



**Municipal Separate Storm Sewer System (MS4) Stormwater Program
Progress Report**

January 1st, 2023, to December 31st, 2023

Submitted to:
Department of Environment, Great Lakes, and Energy



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1.0 General Information

This progress report is being submitted by the Charter Township of Lansing in partial fulfillment of the requirements of the Phase II Stormwater National Pollutant Discharge Elimination System (NPDES) Permit No. MI0059459. The permit allows discharges from a municipal separate storm sewer system (MS4). The Michigan Department of Environment, Great Lakes, and Energy (EGLE) requires that a progress report be submitted on the implementation status of the current permit. This progress report covers the period of January 1st, 2023, to December 31st, 2023. An Abbreviated NPDES MS4 Application Form (Reissuance) is due by 11:59 p.m. on April 4th, 2024.

2.0 Greater Lansing Regional Committee for Stormwater Management

The Greater Lansing Regional Committee for Stormwater Management, or GLRC, is a guiding body comprised of participating permitted MS4 communities within the Greater Lansing region. The committee has been established to guide the implementation of the MS4 program for the communities within three identified urbanized watersheds: the Grand River, the Red Cedar River, and the Looking Glass River Watershed.

2.1 GLRC Background

In November 1999, nine communities and three counties in the Greater Lansing area organized to discuss the federal regulations for the Stormwater Phase II Program. The result of this organization was an agreement to pool resources on a regional basis to fulfill the requirements of the program. Initially, based on 1990 census population data, these nine communities and three counties were the only entities in the Greater Lansing area that were designated to participate in the Phase II “Voluntary Permit Program” by EGLE. Following several meetings of this group during late 1999 and early 2000, a resolution was drafted to establish the “Greater Lansing Area Regional NPDES Phase II Stormwater Regulations Committee” and representatives from each jurisdiction were named to serve on the Committee.

Soon after the organization of the Committee in 2000, the Tri-County Regional Planning Commission (TCRPC) began to assist in providing contractual, fiduciary, and administrative support. Tetra Tech was selected to produce a permit strategy study, and later to prepare the Voluntary Grant Permit Applications for each community. Again in 2002, Tetra Tech was retained to prepare watershed management plans (WMPs) for the Grand River and Red Cedar River watershed areas and would later prepare a WMP for the Looking Glass River watershed area.

Based on the increased population data following the release of the 2000 Census, ten additional communities were designated to meet the stormwater MS4 requirements under federal and state regulations. Ultimately, seventeen communities and the three counties agreed to participate in a regional approach until 2007, when a lawsuit determined some townships no longer required an MS4 permit from EGLE. GLRC members then took formal action to establish an Associate Membership category within its Memorandum of Agreement (MOA). The MOA with GLRC member communities continues to be updated and reapproved, most recently in 2023 to align with the current permit cycle. The recent MOA was adopted by GLRC members and

therefore establishes the GLRC legally through April 30, 2027. There are also several interested parties that are consistently involved with the planning activities associated with this program such as parks departments, conservation districts, utility authorities, and transportation authorities. The participating communities recognize the substantial benefits that can be derived through cooperative management of the watersheds to achieve the MS4 permit requirements and protect our watershed.

2.2 GLRC Members

The participating MS4 entities that currently make up the GLRC are as follows:

- City of DeWitt
- City of East Lansing
- City of Grand Ledge
- City of Lansing
- City of Mason
- Delhi Charter Township
- Delta Charter Township
- DeWitt Charter Township
- Lansing Charter Township
- Meridian Charter Township
- Lansing School District
- Waverly Community Schools
- Clinton County
- Clinton County Road Commission
- Eaton County
- Ingham County
- Michigan State University

2.3 GLRC Organization

Within the GLRC, committees have been established to guide various components of the MS4 program. Other committees may be established as needed throughout the course of the program. A list of the committees including a brief description of their responsibilities follows.

Public Education Program (PEP) Committee

The PEP Committee guides the overall public education, participation, outreach, and involvement process. This also includes evaluation of the program and assessment of public knowledge and activities.

Illicit Discharge Elimination Program (IDEP) / Post-Construction Committee

The IDEP/Post-Con Committee guides the organization and implementation of the Illicit Discharge Elimination Program, mapping guidelines, field-sampling protocols, and how the watershed will be monitored for progress, as well as advises on matters regarding post-construction measures. The Committee has reviewed and provided recommendations related to pet waste reduction techniques, septic tank maintenance issues, and staff training, as well as channel protection and removal practices for total suspended solids.

Total Maximum Daily Load (TMDL) Committee

The TMDL Committee makes recommendations regarding the *E. coli* TMDL requirement for the Grand River and Red Cedar Rivers, as well as the phosphorus TMDL requirement for the Maple River. The committee provides education and updates to GLRC members to assist in the development and implementation of TMDL programs.

Executive Committee

The GLRC Executive Committee is comprised of a maximum of 10 voting members consisting of the Chair, Vice Chair, Secretary, and Treasurer of the GLRC, one representative from each of the three counties, and the chairs of the Illicit Discharge Elimination Program (IDEP)/Post-Construction Committee, Public Education Program (PEP) Committee, and Total Maximum Daily Load (TMDL) Committee. The Executive Committee meets five times a year and the Full Committee meets twice a year.

Current GLRC Organization Effective September 11, 2023



2.4 Watershed Partnerships and Related Efforts

Middle Grand River Organization of Watersheds (MGROW)

MGROW is a 501(c)(3) nonprofit organization established in 2011 as an umbrella group serving the people and organizations within the Middle Grand River watershed. Its mission is to protect and preserve the history and the natural resources of the Middle Grand River watershed by promoting education, conservation, restoration, and wise use of watershed resources. Local watersheds and program administrators involved with MGROW include Friends of the Looking Glass River; Friends of the Maple River; Friends of the Red Cedar River; GLRC; Clinton, Eaton, and Ingham Conservation Districts; Michigan State University Institute of Water Research (MSU-IWR); TCRPC; and Mid-Michigan Environmental Action Council (MidMEAC). These groups operate independently from one another but regularly work cooperatively to promote a healthy watershed. The GLRC Coordinator works with MGROW to identify collaborative opportunities related to education, recreation, and conservation both in daily work and as a board member of the organization. Visit mgrow.org for more information on this valuable partner.

Middle Grand River Water Trail/ Grand River Partnership

The GLRC Coordinator collaborated with MGROW on the development of the DNR-designated Middle Grand River Water Trail and associated materials, with the goal of inspiring new watershed stewards through recreation. In cooperation with TCRPC, the [Middle Grand River Water Trail Development Plan](#) is continually updated and improved. In 2023, the GLRC Coordinator established a Regional Middle Grand River Water Trail Development Plan Advisory Group, called the Middle Grand Advisory Committee to meet quarterly. The Advisory Committee brings all stakeholders together to further the Plan and ensure proper safety, education, marketing, and maintenance of the Middle Grand River Water Trail. The GLRC Coordinator also participates in the Grand River Partnership, a group composed of the Lower Grand River Organization of Watersheds, MGROW, and Upper Grand River Watershed Alliance who work together to promote watershed wide educational opportunities and collaborate on watershed protection and a national water trail designation. On April 29th, 2023, the group held the Hugh Heward Challenge to reenact a one-day, 50-mile sprint down the Grand River in Mid-Michigan by British fur trader Hugh Heward on April 24, 1790. The event includes a 50-mile route, a 25-mile route, and a 13-mile route. A 2025 Grand River Expedition is also being planned.

Friends of the River Groups

The GLRC partners on related events and activities to promote protection and enjoyment of the Middle Grand River, Looking Glass River, Red Cedar River, and Maple River. This includes sharing posts and event information for paddling events and river cleanup and maintenance opportunities with the Friends of the Looking Glass River, Friends of the Maple River, and the Red Cedar Pathway. Regular information, including the GLRC quarterly newsletter is shared with these organizations and the GLRC Coordinator participates in their meetings. The GLRC will continue exploring further opportunities for partnering with these groups.

