

# Lower Grand River Watershed Progress Report

## Village of Sparta

Reporting Period: August 1, 2017– July 31, 2018

Prepared by the:

**GVMC**

Grand Valley Metropolitan Council

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## List of Abbreviations/Acronyms

AWRI	Annis Water Resources Institute
BMP	Best Management Practice
CES	Center for Environmental Study
CoC	Certificate of Coverage
DIP	Data, Information, and Procedures
DPW	Department of Public Works
GI	Green Infrastructure
GVMC	Grand Valley Metropolitan Council
HD	Health Department
ICMA	International City/Country Management Association
IDEP	Illicit Discharge Elimination Plan
I&E	Information and Education
KCDC	Kent County Drain Commissioner
KCRC	Kent County Road Commission
KIH	Kent Innovation High School
LGROW	Lower Grand River Organization of Watersheds
LGRW	Lower Grand River Watershed
LID	Low Impact Development
MACC	Macatawa Area Coordinating Council
MDEQ	Michigan Department of Environmental Quality
MGROW	Middle Grand River Organization of Watersheds
MS4	Municipal Separate Storm Sewer System
MSUE	Michigan State University Extension
MWEA	Michigan Water Environment Association
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source
O&M	Operation and Maintenance
OCWRC	Ottawa County Water Resources Commissioner
PCC	Post-Construction Controls
PEP	Public Education Plan
POS	Point-of-Sale
SEMCOG	Southeast Michigan Council of Governments
SESC	Soil Erosion and Sedimentation Control
SWPPI	Stormwater Pollution Prevention Initiative
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USEPA	U.S. Environmental Protection Agency
WMEAC	West Michigan Environmental Action Council
WMP	Watershed Management Plan
WMSECN	West Michigan Soil Erosion Control Network
WMSRDC	West Michigan Shoreline Regional Development Commission
WQI	Water Quality Index

## **Purpose**

This Lower Grand River Watershed Progress Report was developed by the Grand Valley Metropolitan Council's (GVMC) Department of Environmental Programs in collaboration with the regulated communities within the Lower Grand River Watershed. This document satisfies the requirement set forth in the Michigan Department of Environmental Quality's (MDEQ) National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge General Permit, Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4s) Subject to Watershed Plan Requirements as outlined in Section B(3).



## Part 1 – Contact Information

<b>Contact Information for Michigan Department of Environmental Quality (MDEQ):</b>	
Please provide current contact information for MDEQ to use regarding stormwater issues.	
<b>Permit Application Contact</b>	
Name	Dennis Brinks
Title	Department of Public Works Supervisor
Address	276 W Division
City, State, Zip	Village of Sparta, MI 49345
Telephone (with area code)	616-887-9303
Fax (with area code)	616-887-1114
E-mail	<a href="mailto:dbrinks@spartami.org">dbrinks@spartami.org</a>
<b>Stormwater Program Manager</b>	
Name	Dennis Brinks
Title	Department of Public Works Supervisor
Address	276 W Division
City, State, Zip	Village of Sparta, MI 49345
Telephone (with area code)	616-887-9303
Fax (with area code)	616-887-1114
E-mail	<a href="mailto:dbrinks@spartami.org">dbrinks@spartami.org</a>
<b>Stormwater Permit Fee Billing Address</b>	
Name	Dennis Brinks
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Fax (with area code)	616-887-1114
E-mail	<a href="mailto:dbrinks@spartami.org">dbrinks@spartami.org</a>

## Part 2 – Municipal Stormwater Pollution Prevention Initiatives (SWPPI) Commitments

Committees have been working to address different subject areas to make program implementation as efficient as possible. Municipal Separate Storm Sewer System (MS4) permittees participate in the Lower Grand River Organization of Watersheds (LGROW) committees. Committee meetings have also been used to update everyone on the progress of the other committees and the program in general. The committees are as follows:

- Public Engagement Committee
- Stormwater Ordinance Committee (SWOrd)
- Technical Committee
- Sustainability Committee
- Fund Development and Membership Committee
- LGROW Executive Committee

The list of committee members who have served on the committees during this reporting period are indicated in Table 2 below. Members denoted with an asterisk are not MS4 permitted representatives.

<b>Table 1. LGROW Committee Membership List as of July 31, 2018</b>							
<b>Community</b>	<b>Representative</b>	<b>Public Engagement</b>	<b>Stormwater Ordinance</b>	<b>Technical</b>	<b>Sustainability</b>	<b>Fund Development &amp; Membership</b>	<b>LGROW Executive</b>
Cascade Charter Township	Mr. Steve Peterson						
East Grand Rapids, City of	Mr. Brian Donovan					X	X
East Grand Rapids, City of	Mr. Doug LaFave						
Forest Hills Public Schools	Ron Boezwinkle						
Fruitport, Village of	Jeremy Statler						
Georgetown Charter Township	Mr. Rod Weersing	X					
Grand Haven, City of	Ms. Cheryl Davidson	X					
Grand Rapids Charter Township	Bob Versluys						
Grand Rapids, City of	Mr. Mike Lunn			X			

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Grand Rapids, City of	Ms. Carrie Rivette	X	X		X	X	X
Grand Rapids, City of	Mr. Michael Staal	X	X		X		
Grand Rapids, City of	Mr. Dan Taber		X	X			
Grandville, City of	Mr. Ken Krombeen		X			X	X
Grandville, City of	Mr. Todd Wibright			X			
GVSU*							
Hudsonville, City of	Ms. Jill Frielink	X					
KCDC	Mr. Brad Boomstra		X				
KCRC	Mr. Bruce Schutte	X					
Kent County Health Department*	Mr. Brendan Earl	X					
Kent Resource Recovery*	Ms. Megan Kretz	X					
Kentwood, City of	Mr. Jim Beke		X	X			
Kentwood, City of	Mr. Dan Vanderheide		X				
Kentwood, City of	Ms. Kelsey Sloan	X		X			
MDEQ*	Ms. Amanda St. Amour						
MDEQ*	Ms. Michelle Storey	X				X	
MDEQ*	Ms. Dana Strouse	X		X			
OCWRC	Mr. Dennis Cole	X	X				
OCWRC	Ms. Angela Walachovic	X					
OCRC	Mr. Jerry Olman	X					
Plainfield Charter Township	Mr. Rick Solle		X				
Plainfield Charter Township	Ms. Mary Trapp-Gunst	X					

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Spring Lake, Village of	Ms. Chris Burns						
Walker, City of	Mr. Scott Conners		X			X	X
Walker, City of	Ms. Rachell Nagorsen	X	X	X	X		X
Wyoming, City of	Mr. Aaron Vis	X		X			X
Wyoming, City of	Mr. Myron Erickson		X				

### **Public Engagement Committee**

The Public Engagement Committee met on September 13, 2017, November 8, 2017, January 10, 2018, February 14, 2018, and May 16, 2018 during the reporting period. Agendas and minutes for the meetings are posted to <https://www.lgrow.org/public-engagement>. Throughout the reporting period, the group focused on implementation of the updated Public Education Plan (PEP) approved in February of 2013, available here: <https://www.lgrow.org/ms4information>.

The Public Engagement Committee has been functioning as a joint committee of the Lower Grand River Organization of Watersheds (LGROW) and the permitted Lower Grand MS4 communities since January of 2014. The goals of LGROW, the Lower Grand River Watershed Management Plan, the strategic plan, and the MS4 Public Education Plan align closely, and through this joint committee's combined efforts, the result has been a larger group of involved stakeholders. This group shares the common goals of raising awareness about the Lower Grand River Watershed (LGRW) and improving the stormwater quality within the watershed. The group focuses on messaging and outreach events that address the target messages of: Personal Watershed Stewardship, Ultimate Stormwater Discharge, Public Reporting of Illicit Discharges, Personal Actions that can Impact the Watershed, Waste Management, Management of Riparian Lands. A detailed list of these events and the outreach conducted during this reporting period is provided in Part 3.

### **SWOrd Committee**

The Storm Water Ordinance (SWOrd) Committee met on January 12, 2018, March 9, 2018, March 27, 2018, May 15, 2018 and July 16, 2018 during the reporting period. Meetings were focused on follow up

items related to the LGRW alternative approach, the model ordinance, the standards manual, and the stormwater design spreadsheet for MS4 permittees to utilize in their implementation of the new post-construction stormwater control requirements outlined in the 2016 NPDES Permit Application.

The committee finalized templates for the standards manual, model ordinance, the standards manual BMP design criteria appendix, and the LGROW Design Spreadsheet based on feedback from the Michigan Department of Environmental Quality (MDEQ) after the April 2015 submittal of the alternative approach for channel protection. The standards manual follows the steps outlined in the flow chart submitted with the permit applications for the design, review, and permitting of sites with post construction controls. The standards manual was developed in tandem with a LGROW Design Spreadsheet to assist site designers and reviewers to ensure site designs meet all the regulatory criteria outlined in the permit. The development of maintenance agreements per the stormwater post-construction controls is ongoing, and will continue through the next reporting period.

The manual and Design Spreadsheet tools are also designed to ensure that the alternative approach is only utilized as a last resort. The committee finalized the model ordinance for communities to customize for the application of these standards. On March 14, 2018 a meeting was held by GVMC for all MS4's in order to update each community with the progress made regarding their permit application. Since this work began in 2015, much of this reporting period was spent editing and revising permit application documents to accurately reflect how each community implements their MS4 program, accounting for new stormwater regulations under the next MS4 permit.

### **Technical Committee**

The Technical Committee met on August 16, 2017, October 18, 2017, December 20, 2017, February 14, 2018, April 18, 2018, and June 20, 2018 during this reporting period. Agendas and minutes from the meetings are available at the following site: <https://www.lgrow.org/technical-committee>. During the reporting period, the committee members focused on the development of the LGROW Data Repository, which will serve as a resource for the sharing and viewing of water quality data collected throughout the watershed. The Data Repository can be accessed here: <https://www.lgrow.org/data-repository/>

The Committee also continued work on the watershed monitoring manual to guide the collection, processing, and storage of data in the Lower Grand River Watershed and the Lower Grand River Total Maximum Daily Load (TMDL) monitoring, as required by the MS4 permit. The committee is coordinating the TMDL monitoring in the stream reaches identified in the MS4 Permit application letters. The City of Wyoming and the City of Grand Rapids are providing sampling equipment and laboratory space to collect



and analyze the samples. This work will continue into the next reporting period. At the October 2017 meeting, the committee enjoyed an engaging presentation from a representative from the United States Geological Survey (USGS). IDEP outfall screening was also a focus of the Technical Committee, since many of the MS4's in the watershed were planning to complete this work during the summer of 2018.

## Training

GVMC provides multiple training documents and DVDs for Permittee use. Documents are available at: <https://www.lgrow.org/ms4information>. Training materials, including newsletter articles for communities to provide to residents, can be found on the LGROW website. In addition, GVMC has hosted or partnered on several training events during the reporting period including:

- 15<sup>th</sup> Annual Grand River Spring Forum
  - Held on May 11, 2018 at the Cascade Library
- Stormwater General Awareness and IDEP
  - Offered May 22 and 23, 2018 in both Kent and Ottawa Counties
- Lunch and Learn
  - Offered at GVMC on June 29, 2018 hosted by Upstream Technologies

## Training Library

A lending library of training materials is housed at GVMC and is available to all watershed partners to assist with the Municipal Employee Training requirements of the discharge permit. The following materials are currently available:

DVD from Excal Visual, LLC

- IDDE – A Grate Concern: Illicit Discharge Detection & Elimination (14¼ Minutes)

DVD from Excal Visual, LLC

- Storm Watch - Municipal Stormwater Pollution Prevention (20 Minutes)

DVD from Excal Visual, LLC

- Stormwater Pollution Prevention - A Drop in the Bucket (16 Minutes)

DVD from Excal Visual, LLC

- Ground Control - Stormwater Pollution Prevention for Construction Sites (14.5 Minutes)

DVD from Excal Visual, LLC

- Spills & Skills - Non-Emergency HazMat Spill Response (18.5 Minutes)

DVD from Southeast Michigan Council of Governments (SEMCOG) and the Road Commission for Oakland County

- Keep An Eye On It! - Environmental Awareness for Gravel Road Maintenance (18.5 Minutes)

DVD from USEPA - Reduce Runoff: Slow It Down, Spread It Out, Soak It In (includes the following videos)

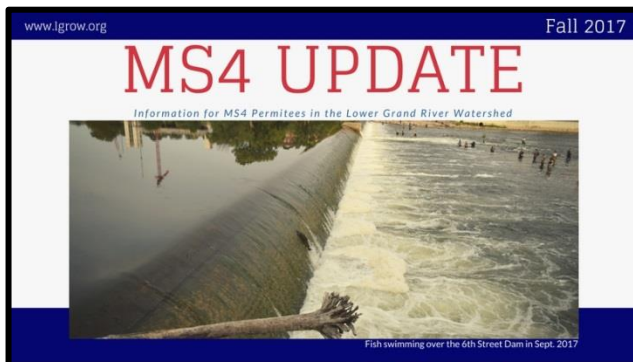
- Reduce Runoff: Slow It Down, Spread It Out, Soak It In 9 Minutes
- RiverSmart Homes: Getting Smart about Runoff 12 Minutes
- Building Green: A Success Story in Philadelphia 11 Minutes
- After the Storm 22 Minutes
- DVD from North Central Texas Council of Governments Municipal Employee Training Series: Preventing Stormwater Pollution: What We Can Do (includes the following videos)
  - Introduction: What We Can Do
  - Construction Activities and Land Disturbances
  - Fleet Maintenance and Material Handling
  - Streets and Drainage Maintenance
  - Parks and Grounds Maintenance
  - Solid Waste Management

Attendance at the live events and completion of other training is recorded in each MS4's individual training logs (Part 2D).

