



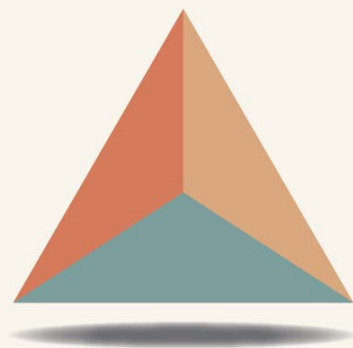
**GREATER LANSING
REGIONAL COMMITTEE**
FOR STORM WATER MANAGEMENT

**2017
ANNUAL
REPORT**



GLRC Members

Clinton County Road Comm.
 Clinton County
 Delhi Charter Township
 Delta Charter Township
 DeWitt Charter Township
 City of DeWitt
 City of East Lansing
 Eaton County
 City of Grand Ledge
 Ingham County
 Lansing Charter Township
 Lansing School District
 City of Lansing
 City of Mason
 Meridian Charter Township
 Michigan State University
 Waverly Communiwty Schools
 Windsor Charter Township



**TRI-COUNTY REGIONAL
PLANNING COMMISSION**

A Letter From Our Chairman



Greetings to All Fellow Watershed Advocates & Guardians of Our Precious Water Resources,

2017 has been another exciting year in the lives of the GLRC members. In April each community/permittee was required to reapply for their NPDES MS4 Permit Coverage. The new permit requirements were largely the same as our current permits with the exception that those permittees that discharge to the Red Cedar River would have to comply with the newly established Total Maximum Daily Load (TMDL) for E. coli. The TMDL requirement has added a whole new challenge to the GLRC, and as usual, the individual members will be tackling it collectively whenever possible.

Many of our members continued to be audited by MDEQ for compliance with their NPDES Permit in 2017. The audits, although at first are a scary undertaking, provide an opportunity to refocus on and enhance our individual programs. Better yet, the individual members share the results of the audits with the GLRC staff to provide a resource for others in preparing for an audit and in enhancing their own programs.

Probably the most significant event affecting the GLRC in 2017 was the opportunity to work with the Tri-County Regional Planning Commission in the interviewing and hiring of a new staff member to help shepherd the GLRC. Cliff Walls, Environmental Sustainability Planner, has been with TCRPC since March. He has been a tremendous addition to TCRPC and especially the GLRC. Cliff has brought many new, fresh and innovative ideas to the GLRC with enthusiasm and professionalism.

A few of the specific endeavors which Cliff has fostered are:

- Redesigning the website, developing a new mobile display, and creating new materials for events
- Strategizing social media outreach- increasing followers and reaching 400,000+ people with water quality messaging
- Helping to spearhead a new outreach initiative to increase the public's river stewardship within the region

Yes, now that I have finished writing this, it really has been a busy and exciting year for the GLRC and its members. But the best is still to come. So each and every one of us must pledge to continue forging ahead for the sake of our precious water resources- after all they have been entrusted to our care.

Sincerely,

Bob Scheuerman, City of East Lansing

2017 GLRC Chairman

The Basics

Who is the GLRC?

The Greater Lansing Regional Committee for Stormwater Management is a guiding body comprised of regulated Municipal Separate Storm Sewer System (MS4) communities within the Greater Lansing Region. The committee was established in 1999 to guide the implementation of the stormwater program for participating communities within the Red Cedar River, Grand River, and Looking Glass River watersheds. The GLRC is administered by the Tri-County Regional Planning Commission.

What is an MS4?

Municipal Separate Storm Sewers Systems (MS4s) capture runoff water in catch basins and pipes that lead directly to rivers, streams, and lakes without being processed at a treatment plant. Oil, pet waste, and other pollutants “hitch a ride” with runoff water, enter the storm system and accumulate in waterbodies. To limit pollution, the EPA’s Phase II rule requires operators of MS4s in urbanized areas to implement programs and practices to control polluted stormwater runoff through the use of National Pollutant Discharge Elimination System (NPDES) permits. For permit compliance, MS4 municipalities must meet the “six minimum measures.”



Public Participation/Involvement

Providing opportunities for citizen participation in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.



Public Education

Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.



Illicit Discharge Detection and Elimination

Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system. Activities include developing a system map and informing communities about hazards associated with illegal discharges and improper disposal of waste.



Construction Site Runoff Control

Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb one or more acres of land. Controls could include silt fences and temporary stormwater detention ponds.



Post-Construction Runoff Control

Developing, implementing, and enforcing a program to address discharges of post-construction stormwater runoff from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas (e.g., wetlands) or the use of structural best management practices (BMPs) such as grassed swales or porous pavement.



