

**Public Education Plan
for the
MS4 Communities
in the
Lower Grand River Watershed**

JULY 2020

**PUBLIC EDUCATION PLAN
FOR THE
MS4 COMMUNITIES
IN THE
LOWER GRAND RIVER WATERSHED**

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TABLE OF CONTENTS

INTRODUCTION	4
PEP OVERVIEW	5
GOALS AND OBJECTIVES	5
PEP STRATEGY	7
TARGET AUDIENCES	8
DEVELOPING MESSAGES	8
DELIVERY MECHANISMS.....	9
EVALUATION METHODS.....	9
SCHEDULE OF IMPLEMENTATION	10
SUMMARY	23
REFERENCES	24

LIST OF TABLES

Table 1. Public Education Plan Strategy.....	11
Table 2. Public Education Plan Delivery Mechanism Descriptions	15
Table 3. Public Education Plan Evaluation Measures	18

LIST OF ABBREVIATIONS/ACRONYMS

BMP	Best Management Practice
DPW	Department of Public Works
EGLE	Michigan Department of Environment, Great Lakes, and Energy (previously MDEQ)
HHW	Household Hazardous Waste
I&E	Information and Education
LGROW	Lower Grand River Organization of Watersheds
LGRW	Lower Grand River Watershed
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PEP	Public Education Plan
PEC	Public Engagement Committee
USEPA	U.S. Environmental Protection Agency

INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Stormwater Regulations in Michigan allowed compliance through a regional watershed-based initiative through 2008. Communities in the Lower Grand River Watershed (LGRW) have worked well together to comply with stormwater regulations since 2003 and will continue to implement the Public Education Plans (PEP) of their new individual permits in a collaborative manner. This PEP takes advantage of the existing collaborative watershed structure by combining available resources in the LGRW to contact a larger area regarding watershed education in a more consistent way. This PEP was created for the participating communities in Kent, Ottawa, and Muskegon Counties and is intended to educate the public on ways they can reduce stormwater pollution. Outreach activities will reach diverse audiences with a variety of viewpoints and concerns. Successful implementation of the PEP to date has formed partnerships with agencies and organizations that have existing programs and use educational materials and strategies familiar and relevant to the area residents.

The unique purpose of the public education portion of the NPDES MS4 Stormwater Regulations is to increase the awareness of watershed residents that their everyday activities can contribute pollutants to, or lead to improvement of, their community's water resources. Most citizens recognize the recreational and aesthetic benefits they receive from water and most even recognize that water quality degradation is a serious concern in the Great Lakes Region. Many people, however, have not made the connection that significant pollution is generated from their normal everyday actions and not simply from large commercial and industrial sources.

The advantage of the regional watershed-based initiative is the cooperation and resource sharing developing between the participating communities. Implementing a successful PEP takes funding and preparation time that one community may find difficult to do alone. Coordination between many communities in the watershed allows these resources to be shared, and a larger audience can be reached at a lesser cost per contributing community. The overall aim is to encourage pollution prevention by coordinating a regional effort. This collaboration will reduce duplication of efforts in neighboring communities and decrease the cost of developing individual PEPs.

PEP OVERVIEW

The Lower Grand River Organization of Watersheds (LGROW) was formed around 2009 in order to facilitate community involvement in the MS4 and watershed management processes. The PEP was updated in 2019 by the LGROW Public Engagement Committee (PEC) and Grand Valley Metropolitan Council (GVMC) staff to reflect current operations and timelines. At the time of update in 2019, permit applications for Lower Grand MS4 communities were submitted, and new permits were in the process of being issued.

The PEC helps streamline the work that GVMC does throughout the LGRW, both in stormwater and general watershed outreach. The committee also ensures that PEP implementation is coordinated with the Information and Education (I&E) strategy of the Lower Grand River Watershed Management Plan (FTC&H, 2011) whenever possible to share resources, convey similar messages, and encourage the reduction of nonpoint source watershed pollution. The committee also assists in coordinating with other current programs and projects in the LGRW involving public stewardship of water resources. Input from the public will ensure the participating communities will make environmental decisions with an understanding of the interest and concerns of affected people and entities. This type of cooperation between those making the decisions and those affected by the decisions is more effective in bringing about an effective change in public behavior. The PEC participants continue to meet regularly to guide the implementation of the PEP and to plan, discuss, and review the implementation of education activities to reduce stormwater pollution.