## **Newsletters**

GVMC sent out seasonal MS4 Newsletters to communities to provide information regarding upcoming training, events, regulatory deadlines, committee meetings, and general program information during the reporting period.

# Village of Sparta Lower Grand River Watershed 2017-2018 MS4 Progress Report



Fish swimming over the 6th Street Dam in Sept. 2017

Newsletters such as this will periodically be sent to you. Since we are all a part of the Lower Grand River Watershed, it is important that everyone has current information, is up to date with regulatory requirements, and is aware of other activities happening in the watershed. This messaging also serves as a reminder for upcoming meetings and events, and offers MS4 training opportunities.

Leaves have begun to fall! Attached to this electronic newsletter, you will find an informational brochure about seasonal yard waste. Please post and/or distribute to your employees and community as you see fit. GVMC can print and customize this flyer for your community, just let us know what changes you would like to make.

## ON THE HORIZON

Next summer, many Lower Grand River MS4's will need to complete dry-weather screening of their outfalls. The last time outfall sampling occurred was in 2013 and 2014. GVMC will hire interns to complete IDEP testing. In Spring 2018, GVMC will give IDEP training and provide the materials needed to complete testing. In the coming months, please be thinking about any new outfalls, updates that need to be made to maps, problem or high-priority sites, and the amount of time it will take field personnel to complete your testing. More information will become available as testing time gets closer.

## 2016-2017 PROGRESS REPORT UPDATE

All MS4 Progress Reports were submitted to MDEQ by their October 1st due date. Please keep track of the trainings that you and your DPW staff complete during this reporting period. Note that the trainings listed in the progress report are examples and recommendations. MS4 training requirements may be met by other means; for example, information covered during staff meetings, flyers

## STORMWATER TRAINING OPPORTUNITIES

13th Annual MiCorps Conference and Training  
Nov. 8-9, 2017 in Tustin, MI

Ottawa County Water Quality Forum  
Nov. 30, 2017 in West Olive, MI

MWEA Watershed and Stormwater Seminar  
Dec. 5, 2017 in East Lansing, MI

More information on these trainings can be found here. Training DVDs are still available through GVMC. GVMC is looking to acquire more up-to-date training that is applicable to your municipality. If you have any ideas for MS4 materials to train DPW employees, please let us know.

## UPCOMING COMMITTEE MEETINGS @ GVMC

Public Engagement Committee

November 8, 2017 2-4 PM

Sustainability Committee

December 4, 2017 1:30-2:30 PM

Technical Committee

December 20, 2017 10:30 AM- 12 PM

2018 Meeting dates and times can be found here.

## MS4 COMMUNITIES

If you have any stormwater information or events coming up in your community that you would like to share with other MS4s in the area, please let us know so we can get the word out! (Send an email to [caradecker@gvmc.org](mailto:caradecker@gvmc.org))



Snowmelt carrying nonpoint source pollution (salt) to storm drain with direct connection to the Grand River

Winter is still here! Attached to this electronic newsletter, you will find an informational brochure about ways to prevent pollution during the winter. There is also a newsletter article that highlights LGROW's illicit discharge reporting website. Please post and/or distribute to your employees and community as you see fit.

## MS4 PERMIT MEETING

A full MS4 meeting will be held on Wednesday, March 14, 2018, from 1:30-3:30pm, at the City of Walker's Commission Chambers located at: 4243 Remembrance Rd NW, Walker, MI 49534.

GVMC will give updates to the permit application process and review new stormwater standards that your community will be responsible for implementing once the ordinance is adopted. This is an important meeting to have all municipal employees and elected officials attend in order to review and understand the new permit requirements before they go to MDEQ's permit section and your new permit is issued. Please make every effort to attend and invite engineers, planners, supervisors, and other employees from your community who will have responsibility in implementing these new standards.

## 2017 PUBLIC EDUCATION PLAN FOCUS GROUP

A focus group was held on December 18, 2017 at GVMC with the purpose to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts since 2009. This focus group ended up being a very educational experience for its participants, while providing valuable feedback on LGROW outreach activities. The mixed demographic of participants and the number of MS4 communities participating provided a fairly diverse view of LGROW's reach into the watershed, and participants shared many ideas to improve LGROW messaging. We plan on using recommendations from this focus group to update the MS4 Public Education Plan, and provide more effective stormwater messaging throughout the watershed. The complete report can be found at: [www.lgrow.org/ms4information](http://www.lgrow.org/ms4information)

More information can be found on the LGROW website



Thank you for attending the 15th Annual LGROW Spring Forum on May 11, 2018!

Attached to this electronic newsletter, you will find an informational brochure about ways to prevent pollution during the summer. There are also newsletter articles that highlight general watershed awareness. Please post and/or distribute to your employees and community as you see fit.

## MS4 PERMITS

All communities have received their updated Stormwater Standards Manuals. These manuals outline design standards to comply with new Post Construction Controls under the next MS4 permit. This is one of many documents that will make up the entire MS4 program for your community.

Timely review is necessary. Please work with Cara to get your comments incorporated into these documents. If you need extra explanation or desire further clarification, please do not hesitate to contact GVMC for help.

Once review is complete, the permit application will be submitted to MDEQ. While we are waiting for MDEQ's Permits Section to issue new MS4 permits, the LGROW Design Spreadsheet will be finalized in order to aid developers with compliance to the new permit requirements.

## IDEP OUTFALL SCREENING

This summer, GVMC will be completing dry-weather screening of MS4 outfalls in accordance with the Illicit Discharge Elimination Plan (IDEP). The last time outfall screening occurred was in 2013 and 2014. GVMC will let you know when we will be in your community to complete this work. Screening is weather dependent, so we appreciate your willingness to be flexible.

GVMC provided IDEP training in May. Many thanks to those who attended- this will be documented in your annual progress report to MDEQ.

The training is available for you to share with those who were not able to attend. You can find the slides here: [www.lgrow.org/ms4information](http://www.lgrow.org/ms4information)  
Please record the date and the names of DPW employees who view the training. We will report them to MDEQ in your progress report.

More information can be found on the LGROW website

## Monitoring

The Grand River Water Quality Index (WQI) is used to show the trend of Grand River water quality downstream of Grand Rapids. A WQI of 71-90 indicates good water quality with high diversity of aquatic life and very few limits for recreational use. Grand Rapids has been monitoring the Grand River for forty years and all of the data are available upon request. A record of the WQI for Wealthy Street Bridge is provided as an example of improving water quality in the Grand River. An interactive map and data from sampling events can be viewed as follows:

[https://grandrapids.maps.arcgis.com/apps/Embed/index.html?webmap=b58bd9f6cda949599b15753b888a7048&extent=-85.8676,42.8116,-85.4244,43.0326&zoom=true&scale=true&search=true&searchextent=false&legend=true&disable\\_scroll=false&theme=light](https://grandrapids.maps.arcgis.com/apps/Embed/index.html?webmap=b58bd9f6cda949599b15753b888a7048&extent=-85.8676,42.8116,-85.4244,43.0326&zoom=true&scale=true&search=true&searchextent=false&legend=true&disable_scroll=false&theme=light)

## Water Quality Index Grand River and Tributary Sampling Sites

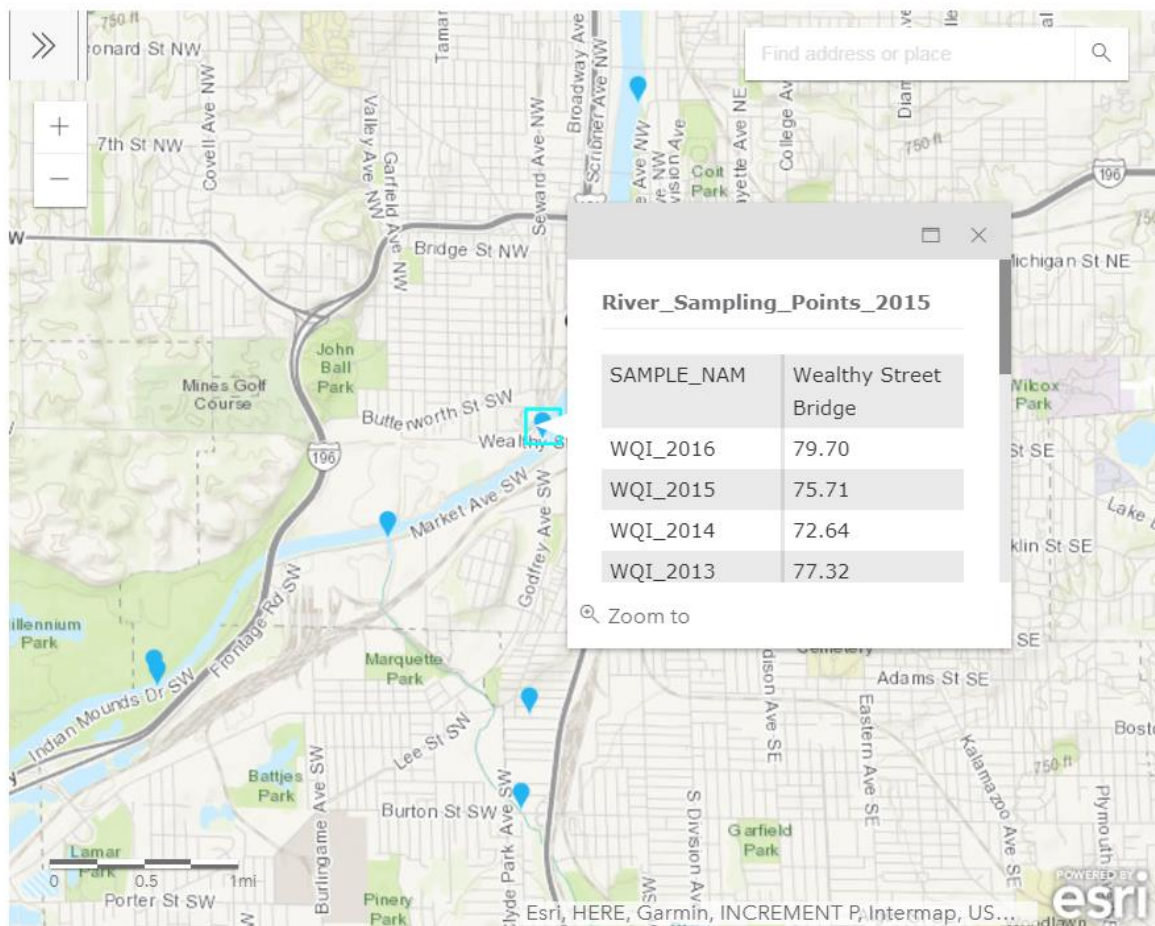




Figure 1 Grand Rapids Water Quality Index Web Interface

## Data Repository

The LGROW Technical Committee continued working on the design for a watershed-wide data repository with the help of GVMC's Regional Geographic Information System (REGIS) department. Using data collected by the Friends of Buck Creek as part of their 319 monitoring grant, and Indian Mill Creek, as part of GVSU Graduate Students' research, the committee designed a landing page, which provides access to the collected data via an Arc GIS online interface – a free online GIS software that allows users basic viewing and searching capabilities. The group also designed a tutorial for data repository users. The long-term goal is that the data repository will be a central location to access water quality data from sampling events in the Lower Grand River Watershed. With this goal in mind, the Technical Committee also developed submittal tools to allow users to share collected scientific water quality data. The data will be reviewed and checked by LGROW before it is uploaded into the data repository for public viewing at this site: <https://www.lgrow.org/data-repository/>. Some students and teachers in local school districts have already begun to use the repository to aid classroom learning.

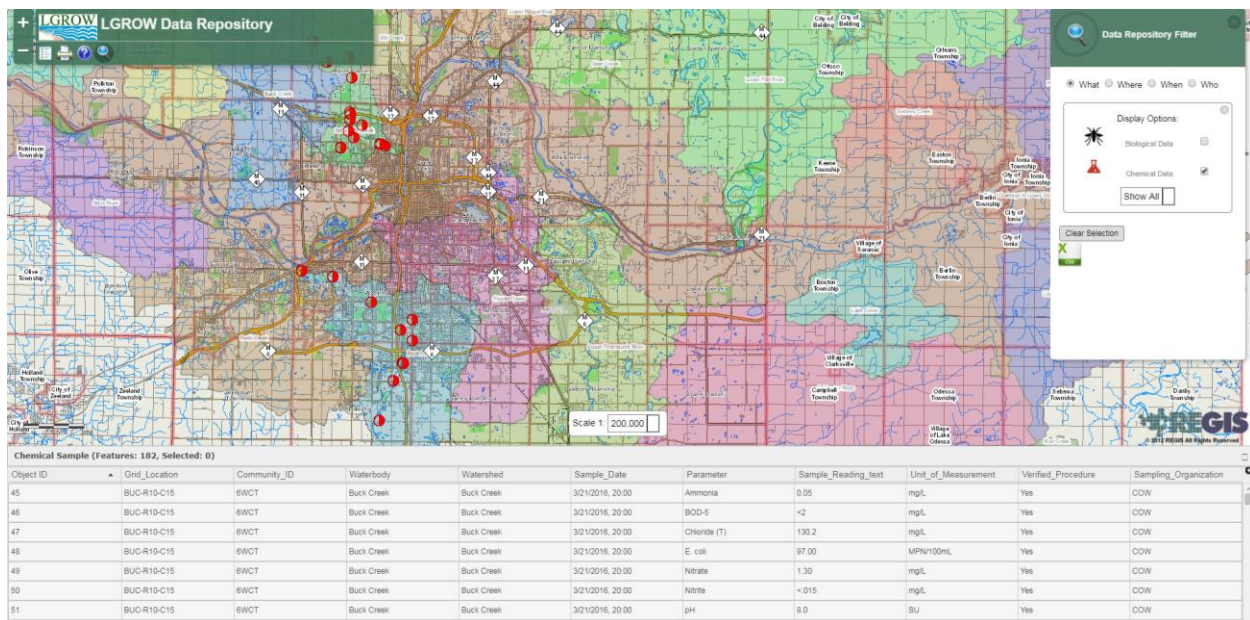


Figure 2 LGROW Data Repository



### **MDEQ Program Audits**

GVMC assists communities in preparing for audits, and in addressing any deficiencies identified by MDEQ. During this reporting period, MDEQ performed audits on site for the following communities in the Lower Grand River Watershed:

City of Wyoming, August 29, 2017

City of Grandville, January 18, 2018

Kent County Road Commission, January 24, 2018

Supplemental documentation for these audits will be included in this report for each of the communities listed above. All communities that were audited during this reporting period were found to be in compliance and are implementing effective MS4 programs.

