Greater Lansing Regional Committee for Stormwater Management

Public Education Plan

January 21, 2013





City of Dewitt, Michigan



TABLE OF CONTENTS

۹.	PUE	PUBLIC PARTICIPATION PROCEDURE - GLRC WEBSITE 1		
В.	PRIORITIZATION AND EVALUATION PROCEDURES		2	
C.	REC	QUIRED TOPIC AREAS	4	
Э.	PUBLIC EDUCATION PLAN IMPLEMENTATION			
	(A)	Promote public responsibility and stewardship in the applicant's watershed(s)	5	
	(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	10	
	(C)	Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4	11	
	(D)	Promote preferred cleaning materials and procedures for car, pavement, and power washing	12	
	(E)	Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers	13	
	(F)	Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4	13	
	(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.	14	
	(H)	Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.	15	
	(l)	Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.	15	
	(J)	Promote methods for managing riparian lands to protect water quality.	18	
	(K)	Identify and educate commercial, industrial, and institutional	18	

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 (2013-2017).

The original PEP was completed in 2003, updated in 2006 and 2010; this current version of the PEP will be submitted to the Michigan Department of Environmental Quality (MDEQ) on January 21, 2013. The PEP was written for all GLRC members, 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 Charter Township
City of Grand Ledge	Lansing Public Schools
City of Lansing	Clinton County
City of Mason	Eaton County
Delhi Charter Township	Ingham County
Delta Charter Township	Michigan State University
DeWitt Charter Township	

Associate GLRC members include: Windsor Charter Township and Oneida Charter Township.

A. PUBLIC PARTICIPATION PROCEDURE – GLRC WEBSITE/SOCIAL MEDIA

As required, the Stormwater Management Plan (SWMP) will be made available to the public via the City of Dewitt website (http://www.dewittmi.org/). 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 also be accomplished through the City of Dewitt website and the GLRC

website. When the progress reports are submitted to MDEQ, they will be posted on the GLRC and the City of Dewitt 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 of the GLRC documents (template manuals, progress reports, implementation materials, brochures, etc.) are available on the GLRC website. 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. The GLRC will continue to utilize social media as a communication and outreach tool.

B. PRIORITIZATION AND EVALUATION 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: <u>Greater Lansing Regional Water Quality Survey</u>
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 current 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. 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 measureable 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 (i.e. Greening Mid-Michigan). High priority topics areas: B. Inform and educate the public about the connection of the MS4 to area water bodies 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 measureable goals achieved during the regular Progress Report submissions.

The 2012 survey results can be found here: <u>Greater Lansing Regional Water Quality Survey</u> Findings Report 2012 (with comparison data)

The GLRC PEP Committee will explore avenues for a follow up survey to be completed when approaching the end of the permit cycle. The survey will be used to evaluate successes, challenges and to determine the overall effectiveness of the PEP. During the Progress Report submittal, general evaluation and effectiveness will be discussed and changes could be made based on initial results, adaptive management is an important part of public education.

The GLRC is also working with several partners in the larger surrounding area to accomplish a variety of public education efforts. The Middle Grand River Organization of Watersheds (MGROW) is developing 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 will work with MGROW and the 319 groups to develop consistent, meaningful public education messages and delivery mechanisms that will benefit the entire region. This effort will 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 eleven 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 water bodies 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.

(l) Educate the public on, and promote the benefits of, green infrastructure and Low

Impact Development.

(J) Promote methods for managing riparian lands to protect water quality.

(K) 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 eleven topic areas A - K for compliance. The

GLRC action plan, as part of the City of Dewitt's SWMP details the activities below and includes

a schedule and general evaluation mechanisms.

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

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

Corresponding topic area:

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.

Responsible party: City of Dewitt

Evaluation: 97 signs have been posted in the watersheds, traffic counts can be used to determine the number of public exposed to the signage.



Activity: Use "Do you know your watershed?" brochure and update as appropriate.

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, posted in community lobbies.

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.

Responsible party: PEP Committee and the City of Dewitt.

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

Activity: Support and promote Mid-Michigan Environmental Action Council (Mid-MEAC) in their volunteer stream monitoring efforts.

Corresponding topic area(s): C, J

Priority: Medium

Target audience: Public – recruiting volunteers for action.

Key message: 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: Direct communication with volunteers, recruitment through events (when using the educational display, GLRC website and social media postings.

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

Responsible party: GLRC Coordinator

Evaluation: Number of volunteers participating in the collections and identification of macroinvertebrates.