GOALS AND OBJECTIVES

Education, awareness, and calls to action are needed to increase stewardship and responsibility in the watershed and overall improvements in water quality. Greater awareness and pride in local natural resources at the grass roots level can help create a bottom up policy change, and more understanding of the relationships between stormwater pollution and local problems can result in a public motivation for change. When this awareness is combined with specific calls to actions, it is more likely that awareness will lead to actual stewardship activities. The following goals and objectives will direct the implementation of the PEP and produce additional public support for stormwater regulations.

GOALS

1. To promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable.
2. To encourage prevention of pollution over treatment of pollution.

OBJECTIVES

To meet the stormwater education goals, enough education activities will be implemented to ensure target audiences are reached with the eleven messages outlined in the MS4 permits.

These required messages include:

1. Promote public responsibility and stewardship in the watershed.
2. 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.
3. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
4. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
5. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
6. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.
7. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
8. Inform and educate the public on proper septic system care and maintenance, and how to recognize septic system failure.
9. Inform and educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.
10. Promote methods for managing riparian lands to protect water quality.
11. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to storm water runoff.

The PEC chose to combine messages with similar information to create six overall stormwater education categories:

1. **Personal watershed stewardship:** Education of the public about their responsibility and stewardship in their watershed.
2. **Ultimate stormwater discharge location and potential impacts:** Education of the public on the location of residential separate stormwater drainage system catch basins, the waters of the state where the system discharges, and potential impacts from pollutants from the separate stormwater drainage system.
3. **Public reporting of illicit discharges:** Encouragement of public reporting of the presence of illicit discharges or improper disposal of materials into the MS4,
4. **Septic system management:** Inform and educate the public on proper septic system care and maintenance and how to recognize system failure.
5. **Personal actions that can impact the watershed:** Education of the public on the need to minimize the amount of residential, or non-commercial, wastes washed into nearby catch basins, including: preferred cleaning materials and procedures for car, pavement, or power washing; the acceptable application and disposal of pesticides and fertilizers; and the effects caused by grass clippings, leaf litter, and animal wastes that get flushed into the waterway. Education of the public on and promotion of the benefits of green infrastructure and Low Impact Development (LID). Promotion of methods for managing riparian lands to protect water quality.
6. **Waste management assistance:** Education of the public on the availability, location, and requirements of facilities for disposal or drop-off of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.

PEP STRATEGY

The PEP strategy begins by identifying specific key messages for each stormwater education category that need to be communicated to the public. From there, GVMC staff and the PEC identified target audiences, appropriate delivery mechanisms, and evaluation measures.

- **Target Audiences:** Key stakeholder groups contributing, or with the potential to

contribute, to stormwater pollution.

- **Key Messages:** Messages to raise awareness, educate, or inspire action as related to each stormwater education category.
- **Delivery Mechanisms:** Activities to promote, publicize, and facilitate education to reduce and prevent stormwater pollution.
- **Evaluation Measures:** Methods to assess the progress of education efforts at meeting the identified goals and objectives.

The complete PEP strategy (as outlined in Table 1) is organized by the six stormwater education categories identified above: 1) Personal watershed stewardship, 2) Ultimate stormwater discharge location and potential impacts, 3) Public reporting of illicit discharges, 4) Septic system management 5) Personal actions that can impact the watershed, and 6) Waste management assistance. Target audiences, key messages, delivery methods, and evaluation measures were identified for each category by GVMC staff and the PEC.

TARGET AUDIENCES

The target audiences are groups that affect or are affected by stormwater quality in their everyday actions. The target audiences identified in this PEP are the public and those key stakeholder groups contributing to, or potentially contributing to, stormwater pollution. Table 1 lists the high-priority target audiences for each public education category. Target audiences not listed within a certain category are considered to be a lower priority but can be reached indirectly through the identified actions.