Red Cedar River Water Trail

In partnership with TCRPC, the GLRC Coordinator has assisted the Red Cedar Pathway in further developing the Red Cedar River Water Trail, a goal of the Middle Grand River Water Trail Development Plan. GLRC staffed a booth at the new annual Red Cedar River Days celebration on September 30, 2023, and has regularly met with the group to provide guidance on the water trail planning effort with the goal of inspiring new watershed stewards and educational opportunities through water-based recreation.

Dam Removal Exploration Workgroup (DREW)

The GLRC Coordinator participates with a group of watershed stakeholders exploring feasibility of removing Lansing's two dams, advising on possible green infrastructure solutions to post-removal riparian restoration. DREW has successfully secured Army Corps of Engineer funds to remove the N. Lansing Dam via their Section 206 Aquatic Restoration Program. This would fund the entire dam removal up to \$10 million. The federal funds will not cover removal of contaminated sediments that might be found behind the dam, and it was noted PCBs are commonly found in the river here. The City of Lansing, Army Corps, and Board of Water & Light have finalized a Feasibility Cost Share Agreement (FCSA) which they are executing while drafting a detailed project report and environmental assessment.

County Programs

To promote the proper disposal of household hazardous waste (HHW), the GLRC Coordinator works with recycling services in Clinton, Eaton, and Ingham counties to promote biannual collection events in the spring and fall. The GLRC Coordinator also works to promote spring and fall native plant and tree sales through the Clinton, Eaton, and Ingham county's Conservation Districts. All county HHW collections and native plant sales are promoted on social media, in newsletters, on event pages, and at outreach events as a way to take personal actions to reduce stormwater pollution. In addition, the GLRC Coordinator participates in the Mid-Michigan Cooperative Invasive Species Management Area, a group consisting of the Clinton, Eaton, Ionia, and Ingham county stakeholders working to prevent the spread of invasive species to protect local ecosystems.

Capital Area Sustainability Partnership (CASP)

In 2021, a group of regional stakeholders began meeting to discuss regional sustainability and climate change planning efforts. The GLRC Coordinator, through the capacity of planner at the Tri-County Regional Planning Commission, assisted in the facilitation of these discussions now led by a group of local municipal leaders. Throughout 2023, the GLRC Coordinator participated in quarterly meetings of CASP and shared information with watershed partners. Much of the focus of CASP has been to help municipalities understand the availability of federal funding for sustainability and resiliency and how to apply for that funding.

3.0 Implementation Committee Reports

3.1 PEP Committee (including individual community activities)

The PEP Committee met on the following occasions in 2023:

January 18, 2023

May 4, 2023

October 5, 2023

Committee Activities:

Public Education Plan Implementation – The PEP Committee sets a budget for each fiscal year to determine how funds will best be utilized to meet outreach needs and adjusts that budget as needed. In FY 2023, funds were dedicated towards three social media campaigns that included responsible septic maintenance, car washing, and pet waste management. A special focus was placed on working with car wash businesses in 2023, resulting in an educational message with car wash coupon mailed to 90,000 households in Clinton, Eaton, and Ingham counties and 41 educational yard signs distributed to local car washes. Additional funds were allocated toward a reprinting of GLRC’s six educational brochures, the annual Dog Photo Calendar Contest, and a new drawstring backpack to give away at outreach events with GLRC’s logo and website.

Regional Water Quality Education Survey – The GLRC has continued to commit to utilizing the Greater Lansing Regional Water Quality Education Survey as an evaluation tool for the PEP Committee regarding all educational efforts and public participation. Surveys were conducted in 2006, 2012, and 2018. The surveys provide comparison data and demonstrate where we have made progress through our educational efforts as well as identify areas that need improvement. This is used to craft and evaluate the success of the BMPs within GLRC’s PEP. The survey results can be found on the GLRC website at mywatersheds.org/water-quality-surveys. An RFP was developed in 2023 and a firm contracted to conduct a 2024 Survey. A virtual presentation of the results occurred on March 11, to which all GLRC members and outside partners such as EGLE, conservation districts, health departments, and environmental groups throughout the tri-county region were invited. A total of 24 people participated in the presentation. A new PEP has been submitted with the 2024 permit based on the survey results.

Overall, the new survey indicated residents realize their actions at home affect the quality of water in lakes and streams where they live and are willing to help reduce water pollution. More residents have also seen advertisements, brochures, signs, and posts from the GLRC. These factors prove the previous Public Education Plan has been effective. However, some survey results have led the GLRC to alter areas of focus. Data indicates people are increasingly turning to YouTube as a source of information. Facebook and Instagram are also popular choices, and printed materials still play a role in education. GLRC will expand the types of information it provides from articles to fact sheets and information segments tailored for social media, while

expanding its use of videos. To meet information gaps discovered in the evaluation, GLRC will provide advice to the public on how to select a watershed-friendly vendor for lawn care management, update its safe salting materials, and consider paid boosting of social media posts on household hazardous waste collections. GLRC will also continue a focus on green infrastructure, connection of the MS4 to area waterbodies, and proper disposal practices for grass clippings, leaf litter, and animal wastes. The proper application and disposal of pesticides, herbicides, and fertilizers has been added as topic of focus.

Pollution Isn't Pretty (PIP) - Originally funded by TCRPC's Mid-Michigan Program for Greater Sustainability, MGROW has facilitated the use of the water resource education campaign entitled Pollution Isn't Pretty (PIP). The PIP campaign was professionally designed and is still in use throughout the region. The campaign is currently owned and housed by MGROW. In late 2020, an error at the web hosting firm caused the web content to be deleted, and MGROW offered to redirect the website to GLRC's website. Today, existing materials, including the roughly 250 pet waste trail signs throughout the region, direct to GLRC's "For Residents" page. The GLRC will continue to financially maintain the Pollution Isn't Pretty domain, pollutionisntpretty.org. GLRC members and MGROW will continue to distribute the campaign's printed materials at watershed-related events throughout the region until supplies are depleted.



The following GLRC members have placed Pollution Isn't Pretty signs in their communities: Lansing Charter Township (3); City of East Lansing (21); Ingham County Parks (5); Clinton County Parks (2); DeWitt Charter Township (3); Meridian Charter Township (5); City of Lansing (5); City of Grand Ledge (4); and MSU (1). Several signs have also been placed on the Lansing River Trail.



Watershed Signage – With the help of local road commissions, signage was placed along roads to indicate watershed boundaries to passing vehicles, cyclists, and pedestrians. These were installed between 2005-2006 but are maintained indefinitely.



GLRC Exhibit Display – A traveling exhibit display was redesigned in 2014 to incorporate the PIP campaign and has been used extensively at local workshops, conferences, and outreach events. In 2017, a scroll style “pop up” banner was developed that could be utilized in more places, like outdoor events. When the display is not being used for a special event, it travels throughout the region to GLRC member offices. It was designed with the header “We All Live in A Watershed” to address previous survey results that indicated many residents do not know they live in a watershed. In 2023, GLRC members displayed the scroll style banner in their lobbies or other public places for 2-3 weeks each year. A total of 7 communities have purchased their own scroll banners to display for longer periods. A table of the display usage can be found in Appendix A. As the GLRC Coordinator brings the display to members, additional copies of GLRC publications and educational materials are replenished as needed.

The GLRC Exhibit Display was in the Charter Township of Lansing lobby from November 1 – December 18, 2023.

Enviroscape – In late 2017, the GLRC purchased an Enviroscape Watershed model, a hands-on, interactive demonstration of the sources and impacts of stormwater pollution. It is utilized at events where time and setting allow for hands-on learning. In 2023, the Enviroscape was used at three events: the Meridian Township Winter Green Fair, the Meridian Township Summer Green Fair, and the Red Cedar River Days celebration.