Pollution Prevention/Good Housekeeping

Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and techniques, such as regular street sweeping, reduction in the use of pesticides or street salt, or frequent catch basin cleaning.



“Strong partnerships are vital to any successful stormwater management program. The working relationships that have been established through the GLRC provide a solid foundation upon which communities throughout the Greater Lansing region have built their programs.”

Ruth Kline-Robach
Outreach Specialist
Michigan State University
Institute of Water Research

Structure and Finances

The GLRC is supported by the Tri-County Regional Planning Commission (TCRPC), which provides program staff, administrative, and fiscal support. GLRC members pay annual dues for the services provided. The following committees coordinate and complete the work necessary to be in compliance with the permit requirements.

Illicit Discharge Elimination Program Committee

Guides the organization and implementation of the Illicit Discharge Elimination Program (IDEP), mapping guidelines, field-sampling protocols, and how the watershed will be monitored for progress. The IDEP Committee has reviewed pet waste management, septic tank maintenance issues, IDEP ordinances, and provided staff training.

Total Maximum Daily Load Committee

Makes recommendations regarding the Grand River and Red Cedar River E. coli Total Maximum Daily Load (TMDL) requirement. The committee provides education and updates to GLRC members to assist in the development and implementation of TMDL programs.

Public Education Program Committee

Guides the overall public education, participation, outreach and involvement process for the stormwater program. This effort includes evaluation and assessment of public knowledge and activities.



Category	Fiscal Year 2017	% of Expenditures
TCRPC Staff/Support Services	\$96,738	77%
Annual Report	\$350	100%
Illicit Discharge Elimination Plan (IDEP)	\$300	0%
Public Education Plan (PEP)	\$10,000	60%
TMDL Committee	\$300	0%
Website Hosting	\$400	66%
Monitoring Support	\$3,000	0%
Total	111,088	



Permit Application Update



The five-year MS4 discharge permit cycle ended in April 2017, prompting all GLRC members to reapply for permit coverage with the Michigan Department of Environmental Quality. Due to a delay at the state following the previous round of applications, many members have only held their current permit since 2015. Rather than requiring members to submit a new, full application just two years after the MDEQ approved their stormwater management plans, the GLRC was offered an “abbreviated permit application” this past spring. This allowed members to roll over the bulk of their previous permit into the new application, streamlining the process and saving time for municipalities and regulators.

It is clear that the GLRC’s positive relationship with the MDEQ fosters a common-sense approach to the

permit requirements and accomplishes compliance both in our communities and through the permitting process.

An E. coli Total Maximum Daily Load (TMDL) requirement was one new component of the application for many members, however. Routine testing has shown that E. coli levels are above the state standard in many water bodies, including the Grand and Red Cedar rivers. The TMDL establishes the allowable level of pollutants for a water body based on the relationship between pollution sources and in-stream water quality conditions. TMDLs provide a basis for determining the pollutant reductions necessary from both point and nonpoint sources to restore and maintain the quality of water resources.

Members under E. coli TMDL requirements must identify potential

sources and the Best Management Practices (BMPs) suited to limit E. coli levels. Additionally, permittees are required to develop an implementation plan outlining how they intend to “make progress toward achieving the pollutant load reduction requirement” for each TMDL listed in its watershed. With assistance from the GLRC TMDL Committee, members developed monitoring plans to track E. coli levels in their MS4 discharge and in receiving bodies.

TMDL requirements will be in place once the MDEQ issues the next rounds of permits. It is estimated that applications will be reviewed, approved and issued by fall or winter 2018. With this estimated schedule, each member will be required to submit a Progress Report in April 2019. GLRC staff will provide municipalities with a Progress Report template to submit in anticipation of the due date.

New GLRC Staff



The GLRC welcomed a new coordinator this past March! Cliff Walls, Environmental Sustainability Planner with the Tri-County Regional Planning Commission, comes to the GLRC and TCRPC after five years of working as a field scientist for a Lansing-area environmental consultant. Cliff has greatly enjoyed his time in his new role and is impressed with the regional approach the GLRC brings to water quality and stormwater management.

“The level of engagement and cooperation among members is inspiring,” said Walls. “As a resident of this region, it’s encouraging to see there is a dedicated group of professionals working together to address water quality issues, and it’s exciting to be given the opportunity to join the effort.”

Cliff joined the group a month before the MS4 permit application deadline and hit the ground running to ensure that GLRC members were on track. He credits the leadership and helpfulness of the Executive Committee and GLRC members for ensuring a smooth transition into the role of coordinator.