## **Part 2A - Lower Grand River Watershed Management Plan Prioritized Objectives**

### **Encouraging proper septic tank maintenance**

Each year a portion of the public education materials distributed address proper septic tank maintenance. Detailed information regarding the nature of these materials is included in Part 3 - PEP of this progress report. Additionally, communities in both Kent and Ottawa Counties work collaboratively with their respective Health Departments to report and ensure correction of failing or failed septic systems. Individual communities track this data in Part 4 – IDEP of this progress report.

The US EPA hosts SepticSmart Week once a year, and LGROW uses the materials provided to encourage of proper septic system care. SepticSmart Week 2017 was held on September 18-22, and focused on educating homeowners and communities on the proper care and maintenance of their septic systems.

### **Encouraging septage ordinance**

The Ottawa County Health Department presently has an ordinance in place requiring point of sale inspections. The permitted communities located within Ottawa County collaborate with and rely on the Ottawa County Health Department for ongoing enforcement of the ordinance.

Kent and Muskegon Counties have not passed an ordinance requiring point of sale septic system inspections. The permitted entities within Kent and Muskegon County rely on implementation of the IDEP and reporting/enforcement through their stormwater ordinances and the Health Department to follow up on failing or failed septic systems. In the case of a failed septic system, a connection to sanitary is typically required if a sanitary sewer connection is available within 250 feet.

### **Implement vegetative buffering practices and restore and protect the stream buffer and canopy**

Several communities including the City of East Grand Rapids and the City of Grand Rapids have instituted or evaluated the potential for buffer ordinances. The Cities of Hudsonville and Rockford have included buffer provisions within their zoning ordinances. Many other communities have adopted mowing buffer procedures on the properties they own and maintain. These procedures are identified in Part 2C.

### **Implement Michigan Department of Natural Resources wildlife population management practices**

Three communities are working with the Michigan Department of Natural Resources on supervised programs to control populations of Canada Geese. These programs include Egg Destruction (East Grand Rapids and Kent County Drain Commissioner), Goose Relocation (Kent County Drain Commissioner), Nest Destruction (Kent County Drain Commissioner), and Targeted Goose hunts for population reduction (Plainfield Charter Township). Communities throughout the watershed are utilizing signage to discourage the feeding of waterfowl, actively installing goose deterrents, and/or instituting procedures for a no-mow buffer adjacent to streams and ponds to function as a natural deterrent. The City of Hudsonville has provided a portal on their website for residents to report nuisance wildlife.

### **Implement sanitary sewer maintenance practices**

Sanitary sewer service is provided by several communities to residents in expanded service areas. Through these partnerships, many communities are able to utilize sanitary sewer infrastructure instead of relying on septic fields. The City of Grand Rapids collaborates with Cascade Charter Township, the City of East Grand Rapids, Forest Hills Public Schools, Grand Rapids Charter Township, Kent County, Kentwood, and the City of Walker. The City of Wyoming collaborates with the City of Kentwood and portions of the City of Grandville. The City of Grandville collaborates with the City of Hudsonville and portions of Georgetown Charter Township. The City of Grand Haven collaborates with the City of Ferrysburg and the Village of Spring Lake. The North Kent Sewer Authority collaborates with Plainfield Charter Township and the City of Rockford. All of the MS4 LGROW community members have procedures to inspect and maintain their sanitary sewer systems, which are independent of their MS4 systems. Information related to the maintenance and upgrades of sewer infrastructure is included in Part 2B of the report.

### **Implement Low Impact Development Practices**

Low Impact Development (LID) and Green Infrastructure (GI) are critical components in both the SWPPI and the PEP. Detailed information on the training related to LID practices and implementation is detailed in Part 2D. Tracking of the installation and consideration of LID practices by Permittees is tracked in Part 2E. The PEP incorporates messages on the implementation of LID practices such as rain gardens, buffer strips, and native plantings for their direct benefits to water quality. The PEP focuses on LID practices that are feasible for individual homeowners to implement, rather than large scale development.

### **Implement watershed focused land-use planning**

Throughout the watershed, construction in FEMA mapped floodplains is regulated by the Michigan Building Code to ensure that construction below the base flood elevation does not occur. This is accomplished by providing prescribed release rates for Bank Erosion Control, as well as Flood Control. Water Quality control

is addressed with detention and infiltration, where possible, or delayed and restricted release where it is not.

As the Stormwater Ordinance Committee worked on developing the model stormwater ordinance for the next MS4 permit, many of the design requirements needed to prevent or mitigate flooding in site designs were left intact. Though these were not required as part of the MS4 permit application, permitted communities recognize the need for flood protection for the protection of downstream residences and receiving waters.

### **Implement proper soil erosion and sedimentation control techniques**

Part 91, Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, regulates the activity of earth work and mandates that projects disturbing an area greater than one acre in size or an area less than 500 feet from a lake or stream obtain a soil erosion permit from the regulatory agency with jurisdiction over the area in which they are working. Table 2 details which Permittees work collaboratively with the county enforcing agent (CEA), which Permittees administer their own program as a municipal enforcing agent (MEA), and which Permittees have the authority to oversee their own projects as authorized public agencies (APA). MEA, CEA, and APA programs implement a thorough soil erosion and sediment control plan review and regular site inspections in their programs for permitted sites. Plan review and site inspections are conducted by staff with either a comprehensive or inspector construction site stormwater operator certification respectively.

Training on topics related to construction site stormwater runoff is detailed in Part 2D. Training ensures that even if a community does not oversee their own program, field staff will be informed regarding observations on a construction site and the appropriate entity to report to if there is an offsite discharge or poorly maintained SESC measures. Many LGRW MS4 permitted communities who administer a Part 91 program also work closely with the West Michigan Soil Erosion Control Network, a professional network that provides regular training, panel discussions and field demonstrations on BMPs and new technologies in this field.

<b>Table 2. LGRW Part 91 Administration Authority as of July 31, 2018</b>							
<b>Community</b>	<b>Part 91 Contact Info</b>		<b>MEA</b>	<b>Utilizes CEA</b>			<b>APA</b>
	<b>Name</b>	<b>Phone</b>		<b>Kent</b>	<b>Muskegon</b>	<b>Ottawa</b>	
Cascade Charter Township	KCRC	616-242-6914		X			
East Grand Rapids, City of	KCRC	616-242-6914		X			
Ferrysburg, City of	OCWRC	616-994-4530				X	
Forest Hills Public Schools	KCRC	616-242-6914		X			
Fruitport, Village of	Muskegon County DPW	231-724-6411			X		
Georgetown Charter Township	OCWRC	616-994-4530				X	
Grand Haven, City of	OCWRC	616-994-4530				X	
Grand Rapids Charter Township	KCRC	616-242-6914		X			
Grand Rapids, City of	Environmental Services Dept.	616-456-3057	X				X
Grandville, City of	KCRC	616-242-6914		X			
Hudsonville, City of	OCWRC	616-994-4530				X	
Kent County Drain Commissioner & Administration	Deputy Drain Commissioner	616-336-3688					X
Kent County DPW	Kent Co. DPW	616-336-3694					X
<b>Kent County Road Commission (Kent County CEA)</b>	KCRC	616-242-6914		X			X
Kentwood, City of	Engineering Dept.	616-554-0737	X				X
<b>Ottawa County Water Resources Commissioner &amp; Administration (Ottawa County CEA)</b>	OCWRC	616-994-4530				X	X
Ottawa County Road Commission	Engineering Dept.	616-842-5400					X
Plainfield Charter Township	KCRC	616-242-6914		X			
Rockford, City of	Public Services Dept.	616-866-9631	X				
Sparta, Village of	KCRC	616-242-6914		X			
Spring Lake, Village of	OCWRC	616-994-4530				X	
Walker, City of	Engineering Dept.	616-453-6311	X				
Wyoming, City of	KCRC	616-242-6914		X			



### **Implement channel and stream bank stabilization, bio-engineering and erosion control techniques**

The MDEQ requires a joint permit from the state of Michigan for all work performed in channels that are designated as waters of the state. Any work that occurs within 500 feet of a lake or stream requires a soil erosion control permit from the authorized Part 91 agency, as referenced above. These permitting procedures work in tandem to prevent negative impacts during and after construction, as well as to ensure adequate restoration. Permitted communities in the Lower Grand River Watershed have policies in place to ensure protection of drainage systems from construction site runoff as detailed in Part 2C and perform regular training as referenced in Part 2D related to construction site stormwater runoff and water quality protection.

### **Implement turf management and proper fertilizer application practices**

Permitted communities within the Lower Grand River Watershed have developed procedures for managing vegetation and using fertilizers on Permittee owned properties as outlined in Part 2C. These policies and procedures were reviewed as permittees prepared their individual permit applications in Spring 2015. All staff at the communities and their subcontractors adhere to these procedures. Training is also provided in the form of the brochure, "What Every Landscaper Must Know". This brochure is distributed as part of the comprehensive training plan on controls to reduce the discharge of pesticides, herbicides, and fertilizers, as described in Part 2D. The brochure was updated in 2014 to allow for permitted MS4s to customize it for distribution to their staff and contractors as well as local landscaping businesses.

## Part 2B - Stormwater Controls Inspection, Maintenance and Effectiveness August 1, 2017 to July 31, 2018

The Village of Sparta conducted an inventory of all village-owned property including the identification of Storm Water Controls, inspection frequencies, and maintenance schedules as the following pages describe.

<b>Property Name: Water Treatment Plant (383 S. State Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Catch Basins	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Vegetated Swale	Every 2 years	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.
<b>Property Name: E. Water Tower (100 Prospect)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.
<b>Property Name: West Water Tower (487 Applejack Court)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.

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Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Well #4 (S. State Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.
Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Catch Basins	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Well #5 (760 S. State)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.

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<b>Property Name: Rogers Park (152 N. State Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual – Brush cleared along creek. Mowed as needed. See time sheets for documentation.	Clearing trees and debris from creek allows for better flow to prevent flooding.
Detention Pond	Yearly	As Needed	Visual – mowed as needed Inlet pipe cleared of debris as needed. See time sheets for documentation.	Helps flow to outlet pipe to prevent flooding.
Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Catch Basins	Every 5 years	As Needed	Visual inspection. Covers cleared during heavy rains – Maintenance log located at DPW 276 W Division.	Works as designed.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Nash Park (350 N. Aspen)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Annual Visual in Spring – Clear ditch of debris if needed. Maintenance log located at DPW 276 W Division.	To prevent flooding of nearby residents – refer to municipal properties BMP's.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.

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<b>Property Name: Buth Park (428 E. Division)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Catch Basins	Every 5 years	As Needed	Visual inspection. Covers cleared during heavy rains – Maintenance log located at DPW 276 W Division.	Control effective if cleared of grass clippings during heavy rains.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Balyeat Park (Olmsted Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Reg. mowing and periodic cleaning prevents flooding.
Storm Sewer	Every 5 years	As Needed	Visual inspection. Maintenance log located at DPW 276 W Division.	Works as designed.
Catch Basins	Every 5 years	As Needed	Visual inspection. Covers cleared during heavy rains – Maintenance log located at DPW 276 W Division.	Control effective if cleared of grass clippings during heavy rains.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. Removed invasive species along	Followed property maintenance



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			bank and planted native plants. See time sheets for documentation.	ordinance by mowing.
<b>Property Name: Spartan Park (164 E. Gardner)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Lamoraux Park (Averill &amp; Pine Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Old Elementary School (200 Alma – Central Park)</b>				
<b>NOTE</b>				
<b>THIS PROPERTY IS NO LONGER OWNED BY THE VILLAGE OF SPARTA</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Curb & Gutter	Every 5 years	As Needed		
Catch Basins	Every 5 years	As Needed		
Storm Sewer	Every 5 years	As Needed		

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Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)		
<b>Property Name: Old Ambulance Building (195 Washington)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Sparta Nature Trails (110 acres N.E. side of town – N. of 13 Mile Rd., East of River Street)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	This property is undeveloped flood plain and natural wetlands.	Flood plain flows naturally.
<b>Property Name: Sparta Airport (9100 Vinton) NOTE: THIS PROPERTY HAS ITS OWN SWPPP</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	Yearly	As Needed	Visual - Mowed as needed. See time sheets for documentation.	Keeps storm water flowing to prevent folding of taxi way.
Dry Well	Every 5 years	As Needed	Visual inspection – Refer to SWPPP for documents.	Works as designed.
Detention Pond	Yearly	Yearly	Visual – Mowed as needed – outlet cleared as needed – refer to time sheets for documentation.	Keeps storm water flowing to prevent folding of taxi way.

