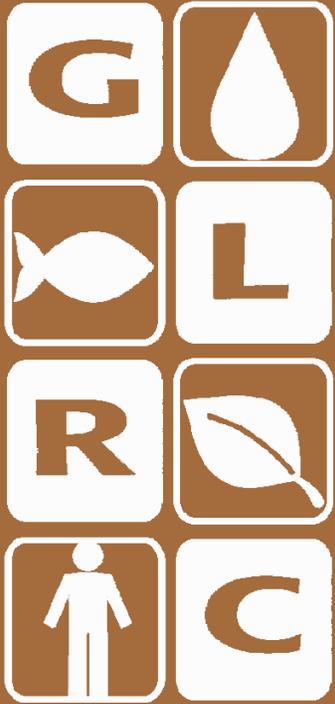
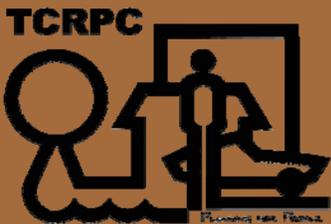


Greater Lansing Regional Committee for Stormwater Management



2011 Annual Report



GLRC Members

- ◆ 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
- ◆ Oneida Charter Township
- ◆ DeWitt Public Schools
- ◆ Lansing Public Schools
- ◆ Windsor Charter Township
- ◆ Clinton County
- ◆ Eaton County
- ◆ Ingham County
- ◆ Michigan State University



Polluted stormwater runoff is often transported to municipal separate storm sewer systems (MS4) and ultimately discharged into local rivers and streams without treatment. The Environmental Protection Agency's Stormwater Phase II Rule establishes an MS4 stormwater management program that is intended to improve the nation's waterways by reducing the quantity of pollutants that stormwater carries into storm sewer systems during storm events. The GLRC began meeting in 1998 and was formed under a Memorandum of Agreement in 2004. The GLRC has been established to guide the implementation of the MS4 program for the communities within three identified watersheds: the Grand, the Red Cedar and the Looking Glass River watersheds.

The six MS4 program elements, termed "minimum control measures" that drive the efforts of the GLRC are described below.

Minimum Control Measures

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 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.

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

Public Participation/Involvement: Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.

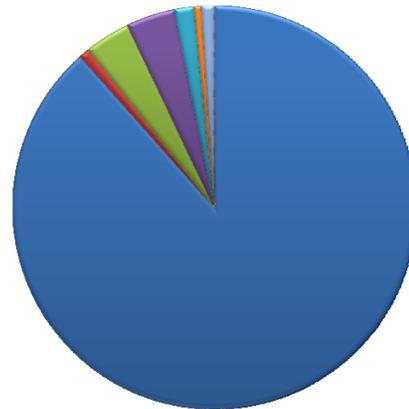
Illicit Discharge Detection and Elimination: Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system. Activities include developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste.

Fiscal Year 2011 GLRC Budget

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 (IDEP) 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. The IDEP Committee has reviewed pet waste techniques, septic tank maintenance issues, IDEP ordinances and provided staff training.



■ Public Education Program (PEP) Committee

guides the overall public education, participation, outreach, and involvement process for the watershed management planning effort. This effort includes evaluation and assessment of public knowledge and activities.

■ Habitat and Recreation Committee (HRC)

focuses on wetland inventory and protection; restoration and ecosystem monitoring; volunteer monitoring efforts; and identifying impairments in the watersheds in order to improve water quality throughout the river systems. The recreation component focuses on enhancing access to the river systems in order to improve activities such as canoeing, hiking, fishing, etc.

■ Ordinance/Best Management Practices (BMPs) Committee

reviews and makes recommendations on existing ordinance updates to ensure that they are consistent with the permit requirements. In addition, the committee provides education to GLRC members related to good housekeeping techniques, low impact development (LID) and for BMPs that reduce pollution from runoff.