New GLRC Coordinator Cliff Walls at the annual Adopt-a-River event in May

Educating Residents Watershed Wide

The GLRC utilizes a traveling watershed display for local workshops, conferences, and events.

When the display is not in use for an event, it circulates throughout the region to GLRC member offices. Look for it at your local city hall, public works, and various locations around the region!

DeWitt Township Community Showcase

April 13th, 2017
Rod Taylor

East Lansing Aquatic Center Dog Swim

September 9th, 2017
Cliff Walls

Adopt-a-River

May 13th, 2017
Allen Bryant & Cliff Walls

East Lansing Whitehills Elementary Girl Scouts Meeting

November 7th, 2017
Cliff Walls

Delta Township Library

June 24th-July 5th, 2017
Ernie West

Delhi Township Vegetable Gardening Seminar

March 21st, 2017
Allen Bryant

Delhi Township Reuse Rally

May 6th, 2017
Allen Bryant

City of Mason Fire Station Open House

October 7th, 2017
Sam Bibler

Lake Lansing Property Owners Association Annual Meeting

June 1st, 2017
Younes Ishraidi

East Lansing Pinecrest Elementary STEM Night

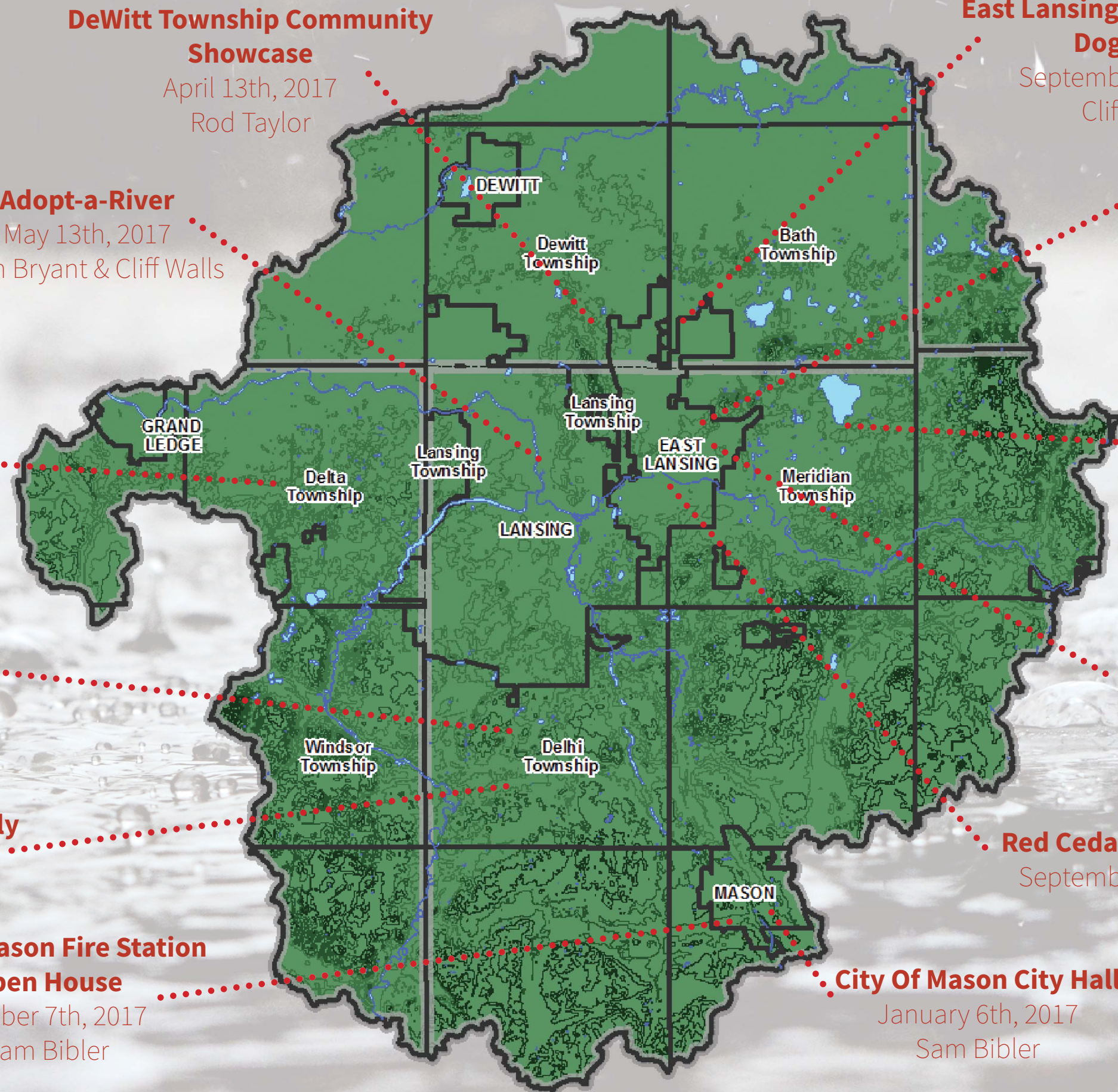
November 16th, 2017
Cliff Walls

Red Cedar Awareness

September 9th, 2017

City Of Mason City Hall

January 6th, 2017
Sam Bibler



PEP Up

The GLRC’s Public Education campaign has gained momentum this year with new promotional items, an interactive display, and a strong social media presence.

Earlier this summer, the GLRC PEP subcommittee dedicated funds for “boosting” GLRC Facebook posts. These paid ads give us the ability to target Facebook users by geographic area, track how many people see our campaign, analyze how users interact with content, and examine performance trends and cost effectiveness. With this, we can determine which posts are most likely to be successful and shape subsequent efforts accordingly. The data is easily exported, reported, and available for audits and Progress Reports.

By “boosting” posts, we put our campaign on the screens of people who haven’t actively sought out the GLRC, and many people have chosen to tune in for more. Since July, the number of GLRC Facebook followers has grown by over 320%. All stats show that we’re reaching and interacting with more people than ever before (see graphics on right)!



Greater Lansing Regional Committee for Stormwater Management (GLRC)
Published by Glrc Coordinator [?] · November 29 at 5:02pm ·

Missing the beach this time of year? Well, you're closer to one than you think!

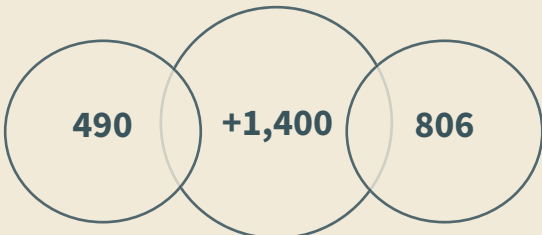
In Michigan, virtually all land eventually drains into the Great Lakes. A rain drop that becomes runoff in the Lansing area travels through the Grand River watershed to Lake Michigan, around the "tip of the Mitt", through Niagara Falls, up the Saint Lawrence River and into the Atlantic Ocean.

