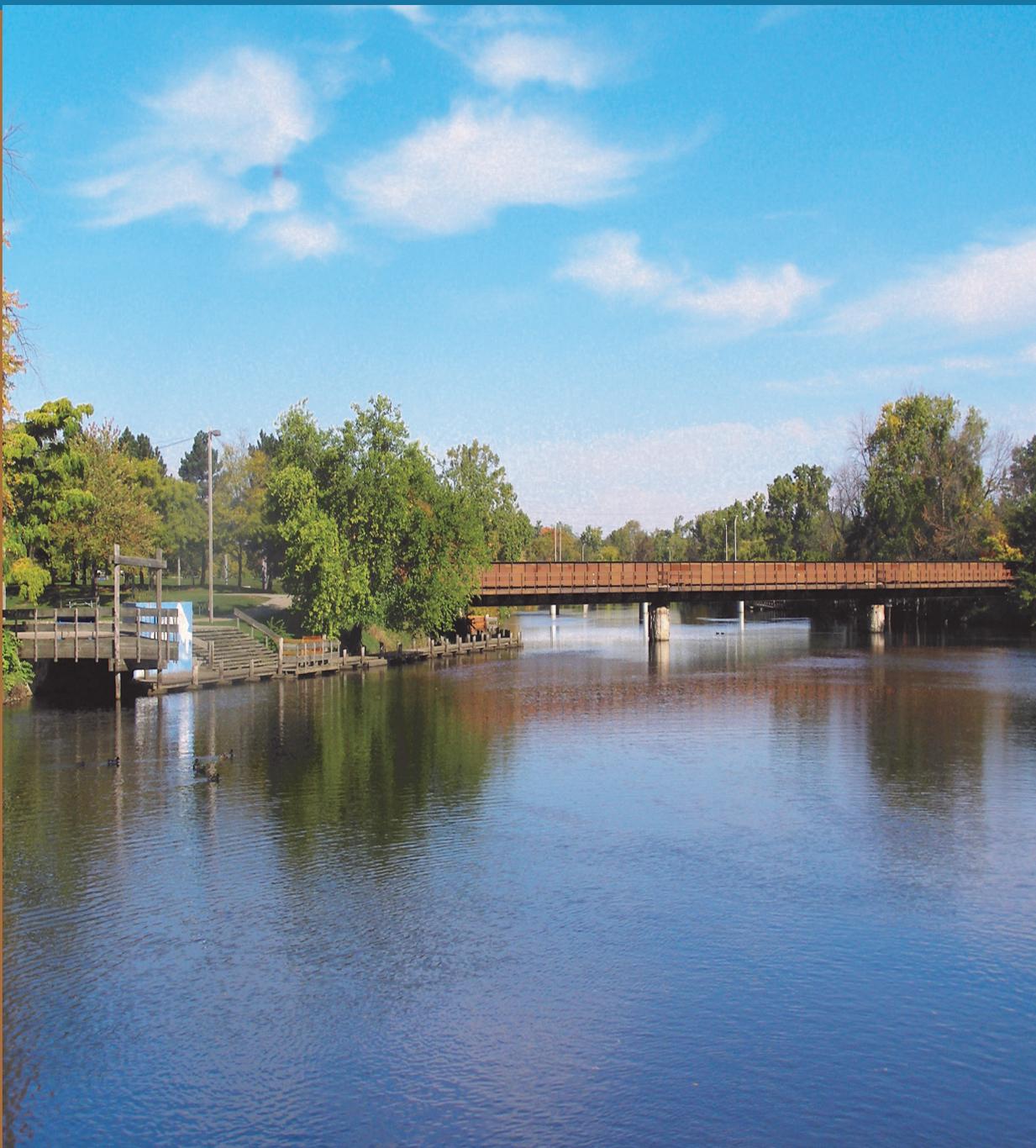
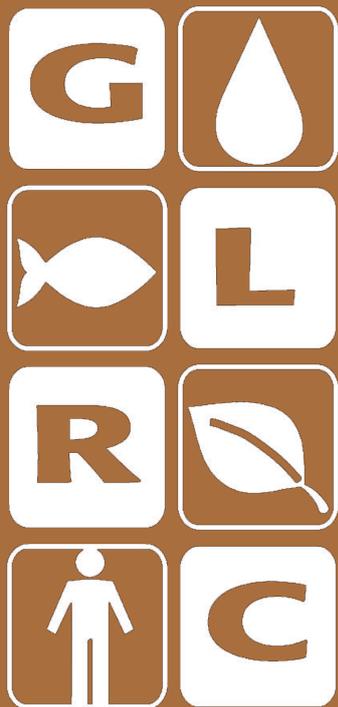