■ Funding Committee

focuses on providing information about equitable and sustainable funding mechanisms for the implementation and maintenance of the watershed management plans.

Category	Fiscal Year 2011	% of Expenditures
Support Staff & Administrative Costs	\$ 85,000	91%
Website Hosting	500	>1%
Illicit Discharge Elimination Program	300	>1%
Public Education Program	3,000	3%
Habitat & Recreation Program	3,250	3%
Ordinance/BMP	1,000	1%
Funding	50	>1%
Total	\$ 93,100	100%

Public Education Efforts

Billboard Public Service Announcement

The GLRC billboard was displayed throughout the Greater Lansing area in March and April of 2011. Each Spring the billboard can be seen at five separate locations in the urban area for two months. In 2011 over 6,300,00 cars were exposed to the billboards!



The billboard displays a fish with a burnt out cigarette and the tag line "It all ends up in the Grand River".

The purpose of the billboard is to increase public understanding that everything one puts on the ground will eventually end up in the local river.

Adopt-A-River

The PEP Committee and GLRC members help promote the annual Adopt-A-River program with the Lansing Board of Water & Light and Impression 5 Science Center.



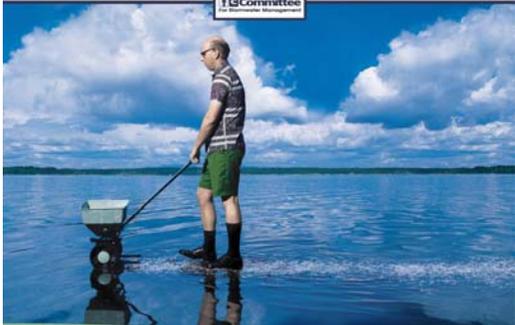
The GLRC continues to promote a series of posters and brochures that relay messages about reducing polluted runoff by controlling our actions on the land. What one puts on the ground impacts local rivers and streams.

Educational News Article Topics:

- ◆ Water is a Watershed
- ◆ Riparian Areas
- ◆ Who/What is the GLRC
- ◆ Onsite Septic Systems
- ◆ Fertilizer
- ◆ Vehicle Maintenance
- ◆ Pet Waste
- ◆ Storm vs. Sanitary Sewer
- ◆ Car Washing
- ◆ Adopt Your Catch Basin
- ◆ Illicit Discharge
- ◆ Wetlands

WHEN YOU'RE FERTILIZING THE LAWN, REMEMBER YOU'RE NOT JUST FERTILIZING THE LAWN.





What's the problem with fertilizer?

Fertilizer isn't a problem if it's used carefully. If you use too much fertilizer or apply it at the wrong time, it can easily wash off your lawn or garden into storm drains and then flow untreated into our rivers, streams, wetlands, and lakes. Just like in your garden, fertilizer in lakes and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes canoeing, fishing and swimming unpleasant. An algae bloom may also use up oxygen in the water that fish and other wildlife need.

Clean water is important to all of us. Together we can make it happen.

You fertilize the lawn. Then it rains. The rain washes the fertilizer along the curb, into the storm drain, and directly into our lakes, rivers and streams. This causes algae to grow, which uses up oxygen that fish need to survive.

So how can you prevent this? Start with the basics.

If you fertilize, please follow the directions and use sparingly!

Your actions can help keep our water clean. Find out how.
www.mywatersheds.org

WHEN YOU'RE WASHING YOUR CAR IN THE DRIVEWAY, REMEMBER YOU'RE NOT JUST WASHING YOUR CAR IN THE DRIVEWAY.





What's the problem with washing the car?

There's no problem with washing your car. It's just how and where you do it. Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt and grime washed from your car, flows along the curb and into nearby storm drains, which run directly into our rivers, streams, wetlands and lakes. The phosphates from the soap can cause excess algae to grow. Algae blooms look bad, smell bad, and harm water quality. An algae bloom also uses up oxygen in the water that fish need.

Clean water is important to all of us. Together we can make it happen.