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Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)		
<b>Property Name: Waste Water Treatment Plant (611 E. Gardner Street)</b> <b>NOTE: THIS PROPERTY HAS ITS OWN SWPPP</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Curb & Gutter	Every 5 years	As Needed	Visual inspection – Refer to SWPPP	Works as designed.
Catch Basins	Every 5 years	As Needed	Visual inspection – Refer to SWPPP	Works as designed.
Storm Sewer	Every 5 years	As Needed	Visual inspection – Refer to SWPPP	Works as designed.
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: S.W. Water Tower (575 W. Glen Street (W. Spartan Dr.))</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual - Mowed as needed. See time sheets for documentation.	Followed property maintenance ordinance by mowing.
<b>Property Name: Paved Streets with Curb and Gutter</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Curb & Gutter	Every 2 years	As Needed	Swept twice a year or as needed. New C&G along Clay street. Refer to	Prevents dirt, grass, trash, and leaves from entering

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			sweeping – refer to Waste profiles and waste manifests	storm sumps and storm system and system requires less maintenance.
Catch Basins	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Catch basins are repaired as needed – refer to maintenance log at DPW 276 W Division.	Catch Basin lids are cleaned before and after heavy rains to keep as much debris as possible from entering the storm system. Prevents back-ups and flooding – refer to maintenance log at DPW 276 W Div.
Storm Sewer	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Storm lines are repaired as needed – refer to maintenance log at DPW 276 W Division.	All storm lines are in good working condition and repaired as needed.
<b>Property Name: Paved Streets with Gravel or other Turf Shoulders</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Catch Basins	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Catch basins are repaired as needed – refer to maintenance log at DPW 276 W Division.	Catch Basin lids are cleaned before and after heavy rains to keep as much debris as possible from entering the storm system. Prevents back-ups and flooding – refer to maintenance log at DPW 276 W Div.
Storm Sewer	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Storm lines are repaired as needed – refer to maintenance log at DPW 276 W Division.	All storm lines are in good working condition and repaired as needed.

<b>Property Name: Gravel or Turf Alley Ways</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Gravel (natural runoff to yards and paved streets)	As Needed	As Needed	Graded as needed – wash outs repaired as needed	Grading helps with more uniform runoff. Washout repairs help keep dirt from entering storm system – refer to maintenance log at DPW 276 W. Div.
<b>Property Name: All Village of Sparta Owned Parking Lots</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Curb & Gutter	Every 2 years	As Needed	Visual – Swept 2 times a year or as needed – repaired as needed – refer to sweeping manifests and maintenance log at DPW 276 West Division	Regular sweeping keeps dirt and other debris from entering storm system.
Catch Basins	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Catch basins are repaired as needed – refer to maintenance log at DPW 276 W Division.	Catch Basin lids are cleaned before and after heavy rains to keep as much debris as possible from entering the storm system. Prevents back-ups and flooding – refer to maintenance log at DPW 276 W Div.
Storm Sewer	Every 5 years	As Needed	On-going process. Now part of our SAW Grant. Storm lines are repaired as needed – refer to maintenance log at DPW 276 W Division.	All storm lines are in good working condition and repaired as needed.

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<b>Property Name: Main Street (13 Mile Road) from State Street to River Road</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Curb & Gutter	Monthly	As Needed	Visual – Swept as needed – average by monthly by Village. Swept one time by KCRC.	Regular sweeping keeps dirt and other debris from entering storm system.
Catch Basins	Every 5 years	As Needed	Inspected and cleaned by KCRC. Repaired one by cemetery.	Records at KCRC. Work as designed.
Storm Sewer	Every 5 years	As Needed	Visual from Structures. Good condition. Refer to maintenance log at DPW 276 West Division	Works as designed.
<b>Property Name: DPW (276 W. Division)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Vegetated Swale	2 times a Year	As Needed	All inspections and maintenance are up to date. Refer to DPW SWPPP	Good condition and working as designed. Swale filters silt run off from gravel parking lot.
Catch Basins	2 times a Year	As Needed	All inspections and maintenance are up to date. Also Vacuumed and Jetted. Refer to DPW SWPPP	Good condition and working as designed.
Storm Sewer	2 times a Year	As Needed	All inspections and maintenance are up to date. Also vacuumed and jetted. Refer to DPW SWPPP	Good condition and working as designed.
Isolated Sump	2 times a Year	As Needed	All inspections and maintenance are up to date. Refer to DPW SWPPP	Good condition and working as designed.

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<b>Property Name: Village of Sparta Police Department (260 W. Division)</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Catch Basins	2 times a Year	As Needed	All inspections and maintenance are up to date. Refer to DPW SWPPP	All controls are working as designed.
Storm Sewer	2 times a Year	As Needed	All inspections and maintenance are up to date. Refer to DPW SWPPP	All controls are working as designed.
<b>Property Name: Paved Alley Ways</b>				
<b>Structural Storm Water Control</b>	<b>Inspection Frequency</b>	<b>Maintenance Schedule</b>	<b>Inspection and Maintenance Conducted and Location of Log (if applicable)</b>	<b>Effectiveness of Control and Support Documentation</b>
Gutter	Every 2 years	Every 5 years	Visual inspection, good working condition – repair as needed. Refer to maintenance log at DPW 276 West Division	Regular sweeping keeps dirt and other debris from entering storm system.
Catch Basins	Every 2 years	Every 5 years	On-going process. Now part of our SAW Grant. Storm lines are repaired as needed – refer to maintenance log at DPW 276 W Division.	Scheduled inspections, maintenance and repairs prevent dirt, trash and other debris from entering storm system.
Storm Sewer	Every 2 years	Every 5 years	On-going process. Now part of our SAW Grant. Storm lines are repaired as needed – refer to maintenance log at DPW 276 W Division.	Scheduled inspections, maintenance and repairs prevent dirt, trash and other debris from entering storm system.

## Part 2C - Procedures Status August 1, 2017 to July 31, 2018

The following Pollution Prevention and Good Housekeeping procedures were adopted by the Village. Dates of revised procedures are listed and revisions attached.

<b>Procedure</b>	<b>Date Adopted</b>	<b>Date Revised (if needed)</b>
Procedure to Ensure Protection of Drainage Systems from Construction-site Runoff	April 9, 2012	Not needed
Procedure to Dispose of Storm Sewer System Operation and Maintenance Waste	April 9, 2012	Not needed
Procedure to Construct, Operate, and Maintain Streets, Roads, Highways, and Parking Lots	April 9, 2012	Not needed
Procedure to Reduce the Runoff of Total Suspended Solids	April 9, 2012	Not needed
Procedure to Prevent Salt and Sand from entering Receiving Streams	April 9, 2012	Not needed
Procedure to Control Dust and Suspended Solids in Runoff	April 9, 2012	Not needed
Procedure for Managing Vegetation on Municipal Property	April 9, 2012	Not needed
Procedure for Using Fertilizer on Municipal Property	April 9, 2012	Not needed



## Part 2D - Staff and Contractors Training on Pollution Prevention and Good Housekeeping

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
<b>Required Topics</b>			
Maintenance activities, maintenance schedules, and inspection procedures	DPW  DPW, Water Dept., Sewer Dept.  DPW, Water Dept., Sewer Dept.	Once every 2 years, new hires-update as needed  1 time  1 time	<b>Written O&amp;M Procedures</b>  <b>Storm Water Pollution Prevention - A Drop in the Bucket - DVD from Excal Visual, LLC</b>  <b>"Best Management Practices for Municipal Operations" Training Session – Live Presentation</b>
<b>Training completed:</b>	New DPW employee. Current employees.	2018 as needed	trained as needed with illicit discharge, reoriented with BMP's
Controls on streets, parking lots, maintenance garages, and storage yards	DPW, Water Dept., Sewer Dept.  DPW, Water Dept, Sewer Dept.  DPW, Water Dept., Sewer Dept, Police Dept.	1 time  1 time  Annually	<b>Storm Watch - Municipal Storm Water Pollution Prevention - DVD from Excal Visual, LLC</b>  <b>Spills &amp; Skills - Non-Emergency HazMat Spill Response - DVD from Excal Visual, LL Gravel</b>  <b>Review DPW Storm Water Control Procedures</b>
<b>Training completed:</b>	New DPW Employee, DPW	2018 as needed	<b>Reviewed salt storage procedures</b> <b>Reviewed DPW SWPPP</b>

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<b>Training Topic Area</b>	<b>Employee Group to Receive Training</b>	<b>Training Frequency</b>	<b>Potential Training Type</b>
Water quality protection in flood control projects (detention basins, dams)	DPW  Contractors, Inspectors	1 Time  As Needed With New Projects	<b>Retrofitting Detention Ponds for Water Quality – Live Presentation, and/or</b>  <b>Various webinars as developed by WEF, AWWA or other similar organizations (Forrester)</b>
<b>Training completed:</b>	Sparta School	2018 as needed	<b>As needed maintenance on existing detention pond with the new construction</b>
Controls to reduce discharge of pesticides, herbicides, and fertilizers	DPW  Contractors Hired by Village,  Contractors working in Village	DPW- Once Every 2 years  As hired  As contacted by DPW	<b>LGRW_LandscapingContractorTrainingBrochure_2011-08-01.pub</b>
<b>Training completed:</b>	Contractor hired by village	2017 – 2018	<b>Brochure handed to contractor</b>
<b>Other Topics</b>			
Construction site stormwater runoff	DPW, Code Enforcement Officers  DPW  Contractors Hired By Village  Contractors Working In Village	1 time  1 time  As Hired  As contacted By DPW	<b>Ground Control - Storm Water Pollution Prevention for Construction Sites - DVD from Excal Visual, LLC</b> <b>LGRW_ContractorTrainingBrochure_2011-09-16.pub</b>

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Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
<b>Training completed:</b>	DPW, Code enforcement, contractors hired by village, and contractors working in the village	2017-2018	Verbally as needed
LID	DPW  Village Inspectors	1 Time  As Needed	<b>Reduce Runoff: Slow It Down, Spread It Out, Soak It In - DVD from USEPA</b>  <b>After the Storm-DVD</b>  <b>Attend New Training As Available</b>
<b>Training completed:</b>	None for this reporting period		
IDEP	DPW, Water Dept., Sewer Dept., Police Dept., Fire Dept., Village Office Employees, Inspectors, Municipal Officials	Annually	<b>WaterPollutionReportForm.doc</b> <b>Article_City_Employees.doc</b>
<b>Training completed:</b>	DPW	2018	Refresher training
General Storm Water Education	Municipal officials	As Hired or Elected to Office	<b>"Back to Basics" Storm Water Training – Live Presentations</b>
<b>Training completed:</b>	None for this reporting period		

## **Part 2E - Post Construction Controls Activities**

### **August 1, 2017 to July 31, 2018**

The Village of Sparta has adopted the Kent County Model Storm Water Ordinance for Storm Water Controls. Ordinance No. 04-10, Chapter 74, Section 1, Article VI. Stormwater, adopted 9-13-04, The Village requires specific practices for water quality and stream protection as follows:

**Sec. 74-294. Stormwater discharge rates and volumes.**

The Village is authorized to establish minimum design standards for stormwater discharge release rates and to require dischargers to implement on-site retention, detention or other methods necessary to control the rate and volume of surface water runoff discharged into a stormwater drainage system.

As described in Division 8 of the Ordinance, the Village requires Low Impact Development practices through its storm water management standards at sites of new development and significant redevelopment if located in Zone A of the Village.

The Storm Water Ordinance includes regulations that adhere to the Floodplain Ordinance and the Soil Erosion and Sedimentation Control program of the Village.

Section 74-317 describes the maintenance agreements required with developers. It states the following:

The Developer shall provide all storm water maintenance agreements necessary to implement the approved drainage plan and to otherwise comply with this ordinance in form and substance as required by the Village, and shall record such agreements as directed by the Village. The maintenance agreements shall, among other matters, assure access for proper inspection and maintenance of storm water runoff facilities and adequate emergency overland flow-ways.

**Explain the enforcement activities of your comprehensive storm water management program for post-construction controls completed during this reporting period:**

The Village of Sparta currently has 2 storm water maintenance agreements. These agreements are up to date for this reporting period. The Village is working on adding 4 more agreements. Refer to Storm Water Controls Maintenance Agreements at the DPW 276 West Division

**How many developments were approved with storm water controls according to PCC?**

Three

**Have any long-term operation and maintenance agreements been signed?**

Six

**How many inspections or enforcement/compliance of O&M agreements were conducted?**

One with Spectrum Health.

**Explain how the Post Construction Controls have addressed other issues, such as protecting sensitive areas, directing growth to identified areas, encouraging infill development in higher density urban areas and areas with existing infrastructure, and/or maintaining or increase open spaces.**

Designed storm water retention under parking lots will prevent storm water system from being overwhelmed during heavy rains. If Storm Water Agreements are followed the system will

have less flooding. This also helps keep dirt, grass clippings, leaves, and other unwanted debris out of the storm system.

## Part 3 - PEP

### Regional PEP

The updated Public Education Plan (PEP) was approved by MDEQ in February 2013. The purpose of the PEP is to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. This section provides a report of public education activities implemented between August 1, 2017, and July 31, 2018.