DEVELOPING MESSAGES

People are more likely to change their habits if they know their everyday behaviors are causing stormwater pollution *and* if they are given a clear path to follow to improve their practices. However, most people will not respond to changing a behavior that is being criticized. Therefore, all messages delivered to target audiences emphasize personal empowerment, build on existing concerns, and are not accusations. To achieve maximum effectiveness, this outreach campaign intends to provide consistent verbal and visual cues to the targeted audiences. Messages relayed to the target audiences will be concise to retain the attention of the readers or listeners. Messages will build on previous efforts allowing the plan to evolve to include information that is more detailed and still be identifiable to the recipient.

DELIVERY MECHANISMS

Delivery mechanisms will relay stormwater messages to the target audiences. While some mechanisms from previous PEPs were recommended for elimination or reduction (i.e., radio public service announcement), others were considered successful and will be continued over the next five years (e.g., using community's webpages, storm drain markers). New delivery mechanisms were also identified, including social media networks, watershed and green infrastructure tours, and additional watershed/green infrastructure signage.

Table 1 identifies the key messages, delivery mechanisms, and target audiences to promote, publicize, and facilitate education to reduce and prevent stormwater pollution. Delivery mechanisms are listed by title in Table 1. A more detailed description of what that delivery mechanism entails, including examples, is found in Table 2. Table 3 identifies evaluation measures for each delivery mechanism.

EVALUATION METHODS

Evaluation measures are necessary to determine the level of permit compliance and program effectiveness. The PEC recommended new evaluation measures in the 2020 PEP to evaluate the activities outlined in the updated PEP strategy. The goal of the PEP evaluation is to assess both the outputs (activities) that occur through the PEP and outcomes (behavior changes that could impact water quality) from the PEP and related activities. Many of the PEP activities, such as tabling at community events or installing signage at community locations, are best understood through outputs, as it is unlikely to see any measurable behavior change through these activities. To assess changes in behavior that could impact the watershed, outcomes will be evaluated whenever possible, particularly within specific programs such as Adopt a Drain, Stream Cleanups, Grand River Rainscaping participation, and septic system repairs. Both the outputs and outcomes to be evaluated are included and identified in Table 3 below.

In order to measure the outputs and outcomes, permittees will complete an annual PEP questionnaire based on the Evaluation Table (Table 3). Pre/post surveys will be used at workshops and presentations when possible, and online surveys of the general population's

awareness of and attitudes toward watershed issues will occur once per permit cycle. Feedback from PEC members on how the PEP is being implemented in their communities will also be collected at committee meetings.

SCHEDULE OF IMPLEMENTATION

The PEP builds on the successes of past work and lays out a clear plan for continuing to raise awareness, improve education, and inspire action. This PEP focuses especially on concrete actions and programs in which target audiences can participate that will reflect actual behavioral change, not just knowledge or awareness improvement.

All activities outlined in the PEP will be completed at least once per permit cycle. Each year, the PEC will set annual activity goals based on the previous year's progress in order to ensure all activities are completed within the permit cycle.

Table 1. Public Education Plan Strategy

This table includes the major Public Education Categories as well as the Key Messages and Target Audiences for those categories. Delivery Mechanisms are listed here by title. For a detailed explanation of how these Delivery Mechanisms will be implemented, see Table 2. For an explanation of how success will be evaluated, see Table 3.

Public Education Category	Key Messages	High-Priority Target Audiences	Delivery Mechanism Title
<p>1. Personal watershed stewardship: Education about responsibility and stewardship.</p>	<ul style="list-style-type: none"> • A watershed is an area of land draining to a common waterbody. You live in the LGRW. Your actions can impact the watershed. • Learn more about the LGRW by visiting www.lgrow.org • There are many reasons for protecting the watershed. • Individuals can affect the watershed through their activities. 	<ul style="list-style-type: none"> • Watershed Residents • Riparian Land Owners • Subwatershed groups • Schools 	<ul style="list-style-type: none"> • Website • Newsletters • Social Media • Events • Printed or Electronic Materials • Giveaway Items • Educational Signage • Cleanup Efforts • Grand River Rainscaping Program • Outreach to Lake and River Associations • Presentations in Schools
<p>2. Ultimate stormwater discharge locations and potential impacts: Education on the location of residential stormwater catch basins, where the system discharges, and impacts from pollutants</p>	<ul style="list-style-type: none"> • Storm drains connect to your local lakes and streams, not a wastewater treatment plant. • Polluted stormwater negatively impacts water quality. • Prevent pollution from entering your storm drains and protect the health of your family, your community, and the Grand River. 	<ul style="list-style-type: none"> • Schools • Watershed Residents • Subwatershed groups • Neighborhood Associations • Commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff (commercial car washes, landscaping companies, snowplow companies, power washing & paving companies, commercial cleaners, school facilities staff, pool companies, home builders associations, realtors) 	<ul style="list-style-type: none"> • Website • Newsletters • Social Media • Printed or Electronic Materials • Giveaway Items • Presentations in Schools • Storm Drain Marking • Adopt a Drain Grand River Program • Outreach to Lake and River Associations • Events • Outreach to Commercial, Industrial, & Institutional Entities likely to contribute pollutants to stormwater runoff