When you wash your car in the driveway or road, the soap, dirt, oil and other grime washed from your car cause pollution, which is unhealthy for fish and other creatures that live in and near the water.

So how do you avoid this whole mess? Easy.

Take your car to a car wash where the water gets treated and recycled!

Your actions can help keep our water clean. Find out how.
www.mywatersheds.org

GLRC Display

The GLRC utilizes a traveling watershed display for local workshops, conferences, etc. 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, the Public Works lobby and various locations around town!

The display includes copies of the watershed management plans, GLRC publications and watershed brochures for distribution to interested parties.



Stormwater Pollution Prevention Radio Public Service Announcements

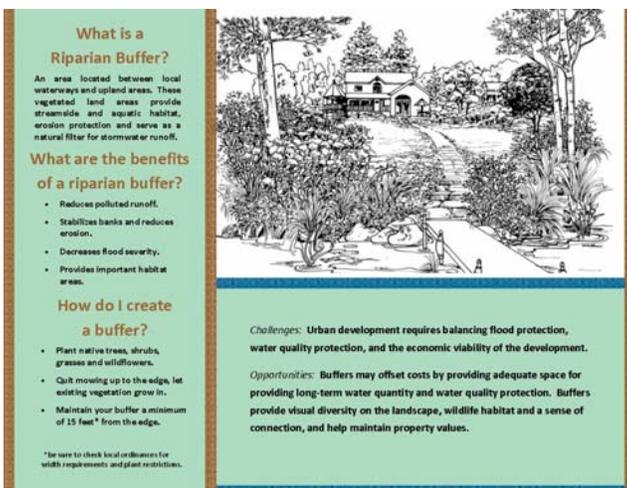
In January of 2011, the GLRC aired public service announcements (PSA)s on WITL 100.7, our local country radio station. The 15 and 30 second spots reached 40,000 local residents, 83% of which were homeowners. You can listen to the PSAs on the GLRC homepage, www.mywatersheds.org. In addition, the PSAs may be posted on local community websites.

Brochures

The Habitat and Recreation Committee developed a brochure titled: ***Riparian Buffers, Protecting our Water Resources.***

The purpose of the brochure is to help the public (specifically riparian land owners) understand what a riparian buffer is and it's importance. The brochure also highlights basic steps for individuals to create a buffer on their property.

This brochure and several other educational and promotional materials are available on the website: www.mywatersheds.org.



Public Education Efforts

HomTV Segment

In the summer of 2011, the PEP Committee began working with Meridian Township to develop "Green Show" segments focusing on stormwater and pollution prevention. The segments are between 15 and 30 minutes long and will air on HomTV and other municipal cable channels.