### Public Engagement Committee

LGRW Public Engagement Committee was formed in 1999 to begin development and implementation of the PEP. Since that time the committee has met on a regular basis to discuss and plan activities scheduled for implementation in the PEP and the LGR Watershed Management Plan. In addition to MS4 communities, the 2017-2018 Public Engagement Committee consisted of the following community partners:

<b>Table 3. Non-MS4 Partner Organizations</b>	
<b>Agency</b>	<b>Representative</b>
MDEQ	Amanda St. Amour
GVMC – West Michigan Clean Air Coalition	Andrea Faber
Ottawa Co. Conservation District	Benjamin Jordan
Boy Scouts of America	Bridget Knight
GVMC	Eileen Boekestein
Trout Unlimited	Jamie Vaughan
Groundswell, GVSU	Joanna Allerhand
Groundswell, GVSU	Kymberly Pawelka
Kent County Resource Recovery	Megan Kretz
MDEQ	Michelle Storey
WMEAC	Jessica VanderArk
WMEAC	Kyle Hart
GVMC/GVSU	Carlos Calderon
The Right Place	Rick Chapla
GVMC	Rachel Frantz
Grand Rapids Public Museum	Stephanie Ogren
Grand Rapids Public Museum	Erin Koren
GVMC	Wendy Ogilvie
Kent County Health Department	Brendan Earl
Kent Conservation District	Jessie Schulte
Citizen Labs	Allen Clark
GVMC	Cara Decker

During this reporting period, the Committee reorganized to set priority topics and create a functional meeting schedule. Instead of holding meetings once every two months, the committee meets in January, February and May. During the summer months, meetings are not held because communities are busy attending and hosting outreach events. The group reconvenes in September to review their summer activities, and begin to plan for the next year. Meetings are then held in October and November. Goals for each meeting are as follows:

January: Distribute PEP materials and discuss distribution

February: Pick up orders, Plan for the year's events

May: Ongoing business, Committee updates

September: Review event year, Ongoing business

October: Ongoing business, Discuss changes for next year

November: Finalize orders for next year

During the October Committee meeting, the group chooses which PEP topics to focus on for the next year. Information regarding all topics covered in the PEP may be discussed and promoted by communities throughout the year, as described in detail in the remainder of this section of the report. The committee decided that if more energy is focused on a few key topics each year, then education regarding those specific topics can be thoroughly explored. Educational materials and give-aways are then designed around the key topics. While each year focuses on a particular set of topics, all six education categories will still be addressed in detail at least once during each reporting period.

Additional information regarding the Public Education Committee is available at: <https://www.lgrow.org/ms4information>. Materials, training opportunities, and other resources are available via this webpage.

## **PEP Implementation**

This section describes the public education activities implemented by the Permittees from August 1, 2017 through July 31, 2018. The following report describes activities which meet the requirements of the 2013 approved PEP. Target audiences, messages, and delivery mechanisms are described for each Public Education Topic.

### Public Education Topic 1 - Personal Watershed Stewardship

*PEP Objective 1*: Educate the public about their responsibility and stewardship in their watershed.

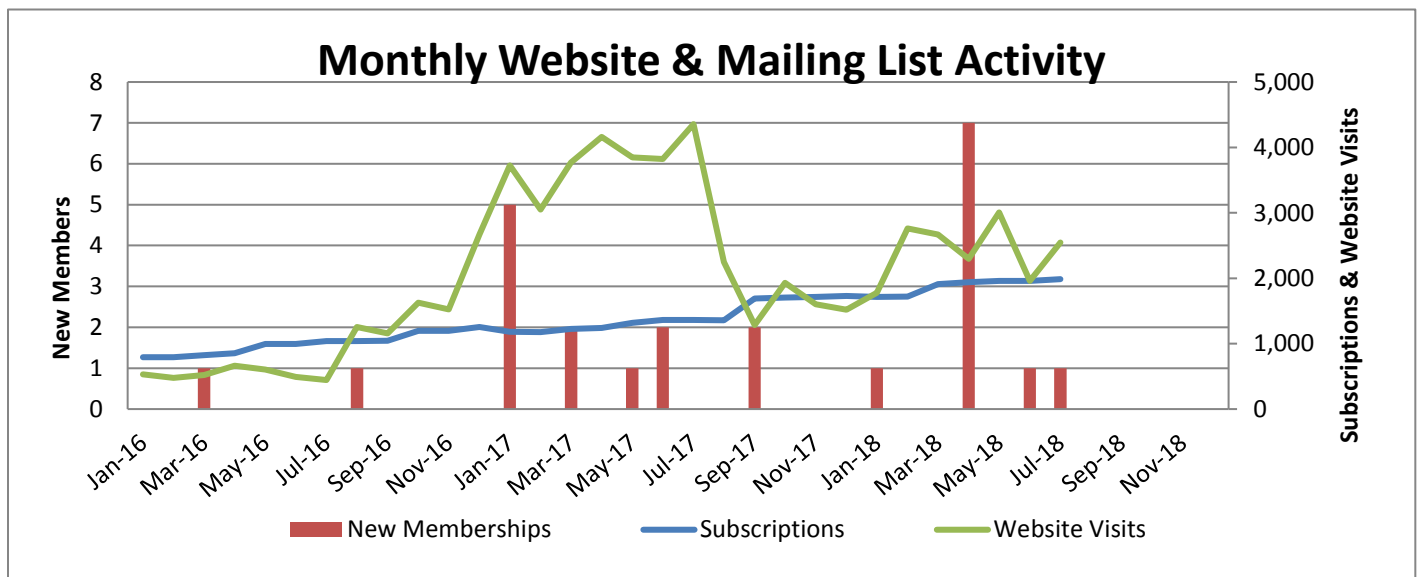
*Target Audience*: Residents, visitors, and public employees

*Content of Message:* 1) A watershed is an area of land draining to a common point. You live in the LGRW, you impact the watershed. 2) Learn more about the LGROW by visiting LGROW.org. 3) Reasons for protecting the watershed. 4) Ways individual can affect the watershed through their activities.

*Delivery Method:*

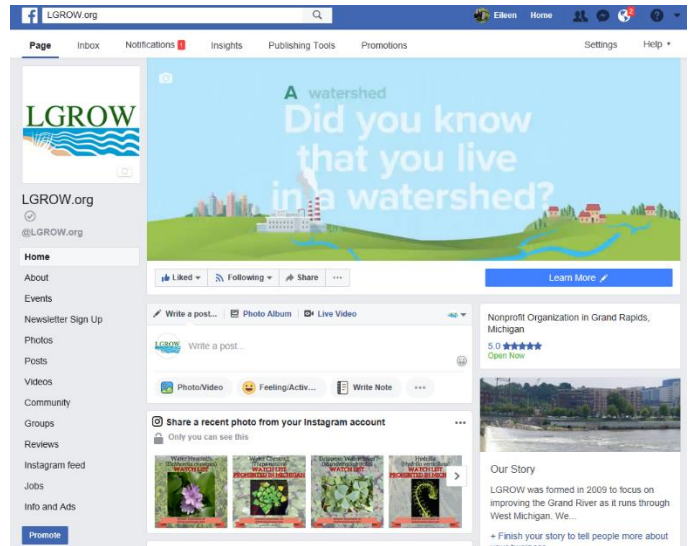
- Permittees' websites link to LGROW's website, [www.lgrow.org](http://www.lgrow.org). The watershed website provides information on non-point source (NPS) pollution, local watershed issues, water science education, and watershed management. A major website update was launched at the beginning of the 2017-2018 reporting period and was accessed by an average of 758 unique visitors each month. The website logged 9,090 unique visitors over the entire reporting period.
- LGROW also sends out a seasonal email newsletter with information about the watershed, upcoming educational events, and stormwater educational articles. Newsletter subscriptions and website traffic by month are displayed in Figure 3.

**Figure 3. Page Visits to LGROW.org by Month**

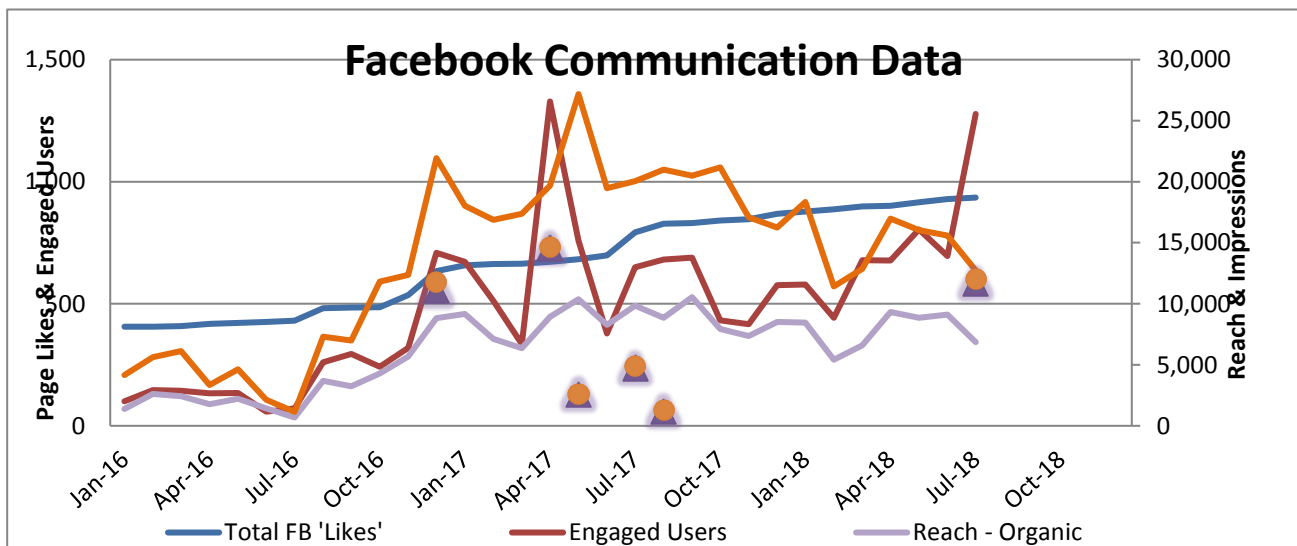




- LGROW worked to promote participation through its Facebook page with a regular posting schedule including watershed project highlights, upcoming events, and volunteer opportunities. Throughout the reporting period, LGROW Facebook posts have reached 107,622 people. As of the end of the reporting period, the Facebook page reached 935 Likes (this number has increased from the last reporting period). Facebook user engagement has shown consistent growth over the reporting period with the average number of Likes, Shares, and Comments. LGROW promoted its Facebook page three times during the reporting period using paid promotions, which increased its audience significantly. Facebook activity is displayed by month in Figure 4.



**Figure 4 Facebook Communication Data by Month**



- Permittees distributed LGROW, stormwater, and watershed education materials listed below to residents in the LGRW at multiple events, and venues. Materials were distributed according to the

type of event and the target audiences in attendance. Listed below are the number and type of educational materials ordered by permittees to distribute throughout the reporting period:

- 2000 LGROW Lip Balms
- 1500 "Report Illicit Discharge" fridge magnets
- 1000 Rainbow Trout "Only rain in the drain" stress balls
- 1500 "Keep your Lakes Great and your River Grand" dry bags
- 700 "Keep your Lakes Great and your River Grand" magic scarves
- 1200 "Report Illicit Discharge" coasters
- 500 Car Wash pledges and shammies
- 500 Pet Waste pledges and dispensers
- 1000 Paint by number Watershed Maps

Other public education materials ordered during previous permit cycles were also distributed by permittees, including:

- Keep Your Lakes Great and Your Rivers Grand Magnets
- Keep Your Lakes Great and Your Rivers Grand vinyl stickers
- Watershed Temporary Tattoos
- Troutie Coloring Books
- Reusable Water Bottles
- Reusable Tote Bags
- LGROW Brochures
- Landscaping for Water Quality booklets
- LGROW Gardening Gloves
- LGROW Pens
- LGROW Custom Baseballs



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- Many Permittees displayed lamppost banners when first purchased in 2012 to advertise the presence of the Grand River, Rogue River, and Plaster Creek Watersheds. The banners featured the LGROW logo and the message “Yours to Protect.” In early 2018, 4 communities ordered additional banners for display, including new banners for Buck Creek and the Thornapple River.



Banners on display in Spring Lake

- Through cooperation of staff in permitted communities, Public Engagement Committee participants, GVMC staff, and other members of LGROW, about 50 events around the watershed had representation from the Lower Grand River. Event participation by community is detailed in Table 4. Community-specific event activities are detailed in each Permittees' PEP questionnaire. Events attended by more than one MS4, or that were coordinated through LGROW, are discussed in the section following Table 4, and in the Delivery Method section of corresponding objectives.

MS4

<b>Table 4 LGROW and MS4 Participant Events</b>		
<b>MS4 Community</b>	<b>Event/ Activity</b>	<b>Date</b>
Cascade Charter Township	LGROW Spring Forum Host	5/11/2018
Ferrysburg, City of	LGROW Focus Group	12/18/2017
Forest Hills Public Schools	Classroom Programming through Groundswell	Ongoing
Georgetown Charter Township	Jenison Public Schools Collaboration	Ongoing
	Ottawa County Water Quality Forum	11/30/2017
Grand Haven, City of	Earth Day Festival	4/21/2018
	LGROW Focus Group	12/18/2017
	Robinson Elementary	3/21/2018
	Coast Guard Festival	7/28 - 8/5/2017
	Salmon Festival	9/16/2017
Grand Rapids, City of	Home Show	3/1-4/2018
	Mayors Grand River Cleanup	9/9/2017
	Ottawa County Water Quality Forum	11/30/2017
	Grand River Water Festival	6/23/2018
	Dia del Nino	4/28/2018
	Canoemobile	5/7-5/11/2018
	Presentation to Museum School	10/11/2017
	Water Resource Recovery Facility Tours	Ongoing
	Rainbarrel Workshop	7/29/2018
	WhiteCaps Game	7/26/2018
	Grand River Spring Forum	5/11/2018
Grand Rapids Charter Township	Partner with FHPS	Ongoing
Grandville, City of	Buck Creek Cleanup	8/5/2017
	Mayors Grand River Cleanup	9/9/2017
	Michigan Week Community Event	5/16/2018
Hudsonville, City of	Ottawa County Water Quality Forum	11/30/2017
Kent County Drain Commissioner	Grand River Spring Forum	5/11/2018
Kent County Road Commission	Facility Tours	Ongoing
Kentwood, City of	Touch A Truck/DPW Behind the Scenes (with Kent Co DPW)	5/16/2018
	Buck Creek Cleanup	8/5/2017
	LGROW Focus Group	12/18/2017
	Grand River Spring Forum	5/11/2018

<b>Table 4 LGROW and MS4 Participant Events</b>		
<b>MS4 Community</b>	<b>Event/ Activity</b>	<b>Date</b>
Ottawa County Administration and Water Resources Commissioner	Ottawa County Water Quality Forum	11/30/2017
	Grand River Spring Forum	5/11/2018
Ottawa County Road Commission	Partner with Georgetown Township & Jenison Public Schools	Ongoing
Plainfield Charter Township	Grand River Spring Forum	5/11/2018
Sparta, Village of	Nash Creek Cleanup-Planting	4/18//2018
	Village Hazardous Waste Collection	4/19/2018
	Partnership with Sparta Schools	Ongoing
Spring Lake, Village of	Mill Point Park River Cleanup	5/12/2018
	LGROW Focus Group	12/18/2017
Walker, City of	Grand River Spring Forum	5/11/2018
	Indian Mill Creek Cleanup	6/2/2018
	KDL Reading Carnival	6/12/2018
Wyoming, City of	Buck Creek Cleanup	8/5/2017
	Partnership with Godwin and Wyoming Schools	Ongoing
	City Cleanup	4/21/2018
	Facility Tours	Ongoing
	Grand River Spring Forum	5/11/2018

- The Quiet Water Symposium promotes non-motorized outdoor recreation and a shared concern for our Great Lakes environment. The 23rd Annual Symposium was held on March 3rd, 2018. LGROW hosted a booth with several watershed displays and distributed information and giveaways focused on watershed awareness and the development of a Water Trail throughout the Grand River. Although this event takes place outside the LGRW, many of the attendees



travel through the Lower Grand during their excursions. The Symposium also presents a valuable opportunity to partner with our upstream watershed, the Middle Grand River Organization of Watersheds (MGROW), who is actively involved in public outreach through their own MS4 program.