Because of the way we're all connected, what happens in your local area can affect an entire watershed... [See More](#)



GLRC Facebook Stats since July 2017

401,964 Unique views
4,804 “Likes”
517 Comments
2010 shares



New Followers	Website Traffic	Most “Liked”
490 more people follow the GLRC Facebook page, an increase of over 320%.	Social media drives traffic to the GLRC web page. One post directed over 1,400 visitors!	A post about stormwater management was “liked” over 800 times.

From our followers:




This was an interesting graphic! I have to say, I don't know much about storm drainage, but I really love the well thought out responses from the GLRC page. Interesting to see how the water moves!

Like · Reply · Message · 2 · December 1 at 9:42pm



Greater Lansing Regional Committee for Stormwater Management (GLRC) what a wonderful, detailed, well-written response, gosh. I'm so glad you actually genuinely address people's concerns and post relevant tips and resources instead of posting pre-made responses like so many other pages do. Rock on!

Website Upgrades



In May, the GLRC revamped its www.MyWatersheds.org website. Video content, colorful infographics, and stormwater news articles were added, resulting in a kid-friendly and educational resource for the public.

The redesigned website also benefits our members! GLRC templates, permit forms, and general municipal guidance documents are easier to locate and access, and the newsletters and an event calendar keep members, their boards, and the public knowledgeable about the GLRC’s ongoing initiatives.

The website was designed in-house by the GLRC staff and moved to a new host, saving the committee roughly \$300 a year in hosting costs and \$5,000 in design and implementation fees. The switch provides the GLRC with greater control of the website, allowing for instantaneous content and design updates.

Public Presentations

May 13th, 2017

Adopt-a-River

Spoke with families about the GLRC, watershed stewardship, and the importance of stormwater management.

Over 500 people attended.

August 14th, 2017

Lansing Exchange Club

Presented to local chapter of a national civic club. Discussed the history, function, and accomplishments of the GLRC and the importance of stormwater management.

25 people attended.

November 7th, 2017

Girl Scouts

Presented the Enviroscapes Watershed Model to a group of 3rd Grade Brownie Girl Scouts to teach watershed dynamics and stormwater management. Prior to interacting with the model, the scouts went outside to identify storm drains and pollution sources.