Lansing State Journal Online Banner Ad

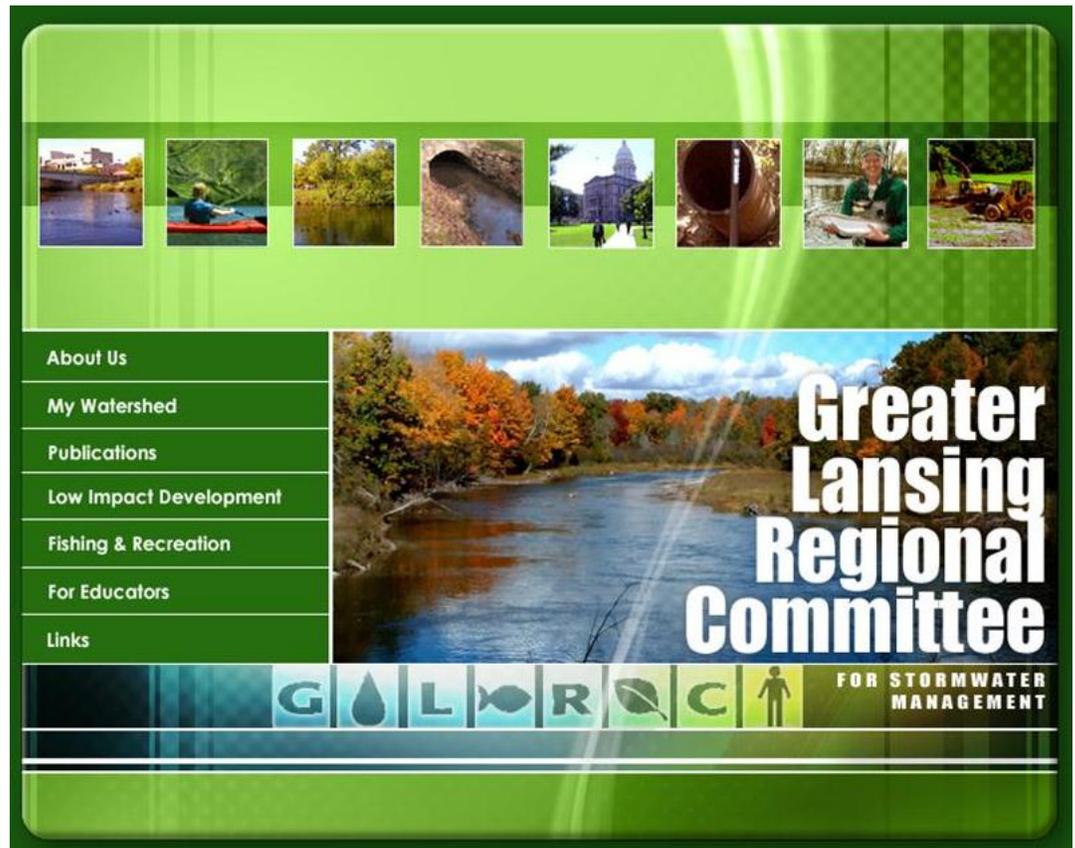
The PEP Committee negotiated an online banner advertisement to appear in the Lansing State Journal. The ad appeared over 34,000 times, reaching over 1,369,000 people.



GLRC Website - www.mywatersheds.org

The GLRC website includes a significant amount of information relating to watersheds, stormwater stewardship, educational information, links to other environmental organizations, local projects, recreational opportunities and much more.

All public education outreach materials direct the viewer to our website. Eye-catching messages related to current public education campaigns can be found on the homepage. For example, when our billboard goes up in the Spring, visitors will find information about using non-phosphorous fertilizer posted on the homepage.



Social Media

The GLRC joined Facebook and Twitter in December, 2009. Regular posts and updates are related to watershed stewardship, public involvement and public participation opportunities.



Other Presentation Topics

Turfgrass Management

In March 2011, the GLRC hosted a presentation from the Michigan Turfgrass Environmental Stewardship Program (MTESP). The presentation provided details of the MTESP which was reviewed by MDEQ and, if followed, can help communities manage their vegetated properties to meet permit requirements.

Tetra Tech Presentation: Stormwater Utilities

The GLRC continues to explore the potential for stormwater utilities in the region. In February 2011, Tetra Tech presented to the GLRC on the implementation of the City of Jackson utility.

Program Tracking Software Presentation

As the complexity of tracking MS4 programs between municipal departments increases, companies are developing software to track the programs throughout an entire community. Spicer Group has developed software specific to the permit requirements in Michigan. The GLRC received a presentation on this customizable software in February 2011. The GLRC will continue to consider tracking our committee and individual activities utilizing this software.

Member Assistance/Training

The GLRC Coordinator is always available to help members understand permit requirements, refresh other department staff on committed action plan items, and overall permit compliance.

Children's Water Festival

Each year members of the GLRC, along with others throughout the region, volunteer their time for the Children's Water Festival. The annual festival is sponsored by the Groundwater Management Board (GMB). Over the past 15 years, the festival has had great success with over 30,000 students from area schools attending. The purpose of the festival is to educate 4th, 5th and 6th grade students about the importance of our environment and water resources and their role in protecting and conserving it.

