

Greater Lansing Regional Committee for Stormwater Management

Public Education Plan



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INTRODUCTION

The Public Education Plan (PEP) is being prepared for the communities of the Greater Lansing Regional Committee for Stormwater Management (GLRC) to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit requirements. This creates a concise document for members and the PEP Committee to work from throughout the permit cycle (2018-2023).

The original PEP was completed in 2003, updated in 2006, 2010, and 2013, and this current version of the PEP will be submitted to the Michigan Department of Environmental Quality (MDEQ) in the summer of 2018. The PEP was written for all GLRC members to guide the development and implementation of strategies aimed at educating the public on a regional and watershed level. However, each permittee will take their specific watershed and community characteristics into consideration throughout PEP implementation. Where applicable, each member has included their specific individual efforts throughout the PEP.

GLRC members participating in the PEP are as follows:

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

A. PUBLIC PARTICIPATION PROCEDURE – GLRC WEBSITE/SOCIAL MEDIA

As required, permittees commit to keeping their Stormwater Management Plan (SWMP) current and publicly available on their community website. Local public notice requirements will be met as appropriate, and both the SWMP and contact information will be provided to encourage public review. The public will be invited to participate in the implementation and periodic review of the SWMP, which will be accomplished through each community website and the GLRC website. When the progress reports are submitted to MDEQ, they will be posted on the GLRC and community websites. This will update the public and invite them to participate or provide input related to the implementation of the SWMP if they choose to.

In addition, the PEP, progress reports and other appropriate supporting documents will be posted on the GLRC website. The GLRC website serves as one of our strongest tools for information sharing with the public. All GLRC documents (template manuals, progress reports, implementation materials, brochures, quarterly newsletters, annual reports, etc.) are available on the GLRC website. The GLRC maintains a calendar that announces public meeting information, workshops, trainings and events.

The GLRC also recognizes the importance of social media. Our existing Facebook and Twitter accounts help us to reach out to different demographics and reach larger audiences. By purchasing Facebook's

“boosted posts”, the GLRC can geographically target the audiences within the urbanized zone and ensure consistent messaging to the residents of all GLRC jurisdictions. The GLRC will continue to annually support the purchase of paid posts from the GLRC Facebook account and track the results using social media analytics. Social media has proven to be an effective tool for outreach communication, and the responsibility of creating and sharing content related to the Required Topic Areas is the GLRC Coordinator’s, indicated by the “social media” Delivery Mechanism in Section D.

B. EVALUATION AND PRIORITIZATION PROCEDURES

The GLRC conducted a water quality survey of residents during the fall of 2006. The purpose of the survey was to provide a benchmark to gauge the effectiveness of regional and local public outreach campaigns on water quality issues in the Greater Lansing Region. The survey results provided a baseline for evaluating the effectiveness of regional and local water quality initiatives over time. These results have been used by the GLRC and other organizations in the region to prioritize and implement public education programs through the most effective and efficient methods possible.

The 2006 survey results can be found here:

[Greater Lansing Regional Water Quality Survey Findings Report 2006](#)

Since a baseline for evaluating the effectiveness of current (and past) water quality initiatives was completed in 2006, the GLRC committed to conducting the survey again in 2012 to identify successes related to the ongoing public education efforts and areas for improvement. The 2012 survey was conducted in the exact same manner as the 2006 survey; both statistically valid surveys ensure the GLRC is effective and efficient in our public education efforts.

The 2012 survey results can be found here:

[Greater Lansing Regional Water Quality Survey Findings Report 2012 \(with comparison data\)](#)

The GLRC PEP Committee conducted another follow up survey in 2018. The survey was conducted in the same manner as the 2006 and 2012 surveys, and will be used to evaluate successes, challenges and to determine the overall effectiveness of the PEP. The PEP Committee will also explore the following options for assessing PEP effectiveness in the new permit cycle: a duplicate of the previous surveys (conducted either in-house or contracted out); the utilization of an online survey; conducting focus groups; or conducting targeted interviews of individuals in the region. This will be completed by the end of the permit cycle, scheduled for October 2023.

During the Progress Report submittal, general evaluation and effectiveness will be discussed and changes could be made based on initial results, as adaptive management is an important part of public education. Evaluation mechanisms are essential to gauge implementation status and assess the effectiveness of the overall program. Identification of quantifiable measures provides both measurability and accountability within the program.