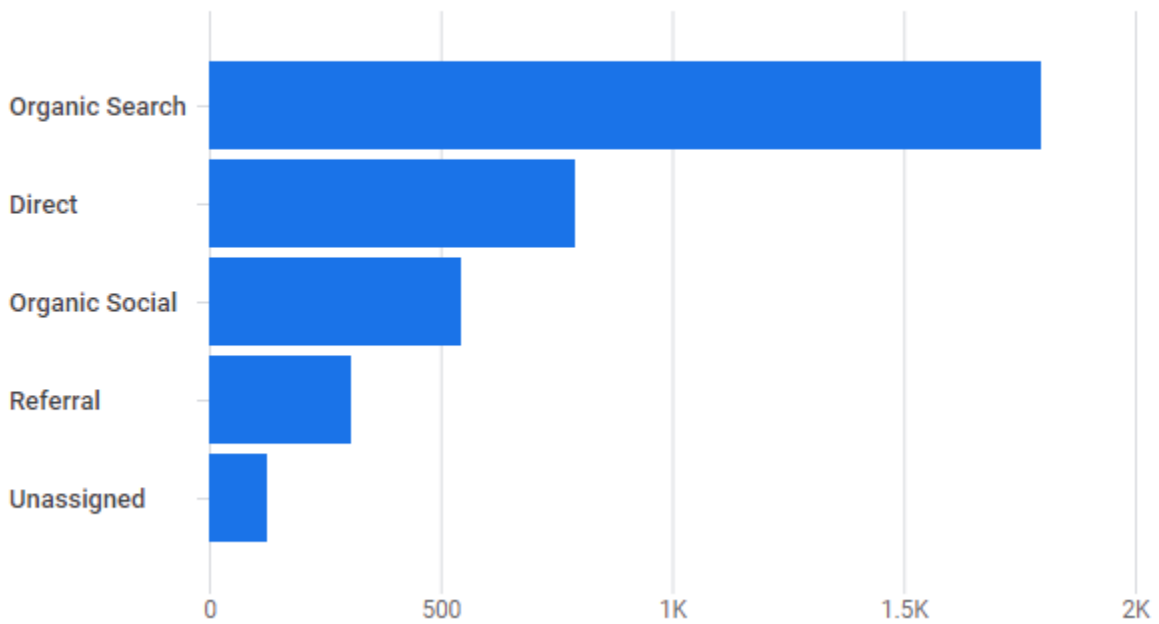
GLRC Website mywatersheds.org – The public website for the GLRC is regularly maintained and updated. The website includes significant amount of information relating to watersheds, stormwater stewardship, meeting materials, GLRC reports, pollution prevention education, water stewardship and conservation events, how to plant a rain garden, links to additional resources, and more. All education outreach materials direct readers to the GLRC website for further education. The website was updated in 2020 to bring attention to the fact that “everyone lives in a watershed” after survey data indicated many residents did not realize they lived in a watershed. Many videos were also added throughout the site as data also indicated this is a preferred method of learning. In 2022, an additional webpage was created to showcase the new Augmented Reality Sandbox and serve as a landing page to direct teachers and the public in how to use the free educational tool. All content was reviewed for accuracy in 2023.

The PEP Committee reviews the website stats on a regular basis. There have been over 81,000 total hits on the website, as indicated by the “ticker” at the bottom of the webpage. Google Analytics show a total of 8,270 page views and nearly 4,500 sessions from January 1 – December 31, 2023. Over 3,400 new users visited the site, with spring and fall being the most popular times of year to visit.

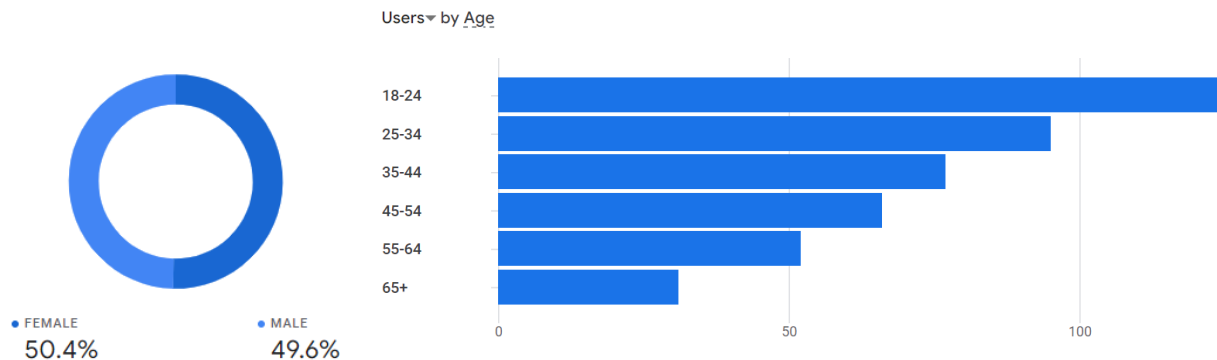


Most users arrived at the site via an organic search, indicating the website is accessible to the public.

Users by Session primary channel group (Default Channel Group)



Users were almost equally divided between females and males, with young people aged 18-24 viewing the website more than any other age group.



The committee also tracks traffic to individual pages to monitor the strength of individual pages and interpret what information resonates well. GLRC’s homepage was viewed over 1,900 times in 2023, with “Rain Garden 101”, “Find My Watershed”, “What’s a Watershed” being the three most viewed pages.

Page title and screen name	Views	Users	Views per user	Average engagement time	Event count	Conversions
	100% of total	100% of total	Avg 0%	Avg 0%	100% of total	100% of total
Greater Lansing Regional Committee for Stormwater Management	1,907	1,034	1.84	5s	4,444	1,729.00
Rain Garden 101	1,242	632	1.97	38s	3,200	619.00
Find My Watershed	878	534	1.64	9s	2,408	771.00
What's a Watershed?	566	298	1.90	25s	1,315	385.00
The Different Types of Stormwater Sewers	343	189	1.81	22s	881	250.00
Pet Waste Management	333	212	1.57	1s	815	718.00
Meeting Agendas/Minutes	279	31	9.00	20s	471	73.00
Quarterly Newsletter	247	119	2.08	8s	557	146.00
Annual Reports	233	145	1.61	5s	536	34.00
About the GLRC	214	51	4.20	26s	354	107.00

GLRC maintains a page on reporting illicit discharges, which received 21 views in 2023.

The following is a screen shot taken from the Township website and are representative of the efforts taken by the Township to promote sustainability and caring for our environment.

Charter Township of Lansing
3209 West Michigan Ave.
Lansing, MI 48917
Phone: 517-485-4000
Fax: 517-485-3278
Mayor: Ben 'Big Ben' Nye

Stormwater Management

POLLUTION ISN'T PRETTY.ORG

LANSING TOWNSHIP STORMWATER MANAGEMENT

Stormwater runoff is created when rain falls on pavement, buildings, and other impervious surfaces that do not allow water to soak into the ground. In developed areas like Lansing Township, we limit flooding by moving this runoff from our roads and neighborhoods through storm drains that discharge directly into rivers and streams. Since stormwater does not get processed at a treatment plant, any contamination on the ground can "hitch a ride" with runoff and impact our shared surface waters. Pet waste, oil, leaves and dirty water from cleaning your car can enter storm drains and flow downstream where it harms aquatic habitats and makes water unsafe for swimming, canoeing and other water-related fun. The Township takes steps to reduce this pollution to meet State and Federal requirements.

Every five years, the Township must submit a Stormwater Permit Application to MDOT to obtain a National Pollution Discharge Elimination System permit. A large part of that application consists of a description as to how the Township will commit to and proceed with the development, implementation, and enforcement of practices to reduce the discharge of pollutants from its municipal separate storm sewer system to the maximum extent practicable and protect water quality. This documentation was formally designated as the Lansing Township Stormwater Management Program and is available below for public review.