Public Education Category	Key Messages	High-Priority Target Audiences	Delivery Mechanism Title
<p>3. Public reporting of illicit discharges: Encourage public reporting of the presence of illicit discharges or improper disposal into the stormwater system</p>	<ul style="list-style-type: none"> • An illicit discharge is anything that enters the storm sewer system other than stormwater. • Chemicals, oil, detergents, or yard waste should never be dumped into storm drains. • Illicit discharges reduce water quality in local lakes, rivers, and streams. • Illicit discharges should be reported to your local community for inspection and cleanup. 	<ul style="list-style-type: none"> • Watershed Residents • Subwatershed groups • Neighborhood Associations • Schools • Anglers • Business Owners • Boaters • Campers • School custodians 	<ul style="list-style-type: none"> • Website • Newsletters • Social media • Events • Printed or Electronic Materials • Outreach to Residents Regarding Home Car Washes • Giveaway Items • Cleanup Efforts • Outreach to Lake and River Associations • Presentations in Schools • Storm Drain Marking • Adopt a Drain Grand River Program • Outreach to Commercial, Industrial, & Institutional Entities likely to contribute pollutants to stormwater runoff • Outreach on How to Report Illicit Discharges • Educational Signage
<p>4. Septic system management: Inform and educate the public on proper septic system care and maintenance and how to recognize system failure.</p>	<ul style="list-style-type: none"> • Septic systems need regular care and maintenance to function properly. • There are ways you can determine if your septic system is beginning to fail. • Failing septic systems can cause local waterways to become contaminated with bacteria, pathogens, and excess nutrients. • Contact the local Health Department for assistance with septic system repair. 	<ul style="list-style-type: none"> • Watershed Residents with Septic Systems • Municipalities with Septic Systems • Subwatershed groups • Real estate agents 	<ul style="list-style-type: none"> • Website • Newsletters • Social media • Events • Printed or Electronic Materials • Giveaway Items • EPA Septic Smart Program • Outreach to Lake and River Associations • Outreach to Commercial, Industrial, & Institutional Entities likely to contribute pollutants to stormwater runoff