The PEP Committee meets frequently to discuss progress of ongoing activities, review current priorities, track measurable goals and to explore new educational opportunities based on the survey results. The PEP Committee has completed the prioritization at the GLRC level and categorized topics areas as: high, medium and low. The PEP Committee met and reviewed the survey results in detail to determine the priority topic areas. Many factors were considered in this process including the survey results, available resources, cost effective outreach methods, existing public knowledge levels and collaborating with other programs currently underway. Examples of High priority topics areas are: **B. Inform and educate**

the public about the connection of the MS4 to area watersbodies and potential impacts discharges have on surface waters; **C.** Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4; **I.** Educate the public on, and promote the benefits of, green infrastructures and low impact development. The GLRC will report on the measurable goals achieved during the regular Progress Report submissions.

The GLRC also continues to work with several partners in the larger surrounding area to accomplish a variety of public education efforts. In 2013-2014, the Middle Grand River Organization of Watersheds (MGROW) developed "Pollution Isn't Pretty", a regional public education campaign to provide educational resources for smaller watershed groups (including the GLRC, friends groups, Middle Grand River Watershed Management Planning Project (319) and the Red Cedar River Watershed Management Planning Project (319)). The GLRC continues to utilize Pollution Isn't Pretty materials and work with MGROW, conservation districts, and local watershed groups to develop consistent, meaningful public education messages and delivery mechanisms that will benefit the entire region. This effort has and will continue to incorporate the GLRC survey results and several other survey results in the region. The GLRC is confident that our collaborative and individual PEP accomplishments and efforts will continue to be successful and we will work in the most effective, efficient way possible.

C. REQUIRED TOPIC AREAS

The PEP follows the format recommended by the MDEQ and includes the ten topic areas required in the permit.

An adequate PEP will implement a sufficient amount of educational activities to ensure that the targeted audiences are reached with the appropriate message(s) for the following topics:

- (A) Promote public responsibility and stewardship in the applicant's watershed(s).*
- (B) Inform and educate the public about the connection of the MS4 to area watersbodies and the potential impacts discharges could have on surface waters of the state.*
- (C) Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.*
- (D) Promote preferred cleaning materials and procedures for car, pavement, and power washing.*
- (E) Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.*
- (F) Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.*
- (G) Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous waste, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.*

- (H) *Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.*
- (I) *Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.*
- (J) *Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.*

D. PUBLIC EDUCATION PLAN IMPLEMENTATION

Activities listed here correspond directly with the ten topic areas A - J for compliance. The GLRC action plan, as part of the City of Grand Ledge’s SWMP details the activities below and includes a schedule and general evaluation mechanisms.

(A) Promote public responsibility and stewardship in the applicant’s watershed(s).

Activity: Continue to maintain watershed signage at road and river crossings.

Corresponding topic area: A

Priority: Medium

Target audience: Public

Key message: Promoting local water resources, connecting the public to their surrounding environment. Signs read “You are in the Grand River, Looking Glass, or Red Cedar River Watershed”.

Delivery mechanism: Passing vehicles, people biking, walking or running will view the signs.

Year and frequency of implementation: The signs were originally posted between 2005 -2006. They will be maintained indefinitely with help from the local Road Commissions and communities.

Responsible party: City of Grand Ledge

Evaluation: Indicate that the signs are still there in Progress Reports.



Activity: Use “Do you know your watershed?” brochure and update as appropriate. An update occurred in 2018.

Corresponding topic area: B

Priority: Medium

Target audience: Public

Key message: The brochure educates the public about what a watershed is, our local watersheds and general information about watershed protection.

Delivery mechanism: Posted on the GLRC website, handed out at public events, available in community lobbies, available during use of the GLRC display.

Year and frequency of implementation: The brochure will be used at all public events (Adopt A River, Quiet Water Symposium, Michigan Water Environment Association (MWEA) Watershed Summit), update as appropriate. The brochure will be available to the public at the City of Grand Ledge Hall.

Responsible party: PEP Committee, GLRC Coordinator and City of Grand Ledge.

Evaluation: Number of brochures provided throughout the year and website link traffic to digital versions.