10 Scouts attended.

June 23rd, 2017

HOMTV Interview

Discussed stormwater management and green infrastructure with local public access TV channel HOMTV.

Segment aired on television and HOMTV social media outlets.

September 9th, 2017

East Lansing Aquatic Center Dog Swim

Spoke with event-goers at the 2nd annual Dog Swim event. Over 60 people signed up for the GLRC newsletter mailing list and signed a pledge to pick up pet waste.

297 dogs (and even more people) attended.

November 15th, 2017

Pinecrest Elementary STEM Night

Assisted MDEQ in presenting Watershed Model at an elementary school science expo.

Over 150 people attended. Many promotional items were handed out.



“The GLRC is our stormwater consultant and costs a lot less than a private firm. The uniformity in work products from community to community helps significantly when dealing with developers who work in several communities. GLRC has a better sense of what is required and keeps the communities on par with each other.”

Bob Scheuerman
Assistant Engineering Administrator
City of East Lansing

Red Cedar Awareness



The Red Cedar in the 1960s. Nutrient pollution led to algal growth.



The same location today.

For years, the Red Cedar River's reputation as a polluted river has discouraged recreation and stewardship among students living on Michigan State's campus despite the great progress that has been made in restoring the river's water quality. This poor perception feeds further abuse. "It's already full of litter, what does another empty bottle hurt?"

This mindset was on display in autumn of 2016, when two paddlers came across hundreds of bottles and many bags of trash in the river near campus.

In response, local environmental groups, businesses, and municipalities began to meet to address the litter problem, focusing on changing the river's reputation through an initiative called "Red Cedar Awareness." Composed of representatives from the GLRC, River Town Adventures, Mid-MEAC, MGROW, Ingham Conservation District, MSU, and the City of East Lansing, the group determined that if residents and visitors knew how far the river had come from its polluted past, they may come to respect the river as a viable recreational

and environmental resource worthy of protection. The Red Cedar's poor reputation was once well deserved, but Red Cedar Awareness sought to educate citizens on the gains made in the decades following the Clean Water Act and inspire them to maintain that momentum.

To do this, a canvassing event was planned along the river during a 2017 Spartan football game. The high foot traffic of residents and visitors provided a great platform to discuss the current state of the river and the individual actions citizens can take to improve water quality on campus and elsewhere.

With financial and staff support from the Greater Lansing Regional Committee for Stormwater Management, as well as informational handouts from the GLRC's ongoing public education campaign, Red Cedar Awareness equipped students and other volunteers to discuss river and stormwater stewardship with the many tailgaters enjoying game day.

Signs were posted along the riverside footpaths that offered passersbys tips

on limiting their impact on stormwater runoff. Volunteers also sparked conversations with people in the tailgating areas. In exchange for signing a river stewardship pledge, signatories received either a green and white "Pollution Isn't Pretty" bracelet or a Red Cedar Awareness magnet that listed household actions they could take to improve water quality. The "take home" half of the pledge included more tips, as well as a copy of the Spartan fight song.

Many interested citizens also signed up to receive newsletters from the individual Red Cedar Awareness organizations and will now be kept in the loop on future GLRC projects.

After successfully reaching hundreds of campus residents and visitors, the group hopes to pass the reigns on to a student organization. The perception problem is rooted in campus life, and students themselves will be most effective in changing it.

Special thanks to GLRC member's for their support of this important project!

Watershed Model Now Available

The GLRC has purchased an Enviroscapes Watershed/ Nonpoint Source Pollution Model. All members are encouraged to incorporate it into their next community event!

An Enviroscapes Watershed/ Nonpoint Source Pollution Model is now available for all members! This hands-on, interactive display allows us to demonstrate the sources and effects of stormwater pollution and how to prevent them.

Powdered drink mix and sprinkles represent fertilizers, pet waste, and fluids from leaking cars. Users mimic rainfall with a spray bottle and watch as the "pollution" is carried through the watershed to a pond, lake, river, bay, or ocean- then learn the best management practices to prevent this type of pollution from occurring.

Though it is designed for kids, it can effectively communicate watershed concepts to all ages. Instructional videos are available at www.enviroscapes.com and YouTube.

All members are encouraged to incorporate the Watershed Model into their planned displays and events. Please contact the GLRC Coordinator Cliff Walls at cwalls@mitcrpc.org for ideas, questions, or to reserve the unit.