Please contact Brad Deck at brad@lansingtownship.org or 517-485-4063 with questions or comments regarding the Township's stormwater program.

Illicit Discharges

An illicit discharge is defined as any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater, except for discharges allowed under an NPDES permit or waters used for firefighting operations. Many of these non-stormwater discharges occur due to illegal connections to the storm drain system from commercial, residential, and other establishments.

Illicit discharges and dumping allow contaminated wastewater into our local waterways without receiving any treatment. Such activities may be intentional, but also may be unknown to the property owner. Some examples of illicit discharges or dumping are failing septic systems, improper disposal of sewage from recreational vehicles, illicit connections of sanitary sewer lines to the storm sewer system, or the cleaning of pool filters, paint brushes, and vehicles in a driveway or street.

Please help us protect the Grand River and other watersheds by reporting illicit discharges and dumping into Lansing Township's stormwater sewer system. You may call Lansing Township at 517-485-4000 or the Ingham County Drain Commissioner at 517-676-8395. You may also contact the Michigan Department of Environmental Quality's Pollution Emergency Alerting System (PEAS) at 800-292-4792.

GREATER LANSING REGIONAL COMMITTEE (GLRC) FOR STORMWATER MANAGEMENT

The [Greater Lansing Regional Committee for Stormwater Management \(GLRC\)](#), a guiding body comprised of Municipal Separate Storm Sewer System (MS4) communities within the Greater Lansing Region. The committee has been established to guide the implementation of the stormwater program for participating communities within the Grand River, the Red Cedar River and the Locking Glean River watersheds.

Reports and Programs

- 2024 Lansing Township MS4 Stormwater Progress Report
- GLRC Annual Report
- GLRC Quarterly Newsletter

Pollution Prevention Tips

Want to learn more about how you can protect our waterways at your home, school, or business? Check out these articles, brochures, and flyers and feel free to print and post them at your workplace or classroom!

- GLRC Educational Articles
- GLRC Brochure
- GLRC Business and Construction Stormwater Flyers

Visit MyWatershed.org to learn about upcoming events, first steps you can take to limit water pollution, and to get involved in managing our shared water resources!

Additional Resources

- The GLRC has an abundance of educational materials for homeowners and community members, [click here](#) to read more.
- Want to see examples of Lansing-area green infrastructure? Check out this [Green Infrastructure Bike Tour!](#)
- Learn about the Ingham County Septic System Point of Sale Program [here](#)
- Do You Know Your Watershed
- Water Environment Federation
- Watersheds

Regional Information Links:

- Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- Tri County Regional Planning Commission (TCRPC)
- Ingham County Recycling Sites and Facilities
- Ingham County Hazardous Materials Disposal
- Ingham County Waste Management
- RV Waste Disposal Locations

MI Counties

If you have questions or comments regarding the Township's stormwater management plan, please contact Brad Beck by email, bbeck@lansingtowship.org, or call (517) 999-0307.

If you happen to see something entering or exiting a storm pipe, catch basin or drainage ditch that looks, smells or feels like something other than stormwater, please contact Brad Beck at (517) 999-0307. The Township has not received any reports of illicit discharges from either the website or any other method.

GLRC Website Subpages

For Residents Webpage – This page was developed on the website to allow GLRC members and the public to review files for educational purposes. These files include brochures, posters, articles, seasonal tips, and other information to educate residents on stormwater pollution prevention. The webpage is updated regularly to add new materials and video content is emphasized. The “For Residents” webpage had 90 views during the reporting period.

The “For Residents” page features the following educational flyers, and at least one was included in each quarterly newsletter in 2023. The articles are updated periodically for content and design updates, most recently in 2020. A suggested timeline for seasonal articles is also provided.

What is a Watershed?
Pet Waste and the Environment
Riparian Buffers
Storm vs. Sanitary Sewer Systems
Septic System Overview
Illicit Discharges

Adopt Your Catch Basin
Safe Fertilizer Use
Vehicle Maintenance
Wetlands: An Overview
Septic System Maintenance
Responsible Car Washing

Rain Gardens: A Homeowner's Guide

Watersheds – Three pages on “What’s a Watershed”, “Find My Watershed” and “About My Watershed” help residents learn more about the watershed in which they live. The Watersheds tab also provides links to watershed management plans throughout the tri-county region. In 2023, a “How’s My Waterway” button was added for residents to be able to check on water quality within local bodies of water. “Find My Watershed” was the most popular with 948 views, while “What’s a Watershed” had 576 views and “About My Watershed” had 96 views.

Augmented Reality Sandbox (ARS) – This newly created webpage continued to promote use of the interactive ARS that allows users to create topographic models by shaping real sand, which is then augmented in real time by an elevation color map, topographic contour lines, and simulated water. Nearly 180 people visited the webpage to learn more about this free educational tool and how to request it.

For Educators Webpage – The PEP Committee maintains a webpage on the GLRC website for educators in the region. The page serves as a resource guide for anyone interested in environmental education. State and federal environmental curriculum is highlighted as well as links to lesson plans. It includes resources and example projects that the schools can integrate into their current activities. This page is updated on a regular basis with lesson plans. During the reporting period, this webpage had 25 views.

For Members Webpage – The GLRC developed this webpage in 2019 to house relevant documents and information for municipalities. There is particular focus on making it easier to view and use digital PEP materials and request physical resources for outreach events. During the reporting period, this webpage had 43 views.

Runoff Calculator – A tool to calculate the runoff from one’s own home continues to be popular on the “Calculator” webpage, educating residents on the effects of rainwater on our homes. A total of 208 people calculated the runoff their home generates and were directed to the rain garden resources page.

Be Septic Smart Webpage – The GLRC developed a septic focused webpage to house info on septic systems, time of sale programs, GLRC’s septic-focused video and EPA’s “Septic Smart” videos. The “Be Septic Smart” webpage received 22 views during the reporting cycle.

Rain Garden 101 – Our most popular webpage, Rain Garden 101, includes manuals, videos, and planting resources to help homeowners plan and install their own native plant rain garden. Residents were commonly directed to this page and its updates during this reporting cycle, which received 1,243 views.

Local Green Infrastructure Projects -- This page was added to highlight Lansing area GSI projects and includes the video clip developed as part of the Greening Mid-Michigan project. It had 106 views during the reporting period.

Household Hazardous Waste – Respondents to the previous GLRC survey indicated they were not utilizing household hazardous waste sites because they didn’t know where they were. In response, the GLRC created a webpage dedicated to these resources. It includes links to recycling and household hazardous waste collections in the tri-county area. In 2023, sections on medication and asbestos disposal were added. This page received 118 views during the reporting cycle.

Event Calendar – The PEP Committee is continuously updating the GLRC calendar with applicable meetings, webinars, educational opportunities, recreation and cleanup activities, native plant sales, and household hazardous waste collection events throughout the watersheds. The “Events” page received a total of 108 views during the reporting cycle.

Stormwater News – The PEP Committee continues to use and promote a series of news articles. They are posted on the GLRC website so members can easily include them in their local community newspapers and newsletters. A total of 19 articles were posted on this webpage in 2023, receiving 90 views.

Presentations – The following presentations were given by the GLRC Coordinator within the reporting period:

- February 26, 2023: Assisted in training seven teachers in watershed management and stormwater pollution prevention as part of the National Oceanic and Atmospheric Administration’s Bay Watershed Education and Training (B-WET) grant.
- March 14, 2023, May 24, 2023, and June 16, 2023: Presented on major activities, accomplishments, outreach, and events of the GLRC to TCRPC’s 19-member Board of Commissioners.
- April 26, 2023: Provided an overview of the GLRC and how residents can prevent stormwater pollution and protect our waters to train Clean Water Action’s seven canvassers. One hundred copies of each of GLRC’s six educational brochures were provided for them to distribute as needed to residents.
- September 28, 2023: Spoke with four Capital Area Humane Society Staff on responsible pet waste management, requesting distribution of 450 pet waste bag dispensers to every new dog adoption along with an educational brochure on the topic.