Activity: Promote the Mid-Michigan Environmental Action Council (Mid-MEAC) volunteer stream monitoring efforts.

Corresponding topic area(s): C, J

Priority: Medium

Target audience: Public – recruiting volunteers for action.

Key message: Promote Mid-MEAC volunteer stream monitoring events that educate the public (volunteers) about macroinvertebrates and why they are an important indicator of water quality. This provides an opportunity to discuss pollutant sources and reporting of illicit discharges and riparian buffer purpose and management.

Delivery mechanism: GLRC Website and social media.

Year and frequency of implementation: Macroinvertebrate collections are done annually in the spring and fall, identification is completed in the fall.

Responsible party: GLRC Coordinator

Evaluation: Website traffic, potential volunteers reached through social media.

Activity: GLRC Educational Display

Corresponding topic area(s): B, C, D, E, F, G, H, I, J (all)

Priority: Medium

Target audience: Public and businesses

Key message: General watershed education; promoting action of the public about what they can do to reduce pollution.

Delivery mechanism: The display is used at the annual Quiet Water Symposium, annual Adopt-A-River event, Michigan Water Environment Association Watershed Summit, and various regional events. Annually at the City of Grand Ledge Color Cruise and Island Festival.

Year and frequency of implementation: Continuous use at annual events. Panels were updated in 2014 to relate more specifically to the minimum control measures and target audiences, and an additional scroll style banner was designed in 2018 to be used in members' municipal lobbies, libraries, and public spaces and created to address knowledge gaps identified by the 2012 public survey. Displays will be updated as needed in the future.

Responsible party: GLRC Coordinator, PEP Committee and City of Grand Ledge.

Evaluation: Number of events, use in municipal lobbies, event attendance.



Activity: Update basic educational graphic with tag line and GLRC website

Corresponding topic area(s): B, C, D, E, F, G, H, I, J (all)

Priority: Medium

Target audience: Public

Key message: The tag line was updated to read “Pollution Isn’t Pretty” and “We All Live In A Watershed”, demonstrating that what we put on land effects the water. The website is also listed which directs the public to information that covers all topic areas listed in this plan.

Delivery mechanism: Trail signage, brochures, social media, website content, events

Year and frequency of implementation: Ongoing

Responsible party: PEP Committee, GLRC Coordinator, City of Grand Ledge

Evaluation: Website link traffic, social media analytics, brochures handed out at events, event attendance.



Activity: Utilize existing news articles and update them to be more flexible with different media outlets (Twitter, shorter columns, etc.).

Corresponding topic area(s): B, C, D, E, F, G, H, I, J (all)

Priority: Medium

Target audience: Public, elected officials

Key message: Articles cover the following topics:

What is a Watershed?	Pet Waste and the Environment
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Wetlands: An Overview	Storm Vs. Sanitary Sewer Systems
Who/What is the GLRC	Responsible Car Washing
Septic System Maintenance	Adopt Your Catch Basin
Safe Fertilizer Use	Illicit Discharge
Vehicle Maintenance	

Delivery mechanism: Articles are posted on the GLRC website, City of Grand Ledge website and community newspapers. Similar educational content posted on social media.

Year and frequency of implementation: Continue to maintain articles on the GLRC website. Update/reformatting occurred in 2017. Educational content will be posted monthly on GLRC social media throughout the permit cycle. A posting timeline guide is also used. The City of Grand Ledge posts the GLRC quarterly newsletter four times a year and the GLRC annual report as they become available to the City of Grand Ledge’s website.

Responsible party: GLRC Coordinator, PEP Committee and the City of Grand Ledge’s website

Evaluation: Number of articles (or similar) posted, including the number of residents receiving a publication tracked by the City of Grand Ledge website. The GLRC Coordinator tracks GLRC website and social media analytics.

(B) Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state.

Activity: GLRC webpage titled “Stormwater Basics” and “What’s a Watershed?”

Corresponding topic area: A, C

Priority: High

Target audience: Public, elected officials

Key message: This section of the website promotes watershed health information, describes what citizens can do, how our water is impacted, etc.

Delivery mechanism: GLRC website and social media, community website links to the GLRC webpage

Year and frequency of implementation: Continuous presence on the website, update as appropriate.