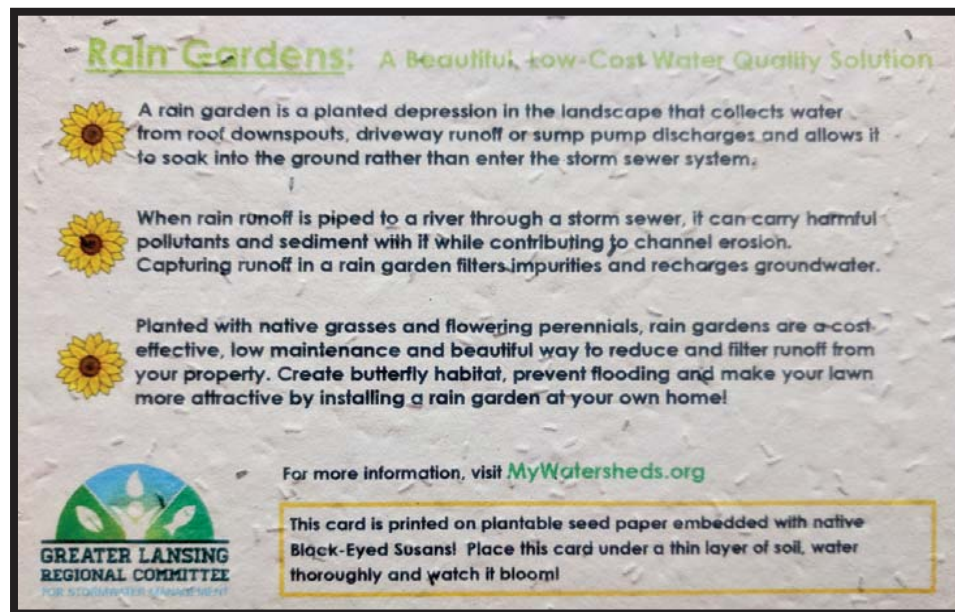
GLRC Coordinator Cliff Walls debuting the Watershed Model with the Whitehills Elementary 3rd Grade Brownie Girl Scouts!

“Swag” and Handouts

The GLRC has developed two new promotional “swag” items for public outreach and educational purposes. Pet waste bag dispensers and rain garden informational cards now join our selection of stickers, brochures, and branded reusable shopping bags that help bring our message home after a presentation or event. Check out our calendar on MyWatersheds.org to see where you can find them next!