Greater Lansing Regional Committee
for Stormwater Management

2012 Annual Report



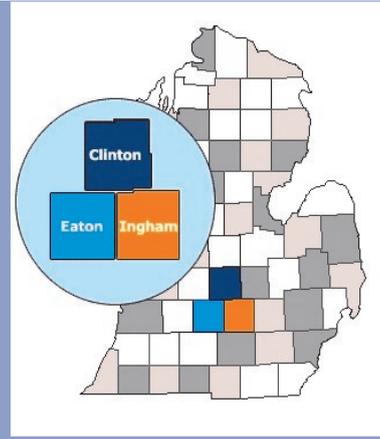
Please Protect
The Looking Glass River
Watershed



PICK IT UP!

In Accordance with Local Ordinance

mywatersheds.org



It all ends up in the Grand River



www.mywatersheds.org

Greater
Lansing
Regional
Committee
For Stormwater Management



Please Protect
The Red Cedar River
Watershed



mywatersheds.org

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 2012 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.

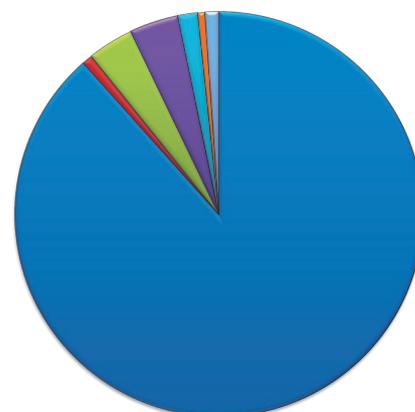
Illicit Discharge Elimination Program (IDEP) Committee guides the organization and implementation of the illicit discharge elimination program, mapping guidelines, field-sampling protocols, and how the watershed will be monitored for progress. The IDEP Committee has reviewed pet waste techniques, septic 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%

GLRC Works on New Permit Applications

In October of 2012 the GLRC became the first urbanized area in Michigan to venture through the new stormwater permit issuance process. The GLRC was chosen because we have a strong program, both collectively at the GLRC level and many members have strong individual programs. In addition, local [Michigan Department of Environmental Quality](#) (MDEQ) staff are in the process of writing the application and drafting permit language so we are all centrally located and overall in a good position to move forward.

There were significant changes to the permit issuance process and the MDEQ will issue individual permits specific to each community based on the commitments described in the application. The GLRC will work together with the MDEQ and the program will be more representative of what communities are doing on the ground, and where they have prioritized efforts due to staff and budget constraints. Permit applications are due January 2013 with hopes that they will be issued by October 2013.



Audits

MDEQ has started to audit GLRC members. One of the biggest challenges thus far has been record keeping. Since the program infiltrates several different departments within a single community it can be very challenging to have a handle on record keeping. MDEQ has a guidance document regarding this and Erin Campbell, the GLRC Coordinator can assist with every step of the audit process.

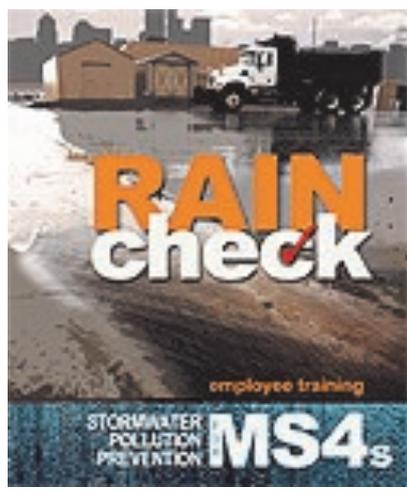
Staff Training for Good Housekeeping and Illicit Discharges

The GLRC implementation committees purchased two staff training videos to assist members with permit requirements related to staff training.