Responsible party: GLRC Coordinator

Evaluation: Website link traffic, social media analytics

Activity: GLRC quarterly newsletters and annual report

Corresponding topic area(s): A, C, D, E, F, G, H, I, J (all)

Priority: High

Target audience: Public, elected officials

Key message: The newsletters and annual report provide information on specific GLRC activities/events related to the six minimum measures. It also provides information related to relevant partner events and activities. It serves to educate municipal staff, elected officials, and the public.

Delivery mechanism: GLRC website, social media, and City of Grand Ledge website

Year and frequency of implementation: Ongoing, newsletters are completed quarterly, and the annual report is completed after the first of the calendar year.

Responsible party: GLRC Coordinator, City of Grand Ledge.

Evaluation: Website link traffic, number of newsletters/annual reports distributed at events, number of people reached through email.

(C) Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.

Activity: Maintain the GLRC and City of Grand Ledge to include information on illicit discharges and contacts for reporting illicit discharges and acts of pollution.

Corresponding topic area: A

Priority: High

Target audience: Public

Key message: To report illicit discharges (description provided), illegal dumping, etc.

Delivery mechanism: GLRC website and social media, City of Grand Ledge website

Year and frequency of implementation: Continuous posting on GLRC website and social media and City of Grand Ledge website. As needed, the PEP committee will explore different delivery methods (language, etc.) to make this more relatable to the public.

Responsible party: GLRC Coordinator, PEP Committee, City of Grand Ledge

Evaluation: Website link traffic and social media analytics

(D) Promote preferred cleaning materials and procedures for car, pavement, and power washing.

Activity: Series of posters and brochures covering: car washing, pet waste, motor oil and fertilizer reduction.

Corresponding topic area(s): A, B, F, G

Priority: Medium

Target audience: Public

Key message: Posters and brochures describe the impact that bad practices related to car washing, pet waste disposal, motor oil disposal and fertilizer application can have on water quality. They also provide alternatives or best management practices for each of the four topics.

Delivery mechanism: Posters and brochures are available in community lobbies, brochures are handed out at public events, etc. Similar information is posted to the GLRC website, GLRC social media, and the City of Grand Ledge website.

Year and frequency of implementation: Continuous use at public events (Adopt A River, Quiet Water Symposium, MWEA Watershed Summit, annually at the City of Grand Ledge Color Cruise and Island Festival, and on website/social media, etc., update as appropriate.

Responsible party: GLRC Coordinator, PEP Committee and City of Grand Ledge.

Evaluation: Number of brochures provided throughout the year, website link traffic, and social media analytics

(E) Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.

See corresponding topic area G below.

(F) Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.

Activity: Promote existing materials related to grass clippings and leaf litter.

Corresponding topic area(s): A

Priority: Medium

Target audience: Public, small businesses

Key message: Use the best management practices for management of grass clippings and leaf litter.

Delivery mechanism: Promoted through the GLRC educational display. Posted to GLRC social media and website.

Year and frequency of implementation: 2013, continuous

Responsible party: GLRC Coordinator and City of Grand Ledge.

Evaluation: Number of flyers/brochures handed out, website link traffic, social media analytics

Activity: Continue to maintain pet waste reduction watershed signage at parks or designated dog areas and post pet waste reduction information on social media and website

Corresponding topic area(s): A, D

Priority: Medium

Target audience: Public

Key message: Promoting pet waste reduction for watershed protection, connecting the public to their surrounding environment.

Delivery mechanism: Passing vehicles, people biking, walking or running, and pet owners will view the signs. Website and social media

Year and frequency of implementation: The signs will be maintained indefinitely with help from the local Road Commissions. Pet waste information will be present on mywatersheds.org indefinitely, with at least two GLRC social media posts per year. The City of Grand Ledge will perform monthly reviews of their signage and pet waste bags.

Responsible party: GLRC Coordinator and the City of Grand Ledge.

Evaluation: Signs posted, maintenance activities, website traffic, social media analytics



(G) Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous waste, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.

Activity: Promote local Household Hazardous Waste Collection and Recycling Events. City of Grand Ledge has a Recycling Center for yard waste only available to the City of Grand Ledge Residents.