Public Education Category	Key Messages	High-Priority Target Audiences	Delivery Mechanism Title
<p>5. Personal actions that can impact the watershed: Education on the need to minimize the amount of residential or non-commercial wastes washed into storm sewer system. Education on and promotion of the benefits of green infrastructure and Low Impact Development (LID) and the management of riparian lands to protect water quality.</p>	<ul style="list-style-type: none"> • Keep wash water from car, pavement, and power washing out of storm drains. • Practice watershed-friendly cleaning practices, including the use of phosphate free and biodegradable products. • Dispose of grass clippings, leaf litter, and animal waste properly and not in storm drains. • Use deicers sparingly to avoid excess material from entering storm drains. • Plant native vegetation on residential properties as an alternative to turf grass. • Residential wastes can cause pollution in local waterways • Low Impact Development (LID) techniques and green infrastructure can reduce water usage and improve water quality. 	<ul style="list-style-type: none"> • Schools • Watershed Residents • Nonprofit Groups • Subwatershed Groups • Commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff (e.g. commercial car washes, landscaping companies, snowplow companies, power washing and paving companies, commercial cleaners, school facilities staff, pool companies, and home builders association) • Pet Owners 	<ul style="list-style-type: none"> • Website • Newsletters • Social Media • Events • Printed or Electronic materials • Outreach to Residents Regarding Home Car Washes • LID/GI Workshops & Tours • Educational Signage (at Recreational Sites) • Grand River Rainscaping Program • Cleanup Efforts • Giveaway Items • Storm Drain Marking • Adopt a Drain Grand River Program • Promotion of Municipal HHW programs • Outreach to Lake and River Associations • Presentations in Schools • Outreach to Commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff • Outreach to Pet Owners
	<ul style="list-style-type: none"> • Riparian corridors and stream buffers are important for water quality. • Residential and commercial landscaping practices affect water quality. • Experts can help you stabilize shorelines and install BMPs like stream buffers, filter strips, conservation easements, and bioengineering techniques. 	<ul style="list-style-type: none"> • Watershed Residents • Riparian Land Owners • Subwatershed Groups • Businesses with riparian property • Schools with riparian property 	<ul style="list-style-type: none"> • Website • Newsletters • Social Media • Events • Printed or Electronic Materials • Giveaway Items • Grand River Rainscaping Program • LID/GI Workshops & Tours • Michigan Natural Shoreline Partnership • Educational Signage • Outreach to Lake and River Associations • Outreach to Commercial, Industrial, & Institutional Entities likely to contribute pollutants to stormwater runoff • Presentations in Schools

Public Education Category	Key Messages	High-Priority Target Audiences	Delivery Mechanism Title
<p>6. Waste management assistance: Education on proper disposal of household hazardous waste (HHW), travel trailer/boating sanitary washes, chemicals, motor vehicle fluids, and unused medications</p>	<ul style="list-style-type: none"> • HHW in the storm sewer system can reduce water quality. • There are alternatives to products that create HHW. • Protect your family's health by disposing of unwanted paints, solvents, and cleaners at your county collection center. • Recycle used oil and automotive fluids. • Dispose of HHW, travel trailer/boating sanitary wastes, chemicals, motor vehicle fluids, and unused medications at the proper facilities. 	<ul style="list-style-type: none"> • Watershed Residents • Subwatershed Groups • Neighborhood Associations • Schools • Waste Management Employees • Campers • Boaters 	<ul style="list-style-type: none"> • Website • Newsletters • Social Media • Events • Printed or Electronic Materials • Giveaway Items • Outreach to Lake and River Associations • Presentations in Schools • Promotion of Municipal HHW programs • Outreach to Commercial, Industrial, & Institutional Entities likely to contribute pollutants to stormwater runoff

Public Education Plan Categories

- | | |
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| 1 – Personal watershed stewardship | 4 – Septic System Management |
| 2 – Ultimate discharge locations and impacts | 5 – Personal actions that can impact the watershed |
| 3 – Public reporting of illicit discharges | 6 – Waste Management Assistance |

Table 2. Public Education Plan Delivery Mechanism Descriptions	
<p>This table gives a detailed explanation for how each Delivery Mechanism will be implemented and which Public Education Category each mechanism will be used to address. Public Education Categories, Key Messages and Target Audiences can be found in Table 1, where Delivery Mechanisms are listed only by title. For an explanation of when these mechanisms will be implemented and how success will be evaluated, see Table 3.</p>	
Mechanism Title Details & Examples	Categories Mechanism Applies To
<i>Social Media</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Advertise watershed related information and events on social media accounts. • Conduct contests or giveaways on the LGROW Facebook page. 	
<i>Website</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Update LGROW website regularly and provide information for municipalities to post on their websites. • Municipality websites link to LGROW website. 	
<i>Newsletters</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Include PEP-related content in quarterly LGROW newsletters. • Permittees include PEP-related content in community newsletters or news outlets. 	
<i>Events</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Attend community events to share PEP-related content to residents per the other areas of this plan. 	
<i>Educational Signage</i>	1, 3, 5
<ul style="list-style-type: none"> • Assess current presence of educational signage and need/prioritization for new signage relating to watershed awareness, illicit discharges, riparian lands, and personal actions at least once per permit cycle. • Post new educational signs in high priority locations as identified by each community. 	
<i>LID/GI Workshops & Tours</i>	5
<ul style="list-style-type: none"> • Offer green infrastructure tours to highlight successful projects in the watershed. • In partnership with municipalities, offer workshops on green infrastructure to watershed residents. 	
<i>Cleanup Efforts</i>	1, 3, 5
<ul style="list-style-type: none"> • Hold or support stream and storm drain cleanup events annually. 	