Activity: GLRC Educational Display

Corresponding topic area(s): B, C, D, E, F, G, H, I, J, K (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 and the Michigan Water Environment Association Watershed Summit.

Year and frequency of implementation: Continuous use at annual events. Panels will be updated in 2014 to relate more specifically to the minimum control measures and target audiences.

Responsible party: GLRC Coordinator, PEP Committee and the City of Dewitt.

Evaluation: Number of events and potential foot traffic, general conversations with the public. Review website traffic after an event to see if correspondents visited the website.



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

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

Priority: Medium

Target audience: Public

Key message: The current tag line reads "It all ends up in the Grand River," 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: The 2013 billboard posting will direct viewers to the website. Other media will also be used with the graphic to direct people to the website.

Year and frequency of implementation: 2013 billboard posting for the months of March and April. The graphic will be updated in 2014.

Responsible party: PEP Committee

Evaluation: Website link traffic.



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, K (all)

Priority: Medium

Target audience: Public, elected officials

Key message: Articles cover the following topics:

What is a watershed	Pet Waste
Riparian Areas	Storm Vs. Sanitary Sewer
Who/What is the GLRC	Car Washing Article
Onsite Septic System	Adopt Your Catch Basin
Fertilizer	Illicit Discharge
Vehicle Maintenance	Wetlands

Delivery mechanism: Articles (including a posting timeline) are posted on the GLRC website, community websites and newspapers.

Year and frequency of implementation: Continue to maintain articles on the GLRC website. Update/reformatting is scheduled for 2014. News articles will be posted monthly through social media throughout the permit cycle. The City of Dewitt will continue to maintain direct links on the City website to these articles and updates distributed by the GLRC.

Responsible party: GLRC Coordinator, PEP Committee and the City of Dewitt

Evaluation: Number of articles posted, including the number of residents receiving the publication from the Watershed Management section of the City of Dewitt website. The GLRC Coordinator can track website link traffic.

Activity: Children's Water Festival participation

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

Priority: Medium

Target audience: Elementary students, teachers and parents

Key message: Water resource awareness, pollution prevention, source water

protection, water conservation, infiltration, etc.

Delivery mechanism: Direct communication with teachers (mail, phone, etc.)

Year and frequency of implementation: This is anticipated to be an annual event as is has been in the past.

Responsible party: GLRC Coordinator (aka water festival coordinator), Dewitt School District (on behalf of the City of Dewitt) as a presenter to the public.

Evaluation: Number of participants including students, teachers, presenters, etc.

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

Activity: GLRC webpage titled "My Watershed"

Corresponding topic area: A

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

Year and frequency of implementation: Continuous posting on the website, update

as appropriate.

Responsible party: GLRC Coordinator

Evaluation: Website link traffic.

Activity: GLRC quarterly newsletters and annual report

Corresponding topic area(s): A, C, D, E, F, G, H, I, J, K (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 also the public.

Delivery mechanism: GLRC website, social media, community lobbies, email distribution

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, and the City of Dewitt.

Evaluation: Website link traffic, 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 website for community and the state website and pollution reporting phone numbers for illicit discharges and acts of pollution. The GLRC will explore different delivery methods (language, etc.) to make this more relatable to the public. The City of Dewitt encourages the public to contact local authorities to report illicit discharges and acts of pollution. The Clinton County "Reverse 9-1-1" Emergency Notification System can be utilized for reporting illicit discharges and acts of pollution. Both contact information and reporting measures will be provided on the City public website.

Corresponding topic area:

Priority: High

Target audience: Public

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

Delivery mechanism: GLRC website and social media, the City of Dewitt website

Year and frequency of implementation: Continuous posting on the website, social

media.

Responsible party: GLRC Coordinator, PEP Committee, and the City of Dewitt

Evaluation: Website link traffic.

(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: The 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. In addition, they are also posted to the GLRC website and social media. The public can also refer to the City of Dewitt Watershed Management webpage for the GLRC brochures.

Year and frequency of implementation: Continuous use at public events (Adopt A River, Quiet Water Symposium, MWEA Watershed Summit), etc., update as appropriate.

Responsible party: GLRC Coordinator, PEP Committee and the City of Dewitt.

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

(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, K

Priority: Medium

Target audience: Public, small businesses

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

Delivery mechanism: Website and social media postings, promoted through the GLRC educational display.

Year and frequency of implementation: 2013, continuous

Responsible party: GLRC Coordinator and the City of Dewitt.