Corresponding topic area(s): D, E

Priority: Medium

Target audience: Public, small businesses

Key message: Pollution prevention by using available resources for appropriate disposal of waste.

Delivery mechanism: GLRC website, GLRC social media, City of Grand Ledge website.

Year and frequency of implementation: Continuous, updates as necessary and as events are scheduled.

Responsible party: GLRC coordinator and City of Grand Ledge

Evaluation: Website link traffic, social media analytics

(H) Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.

Activity: Promote information on proper septic system care.

Corresponding topic area: A

Priority: Low

Target audience: Public

Key message: Maintain your septic system; it could be contaminating local water bodies through stormwater runoff.

Delivery mechanism: GLRC website and social media and the City of Grand Ledge website.

Year and frequency of implementation: Continuous

Responsible party: GLRC coordinator and City of Grand Ledge.

Evaluation: Website link traffic, social media analytics, brochures handed out.

(I) Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.

Activity: Promote Green Infrastructure and Low Impact Development brochure, update as appropriate.

Corresponding topic area: A

Priority: High

Target audience: Public, elected officials, small businesses

Key message: Promote the use of LID and Green Infrastructure (GI) as a tool for reducing polluted runoff from developments and homes. The brochure explains what LID and GI are and provides examples and resources (links).

Delivery mechanism: GLRC website, GLRC social media, use with GLRC educational display, lobbies, City of Grand Ledge Hall and website.

Year and frequency of implementation: Continuous, will use at events (Adopt A River, Quiet Water Symposium and MWEQ Watershed Summit, and annually at the City of Grand Ledge Color Cruise and Island Festival, and update as appropriate.

Responsible party: GLRC Coordinator and City of Grand Ledge.

Evaluation: Number of brochures handed out, website traffic, social media analytics

Activity: GLRC local Green Infrastructure projects webpage

Corresponding topic area: A

Priority: High

Target audience: Public, small businesses

Key message: The webpage highlights various local LID and GI projects in the region to help encourage others to pursue projects in their own neighborhood or community.

Delivery mechanism: GLRC website and social media, City of Grand Ledge website and social media

Year and frequency of implementation: Continuous, will update as needed, initial revision July 2013.

Responsible party: GLRC Coordinator

Evaluation: Website link traffic.

Activity: Green Infrastructure educational programming

Corresponding topic area: A

Priority: High

Target audience: GLRC members, elected officials, public

Key message: Educate public, members, and elected officials on several different best management practices (examples include: snow management, Green Infrastructure project highlights, Green Infrastructure monitoring results, pervious pathways and tree preservation techniques, etc.)

Delivery mechanism: GLRC website, social media, newsletter distribution, presentations

Year and frequency of implementation: Continuous presence of GI information on website and social media, GLRC to host two GI presentations per permit cycle.

Responsible party: GLRC Coordinator, PEP Committee

Evaluation: Number of people reached by email, website traffic, and social media analytics. Attendance at programs.

Activity: Promote Greening Mid-Michigan (GMM) Project (regional GI vision) videos

Corresponding topic area: A

Priority: High

Target audience: Public

Key message: A 27-minute video was produced with WKAR, promoting Green Infrastructure techniques and demonstrating how they lead to improved land use, water resource management, etc. The GLRC also received 3-4 shorter sound bites specifically related to stormwater management.

Delivery mechanism: GLRC website, GLRC social media, video distribution.

Year and frequency of implementation: Video development occurred in 2013-2014. GLRC has and continues to post video segments to website, social media.

Responsible party: GLRC Coordinator

Evaluation: Number of video views, website traffic, social media analytics

(J) Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.

Activity: Educate business community on MS4 and pollution prevention. Will outreach to entities such as car wash facilities, lawn care companies, food establishments, and industrial and institutional entities to share information on how these operations can impact the MS4 or to partner with them in educating their customers.

Corresponding topic area(s): A

Priority: Medium

Target audience: Businesses, industries, institutions

Key message: Improve stormwater management to reduce pollution.

Delivery mechanism: Sharing educational materials with businesses, presentations to business groups, and/or utilizing business publications.

Year and frequency of implementation: The GLRC Coordinator will outreach to local businesses twice per permit cycle.

Responsible party: PEP Committee, GLRC Coordinator

Evaluation: Number of connections made with local businesses, etc.