There are over 40 presenters from many different organizations, agencies and companies including Conservation Districts, MI Department of Environmental Quality, and the American Water Works Association – MI Section. Presenters provide a hands-on experience for the students, requiring interaction and critical thinking.



PCSWSC Technical Workgroup

Local Low Impact Development Projects

- Tollgate Drain
- City of Lansing Rain Gardens
- Towar Rain Gardens
- City of Eaton Rapids Parking Lot
- Rain Gardens of West Michigan
- MSU Green Roofs
- East Lansing Green Roof
- MI Concrete Association Pervious Concrete
- Carrier Creek Stormwater Restoration Project
- General Motors Delta Plant
- MSU Buffer Strips
- Meridian Township Porous Concrete
- Delta Dental Rain Gardens
- Printer's Row Redevelopment
- And more!

Post-Construction Stormwater Control (PCSWC) Technical Workgroup

The PCSWC Technical Workgroup was developed to address post-construction stormwater control requirements listed in the 2008 General Watershed Permit. The workgroup developed both a policy and procedures manual as well as a design standards manual for communities to implement at the local level. These materials also include a draft ordinance.

Development of the GLRC PCSWC Manuals

The PCSWC Technical Workgroup used the Center for Watershed Protection's (CWP) Stormwater Manual Kit (tool 5). The CWP did a complete review of manuals from around the county and the toolkit provided a "best of the best" for each category. The GLRC workgroup reviewed those resources including, local County Drain Commissioner standards and the LID Manual for MI, and developed manuals to best suit the Greater Lansing Area. In February 2011, GLRC members were provided template documents and manuals with detailed instructions to fill in the specifics of their community. This regional approach creates an equitable environment for future development and redevelopment that meets permit requirements.



Water Quality Mapping Database

Data management is an important part of evaluating successes and challenges in watersheds. The Habitat and Recreation Committee has been maintaining the water quality database originally created in 2007. The main purpose of the database is to organize past, current, and future water quality data in conjunction with available land use data to help protect and improve water quality in the region. The database is primarily used for viewing current information in a comprehensive, visual format. While the GLRC does not currently have the resources for an in-depth analysis of the data, this will be executed in the future as a result of our partnership with 319 efforts for the Red Cedar and Grand River watersheds.

Volunteer Monitoring Efforts

The Habitat and Recreation Committee partners with the Mid-Michigan Environmental Action Council (Mid-MEAC) on volunteer stream monitoring efforts. Mid-MEAC collects data on benthic macroinvertebrates in the Red Cedar River every spring and fall. Information regarding this effort and test results can be found at the following web address: www.midmeac.org. The results of the monitoring are included in the GLRC water quality database.

The goal of the monitoring program is to create swimmable, fishable streams and rivers in mid-Michigan. Not only does the program allow us to collect data which can then be used in the future for advocacy efforts and river protection efforts, it also helps people connect with, appreciate, and understand our local waterways.

