pressure to get the water to our customers. Water is pumped from the Verona Pumping Station, our water treatment facility, to these water towers and tanks, where it can be stored for future use to ensure our customers have access to water 24 hours a day.

These tanks require periodic maintenance to keep them working properly. The outsides of the tanks are typically painted every 8 to 12 years and the interiors of the tanks are normally painted every 12 to 15 years, per consultant recommendation. The exteriors are also power washed regularly. The painting process involves a high-pressure wash, followed by a prime coat, an epoxy intermediate coat, a urethane intermediate coat, and a final topcoat. The contractors either spray the paint on, or suspend the workers with high lift booms or suspended platforms to allow rolling the paint. This maintenance keeps the tanks from rusting, and in good working order to ensure high quality water for our customers and confidence in our water system.

The east Brigden tank on Eldred Street and the Emmett Township water tower on 11 Mile Road were painted and underwent minor repairs in 2025, at a cost of \$122,000 and \$64,680, respectively. The west Brigden tank on Eldred Street and the Beckley Road tank were power washed this year, for a cost of \$14,000. This investment in our water system will help the city deliver a quality, reliable water supply to our customers.



East Brigden tank before maintenance



Emmett Township tower before maintenance



East Brigden tank after maintenance



Emmett Township tower after maintenance

Battle Creek's Water Tower Capacities

Urbandale: 1,000,000 gallons
Fort Custer: 1,000,000 gallons

Gethings: 2,000,000 gallons
Bridgen tanks: 3,800,000 (west) and 5,000,000 (east) gallons

Emmett Twp.: 500,000 gallons

Battle Creek's Verona Wellfield Rehabilitation Updates

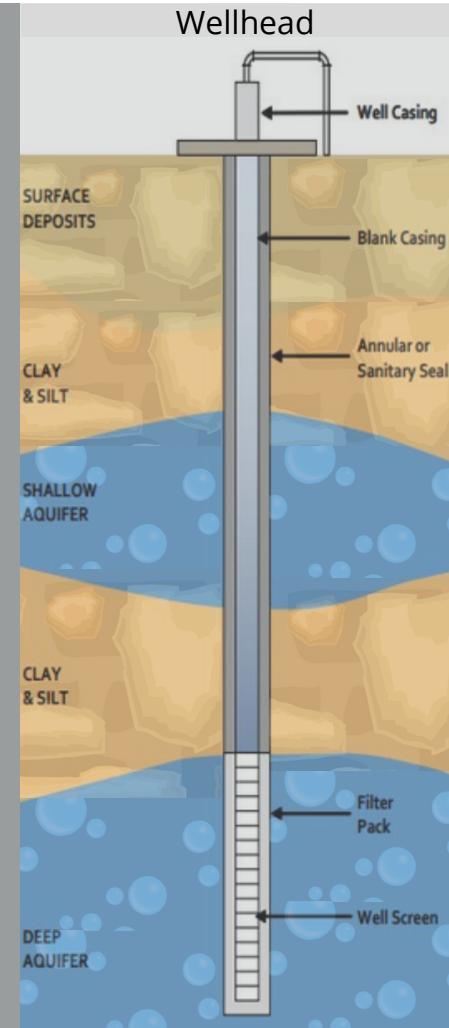
The Verona Wellfield rehabilitation project to replace all 21 of the city's water supply wells is continuing to progress. After a couple of administrative delays in fully understanding the funding sources being used, this project is again on track.

During August, Peerless Midwest, our well contractor, began pouring concrete pedestals that will house the new pumps. These pedestals are constructed around the new well casings that have been completed on all 21 new wells in Bailey Park and the Verona Wellfield. (Well casings are tubular structures installed vertically to maintain the well opening and protect the well from external contaminants.)

Peerless Midwest worked on the rebuild of well #153 in August and will also be installing new wells in casings that have been granted permits by the Michigan Department of Environment, Great Lakes and Energy (EGLE) allowing for conversion from a test well to a permanent production well. Conversion to a production well is based on criteria including water yield from each well. As wells are tested and permitted, they will be individually brought online to the city's water supply.

Sub-contractors for Peerless Midwest began work in the wellfield in early September to complete the underground water main installation needed to connect the new wells to the source water collection system. There will be an additional contractor on site to connect the wells to the electrical power supply that is being relocated underground to keep the system out of danger from outages that can be caused by wind storms.

More wellfield improvements will take place this fall, as a fiber optic network is being installed underground to provide for operation of the new wells and greater control for our Water Treatment Operators. This major renovation of the city's wellfield is progressing well and will continue into 2026.



Graphic of a well casing into the deep aquifer
(water.ca.gov)

Winter Tips

Winter is just around the corner and it will soon be time to think about keeping snow off our city streets and sidewalks. To help minimize the need to shovel your driveway twice, see the diagram below for guidance.

Avoid the "Second Shovel"

After a snowstorm, how many times have you shoveled your driveway only to have it plowed in when your local snowplow comes through? Clearing an area to the right of your driveway (as seen in the diagram below), giving the snow on the plow a place to go other than your driveway, should keep you from having to do the same job twice.



Credit: County Road Association of Michigan, 2014.
milocalroads.com

Also, please remove any basketball hoops or other items that may keep the snow plows from servicing your street - before the snow falls. Plows need full access to the streets to keep the roadways safe for travel. Be sure to also keep garbage, yard waste and recycling containers on the curb and out of the streets during the winter months. Thanks for your help in keeping the streets safe for all Battle Creek neighbors! If you have questions, please contact: **(269) 966-3507**.



Watch for **"Snowtifications"** on the city's Facebook and Nextdoor pages. They give you tips and ideas for a smooth winter. Also visit battlecreekmi.gov/snow.