- LGROW hosted a table at the Blandford Nature Center Earth Day event on April 21, 2018. This was a public event designed to connect residents of the Grand Rapids metro area with their local community



conservation resources, information on new and upcoming projects, and highlight volunteer opportunities to get involved. LGROW hosted a table with information on the watershed, the LGROW Rainscaping program pilot in Indian Mill Creek Watershed, and stormwater educational materials focusing on pet waste and car wash pledges.

- The 15th Annual Grand River Forum on May 11, 2018, was put on by LGROW at the Wisner Center in Cascade Township. The event offered 111 attendees a regional perspective on emerging issues and accomplishments from around the Watershed. This year's keynote speaker, Al Steinman, from GVSU's Annis Water Resources Institute, spoke about Integrated Water Management. Next, Scott Conners (City of Walker Engineer and LGROW Board Chair) moderated a Panel Discussion that focused on the new post-construction control stormwater requirements. Panelists included Carrie Rivette, Wastewater/Stormwater

WELCOME TO THE  
LOWER GRAND RIVER ORGANIZATION OF WATERSHEDS'  
15th ANNUAL

# Grand River Spring Forum

CASCADE TOWNSHIP LIBRARY  
WISNER CENTER  
MAY 11, 2018  
8:30 am - 11:30 am

## Agenda

8:00-8:30	Registration
8:30-8:45	Welcome and Introduction
8:45-9:05	Keynote Address
9:05-9:35	Panel Discussion
9:35-9:55	Passing of the Paddle
9:55-10:10	Break
10:15-11:15	*Shed Talks
11:15-11:25	Questions and Evaluations
11:25-11:30	Closing and Next Steps
12:00 PM	Boxed Lunch and Kayak Trip
	*Must be preregistered to attend
	Ending at Thornapple Brewing Co.



Superintendent of  
the City of Grand

Rapids, Teresa Siedel, Director of the Water Resources Division of MDEQ, and Jeff Gritter, Project Manager at Vriesman and Korhorn Civil Engineers. The LGROW Chair, who was previously Scott Conners from the City of Walker, changed hands to Carrie Rivette from the City of Grand Rapids. This change was commemorated with a 'Passing of the Paddle' ceremony.

The remainder of the forum focused on emerging watershed issues. Presentations were given by Jessie Schulte (Kent County Conservation District) and Rob Petit

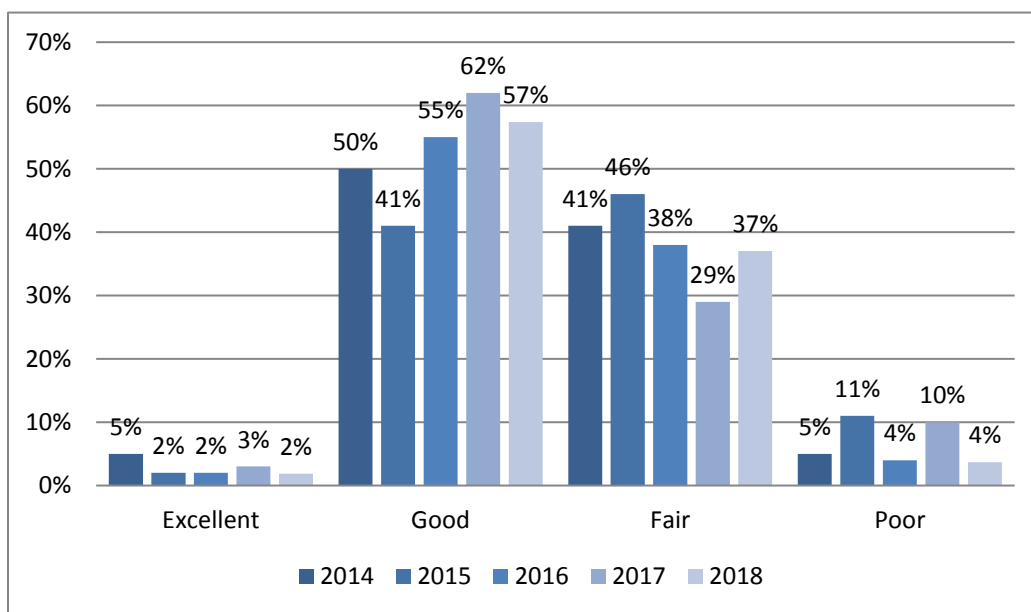
(ECT) on the Regional Conservation Partnership Program; Brenda Perry (Facilitator, Kent Innovation High School), Joe Phillips (Design Lab Instructor, Kent Career Tech Center) and their students on place-based environmental education curriculum they used in their classrooms; Wes Landon (Native Edge, LLC.) and Julie Parks (Executive Director of Workforce Training, Grand Rapids Community College) on the Rainscaping Program; Natalie Henley (West Michigan Environmental Action Council) on the Grand River Water Trail; LGROW Committee Chairs gave updates for each committee; and LGROW Staff discussed the pre-forum survey results.

Each forum participant completed surveys after both registering and attending the event. A



selection of the questions from each survey is asked annually to determine if there is a measurable change in people's attitudes toward and perception of the river. Figure 5 shows an increase in respondents identifying water quality in the Grand River as "Fair" rather than "Poor" from 2017 to 2018.

**Figure 4. 2017 Survey Results: How would you rate the water quality in the Grand River?**



- LGROW sponsored the Grand River Water Festival on June 23, 2018, at Riverside Park, which was attended by approximately 3,000 people. The festival is a free-of-charge, day-long, music driven, environmental festival featuring traditional folk, country, bluegrass, Cajun, blues, and world beat music performed by Michigan musicians. Visitors to the LGROW booth identified their location in the watershed by referencing maps, and Major Runoff, the Stormwater Mascot, engaged



with children and adults. Volunteers at the LGROW booth helped children of all ages create paintings of nature scenes using native soils to the watershed, similar to artists who create field drawings using natural materials they find in the environment. The LGROW booth's educational materials focused on how homeowners can reduce stormwater runoff from their properties

by installing green infrastructure practices through the LGROW Rainscaping program.

- LGROW hosted a concourse table at a WhiteCaps game on Thursday, June 26, 2018. GVMC staff and volunteers from the City of Grand Rapids (a MS4 permitted community) helped run a booth. Volunteers handed out LGROW baseballs, LGROW brochures, Pet Waste Pledges with pet waste bag dispensers, and Car Wash Pledges with shammies. Volunteers discussed the importance of watershed protection with attendees of the game.



- LGROW worked with students from schools throughout the watershed to educate about the connections between land use and water quality. LGROW led activities for 465 students from the City of Grand Rapids and Plainfield Township focused on macroinvertebrate sampling and runoff vs. infiltration at the annual Canoemobile event at Riverside Park in Grand Rapids. LGROW also worked directly with Jenison



Public Schools and Forest Hills Public Schools to teach 99 students at Bauerwood Elementary and 90 at Northern Trails 5/6 about the Grand River Watershed and the ultimate discharge location of stormwater systems, as well as personal actions that can protect water quality. These activities resulted in students marking 50 catch basins on Northern Trails' campus and 100 catch basins in the neighborhood surrounding Bauerwood. LGROW also assisted schools with their existing educational activities surrounding watersheds and nonpoint source pollution. LGROW led an activity connecting land use and habitat with macroinvertebrates and water quality at a Water Field Day for 525 students in Godfrey Lee schools in Wyoming, helped 25 students stencil 9 catch basins and complete rain garden/riparian maintenance near Buck Creek in Grandville, and assisted a teacher at Pinewood Elementary in Kentwood Public Schools with her annual Buck Creek education day for 120 students. Additionally, 40 students from Kenowa Hills High School participated in the spring Indian Mill Creek Cleanup. LGROW also participates as a member of the Groundswell advisory council, which supports schools in the Lower Grand River Watershed as they implement place-based education and stewardship projects in the watershed. Groundswell reaches approximately 500 students annually through its programs focused on the Lower Grand River Watershed, including supporting projects at 3 schools in the nested jurisdiction of Kentwood Public Schools and at 5 schools in the permitted district of Forest Hills Public Schools.



Students marking catch basins at Northern Trails 5/6 in Forest Hills

- The 'Find My Watershed Tool' was improved during this reporting period and can be accessed via LGROW's homepage, or at: [https://www.google.com/maps/d/u/0/viewer?mid=1WuQZRA612p4X1t\\_9i4qNYIP\\_830\\_ZIi-&ll=42.99923233465322%2C-85.46882900000003&z=9](https://www.google.com/maps/d/u/0/viewer?mid=1WuQZRA612p4X1t_9i4qNYIP_830_ZIi-&ll=42.99923233465322%2C-85.46882900000003&z=9). An advertisement was created through National CineMedia, LLC regarding this tool. The 30-second advertisement is also available for viewing on LGROW's website. The advertisement ran for 8 weeks as a digital media campaign, targeted online to people who were in the Lower Grand River Watershed. About 79% of people that the advertisement was delivered to watched the entire commercial. Industry average is around 60%. The commercial was shown 120,419 times.



Fall Seasonal Tips Flier

- Seasonal Watershed 'Tip' fliers were distributed to communities. These fliers focused on positive actions that Department of Public Works employees and citizens alike could take to improve the water quality in the watershed. Tips focused on different actions that were relevant to that respective season.

Public Education Topic 2 - Ultimate Stormwater Discharge  
Location and Potential Impacts

*PEP Objective 2:* Education on the location of residential stormwater system catch basins, where the system discharges, and impacts from pollutants.

*Target Audience:* Landscapers/lawn care companies, auto repair shops, commercial power washers, carpet/floor cleaning companies, commercial operations, industries, residents, and local businesses

*Content of Message:* 1) Storm drains connect to your local lakes and streams, not a water treatment plant. 2) Prevent pollution from entering your storm drains and protect the health of your family, your community, and the Grand River. 3) Education on the impacts of stormwater pollutants. 4) Education on the stormwater system and receiving water bodies in a person's or company's neighborhood.

This topic was chosen as one of two key topics by the Public Education Committee to focus on during this reporting period.

*Delivery Method:*

- Permittees installed the plastic storm drain markers designed by the Public Engagement Committee. The drain markers carry the messages "Keep your Lakes Great and your Rivers Grand." Some Permittees also engaged with community partners to do storm drain stenciling events which are detailed in the PEP Questionnaire. This image was also used on several giveaways including vinyl stickers and magnets. In total, 150 drain markers were installed and 9 storm drains stenciled with the message "No Dumping: Drains to Waterway" in the watershed.



Storm drain markers

- Permittees utilized a variety of stormwater displays including the drop toss game, the watershed pushpin map, the LGROW banners on non-point source pollution, Car Wash and Pet Waste Pledge posters, and the "Grand River Yours To Protect" informational poster board at a variety of events and locations throughout the Watershed. The PEP Questionnaire included in this report details when and where these displays were used by individual Permittees.
- An advertisement explaining that storm drains lead directly to rivers, lakes and streams was printed on the back of all household hazardous waste collection flyers printed for Kent County MS4 communities.
- Troutie Stress Balls were provided for communities to distribute. The fish shaped stress balls had the message: 'Only rain in the drain, it leads directly to my home!' This give-away allowed people to easily make the connection between storm drains and water quality as it relates to aquatic habitat.



Household Hazardous Waste flyer advertisement

### Public Education Topic 3 - Public Reporting of Illicit Discharges

*PEP Objective 3:* Encourage public reporting of the presence of illicit discharges or improper disposal into the stormwater system.

*Target Audience:* Residents, public employees, businesses, construction activities, industries, and septic system owners/haulers.