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Mechanism Title Details & Examples	Categories Mechanism Applies To
<i>Giveaway Items</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Provide giveaway items for municipalities to distribute aligned to PEP Categories. 	
<i>Storm Drain Marking</i>	2, 3, 5
<ul style="list-style-type: none"> • Host drain marking/stenciling events or provide materials to mark storm drains. 	
<i>Adopt a Drain Grand River Program</i>	2, 3, 5
<ul style="list-style-type: none"> • Encourage sign ups on LGROW and municipality social media accounts. • Promote program at storm drain marking events. 	
<i>Outreach to Commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff</i>	2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Distribute printed or electronic materials to commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff to promote best practice standards. Potential audiences: • Commercial car washes: Distribute information and materials on BMPs for car washing. • Landscaping companies: Distribute information and materials on BMPs for landscape management, including use of pesticides and herbicides, disposal of chemicals, and management of grass clippings and leaves. Promote participation in LGROW Rainscaping Contractor Training program. • Snowplow companies: Distribute information and materials on BMPs for residential de-ice use. • Power Washing & Paving companies: Distribute information and materials on BMPs for pavement and power washing. • Commercial Cleaners: Distribute information and materials on BMPs for preferred cleaning materials and practices and disposal of cleaning wastes. • School Facilities Staff: Distribute information and materials on BMPs for groups, operations, and custodial work. • Pool Companies: Distribute information and materials on BMPs for chemical use and residential pool draining. • Home Builders Association: Distribute information and materials on BMPs for soil erosion and waste disposal. • Realtors: Distribute information and materials on BMPs for septic system maintenance. 	

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Mechanism Title Details & Examples	Categories Mechanism Applies To
<i>Presentations in Schools</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Provide ongoing presentations to schools on PEP topics as requested. • Distribute packet of curriculum and activities for watershed education to schools. 	
<i>Outreach on How to Report Illicit Discharges</i>	3
<ul style="list-style-type: none"> • Ensure municipality and LGROW websites have up to date information on how to report illicit discharges (Maintain LGROW Reporting page). • Distribute information on what illicit discharges are and how to report them via social media and newsletters. 	
<i>EPA Septic Smart Program</i>	4
<ul style="list-style-type: none"> • Distribute Septic Smart program materials to real estate agents and at community events. • Distribute Septic Smart homeowner materials on the costs and potential dangers of improper septic maintenance to watershed residents and Subwatershed groups. • Participate in the EPA SepticSmart Week program annually. 	
<i>Promotion of Municipal HHW Programs</i>	5, 6
<ul style="list-style-type: none"> • Increase awareness of disposal sites in the watershed and events via social media and newsletters. • Provide information and materials on proper disposal of HHW to residents at municipal drop-off events. 	
<i>Printed or Electronic Materials</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Distribute printed or electronic materials to educate watershed residents and businesses regarding watershed stewardship per the other areas of this plan. 	
<i>Outreach to Residents Regarding Home Car Washes</i>	3, 5
<ul style="list-style-type: none"> • Distribute social media or electronic materials about the harm of washing your car in the street or where it can drain into a storm drain. 	
<i>Grand River Rainscaping Program</i>	1, 5
<ul style="list-style-type: none"> • Perform site assessments and make recommendations for LID and green infrastructure practices on residential properties through the Rainscaping program. 	