- Throughout 2023, the GLRC Coordinator attended Meridian Township’s weekly Wednesday Green Dialogue meetings at least once a month. Township residents interested in environmental issues meet for free-flowing discussion and presentations. The GLRC Coordinator provides regular updates on Committee activities to this group and helps connect them with regional resources.

GLRC Annual Report – The first GLRC Annual Report was developed in early 2012. The intent of the report is for GLRC members to share it with their boards, councils, and commissions in order to demonstrate the work that has been done throughout the year. TCRPC also shares the report with TCRPC Commissioners, newsletter subscribers, and on the website.

In 2023, it was decided to offer the annual report at outreach events throughout the region. A total of 144 annual reports were distributed at events, with all 500 printed copies distributed to members and partners throughout the year.

GLRC Quarterly Newsletters – The GLRC began publishing quarterly newsletters in January 2010 and continues to do so. The newsletters are posted on the GLRC and TCRPC websites and are shared through an email distribution list of over 600 stakeholders. It is recommended that GLRC members share the newsletters with elected officials and appropriate boards, councils, and commissions. Efforts to increase subscribers on the website, at outreach events, and with partners led to a doubling of subscribers in 2023.

Edition	Date sent	Number of Recipients
Winter 2023	1/20/2023	611
Spring 2023	4/26/2023	626
Summer 2023	7/27/2023	1,202
Fall 2023	10/18/2023	1,289

The quarterly newsletters are posted in the lobby for review and they are available to the general public upon request as well.

GLRC Fact Sheet – A fact sheet describing the Phase II program and purpose of the GLRC was created in 2017 and updated in 2022 to help community leaders quickly understand the requirements of the program and how the GLRC helps to implement them. This educational piece is distributed with annual reports, dues invoices, and to new TCRPC Commissioners to help those in leadership roles understand their municipality’s responsibilities and the GLRC resources available to them.

Social Media – The GLRC joined Facebook and Twitter in December 2009. Post content is related to watershed stewardship, public involvement, and participation. Information on GLRC and partner events are also posted frequently. Currently 1,425 people follow GLRC on Facebook and there are 428 followers on Twitter. The GLRC places emphasis on the use of paid advertising

through Facebook boosts to spread our messaging on required PEP topics. This tool allows the GLRC to target residents within the urban area of the tri-county region and ensure that we are reaching people who do not already interact with our page. During this reporting period, a renewed emphasis was placed on Twitter to grow our audience beginning in May of 2022, and the GLRC Coordinator also began posting on Instagram. GLRC's Instagram currently has 73 followers and had a total reach of 1,115 accounts during the reporting period.

In 2023, GLRC's social media posts reached 42,375 Facebook accounts with 838 engagements on Facebook and Instagram. Reach is defined as the number of Facebook and Instagram accounts that saw a post at least once and is separate from impressions, which may include multiple views of your post by the same Facebook and Instagram accounts. Engagements are defined as the number of reactions, comments, shares, and clicks on GLRC posts.

Paid posts or Facebook boosting has allowed GLRC to target all urban areas within the tri-county region. When boosting, posts can be displayed not just on Facebook, but also on Instagram, Messenger, Facebook Marketplace, and in the sidebar of Facebook. GLRC purchased Google Ads in 2023 to promote their responsible car washing video and educational message, receiving over 118,500 impressions. An impression is the number of times GLRC posts published during the time frame were displayed on a person's screen.

The GLRC has not advertised on Twitter during the reporting period. During 2023, total Twitter impressions were 4,808 with 121 engagements. Engagements are the number of times people clicked on the images, GIFs, and videos in tweets GLRC published during the time frame. A table of all social media posts, their content, relation to PEP topics, and reach is included in Appendix B.

View GLRC's social media pages here: facebook.com/GLRC4stormwater/, and twitter.com/GLRC4stormwater, and instagram.com/mywatersheds/.

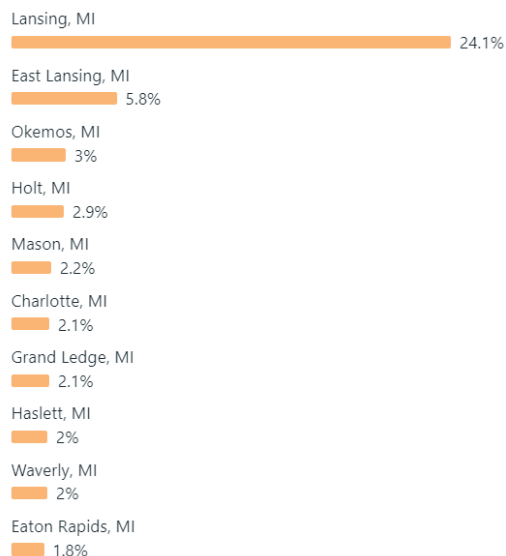
FACEBOOK

Age and Gender

■ Men 42.60%
■ Women 57.40%



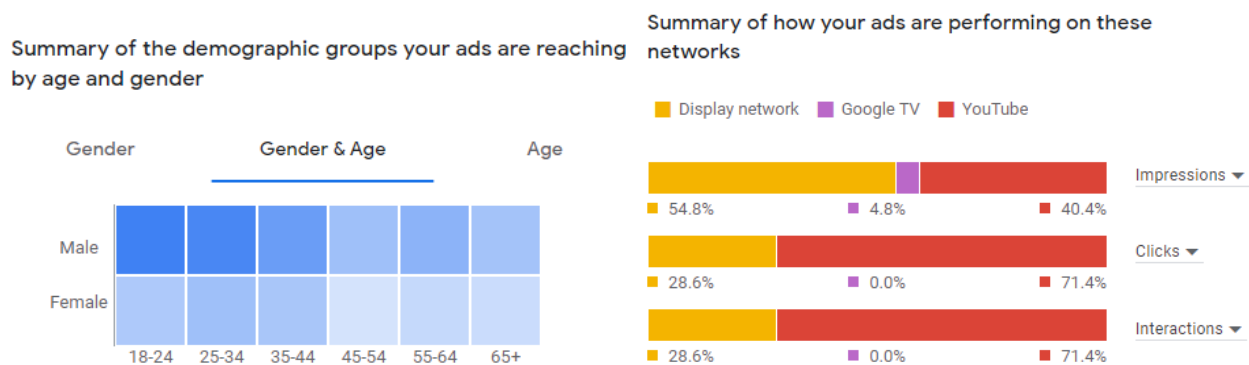
Top cities



Video -- Survey results have indicated that respondents prefer learning about environmental issues through video. As such, GLRC invested in a suite of videos for inclusion on the website, Facebook, and YouTube. One video is two minutes and explains the GLRC and basic stormwater pollution prevention, other videos cover the required PEP topics. Most topics have two videos: one that is roughly 60-90 seconds and one that is under 15 seconds, as 15 seconds is the maximum length of a non-skippable ad. The GLRC pays to promote these videos on YouTube, Meta, and Google Ads.

The use of Google Ads in 2023 helped expand GLRC’s reach by capturing younger males aged 18-34 as one quarter of its audience. The GLRC’s multimedia approach is meeting residents where they are and ensuring our outreach material has a broad reach. It also helps us diversify the places our ads display, because these ads show up throughout the Google ecosystem and on any website that uses Google Ads. View the GLRC’s YouTube channel here: youtube.com/channel/UCm-2OdB67N_dSAnR5osYSFw.