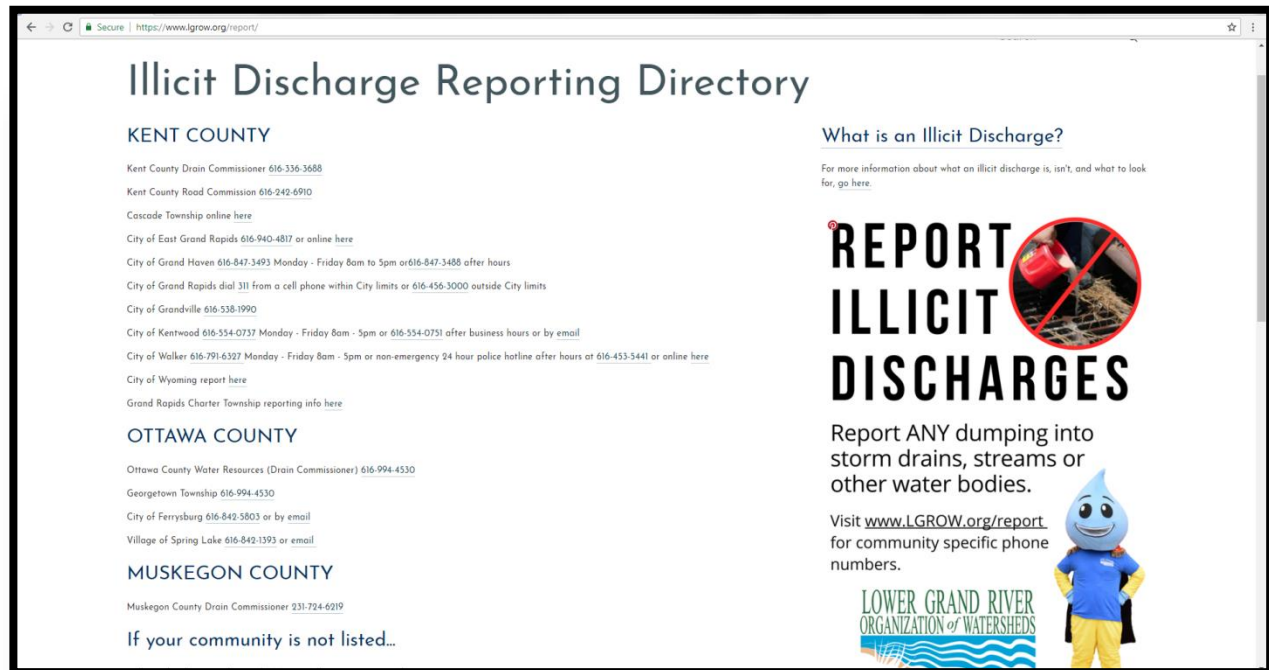
*Content of Message:* 1) How to identify illicit discharges. 2) How to report illicit discharges. 3) Water quality impacts from illicit discharges. 4) Consequences/penalties associated with illicit discharges and improper waste disposal. 5) Proper septic system care and maintenance. 6) How to recognize system failure. 7) Impacts failing systems have on water quality. 8) Where to go for assistance.

The Public Reporting of Illicit Discharges was selected by the Public Education Committee as one of two key topics to focus on for this reporting period. It was important that communities focused on this topic because IDEP outfall screening occurred for many municipalities in the watershed during the summer of 2018.

Village of Sparta  
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*Delivery Method:*

- A reporting website for MS4 communities across the Lower Grand River Watershed was created in



order to offer a Reporting Directory for DPW employees or citizens seeking information about how to report illicit discharges. This website can be found at: <https://www.lgrow.org/report/>. Communities were encouraged to share this information on their municipal webpages, and on social media. Information was also added to the LGROW website to inform the public about what an illicit discharge is.

- Illicit discharge magnets and coasters were created in conjunction with the reporting website to promote use of the website and to raise awareness for DPW employees and citizens, encouraging them to report illicit discharges.
- A newsletter article titled, 'Reduce and Report Pollution Entering the Grand River' was published for all MS4s to distribute to their employees or citizens. This article highlighted the reporting webpage, and gave advice on how to reduce stormwater pollution.





- Permittees made information about how to report illicit discharges available to residents and staff through a variety of channels. Some communities promote the Citizens Reporting form developed previously by LGROW, while others use an online reporting form. The method each community used to distribute this information is detailed in PEP Questionnaires.
- Permittees distributed the article *"How you as an Employee Can Help Reduce Pollution Entering the Grand River"* to their employees. This article encourages employees to report stormwater discharges to their community's stormwater coordinator.
- Permittees distributed copies of USEPA's *"Do your Part- Be Septic Smart!"* brochure to their residents. This brochure describes what a septic system is, how it works, and how to maintain it. LGROW participated in SepticSmart week September 18-22, 2017 by publishing a blog post and daily social media posts about proper septic maintenance.



#### Public Education Topic 4 - Personal Actions that can Impact the Watershed

*PEP Objective 4:* Education on the need to minimize the amount of residential or non-commercial wastes washed into the storm sewer system.

*Target Audience:* Residents, schools, non-profit groups conducting carwash fundraisers, public employees, visitors, recreational users, riparian landowners

*Content of Message:* 1) BMPs for car, pavement, power washing. 2) Preferred cleaning materials and practices, "phosphate free as important as biodegradable". 3) BMPs for pesticide use, fertilizer use and their disposal. 4) BMPs for proper management of grass clippings, leaf litter, and animal wastes. 5) BMPs for residential deicer use. 6) BMPs for native vegetation on residential properties as an alternative to turf grass. 7) Effects of residential wastes on our waterbodies. 8) Education on low impact development techniques.



*Delivery Method:*

- Permittees distributed the brochure "*Make your Household the Solution to Water Pollution*". The Public Engagement Committee contracted with the Hispanic Center of West Michigan to produce a Spanish translation of this brochure for communities as well.
- Several communities hosted rain barrel events or rain garden work days as detailed in their PEP Questionnaires.
- Permittees collected pet waste pledges from dog owners in exchange for a free pet waste bag dispenser to hook to the pet's leash. The pledges also provide information on dog parks in the Watershed and discuss the connection between picking up pet waste and protecting stormwater. This brochure was adapted, with permission, from a similar program in Portland, Oregon. In this reporting period, 127 new pet waste pledges were collected from around the watershed.
- Permittees collected car wash pledges from residents in exchange for a free shammy to use for home car washes. The pledge provides the following information about car washes: *There's no problem with washing your car, it just matters how and where you choose to wash it. The average homeowner uses 116 gallons of water to wash a car. If you wash your car in your driveway, all that water, along with the soap, grease, brake dust, oil, and dirt that you wash off your car flows directly into the nearest storm drain. From there, it's just a short trip to the Grand River and eventually Lake Michigan.* In addition, residents keep a portion of the pledge that provides other environmental friendly car care tips. In this reporting period, 52 new car wash pledges were collected from around the watershed.
- LGROW developed a flyer describing proper procedure for draining residential swimming pools in the fall. This was distributed publicly online via [www.lgrow.org](http://www.lgrow.org) and made available for customization by MS4 communities. The flyer can be downloaded at <https://www.lgrow.org/ms4information>.



Public Education Topic 5 - Waste Management Assistance

*PEP Objective 5:* Education on proper disposal of household hazard waste (HHW), travel trailer/boating sanitary wastes, chemicals, motor vehicle fluids, and unused medications.

*Target Audience:* Residents, visitors, and public employees

*Content of Message:* 1) Protect your family's health: dispose of unwanted paints, solvents, and cleaners at your county collection center. 2) Recycle used oil and automotive fluids. Just one gallon of used motor oil dumped down a catch basin can contaminate one million gallons of your drinking water. 3) Education on types of HHW and available alternatives. 4) Education on disposal locations of HHW, travel trailer/boating sanitary wastes, chemicals, motor vehicle fluids and unused medications.

*Delivery Method:*

- Permittees and LGROW.org shared the newsletter articles "*How You Can Help Reduce Pollution Entering the Grand River*" and "*What Can You Do to Help Protect Your Watershed?*" These articles explain the watershed concept and encourage residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.
- Permittees distributed the flyer "*Make Your Household the Solution to Stormwater Pollution*" in both English and Spanish, which also details the importance of proper disposal of household hazardous waste.
- Both Kent and Ottawa County communities distributed household hazardous waste flyers at events and provided information on recycling household hazardous waste via the phone and websites. Many permittees also opted to distribute these materials at their respective community events. Kent County's expanded household hazardous waste collection hours to allowed more Kent County residents to take advantage of this service.
- Many communities hosted clean up days to encourage proper disposal of unwanted materials. Details of these events, as applicable, are provided in individual PEP Questionnaires and Part 7.



## Public Education Topics 6 - Management of Riparian Lands

*PEP Objective 6:* Education concerning management of riparian lands to protect water quality.

*Target Audience:* Riparian landowners, construction activities, landscapers

*Content of Message:* 1) Importance of riparian corridors/stream buffers. 2) How to landscape for better water quality. 3) Education on shoreline stabilization techniques, stream buggers, filter strips, conservation easements, and bioengineering techniques.

*Delivery Method:*

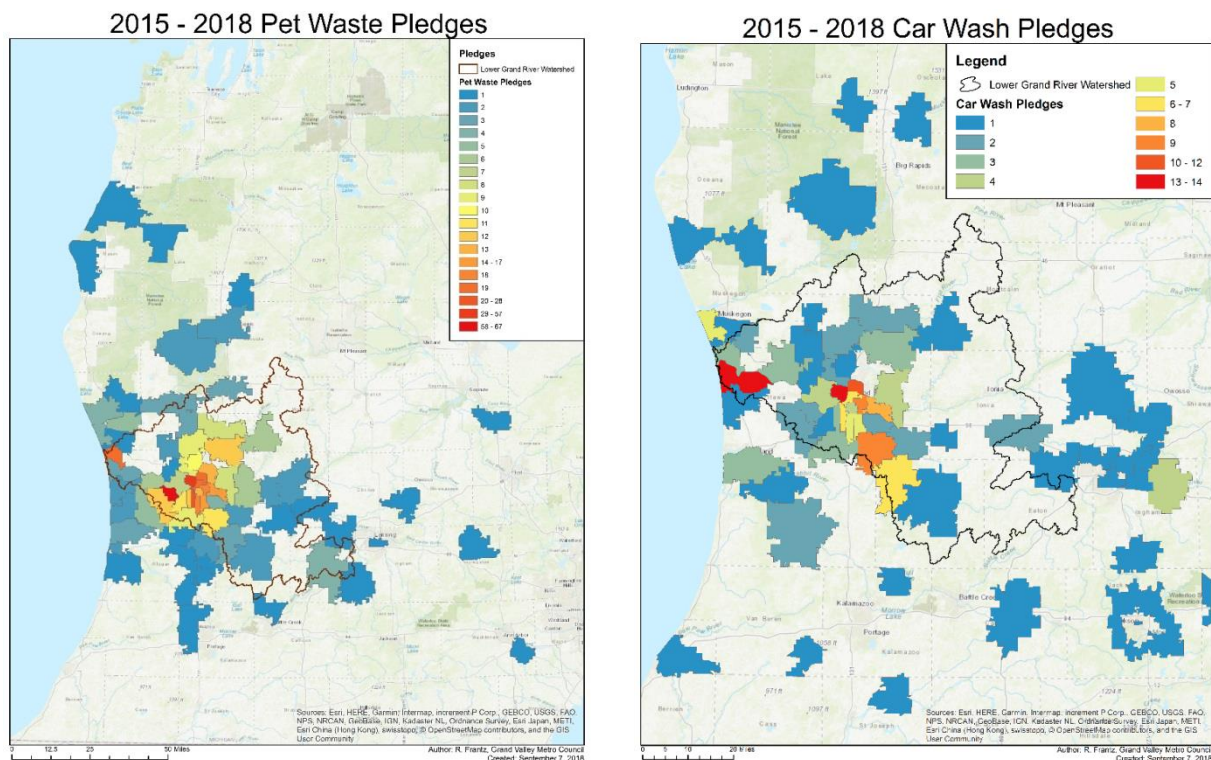
- Permittees distributed the brochure "*What Every Landscaper Should Know*, to their subcontractors and facilities staff. These brochures detail BMPs for fertilizer and pesticide application, lawn care, and native plantings.
- LGROW launched and promoted its Grand River Rainscaping: Treating Stormwater Naturally program. This program aims to promote installation of green infrastructure and native landscaping practices to reduce stormwater runoff from residential properties and improve water quality. Residential site assessments were performed on 28 properties, 19 of which were in MS4 communities, and a 600 square foot demonstration rain garden was installed at West Catholic High School. Residents who have a site assessment completed receive a customized report of what green infrastructure practices are best suited to their site as well as resources for implementing those practices. The Rainscaping program is aimed at both shoreline and non-shoreline properties.



## Evaluation Measures

This section includes a description of the quantitative and qualitative evaluation measures of PEP effectiveness implemented between August 1, 2017, and July 31, 2018. During this reporting period, LGROW also contracted with Petersen Research Consultants, LLC to create updated robust evaluation measures for the PEP. An updated evaluation plan will be completed during the next permit cycle as part of LGROW's ongoing PEP update process.

During this permit cycle, permittees completed PEP Questionnaires to provide a quantitative and qualitative evaluation of their individual stormwater education efforts. In total, materials were distributed at over 50 events (Table 4) and at various locations throughout the watershed. The car wash and pet waste pledges represent more than an educational outreach effort; these are a commitment to a behavioral change which has an important impact on water quality. The majority of responses for both pledges were from residents within the watershed. This program was very popular, with a total of 551 pet waste and 211 car wash pledges collected since the start of the 2015-16 reporting period to the end of the 2017-2018 reporting period. Of those totals, 127 pet waste and 52 car wash pledges were collected during the 2017-2018 reporting period from across the watershed.



### 2017 Public Education Focus Group

A focus group was held on December 18, 2017 at the offices of GVMC with the purpose to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts. The last focus group held to evaluate the PEP was in 2009 at Fishbeck, Thompson, Carr & Huber (FTC&H) in Grand Rapids to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts in 2008 and 2009.

The 2017 focus group was held with the purpose to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts since 2009. Using the information provided from the focus group, the PEP for the LGRW communities can be edited in the future to better serve the public. The challenges, successes, and recommendations communicated in this report will be evaluated to modify the PEP as needed. The updated PEP will result in a more effective public outreach campaign to reduce stormwater pollution and raise MS4 awareness during the next permit cycle.