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Mechanism Title Details & Examples	Categories Mechanism Applies To
<i>Outreach to Pet Owners</i>	5
<ul style="list-style-type: none"> • Provide pet waste bags as giveaway to promote proper disposal of pet waste. • Provide education through printed and/or electronic materials regarding the hazards of pet waste that is not disposed of properly. 	
<i>Michigan Natural Shoreline Partnership</i>	5
<ul style="list-style-type: none"> • Promote materials from the Michigan Natural Shoreline Partnership and participation in the Michigan Shoreline Steward Program (https://www.mishorelandstewards.org/) to Lake and River Associations and to Subwatershed groups. 	
<i>Outreach to Lake and River Associations (including Subwatershed Groups)</i>	1, 2, 3, 4, 5, 6
<ul style="list-style-type: none"> • Provide printed and electronic materials on BMPs for shoreline management. • Provide printed and electronic materials to educate residents about watershed stewardship per the other areas of this plan. 	

Table 3. Public Education Plan Evaluation Measures

This table describes how the PEC will evaluate successful implementation of the PEP. All activities listed will be completed once per permit cycle, and the PEC will identify annual activity goals in order to complete all activities within a given cycle. This table will be completed annually by the PEC in order to assess progress, and the year each activity was completed will be identified in the Accomplishments column. Unless specifically noted as annual, each activity has a permit cycle goal. Public Education Categories, Key Messages and Target Audiences can be found in Table 1, and detailed explanations of how each Delivery Mechanism will be implemented can be found in Table 2. Achievements are also classified as either outputs or outcomes to highlight activities aimed at changing behavior.

Delivery Mechanism Title	PEP Categories	Permit Cycle Goals	Outcome/Output	Accomplishments
LGROW Social Media	1,2,3,4,5,6	30% increase in likes per year over previous year	Output	
		15,000 Average monthly post reach/1,000 Average monthly engaged users	Output	
		Conduct 3 contests annually	Output	
LGROW Website	1,2,3,4,5,6	10% increase in unique visitors per year over previous year	Output	
		2,000 unique page views	Output	
		Permittee websites (23) link to LGROW website	Output	
		20% increase in views of LGROW Disposal and Reporting websites over previous year	Outcome	
Newsletters	1,2,3,4,5,6	LGROW publish 4 articles annually in Quarterly Newsletter	Output	
		Permittees publish 1 article annually in community newsletter or news outlet	Output	
Events	1,2,3,4,5,6	LGROW present at 3 community events annually	Output	
		Community presence or stormwater display at 1 community event or location annually	Output	

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Delivery Mechanism Title	PEP Categories	Permit Cycle Goals	Outcome/Output	Accomplishments
Educational Signage	1,3,5	LGROW Complete current watershed signage assessment once	Output	
		Permittee post 1 new educational sign	Output	
LID/GI Workshops & Tours	5	LGROW deliver 2 workshops in partnership with permittees	Outcome	
		LGROW host 2 LID/GI tours	Outcome	
Clean Up Efforts	1,3,5	LGROW host or participate in 1 stream clean-up effort annually	Outcome	
		LGROW host 2 storm drain cleaning events annually in the watershed	Outcome	
Giveaway Items	1,2,3,4,5,6	Permittees distribute giveaway items for each PEP Category	Output	
Storm Drain Marking	2,3,5	LGROW or Permittee host or provide materials for 2 drain marking events	Outcome	
Adopt A Drain Grand River Program	2,3,5	Increase adoption by 100 basins annually	Outcome	
		LGROW Promote program at 2 events annually	Output	

Table 3. Public Education Plan Evaluation Measures

This table describes how the PEC will evaluate successful implementation of the PEP. All activities listed will be completed once per permit cycle, and the PEC will identify annual activity goals in order to complete all activities within a given cycle. This table will be completed annually by the PEC in order to assess progress, and the year each activity was completed will be identified in the Accomplishments column. Unless specifically noted as annual, each activity has a permit cycle goal. Public Education Categories, Key Messages and Target Audiences can be found in Table 1, and detailed explanations of how each Delivery Mechanism will be implemented can be found in Table 2. Achievements are also classified as either outputs or outcomes to highlight activities aimed at changing behavior.