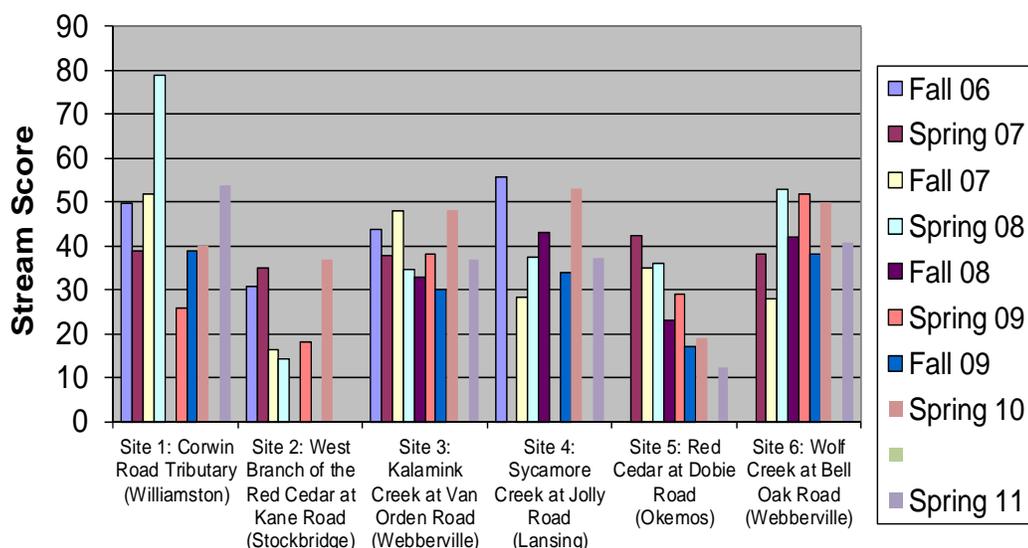


Other Watershed Groups and Partners.

The Clinton and Eaton Conservation Districts and Michigan State University Institute of Water Research each received a 319 non-point source grant from the Michigan Department of Environmental Quality to develop watershed management plans for the Maple River, Upper Looking Glass River, Middle Grand River, and Red Cedar River Watersheds respectively. These plans will focus on improving the quality of impaired water bodies. Clinton Conservation District recently received implementation funding to move their completed plan towards on-the-ground water quality improvements.

Middle Grand River Organization of Watersheds (MGROW) is an outgrowth of Grand River Expedition 2010, and strives to bring together local communities, sub-watershed groups and other stakeholders in the Middle Grand River towards a greater understanding of and stewardship for the river. One objective is to serve as a data bank and an information clearinghouse for the entire watershed. MGROW will organize and conduct educational and scientific expeditions on the entire main channel every ten years, and encourage and support periodic similar educational activities on the tributaries of the entire Grand River.

Mid-Michigan Environmental Action Council
Red Cedar Watershed Stream Scores
 Volunteer Stream Monitoring Fall 2006 through Spring 2008



Changes at Tri-County Regional Planning Commission



After 35 years of outstanding service to the Tri-County Region Jon W. Coleman retired in January of 2011.

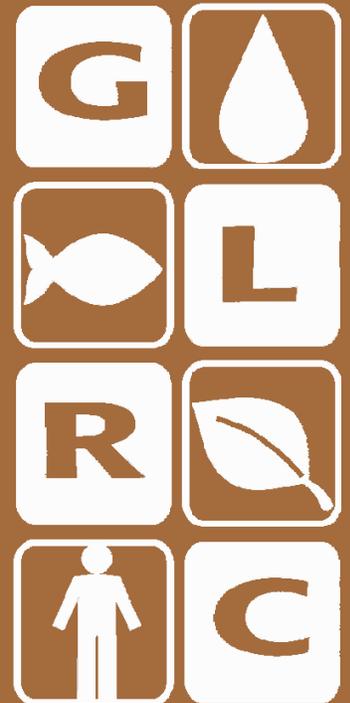


Susan Pigg, formerly of Delta Charter Township and MSU Ingham County Extension, is the new Executive Director.

Erin Campbell Named "Friend of Conservation" for 2011

GLRC Coordinator and Associate Environmental Planner, Erin Campbell, was recognized for her professional contributions to watershed management by the Michigan Association of Conservation Districts (MACD). Ms. Campbell was selected as Michigan's "Statewide Friend of Conservation" for 2011.

Ms. Campbell was honored at the MACD annual conference in Mt. Pleasant, MI on December 8-9, 2011 and was presented recognitions during their annual banquet. The Eaton Conservation District also recognized Ms. Campbell as the Eaton County "Conservationist of the Year" at their annual meeting in January 2012. TCRPC extends our thanks to our regional partners in the Eaton County Conservation District who nominated Ms. Campbell for these prestigious recognitions.



www.mywatersheds.org