Winter in

From the City of Battle Creek

With Michigan's cold climate in mind, here are some helpful hints to prevent potential damage to your home, related to freezing water pipes and meters. These suggestions will go a long way to avoid the unexpected cost and inconvenience a freeze-up can cause. If these items freeze, they can stop the flow of your water, or burst and cause flooding.

LOCATION

Check crawl spaces and basements where water lines are located. These areas should be clear of

cold drafts

and should have heat access, so pipes and meters do not freeze. Open the door partway if your water meter is in a cabinet.

HOSES

Once winter and cold temperatures arrive, remove hoses from your outside faucets, so they can drain as designed. Otherwise, this could

freeze & flood

your basement.

COLD AREAS

Look for water pipes and meters near windows or outside walls, and air leaks between your foundation and wood part of your home, where a draft could be cold enough to

freeze the pipes.

QUESTIONS

If you have additional questions, or find you have

lost water

please call the city teams in Water Distribution, **269-966-3506** or Utility Billing, **269-966-3366**. After hours, call **269-966-3493**.

Helpful Numbers

Need to talk to city staff?

We now have a one-call shop to answer your non-emergency city questions, and help you with service needs. Hours: 7:30 a.m. - 4 p.m. Monday - Friday

269-966-3311

Water or sewer emergency?

Report emergency issues related to water and sewer on nights and weekends.

269-966-3493

Streetlight out?

Report any issues related to the city's streetlights to Consumers Energy by calling **800-477-5050** or online at streetlights.consumersenergy.com

Always call 911 for emergencies

Storm Drains and Flooding

The city's stormwater system is designed to carry rainwater and snowmelt away from paved areas to local rivers, lakes and wetland areas. This system consists of a network of underground pipes that are designed to quickly move water away from developed areas to help prevent flooding damage. As areas become more developed with roads, parking lots, buildings and sidewalks, there are less unpaved areas for the rain to soak back into the ground, which increases the volume of water entering the storm system. This, combined with predicted increased frequency of more intense rainfall events, can lead to more instances of localized flooding.

Storm drains or "catch basins" are the metal grates you see along the streets that connect to the underground storm sewer pipes. There are about 7,500 catch basins in the City of Battle Creek. While we do have city crews routinely sweeping the streets to clean the drains, they just can't keep up with all the debris that can **quickly** clog the drains, resulting in street flooding.

Please remember - only rain (and snow) in the storm drain!

Another leading cause of storm drain blockages is litter. Trash left along roadways, ditches and stream banks washes into our waterways with rain and melting snow.



What can you do?

If you live near a storm drain on a neighborhood street, consider keeping the drain clear of debris and litter if you can **SAFELY** do so.

- If possible, clear the drain before it starts raining.
- Use a rake or pitch fork to clear leaves and debris from the storm drain.
- Never try to remove the grate. Only remove the debris on top of the grate.
- Dispose of leaves in your yard debris container or compost bin.
- Please do not rake leaves into the street.
- If snow or ice is blocking the drain, try clearing a channel along the curb for the melting snow and ice.
- For safety's sake, it's best to stand on the sidewalk or landscaping strip when clearing the drain.
- Don't wade into standing water that can conceal hazards.
- Beware that when the drain unclogs, it can create sudden and surprisingly strong currents as the water rushes in that could take you off your feet.
- **Always wear gloves, beware of sharp objects, and watch out for traffic!**

More Lift Station Upgrades

The City of Battle Creek, in partnership with Jones & Henry Engineers (J&H) and Grand River Construction, has nearly completed an upgrade to the Edgebrook pump station, a vital part of its sanitary sewer system.

Originally constructed in the early 1980s, the pump station pumps raw sewage from the lower Minges Brook area and surrounding communities to a higher elevation to allow gravity flow to the Wastewater Treatment Plant. Over time, the original system struggled to accommodate regional growth, leaving the undersized station prone to sewer backups and flooding. The outdated "can" design, with equipment housed underground, also posed safety concerns for maintenance workers.

J&H designed a modern, fully submersible pump station to accommodate current and future flow demands. The design prioritizes efficiency and ease of maintenance, with all major electrical equipment relocated above ground. The new design also has triple the capacity, extending response times to prevent overflows. These upgrades protect the local environment from potential contamination from sewer overflows.

Construction began in the fall of 2023. The project incorporates eco-friendly features and an advanced odor control system. The Edgebrook pump station upgrades strengthen critical infrastructure and continues the city's high standard for environmental stewardship and worker safety.





What's happening on Jackson Street?



The city received grant funding in 2024 from the National Fish and Wildlife Foundation to plant nearly 3,000 native trees and shrubs in the Jackson Street forest, between 20th Street and Stringham Avenue, following a selected harvest of trees. All the white tubes you may have seen sprouting up in this area are protecting new tree seedlings. These tubes guard the young plants from predation by deer and other animals, and they also act as a sort of greenhouse, promoting growth during the critical establishment period. Depending on the species, the tubes may remain on the tree for several years until it's large enough to withstand deer grazing.

The city's contracted forester, Natural Capital Forestry, developed a Forest Management Plan for the Jackson Street forest with the goal of creating a healthier, more diverse and resilient forest. The native species planted include: oak, maple, hickory, walnut, pine, birch, black gum, beech, pawpaw and a variety of native shrubs. Species were selected for the site conditions and to help restore wildlife habitat and add both age and species diversity to the urban forest. The trees and shrubs have been planted with help from a multitude of community volunteers, City of Springfield staff and City of Battle Creek staff.

The grant funds have also been used for invasive species management, and urban forestry and birding outreach. This grant funding and all the community involvement are a great investment in the future of Battle Creek's urban forest. Thanks to all who have been a part of this project!