Delivery Mechanism Title	PEP Categories	Permit Cycle Goals	Outcome/Output	Accomplishments
Outreach to Commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff	2,3,4,5,6	Permittees distribute information/materials to at least 2 targeted businesses/groups from the following categories: <ul style="list-style-type: none"> • Commercial Car Washes • Landscaping Companies • Snowplow Companies • Paving Companies • Power Washing Companies • Commercial Cleaners • Pool Companies • School Facilities Staff • Home Builders' Association • Real Estate Agents 	Output	
Presentations in Schools	1,2,3,4,5,6	LGROW or Permittee provide 4 presentations on PEP topics in schools	Output	
		LGROW distribute curriculum packet to 20 teachers	Output	
		LGROW provide 1 professional development session for teachers	Outcome	
Outreach on How to Report Illicit Discharges	3	Update LGROW Reporting website annually to include up-to-date reporting information	Output	
		LGROW or Permittee post 5 social media, website, or newsletter posts on illicit discharge reporting	Output	

Table 3. Public Education Plan Evaluation Measures

This table describes how the PEC will evaluate successful implementation of the PEP. All activities listed will be completed once per permit cycle, and the PEC will identify annual activity goals in order to complete all activities within a given cycle. This table will be completed annually by the PEC in order to assess progress, and the year each activity was completed will be identified in the Accomplishments column. Unless specifically noted as annual, each activity has a permit cycle goal. Public Education Categories, Key Messages and Target Audiences can be found in Table 1, and detailed explanations of how each Delivery Mechanism will be implemented can be found in Table 2. Achievements are also classified as either outputs or outcomes to highlight activities aimed at changing behavior.

Delivery Mechanism Title	PEP Categories	Permit Cycle Goals	Outcome/Output	Accomplishments
EPA Septic Smart Program	4	LGROW or Permittee participate in EPA SepticSmart week annually using EPA's social media guide	Output	
Outreach to Residents regarding home car washes	3, 5	LGROW or Permittee post 5 social media, website, or newsletter posts on BMPs for home car washing	Output	
Promotion of Municipal HHW Programs	5, 6	LGROW or Permittee post 5 social media, website, or newsletter posts on Municipal HHW Programs	Output	
		Increase the number of residents utilizing HHW drop-off programs by 10% as compared to 2018	Outcome	
		Increase the poundage of HHW dropped off by residents by 10% as compared to 2018	Outcome	
Grand River Rainscaping Program	1,5	LGROW perform 10 site assessments on residential properties in MS4 communities	Outcome	
		LGROW holds 2 Rainscaping workshops	Outcome	
Outreach to Pet Owners	5	LGROW or Permittee post 5 social media, website, or newsletter posts on BMPs for pet waste management	Output	
		LGROW or Permittee distribute pet waste bag dispensers	Output	
Michigan Natural	5	LGROW provide information or	Output	

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Delivery Mechanism Title	PEP Categories	Permit Cycle Goals	Outcome/Output	Accomplishments
Shoreline Partnership (MNSP)		presentations on the MNSP to 10 lake or watershed associations		
Outreach to Lake and River Associations	1,2,3,4,5,6	LGROW provide presentations or information on PEP topics to 10 lake or watershed associations	Output	
		LGROW facilitate development of 1 new subwatershed group	Outcome	
Printed or Electronic Materials	1,2,3,4,5,6	LGROW create 1 new printed or electronic material for each PEP category	Output	

SUMMARY

Each year the PEC and GVMC staff will work together to identify the activities needed to make progress on completing all PEP activities within a given permit cycle. MS4 communities and GVMC staff will record accomplishments using Table 3 and submit progress reports to EGLE that meet regulatory reporting requirements. The sharing of information, time, expertise, and programs among the participating communities in Kent, Ottawa, and Muskegon Counties allows the updated PEP to efficiently reach the target audiences in the LGRW. Since increasing awareness, education, and action of all residents in the watershed will help improve water quality and protect water resources of the watershed-based initiative, this PEP effectively meets the MS4 Permit requirements with the greatest benefit for the participating communities. This regional approach to public education will share responsibilities, communicate messages to a greater number of audiences, and provide consistent information to the public.

REFERENCES

Fishbeck, Thompson, Carr & Huber, Inc. 2011. Lower Grand River Watershed Management Plan. Prepared for the Grand Valley Metropolitan Council. Lower Grand River Organization of Watersheds Initiatives Implementation Project. MDEQ Tracking Code: 2007-0137. FTC&H, Grand Rapids, Michigan.