Rain Check: focuses on good housekeeping and pollution prevention on municipal properties

IDEA A Grate Concern: focuses on identifying and correcting illicit discharges.

GLRC members can borrow the videos at any-time, in the future, more collaborative training will be conducted in order to streamline this process for members.



Greater Lansing Regional Water Quality Survey Findings Report

What do you know about stormwater? How is Greater Lansing's water quality? A recent survey by GLRC probed residents to find out. Area citizens take more action towards water quality improvements but additional public education is still needed. A statistically valid sample of the watershed area's 343,434 residents in late 2012 was conducted to determine the effectiveness of regional and local public outreach campaigns on water quality issues. The results were compared with those of a similar survey conducted in 2006.

Survey results indicate that more than one-third (38% or about 130,000 residents) of area residents had taken some type of action to protect water resources in the past five years and 11% indicated that they "didn't know" if their household had done anything that would have helped protect water resources. The percent of residents who indicated their household had taken some type of action to protect water resources increased by 11% to 38,000 residents over a similar survey given in 2006.

When questioned about current activities, 77% (265,000) of residents responded that their household uses a community collection site to dispose of household hazardous waste, such as old oil, fluids from vehicles, batteries, and pesticides. This was an 8% increase from 2006. The remaining households typically dispose of household hazardous waste with their regular trash (14%) or leave household hazardous waste in a container at home (8%).

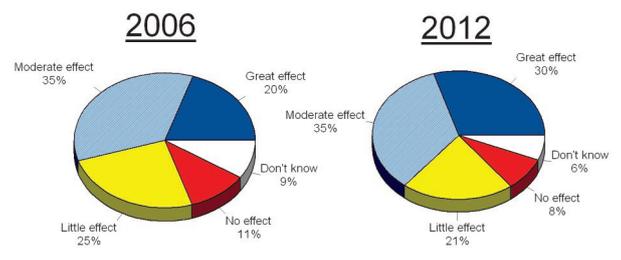
Most residents (85% or about 290,000 people) indicated that they typically pick up their dog's waste when they go for a walk. This response was an increase of 18% over responses given in the 2006 survey. Those willing to promptly pick up and dispose of their pet's waste increased 7% from 78% in 2006 to 85% in 2012.

The survey asked how willing residents are to take actions that reduce water pollution. Residents were most willing to dispose of hazardous waste at a community collection day (92%), sweep excess fertilizer/grass clippings into their lawn (90%), change their car washing practices (86%), and use low phosphorus or slow release fertilizer (85%). Residents were least willing to have their soil tested (50%).

The survey also queried residents about their knowledge concerning the connection of stormwater runoff and water resources. Forty-nine percent (49% or approximately 168,000 residents) thought stormwater went directly to lakes/streams without treatment; 17% thought it went to a treatment plant, 12% thought it went to lakes/streams with treatment and 22% indicated that they "did not know." The percent of residents who thought that stormwater went to lakes/streams without treatment decreased 7% from 56% in 2006 to 49% in 2012. The GLRC notes that the survey results indicate more public education about stormwater runoff and its impacts on area rivers and lakes is needed.

Further information and full survey reports are available at www.mywatersheds.org.

How much do you think the way you maintain your home affects the quality of water in lakes and streams in the community where you live?
by percentage of respondents



86% of Residents Felt The Way They Maintain Their Home Impacts the Quality of Water; This was A 6% Increase From 2006

TRENDS

Public Education Efforts

Billboard Public Service Announcement

The GLRC billboard was displayed throughout the Greater Lansing area in March and April of 2012. Each Spring the billboard can be seen at five separate locations in the urban area for two months. 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 river.