GOOGLE ADS



Brochures – The GLRC reprinted its six educational brochures in 2023, titled; Green Infrastructure, Pet Waste Management, Fertilizer and Lawn Care, Responsible Car Washing, Motor Oil Management, and Do You Know Your Watershed? These brochures are distributed at events and lobbies. The GLRC Coordinator distributed 2,106 brochures at events during the reporting period. A compilation of this distribution occurs in Appendix C. The following reflects distribution of brochures related to individual required PEP topics.

- Topic A: 2,106 brochures distributed
- Topic B: 2,106 brochures distributed
- Topic D: 351 brochures distributed
- Topic E: 305 brochures distributed
- Topic F: 800 brochures distributed
- Topic G: 301 brochures distributed
- Topic I: 349 brochures distributed

Similar information is presented digitally on the website and on social media.

Overall, 2,342 total pieces of outreach material - including MyWatersheds.org stickers, cups, water bottles, bracelets, rain garden seed cards, pet waste bag dispensers, etc. were distributed by the GLRC coordinator at events during the reporting period. An additional 1,000 pieces were purchased for use by members during their events.

The following reflects distribution of brochures related to individual required PEP topics distributed in the Township office in 2023.

- Topic A: 37 brochures distributed
- Topic B: 27 brochures distributed
- Topic C: 21 brochures distributed
- Topic D: 39 brochures distributed
- Topic E: 15 brochures distributed
- Topic F: 23 brochures distributed

Dog Calendar Contest – The annual Dog Photo Calendar Contest offers residents a chance to see their dog as a month’s feature photo and win a \$20 gift card to an area pet store. To enter, contestants must read about pet waste’s impact on water quality and pledge to pick up after their pets. The GLRC launched the first contest in 2018 and it grew steadily through 2020 with 300 plus participants each year but declined in 2021 with 121 participants and again in 2022 with only 27 participating. It was decided to try one more time with a new format in 2023, but the contest only attracted 21 participants even with paid advertising. All participants in 2023 were added to the GLRC’s newsletter mailing list to educate them on further ways to protect the watershed.

2024 CALENDAR

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	3	4	5	6	7	8	9	1	2	3	4	5	6	
7	8	9	10	11	12	13	4	5	6	7	8	9	10	10	11	12	13	14	15	16	7	8	9	10	11	12	13
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21	22	23	24	25	26	27	18	19	20	21	22	23	24	24	25	26	27	28	29	30	21	22	23	24	25	26	27
28	29	30	31				25	26	27	28	29			31							28	29	30				

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4						1		1	2	3	4	5	6					1	2	3
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	16	19	20	21	22	23	24
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	31

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
1	2	3	4	5	6	7					1	2	3	4	5						1	2	1	2	3	4	5	6	7
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	6	9	10	11	12	13	14		
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21		
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28		
29	30						27	28	29	30	31			24	25	26	27	28	29	30	29	30	31						



We love our dogs, but nobody enjoys picking up their waste. Yet when left on the ground, rain can wash dog waste (and the bacteria and harmful nutrients in it) down our storm drains where the water discharges directly into our lakes, rivers, and streams.

Follow GLRC for tips on protecting our watershed

@GLRC4Stormwater
mywatersheds.org

@mywatersheds

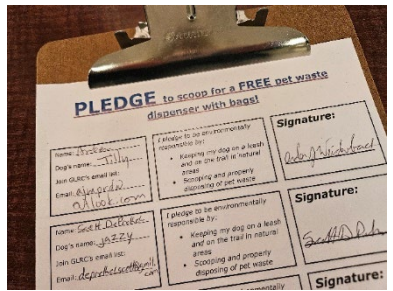
Produced by:

GREATER LANSING REGIONAL COMMITTEE
 FOR STORMWATER MANAGEMENT
www.mywatersheds.org

TRI-COUNTY
 regional planning commission

Rain Garden Seed Cards – In 2017, the GLRC began distributing rain garden information cards printed on paper embedded with native black-eyed Susan seeds. These provide information on the benefits of native plantings and provide residents with seeds to plant their own. They have proven very popular at events. Over 820 have been distributed but in 2023 only 12 were distributed due to low supplies. This campaign will likely be continued in the future.

Dog Waste Bag Dispensers -- In 2017 the GLRC began distributing branded dog waste bag dispensers with the tagline “In The Bag, Not The River” to meet pet waste education requirements. To receive one at events, attendees must sign a pledge to pick up after their pets, with the option to join the e-newsletter mailing list. In 2023, a total of 542 pet waste bag dispensers were



provided, which included 450 given to the Capital Area Humane Society for distribution. The GLRC will continue to offer this popular tool to encourage all residents to “pledge to scoop” at area events.

Green Infrastructure Bike Tour – A bicycle tour of area green infrastructure was developed in 2019 to provide users an interactive experience and inspire them to install green infrastructure on their own properties. The bike tour follows area bike trails and includes a printable map as well as a custom Google Map. In 2023, 77 maps were distributed at area events.

Green Stormwater Infrastructure
When it rains in an urban environment, water flows off of impervious surfaces like driveways, buildings, and roads. This run-off is called stormwater. Any pollutants on the ground, like pet waste, leaking motor oil, and litter can be swept up by stormwater run-off as it flows towards our waterways. This is the number one cause of water pollution in urban environments.

Green Stormwater Infrastructure (GSI) addresses this by mimicking the natural landscape to slow, absorb, and filter run-off. Using GSI to manage stormwater not only helps improve water quality, it's cost-effective, low maintenance, and beautifies our cities!

GSI you will see on this tour:

- Rain Gardens** are depressed vegetated gardens that allow rain water to pool before being absorbed by soil and vegetation.
- Rainwater Harvesting** systems collect and store rainfall for later use. When designed appropriately, they slow and reduce run-off and provide a source of water. A rain barrel collecting roof run-off is an example.
- Riparian Buffers** are vegetated areas adjacent to a stream or river that preserve water quality by filtering sediments and pollutants from run-off before it enters the waterbody. It also protects banks from erosion and provides storage area for flood waters.
- Permeable Pavement** consists of a permeable surface that allows stormwater to pass through it into storage reservoir below rather than become run-off.
- Green Roofs** are rooftops that include a covering of vegetation that enables rainfall infiltration and evapotranspiration of stored water. They can aid in stormwater management by reducing runoff and improving water quality.
- Bioretention** is a water quality practice that utilizes landscaping and soils to treat stormwater runoff by collecting it in shallow depressions before filtering through a fabricated planting soil media.
- Waterway or Drain** indicates a river confluence or nearby county drain.
- Stormwater Trees and Urban Canopy** are trees in urban settings that intercept and absorb rainfall, reducing flow volumes. Their leaf canopies help reduce erosion caused by falling rain and provide surface area where rain lands and evaporates.

2. Towar Rain Gardens

3. Moores Park Urban Canopy

4. Beal Gardens Riparian Buffer

5. I.M Sports West Porous Asphalt

15. Barnes Ave Permeable Pavement

17. Michigan Ave Rain Gardens

View the online map!
for additional information on Greater Lansing GSI, visit:
www.MyWatersheds.org/BikeTour

This map of Green Stormwater Infrastructure (GSI) is brought to you by the Greater Lansing Regional Committee for Stormwater Management (GLRC). The GLRC guides the implementation of the MS4 stormwater program for participating communities in the Red Cedar, Looking Glass, and Grand River Watersheds.

www.MyWatersheds.org

GREATER LANSING REGIONAL COMMITTEE
FOR STORMWATER MANAGEMENT
www.mywatersheds.org