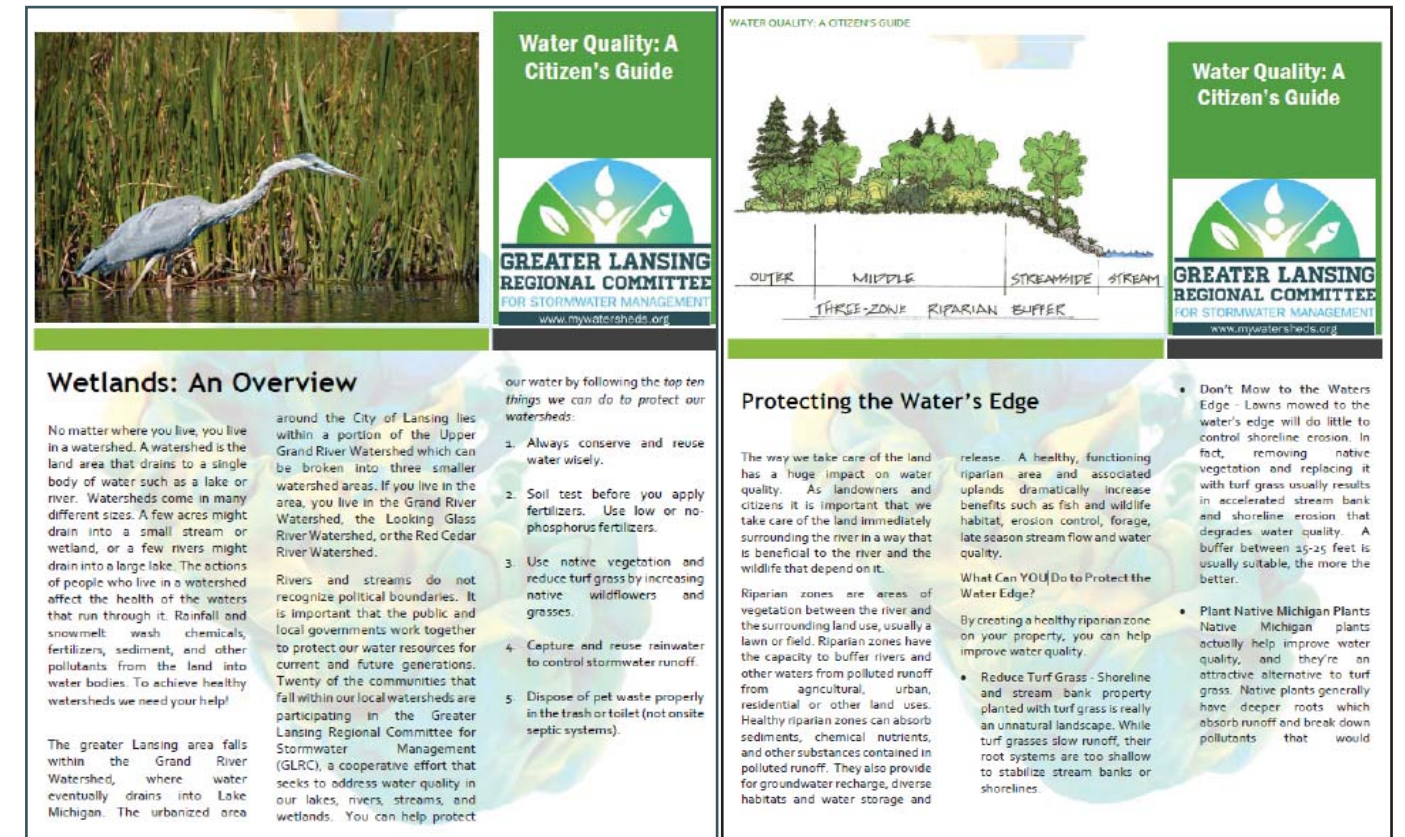


The GLRC-branded pet waste bag dispensers have been popular at events and are a great way to educate the public on why proper pet waste disposal is important while also equipping them with the tools to adopt the practice. This is an especially important public education tool in light of the recent E. coli TMDL requirements. Dog waste is a major source of E. coli water pollution, and for many members, educating the public on proper pet waste disposal will be the most important practice necessary to achieve TMDL compliance. The dispenser can be refilled with bags too!



These informational cards detail the benefits of rain gardens and direct the public to www.MyWatersheds.org for more information. The paper is embedded with native Black-Eyed Susan seeds. Just plant, add water, and wait for it to bloom!

Citizens Guide to Water Quality



The GLRC has taken some of our existing educational materials, reformatted them, and created a series of articles titled “Water Quality: A Citizen’s Guide.” The guide informs the public of how their actions can impact surface water quality locally and “downstream.” Information on illicit discharge reporting, watershed stewardship, and proper pet waste disposal are examples of important stormwater topics covered, and each is a required Public Education Program topic under the MS4 permit.

To satisfy PEP obligations, GLRC members are encouraged to include the articles on their website, have printed copies available for pick-up in their lobbies, and post them on social media channels. To further assist members, the GLRC has developed a suggested timeline for when to post about each topic. For example, information on septic system maintenance is best suited for the fall months, and proper yard fertilizing is most relevant during spring.

Visit the “For Homeowners” page of MyWatersheds.org to access digital copies of the articles and for more helpful tips!

Pets, Pollution, & Parks

Pet Owner Outreach

Properly disposing of pet waste is one of the easiest ways citizens can help maintain and improve our region's surface water quality. The GLRC took an active role in promoting this practice to the general public this year through social media and new printed materials, including the doggy bags and an educational flyer (right).

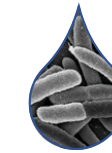
The new flyer describes the negative impacts of dog waste on our watershed, and it encourages owners to pick up after their pet when they visit local parks. It also includes a list of dog-friendly parks in the tri-county area for citizens' personal use. The flyer can be posted at parks and trails across the region and will be used for outreach and educational purposes at future GLRC events.

By including both educational and practical components in the flyer's content, we are hoping it can be used as a resource for parks and water quality advocates that are looking to reach an untapped target audience. Any pet owner who views it and is interested in the dog-friendly park inventory list, learns about stormwater pollution and watersheds inadvertently!

The poster also complements the Pollution Isn't Pretty campaign signs (below) that are placed throughout the region's parks, trails, and non-motorized system.



Picking up after your pet isn't just polite, it protects the environment!



10 million tons of dog waste are produced every year in the United States alone, and **just one gram can contain as many as 23 million fecal coliform bacteria.** (CDC, US EPA)



Dog waste is a major contributor to stormwater pollution. Dog waste that isn't picked up is carried into rivers, streams and drains by stormwater runoff, contaminating our water resources.



All runoff in the Grand River watershed (below) eventually makes its way into the Grand River and Lake Michigan. It doesn't matter if your dog lives miles from a stream or river; its waste can impact water quality close to home and further downstream.