The GLRC logo and website are prominently featured on the billboards. This has led to an increase in website traffic. The GLRC took advantage of the increase by posting seasonal messages about reducing fertilizer use and appropriate car washing techniques.

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. These posters, brochure, and several other materials can be found on the GLRC website www.mywatersheds.org.

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 YOUR PET GOES ON THE LAWN, REMEMBER IT DOESN'T JUST GO ON THE LAWN.

What's the problem with pet waste?

It's a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. If it's washed into the storm drain and ends up in a river, lake, or stream, the bacteria ends up degrading water quality. People who come in contact with the water can get very sick. The waste produced by the dogs and cats in the TriCounty Region is about the same as what the population of East Lansing - about 50,000 people - would produce. Unless people take care of it, the waste enters our water with no treatment.

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

When our pets leave those little surprises, rain washes all that pet waste and bacteria into our storm drains. This waste then pollutes our waterways.

So what should you do? It's as easy as 1-2-3.

1. Bring a bag. 2. Clean it up. 3. Dispose of the pet waste properly.

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

WHEN YOUR CAR'S LEAKING OIL ON THE STREET, REMEMBER IT'S NOT JUST LEAKING OIL ON THE STREET.

What's the problem with motor oil?

Oil does not dissolve in water. It takes a long time and sticks to everything from soil and rocks to bird feathers. Oil and other petroleum products are toxic to people, wildlife and plants. One pint of oil can make a slick larger than a football field. Used motor oil is the largest single source of oil pollution in our lakes, streams and rivers. Americans spill 180 million gallons of used oil each year into our waters. This is 36 times the amount spilled by the Exxon Valdez in Alaska.

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

Poorly maintained vehicles are one of the biggest sources for oil in our waterways. Leaking oil goes from car to street. It then washes from the street into the storm drain and into our lakes, rivers and streams.

So how can we reduce the amount of oil in our waterways? Simple!

Stop drips. Check for oil leaks regularly and fix them promptly.

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.

This year the display could be seen at the following events:

Quiet Water Symposium, March 3, 2012

Michigan Water Environment Association Watershed Summit, March 28, 2012

Adopt A River downtown Lansing , May 5, 2012



Regional Watershed Education Efforts

The Middle Grand River Organization of Watersheds (MGROW) in partnership with the Tri-County Regional Planning Commission serves the needs of six local watershed groups and residents in the region. MGROW is an umbrella organization that is working 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.