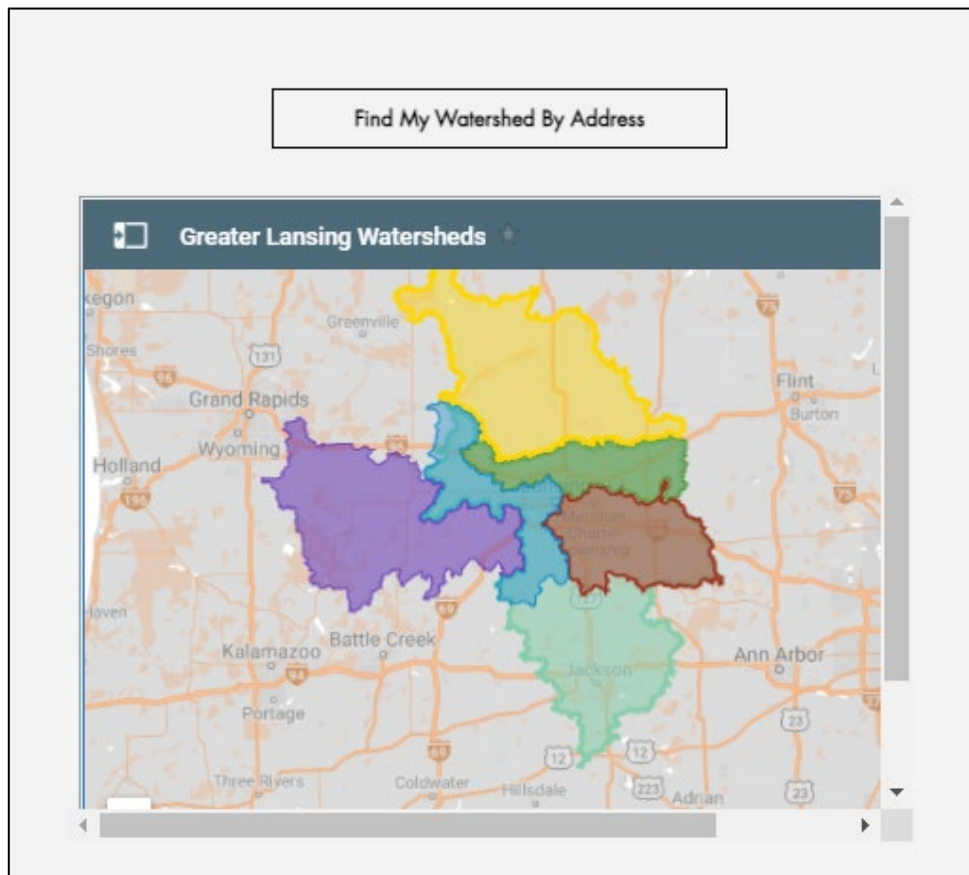
Watershed Tattoos – The GLRC added an additional “swag” item to distribute during the permit cycle: a temporary Middle Grand River watershed tattoo. Sized to fit a hand, it creates a geographically accurate depiction of the Middle Grand River watershed overlaid the Michigan “mitten”.

Color Changing Cups and Sport Water Bottles – In 2021, the GLRC designed a reusable cup and sport water bottle for event giveaways. As the cup changes with the temperature of the water, it engages children and both promotional items allow for discussion on how the GLRC works to protect our water. These lasting items drive residents to the website, and the cups were also utilized by participants at the GLRC seminar in 2022. In 2023, 404 cups were distributed at area events along with 200 sport water bottles.

Pollution Isn't Pretty Bracelets – Stretchy bracelets with the theme “Pollution Isn't Pretty” written on them were produced during the PIP campaign in 2018. This popular item was distributed to 238 children at events during 2023.

GLRC Bags – Reusable tote bags with the GLRC's name and website were designed in 2021 and distributed at area events. A total of 109 bags were given away in 2023, using the remaining supplies.

Find My Watershed Tool – In 2019, GLRC developed a Find My Watershed Tool. Users can plug in their home address and see which watershed they live in and where they live within it. It also provides information about the watershed, links to 319 plans, and contact information for watershed organizations focused on stewardship within its boundaries. Survey results indicate that many residents do not know that they live in a watershed and this tool has made it easier for them to learn about the watershed they call home. This tool has been viewed 59,870 times since its debut.



General Outreach/Education Efforts – The GLRC Coordinator partners with several different groups, agencies, and organizations in the region. Here is a summary of general collaboration and activities related to stormwater and pollution prevention:

- March 4, 2023 – Promoted and exhibited at the Quiet Adventures Symposium (QAS). No sponsorships were purchased for the event, but the GLRC Coordinator interacted with 500 people.
- March 2023 – Assisted the City of Lansing in writing a Volunteer Stream Cleanup Program grant and submitted a letter of support for their two cleanup projects on behalf of GLRC.
- April – November 2023 – Worked with Eaton Conservation District to host the Augmented Reality Sandbox at four locations, reaching 1,380 citizens through presentations on the water cycle and stormwater management.
- June 10, 2023 - The GLRC Coordinator promoted and participated in the Lansing Rivers and River Trail Cleanup along the Middle Grand and Red Cedar Rivers. Over 260 volunteers and 30 organizations participated in the community event, with 3-4 tons of trash removed.
- August 5, 2023 - 21st Annual Chuck Gorman Youth Day. Discussed the watershed and how to protect it while teaching 75 youth how to paddle a kayak. An estimated 250 people attended the event, with a parent presence required at the kayaking station on Stony Creek.
- September 18, 2023 - The GLRC developed a topical on proper septic care and maintenance for Septic Smart Week in conjunction with the Groundwater Management Board, which was posted as a blog on the Tri-County Regional Planning Commission website as well as on social media platforms. Read the full article at mitcrpc.org/post/protecting-homeowners-and-our-waters-septic-systems-of-mid-michigan. The blog had 175 views in 2023.
- September 30, 2023 – The Red Cedar Pathways and City of Williamston held a Red Cedar River Day Celebration which the GLRC Coordinator attended with the Enviroscope. A total of 48 people visited the GLRC booth at the event.
- December 2023 – Met with the Eaton Conservation District, Barry-Eaton District Health Department, and EGLE on development of a Watershed Council Support Grant to research areas of concern from septic systems in the Watershed Management Plan for Eaton County. A letter of support for the grant application was submitted by GLRC.
- December 2023 – The GLRC Coordinator promoted and attended the annual MWEA Stormwater Seminar.
- The GLRC Coordinator has consistently provided notices to GLRC members regarding anything relevant to the MS4 program including seminars, training, webinars, legislative updates, etc.

Adopt A River – The GLRC display was part of the environmental fair at the Adopt A River events held in May of 2016 through 2019. The 2020 event was canceled due to the Covid-19 pandemic and the 2021 event was scaled back. In 2022, the GLRC did not attend due to a vacancy in the coordinator’s position. The GLRC Coordinator was unable to participate as planned with the Enviroscape model in 2023 due to Covid-19 and will be back in 2024. Over 500 residents participate in this event each year.

MSU Science Festival – The MSU Science Festival is an annual month-long educational event hosted by Michigan State University. The GLRC has participated in the Festival’s EXPO Days, utilizing the Enviroscape Watershed model, handing out brochures, and speaking with children and families. The EXPO Days draw thousands of people each year, but it was cancelled in 2020 due to the COVID-19 pandemic and was virtual only in 2021. The GLRC participated in 2018 and 2019 and debuted the new Augmented Reality Sandbox at the Festival in 2023, reaching 1,001 people with the interactive, educational tool.

Meridian Township Green Fairs – GLRC participated in the Winter and Summer Green Fairs at Meridian Township, bringing the Enviroscape to educate residents on the effects of stormwater pollution. A total of 201 people interacted with the GLRC booth at the Winter Fair and 153 people interacted with GLRC as the Sumer Fair.

Business Outreach: The GLRC has developed a variety of resources for local businesses to help educate them and staff on pollution prevention at their facilities and as part of their operations:

For Business Webpage – In 2020, a For Businesses webpage was developed to house outreach information particular to businesses and industrial facilities and flyers/posters detailing industrial BMPs. In 2023, the “businesses” page was updated to include materials from the car wash campaign on responsible car washing. The page was viewed 51 times during the reporting period.