Evaluation: Number of flyers/brochures handed out and website link traffic.

Activity: Continue to maintain pet waste reduction watershed signage at parks or designated dog areas.

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.

Year and frequency of implementation: The signs will be maintained indefinitely with help from the local Road Commissions.

Responsible party: The City of Dewitt

Evaluation: 84 signs have been posted in the watersheds.



(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

Corresponding topic area(s): D, E,

Priority:

Target audience: Public, small businesses

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

Delivery mechanism: GLRC website, social media, and the City of Dewitt website.

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

Responsible party: GLRC coordinator and the City of Dewitt.

Evaluation: Website traffic linked.

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

Activity: Promote and post local Point of Sale/Time of Sale septic/well inspection ordinances in Eaton and Ingham Counties. In addition, partner with local 319 groups addressing existing *E.coli* TMDL, post materials developed, explore educational opportunities, etc.

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, social media, the City of Dewitt website.

Year and frequency of implementation: Continuous

Responsible party: GLRC coordinator and the City of Dewitt.

Evaluation: Website traffic linked.

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

Activity: Low Impact Development (LID) 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 development sites. The brochure explains what LID and GI are and provides examples and resources (links).

Delivery mechanism: GLRC website, social media, use with GLRC educational display, lobbies, etc. The public can also refer to the City of Dewitt website for links to LID GLRC brochures.

Year and frequency of implementation: Continuous, will use at events (Adopt A River, Quiet Water Symposium and MWEQ Watershed Summit) and update as appropriate.

Responsible party: GLRC Coordinator and the City of Dewitt.

Evaluation: Number of brochures handed out and website traffic linked.

Activity: GLRC LID local projects webpage

Corresponding topic area: A

Priority: High

Target audience: Public, small businesses

Key message: The webpage promotes local LID and GI projects in the region to help encourage others to pursue projects in their own neighborhood or community. Promotes Networked Neighborhood for Eco-Conservation Online (NECO) (LID map and sharing system).

Delivery mechanism: GLRC website and social media

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

Responsible party: GLRC Coordinator

Evaluation: Website traffic linked.

Activity: LID Presentation Series

Corresponding topic area: A

Priority: High

Target audience: GLRC members, elected officials, public

Key message: Educate participants on several different best management practices (examples include: snow management, LID project highlights, LID monitoring results, pervious pathways and tree preservation techniques, etc.) Several topics are explored based on interest from the GLRC.

Delivery mechanism: Email distribution, GLRC website, social media

Year and frequency of implementation: Continuous, complete 5 presentations in the permit cycle.

Responsible party: GLRC Coordinator, Ordinance/BMP Committee

Evaluation: Number of participants at each presentation.

Activity: Participate in the Greening Mid-Michigan (GMM) Project (regional GI vision)/Video Development

Corresponding topic area: A

Priority: High

Target audience: Public

Key message: The 27-minute video will be produced with WKRA and shot by Scott Allman will promote GI techniques, demonstrating how they lead to improved land use, water resource management, etc. The GLRC will also receive 3-4 shorter sound bites specifically related to stormwater management.

Delivery mechanism: GLRC website, social media, video distribution (including schools), WKAR local TV, municipal TV, and the City of Dewitt website.

Year and frequency of implementation: 2013-2014

Responsible party: GLRC Coordinator represents the GLRC at all GMM meetings.

Evaluation: Number of video views, website traffic.

(J) Promote methods for managing riparian lands to protect water quality.

Activity: Riparian buffer brochure developed, other resources posted to the GLRC

website

Corresponding topic area: A

Priority: Medium

Target audience: Riparian landowners

Key message: The brochure provides general information about native riparian buffers and why they are important for water quality and habitat.

Delivery mechanism: GLRC website, social media, use with educational display, lobbies, etc. The City of Dewitt public website currently links to the GLRC Riparian buffer brochure for current riparian land owners.

Year and frequency of implementation: Continuous, will use at events.

Responsible party: GLRC Coordinator and the City of Dewitt.

Evaluation: Number of brochures provided at events, website traffic linked.

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

Activity: Explore opportunities to connect with local business regarding pollution prevention through stormwater runoff. This may include business publications, presentation to associations, focus groups, etc.

Corresponding topic area(s): A

Priority: Medium

Target audience: Businesses, industries, institutions

Key message: Improve stormwater management to reduce pollution.

Delivery mechanism: Will explore through the committee

Year and frequency of implementation: Long term

Responsible party: PEP Committee

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