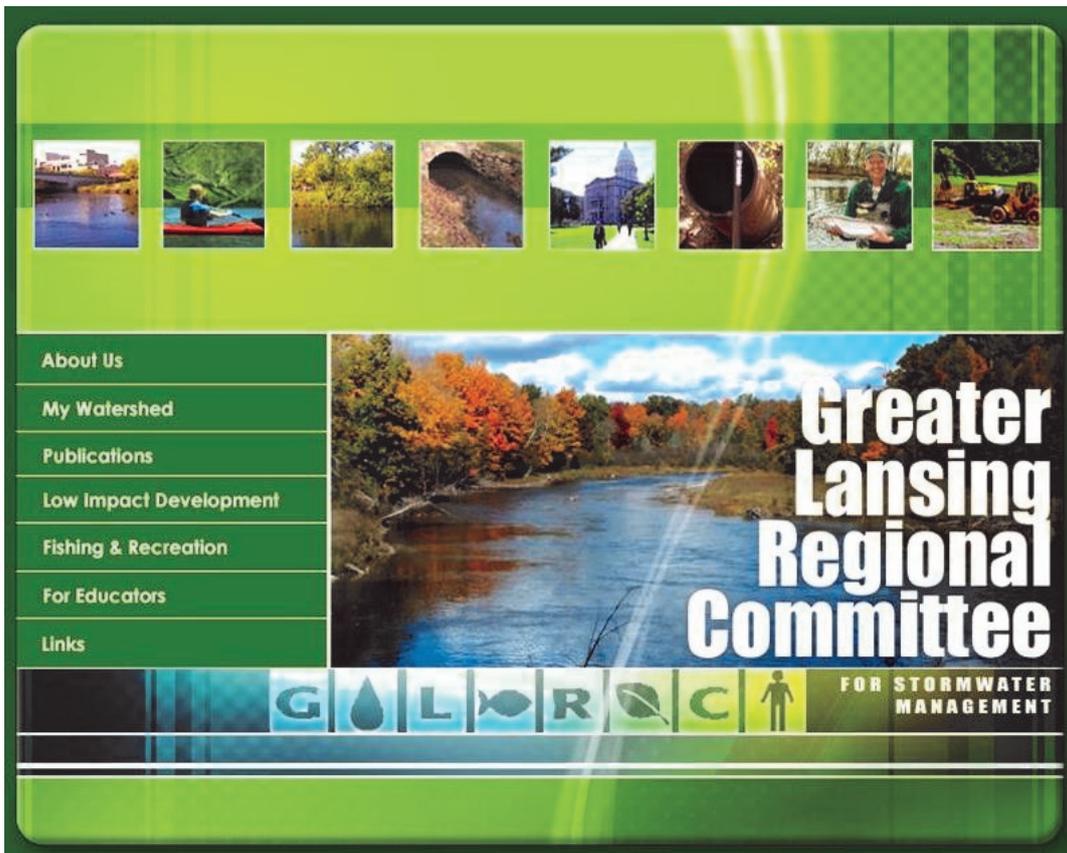
There are several watershed educational efforts currently underway and in place by local watershed groups. They each have their own specific priorities related to water quality improvements, but the overall general missions of these organizations are overlapping and related to working to improve regional water quality and management. Consequently, these groups collaborate on several different projects and efforts related to water quality improvements, recreational opportunities, pollution prevention and in general regional water resource management. MGROW is working with the local groups to develop a consistent, efficient, concise marketing campaign and brand that all watershed groups could utilize regularly.

Website & Social Media

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.



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 16 years, the festival has had great success with over 32,000 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.

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.



Regional Partners for Improved Water Quality

The Clinton and Eaton Conservation Districts and Michigan State University Institute of Water Research each received a federal 319 non-point source grant from the Michigan Department of Environmental Quality to develop watershed management plans for the Maple River and 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.

These efforts continue to move forward - visit their project websites for the latest news!

Maple River Watershed Management Planning Project: www.clintonconservation.org

989-224-3720 x3 (and Upper Looking Glass)

Middle Grand River Watershed Planning Project: www.middlegrandriver.com

517-543-5848 x5

Red Cedar River Watershed Planning Project: www.iwr.msu.edu/redcedar

517-353-3742

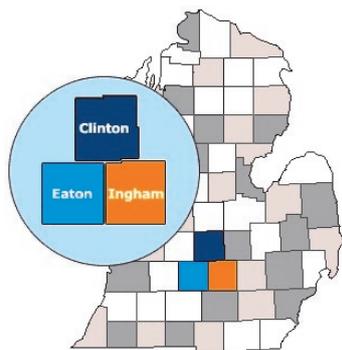
Mid-Michigan Environmental Action Council - Bugging Out!

The [Mid-Michigan Environmental Action Council](#) (Mid-MEAC) helps translate environmental concern into action through volunteer programs, educational opportunities and community advocacy. More than a decade ago, Mid-MEAC created a Volunteer Stream Monitoring program to monitor the health of the Red Cedar Watershed. As part of a statewide network of volunteer programs through the Michigan Clean Water Corps, they organize and train volunteers to collect aquatic macroinvertebrates at sites throughout the Red Cedar and Grand River Watersheds.

This year, 2012 saw the largest growth in volunteer participation since the inception of the program. By adding two new sites and widely publicizing the "Bug ID Day", Mid-MEAC engaged nearly 200 new and returning volunteers in all aspects of the Volunteer Stream Monitoring experience.



Photo credit: Mid-MEAC



Local LID Projects

- Tollgate Drain
- City of Lansing MI Ave Rain Gardens
- Towar Rain Gardens
- 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
- Delhi Township Green Roof
- Many more!

Green Roof in Delhi Township



www.mywatersheds.org





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