The Tri-County Area has many Dog Friendly Parks!

Visit them responsibly: ★

Off-Leash

Soldan Dog Park
1601 E Cavanaugh Rd, Lansing, MI

Northern Tail Dog Park
6400 Abbot Rd, East Lansing, MI

On-Leash

Lake Lansing Park North
6260 E Lake Drive, Haslett

Sleepy Hollow State Park
7835 E Price Road, Laingsburg

Lansing River Trail
300 N Grand Avenue, Lansing

Woldumar Nature Center
5739 Old Lansing Road, Lansing

Burchfield Park
881 Grovenburg, Holt, MI

Crandell Park
3425 E Clinton Trail, Charlotte, MI

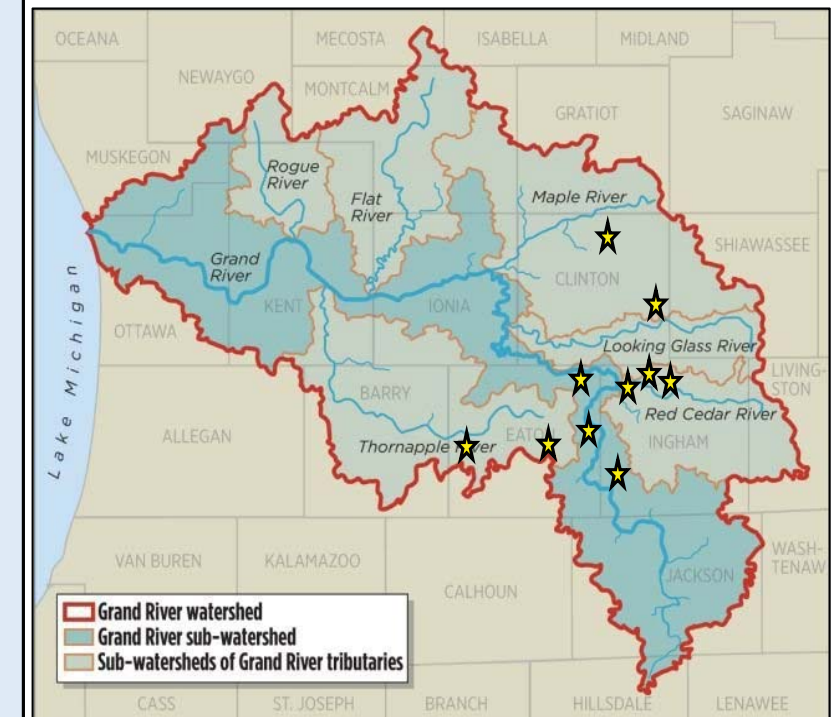
Fitzgerald Park
133 Fitzgerald Park Dr, Grand Ledge, MI

Lincoln Brick Park
13991 Tallman Rd, Grand Ledge, MI

Paul Henry-Thornapple Trail
Mason Road Trail Head, Vermontville, MI

Motz County Park
4630 N Dewitt Road, St. Johns, MI

Contact your local parks department for others!



Learn more at
www.MyWatersheds.org

GLRC Plans for 2018

- Administer the 2018 Greater Lansing Regional Water Quality Survey
- Continue to conduct public education throughout the watershed
- Prepare for MS4 permit issuance in late 2018
- Hold member staff training events for Post-Construction Control and IDEP
- Conduct workshop for members' communications teams to boost PEP compliance
- Continue to collaborate with regional partners
- Debut and rotate new GLRC informational display at each members' office throughout the year
- Refresh guidance documents and GLRC forms



“At the request of the DEQ, the GLRC successfully piloted a new MS4 permitting approach. The GLRC framework of engaged membership focused on regional collaboration was used by the DEQ to guide development of the new MS4 permitting approach. The GLRC continues to be an example of a successful model for collaborative stormwater management by maximizing financial resources, delivering consistent messaging across the watershed, and developing regional stormwater control standards.”

Christe Alwin
Statewide MS4 Program Coordinator
Michigan Department of Environmental Quality

Produced by the Tri-County Regional Planning Commission



**TRI-COUNTY REGIONAL
PLANNING COMMISSION**

Planning Mid-Michigan's Future Together Since 1956

Stay Connected.

Follow the GLRC and TCRPC online for updates on regional planning and stormwater management!



**@GLRC4Stormwater
@TriCountyPlanning**



**@GLRC4Stormwater
@MI_TCRPC**



**GREATER LANSING
REGIONAL COMMITTEE
FOR STORM WATER MANAGEMENT**

www.mywatersheds.org