Car Wash Campaign - GLRC has been building relationships with car washes to implement a car wash campaign. GLRC members were given a list of all known car washes in the Tri-County region (48) to verify they are all connected to the sanitary sewer system. A hundred copies of the sign below were developed and printed for distribution to area car washes, with 41 distributed in 2023.

The GLRC designed an insert in the October ValPak to educate residents on the benefits of using car washes and to encourage the use of car washes with a \$2 off washes coupon. The GLRC worked with seven car washes in Clinton, Eaton, and Ingham counties to offer the coupon. The ValPak was mailed to 90,000 households throughout Greater Lansing. A total of 124 coupons were redeemed, see Appendix D.

RESPONSIBLE CAR WASHING

Minimize your environmental impact. Use a commercial car wash.



Soaps, oils, greases, grime, and heavy metals from vehicles wash down storm drains.

Storm drains flow directly into our rivers, streams, and lakes.

Soap phosphates cause excessive algae growth and reduce oxygen levels, harming aquatic life.

Soap surfactants damage fish gills and kill their eggs.



Don't wash your car in your driveway or on the road.



FACT

- An average homeowner uses 116 gallons of water to wash a car.
- Homeowners often let soapy water flow into untreated storm drains.
- A homeowner should wash their car on the lawn as permitted so the ground can filter wastewater naturally.
- Car washes use 60% less water than homeowners.
- Car washes can filter and reuse water at each facility.
- Car washes connect directly to the sanitary sewer system for proper treatment of wastewater.

Thank you for keeping our waters clean!

Visit mywatersheds.org for more pollution prevention tips.



Minimize your environmental impact. Use a commercial car wash.

\$2 OFF
At A Participating Car Wash

*This Coupon Not Valid with Any Other Offer. Expires 12/31/23

Pennzell One Stop Wash-N-Lube (Use Code 17867)
1141 W Clark Rd., DeWitt, MI 48820

Wash World
2209 Jolly Rd., Okemos, MI 48864
2780 Eaton Rapids Rd., Lansing, MI 48911

WhiteWater Express Car Wash (Use Code 7011)
2703 E Grand River Rd., East Lansing, MI 48823
5032 S Cedar St., Lansing, MI 48910

Outshiner Car Wash
130 Lansing St., Charlotte, MI 48813
1878 W Grand River Ave., Okemos, MI 48864

See how washing at home can be harmful on reverse side.
Visit mywatersheds.org for more pollution prevention tips.

Advertisement with Virginia of Southwestern Michigan, 688-688-1165

©NIPCM, Inc. 8/2024

Open more great neighborhood deals at mywatersheds.org SFAD_00368961

Tue. - 09/19/2023 - 3:56:07 AM SFAD_00368961

Don't Wash Your Car In Your Driveway Or On The Road
Use a commercial car wash

- Soaps, oils, greases, grime, and heavy metals from vehicles wash down the storm drain.
- Storm drains flow directly into our rivers, streams, and lakes.
- Soap phosphates cause excessive algae growth and reduce oxygen levels, harming aquatic life.
- Soap surfactants damage fish gills and kill their eggs.

Car washes use 60% less water than homeowners, can filter and reuse water on site, and connect directly to the sanitary sewer system for proper treatment of wastewater.

**GREATER LANSING
REGIONAL COMMITTEE**
FOR STORM WATER MANAGEMENT
www.mywatersheds.org

Customer Education Collaboration – The GLRC seeks to work with area businesses to educate their customers on stormwater pollution prevention:

- Between 2019 and 2021, the GLRC worked with the Capital Area Humane Society (CAHS) to provide 750 dog waste bag dispensers and pet waste brochures to be included in the adoption packets for new pet owners. These materials highlight the importance of picking

up pet waste while providing owners with the tools needed to start good dog ownership habits. An additional 450 pet waste bag dispensers and brochures were delivered to the CAHS in 2023.

- Throughout 2021, the GLRC worked with a group of MSU students to develop an educational campaign focused on car washes as the most environmentally-friendly choice for customers versus at-home car washing. The GLRC Coordinator implemented this campaign in 2023.
- In 2023 a letter from the GLRC Coordinator was mailed to 56 high schools and middle schools in Clinton, Eaton, and Ingham counties on responsible car washing in conjunction with a car wash campaign. The letter included an educational brochure and contact information for any questions.

3.2 IDEP Committee/Post-Construction Committee

All GLRC members work hard to implement their individual IDEP programs. The GLRC Coordinator continues to work with regional partners on watershed protection efforts focused on pollution prevention and Illicit Discharge Elimination.

As referenced above, the GLRC developed a reporting page on the website to better advertise the contact information for reporting illicit discharges to member communities. [Mywatersheds.org/report](https://mywatersheds.org/report) is easy to remember and promote. A Septic Smart webpage was also developed to educate residents on reducing illicit connections to the storm sewer. The primary focus of this committee has been staff training.

As two video and two field training sessions were held in 2022, no further IDEP training was needed in 2023.

3.3 TMDL Committee

The TMDL Committee provides a forum for discussing TMDL implementation. Members have individual TMDL implementation plans but utilize GLRC's Quality Assurance Project Plan (QAPP) to standardize sample collection and guide field operations related to wet weather monitoring. The QAPP informs project managers and field staff of laboratory requirements and options for analysis. In the summer of 2022, the QAPP was updated and distributed to all members with new lab contact information and all procedural changes/recommendations from EGLE and US EPA.

The TMDL Committee met on the following dates in 2023:

- June 22, 2023
- October 13, 2023

4.0 Other GLRC Activities

Good Housekeeping Training – As two video training sessions were held in 2022, no further training was needed in 2023.

GLRC Seminars – In June 2018, the GLRC held an educational seminar for members to learn about a variety of topics, including stormwater utilities, impervious surface mapping, GSI site plan reviews, and NJDEP performance standards. Thirty-five people attended. A second GLRC Seminar was planned for 2020 but was postponed due to COVID-19. In November of 2022, the GLRC held a technical, educational seminar for members and the public to explore Stormwater Treatment in Clay Soils. Per an EGLE suggestion, GLRC brought in national expert Don Carpenter, PhD, PE, LEED AP, Executive Director of the Great Lakes Stormwater Management Institute at Lawrence Technological University to help engineers learn how to address stormwater quality goals by evaluating mechanical separators and the retention and infiltration of Michigan’s clay soils. A total of 55 people attended.

Recreation Efforts

The GLRC promotes partner efforts and recreational events through the website and social media, like paddling expeditions and races and other opportunities for residents to connect to our watershed and water resources. The GLRC understands that residents will be more likely to adopt pollution prevention strategies if they use and love the resources those actions would protect.

Green Infrastructure Code Audit – The GLRC Coordinator worked with Meridian Township to audit their codes and ordinances for barriers to green infrastructure implementation. In 2020, the Committee agreed to reconvene the GLRC Ordinance Committee to develop a GSI Ordinance Manual for area communities interested in similar audit exercises. The document will provide model ordinances and language to standardize and improve the region’s landscape and surfacing requirements in a way that promotes the use of green infrastructure. The final document is almost complete, and GSI Code Audits at other GLRC members will resume.

Coal Tar Seal Coat – The GLRC also tasked the Ordinance Committee with assisting area communities in the development of coal tar seal coat bans, as Polycyclic Aromatic Hydrocarbons or PAHs within are showing up in significant concentrations in runoff. So far, two of GLRC’s members have passed a total coal tar seal coat ban, requiring contractors to register and certify that they are not using mixtures with PAH content greater than .1%. In 2021, GLRC developed a fact sheet on coal tar sealcoating. The educational piece outlines the cancer risk for people as the PAHs make it into their homes on shoes and pets. The Committee will continue to work to develop a resource guide to standardize the region’s approach to these contaminants.