Focus group participants were nominated by local units of government that maintain MS4 permits. Each participating local unit of government was asked to submit two potential participants that meet the following criteria:

1. The nominees must live in Kent or Ottawa Counties, specifically in the Lower Grand River Watershed, preferably in the community they are representing
2. The individuals do not manage or have direct involvement with your community's MS4 Permit
3. The nominees have had the potential to encounter LGROW deliverables (examples: events, educational outreach, brochures or fliers, LGROW website or Facebook page)

GVMC staff administered the 1.5 hour long focus group session on December 18, 2017. Twelve invited individuals were present, representing Kent and Ottawa Counties. Eleven of the 23 municipalities that GVMC



works with regarding MS4 permits were represented. There was a diverse demographic represented among the group.

Discussion began with introductions of everyone present and an ice breaker question. The conversation followed six dialogue questions led by GVMC. The dialogue questions were as follows:

2017 LGROW Focus Group Dialogue Questions
1. What do you know about LGROW?
2. What LGROW information have you seen, heard, or read?
3. Did the message (that you have seen, heard, or read) influence you? If so, how?
4. Have you seen any stormwater or pollution prevention messaging at your workplace? Who was the message from? (LGROW, employer, other org.)
5. How could LGROW project deliverables be improved?
6. Where and how do you get information on community activities?

This focus group ended up being a very educational experience for its participants while providing valuable feedback on LGROW outreach activities. The mixed demographic of participants and the number of MS4 communities participating provided a fairly diverse view of LGROW's reach into the watershed, and participants shared many ideas to improve LGROW messaging.

Key take-aways for LGROW from the focus group are summarized in the following table:

How LGROW messages can be improved	
New Target Audiences	<ul style="list-style-type: none"> <li>• <i>Municipal employees</i></li> <li>• <i>Adults through schoolchildren</i></li> <li>• <i>People living in apartment complexes</i></li> <li>• <i>LEED certified building owners</i></li> <li>• <i>Farmers</i></li> </ul>
Reworking Messages	<ul style="list-style-type: none"> <li>• <i>Translating materials in to the language of the neighborhood</i></li> <li>• <i>Address 'why' citizens need to know the message presented</i></li> <li>• <i>Simplify messages</i></li> </ul>
Delivery Mechanisms	<ul style="list-style-type: none"> <li>• <i>Placement of watershed information (placement of 'Entering the Watershed' signs, more signs for GI)</i></li> <li>• <i>Tours of municipalities and events at breweries</i></li> <li>• <i>Word of mouth</i></li> </ul>

	<ul style="list-style-type: none"><li>• <i>Presence at festivals</i></li><li>• <i>Advertising in churches in the watershed</i></li></ul>
--	--

The full 2017 Focus Group Report is attached to this Progress Report. Please reference it for further details.

## 2018 Stormwater Public Education Plan (PEP) Questionnaire

Reporting period of August 1, 2017 to July 31, 2018

Please complete this questionnaire to provide an evaluation of the stormwater education activities you have implemented between **August 1, 2017 and July 31, 2018**. GVMC will include this information, along with watershed-wide measures of effectiveness, in your 2017 Progress Report to MDEQ. **Please return this form to GVMC by September 7, 2018.**

**Community Name: Village of Sparta**

### **Brochures, Flyers, and Giveaways:**

1. Which of the following general stormwater awareness/LGROW materials (brochure, flyers, giveaways) did you order/distribute from GVMC this year:

- |   |   |
|---|---|
| <input type="checkbox"/> LGROW Brochures  | <input type="checkbox"/> LGROW "magic scarf"  |
| <input type="checkbox"/> Grand River Infographic  | <input type="checkbox"/> LGROW Totebags   |
| <input type="checkbox"/> "Make your home the Solution to Stormwater Pollution" brochure     | <input type="checkbox"/> "Keep your lakes Great and your River Grand" sticker                           |
| <input type="checkbox"/> "Do your part – be SepticSmart! Brochure                           | <input type="checkbox"/> Troutie coloring book  |
| <input type="checkbox"/> Household hazardous waste disposal guidelines from Kent County DPW | <input type="checkbox"/> Paint by number watershed map  |
| <input type="checkbox"/> Seasonal Tip Sheets (Fall, Winter, Spring, Summer)                 | <input type="checkbox"/> Watershed hand stamp   |
| <input type="checkbox"/> LGROW Water Bottles  | <input checked="" type="checkbox"/> "Report Illicit Discharges" magnet                                  |
| <input checked="" type="checkbox"/> LGROW Chapstick   | <input type="checkbox"/> Trout stress ball with "Only rain in the drain – it leads directly to my home" |
| <input type="checkbox"/> "Keep your Lakes Great and your River Grand" dry bags              | <input type="checkbox"/> Report Illicit Discharges beverage coaster                                     |
|   | <input checked="" type="checkbox"/> Other: <b>Cell phone dry bags</b>                                   |

2. Have you given away all the materials (brochures, flyers, giveaways) you ordered from GVMC this year?  
☒ Yes ☐ No

3. Where did you distribute your materials?  
☒ Government office ☐ Library ☒ Community event ☒ Other School

4. Approximately how many people did you interact with during distribution of materials? Around 800

5. What was the most popular giveaway from the materials distributed in your community? The dry bags went quickly following the chapstick. I'll try the water bottles next time if available.

6. What topics are of greatest interest to members of your community?
- |   |  |
|---|--|
| <input type="checkbox"/> How to report stormwater pollution                         | <input type="checkbox"/> Proper use of pesticides/fertilizers/herbicides |
| <input type="checkbox"/> Stormwater discharge locations/impacts                     | <input checked="" type="checkbox"/> Proper yard waste disposal           |
| <input checked="" type="checkbox"/> Native vegetation/rain gardens/riparian buffers | <input type="checkbox"/> Proper septic system maintenance                |
| <input type="checkbox"/> Proper vehicle care/motor oil disposal                     | <input checked="" type="checkbox"/> Household hazardous waste management |

### **Illicit Discharge Reporting**

1. Did you distribute illicit discharge reporting materials to your residents?  
☒ Hard copies of "Citizens Reporting Brochures" from the IDEP – Number distributed: 50 Available at Sparta Village Office 156 E. Division  
☒ Link to LGROW's reporting page posted to your website <https://www.lgrow.org/report/>



☒ Report Illicit Discharge magnets – Number distributed: 50

Please describe any interest, comments, or discussion generated from the brochure, magnet or website <https://www.lgrow.org/report/>:

0

How many complaints were received from the general public regarding illicit discharges? 4

### **Newsletters, Banners, and Displays**

2. Did you order and display new lamppost banners during this permit cycle?

☐ Ordered and displayed new lamppost banners at (streets):

☒ Displayed lamppost banners provided in 2009-2013 at (streets): On Division St. from February to Aug. 25<sup>th</sup>.

☐ Did not order or display lamppost banners

3. Did you distribute stormwater focused newsletter articles to your residents? ☒ Yes ☐ No

a. Please describe any interest, comments, or discussion generated from the articles

b. If applicable, list the newsletter name or webpage address used to distribute stormwater information to the public: Sparta Today. Also on [www.spartami.org](http://www.spartami.org)

c. If applicable, how many residents received your community newsletter? 13,000

d. If applicable, how many total website hits did you receive for your online newsletter articles or stormwater information website? Unknown

4. Did you use any of the following materials or activities at events during the reporting period?

Stormwater poster board display ☒ Yes, Date: All year ☐ No

EnviroScape interactive stormwater model ☐ Yes, Date: ☒ No

Watershed map with pushpins ☐ Yes, Date: ☒ No

Stormwater mural banner and scavenger hunt ☐ Yes, Date: ☒ No

Major Runoff stormwater mascot ☐ Yes, Date: ☒ No

Interactive Corn Hole Board ☐ Yes, Date: ☒ No

Interactive catch basin demos ☐ Yes, Date: ☒ No

### **Events and Pledges**

5. Did you host a seed bomb or native plant workshop? ☐ Yes, on: ☒ No But our local schools planted many native plants and shrubs along the Nash Creek banks after removing the invasive species.

6. Did you distribute any additional educational materials on native plants?

☒ Yes (We have a plaque from the schools that we post along Nash Creek): ☐ No

7. Please describe any interest, comments, or discussion generated from native plant workshops or giveaways:

8. Did your community collect pet waste pledges distributed with the public education materials?

☐ Yes, Number: ☒ No But we installed 6 dog waste stations near our parks

9. Did your community collect car wash pledges distributed with the public education materials?

☐ Yes, Number: ☒ No

Please describe any interest, comments, or discussion generated from either of the pledges and associated giveaways.

10. Did you implement a storm drain awareness activity between August 1, 2017 and July 31, 2018?

☐ Yes: (streets) on (dates)

☐ Yes, we held a storm drain stenciling event on (dates) and stenciled (streets)

Village of Sparta  
Lower Grand River Watershed  
2017-2018 MS4 Progress Report

- ☒ Yes, we have approximately 4 pre-marked catch basin backs/grates with the message "No dumping, drains to waterway"
- ☐ Yes, we hung door knob flyers on \_\_\_\_\_ (streets) on \_\_\_\_\_ (dates)

Please describe any interest, comments, or discussion generated from the activities above:  
Have you noticed a reduction in storm drain dumping? ☒ Yes ☐ No Describe: \_\_\_\_\_ Reduced number of calls

11. Please describe any interest, comments, or discussion generated from these materials/activities:

12. Did you participate in any community stormwater events? (check all that apply)

- |  |                 |                            |
|--|-----------------|----------------------------|
| <input type="checkbox"/> Rain barrel workshop  | Date: _____     | Number of Attendees: _____ |
| <input type="checkbox"/> Rain garden/Green Infrastructure Workday                        | Date: _____     | Number of attendees: _____ |
| <input checked="" type="checkbox"/> River clean up (Nash Creek):                         | Date: Jan. 2018 | Number of Attendees: 300   |
| <input type="checkbox"/> Ottawa County Water Quality Forum – November 30, 2017           |                 |                            |
| <input type="checkbox"/> MWEA Watershed & Stormwater Seminar – December 5, 2017          |                 |                            |
| <input type="checkbox"/> MWEA Watershed Summit – March 28, 2018                          |                 |                            |
| <input type="checkbox"/> Earth Day at Blandford Nature Center – April 21, 2018           |                 |                            |
| <input type="checkbox"/> 15 <sup>th</sup> Annual Grand River Spring Forum – May 11, 2018 |                 |                            |
| <input type="checkbox"/> Grand River Water Festival – June 24, 2018                      |                 |                            |
| <input type="checkbox"/> MWEA Annual Conference – June 25-27, 2018                       |                 |                            |
| <input type="checkbox"/> West Michigan WhiteCaps Concourse Table – July 26, 2018         |                 |                            |
| <input type="checkbox"/> Other:  | Date: _____     | Number of Attendees: _____ |

13. Describe any materials distributed, number of attendees, messages used at these events:

14. If applicable, please describe any other stormwater public education activities your community implemented beyond the events described above (This includes education with school groups, other community events, etc.) and submit any relevant documentation.

We also had 2 locations relocate the sump pump water from homes that went to the curbs at 85 Orchard and 169 Cherry. We published articles from your emails in the Sparta Today on November 2017, February 2018 and August 2018. In addition, Sue Blackall a former teacher here in Sparta is still very active with native plants and creek clean ups and gets the students involved as well. Some articles are attached to this report.



## **PART 4 - IDEP**

### **Regional IDEP Activities**

The IDEP for the Lower Grand River Watershed was approved in July of 2013 as meeting requirements of the General Permit Application for Storm Water Discharges from MS4s. The IDEP is intended to prohibit and effectively eliminate illicit discharges to the MS4.

The IDEP is being implemented under a cooperative program administered by the Grand Valley Metropolitan Council (GVMC) and involving the county agencies and municipal units participating in the Watershed Approach. The approved IDEP utilizes an alternative approach which includes the sampling of all storm sewer outfalls to Waters of the State within the urbanized area for the following parameters: surfactants, temperature, ammonia, and pH. Cooperative agreements were signed by participating communities to ensure that any illicit discharges detected would be traced upstream to their point of origin within the approved timeline whether or not they crossed jurisdictional boundaries. Illicit discharges that were identified either by public reporting or staff identification during this reporting period are detailed in each community's IDEP. Descriptions of the other IDEP activities undertaken on an individual basis are included below. IDEP activities include dry-weather screening of discharge points, locating possible sources of contamination, responding to reported incidents, correcting the problems, and preventing new illicit connections.

Dry-weather screening was completed by the Kent County Drain Commissioner during this reporting period for the Drain Commissioner's MS4. Other communities in the watershed began outfall sampling in the summer of 2018, and that work had not been completed at the time this report was written. A full report on IDEP outfall screening will be included in next year's report.

### Community IDEP Activities

Please describe any dry-weather screening conducted during the reporting period and the findings of that screening.
Dry weather screening was conducted in August 2018, no follow up is required at this time. A full report will be included in next year's report.
<p>Please list any other known and/or resolved illicit discharges identified during the reporting period and status of elimination. For significant discharges, also list the pollutants involved with an estimate of the volume and loading.</p> <p>Examples of illicit discharges include: malfunctioning septic systems; sanitary sewer leaks, overflows, or cross-connections; laundry water discharges; leaking fluids from vehicles, barrels, dumpsters, or tanks; concrete truck wash water; polluted runoff from temporary or permanent storage areas; improper fire hydrant flushing; spills from auto accidents; power washing wastewater; industrial/commercial wastewater, dumping; and any other violation of the IDEP ordinance.</p>
<p>02-09-18, Alley between Rogers and Dollar General. Unknown offender. Approx. 1 pint of transmission fluid spilled on asphalt. Cleaned up by DPW.</p> <p>08-27-18, 560 E. Division St. SSO. Came out of the manhole flowing into a county ditch that was plugged and collected with rain water. Cleaned up by DPW and Plummers Environmental.</p> <p>05-17-18, 560 E. Division St. SSO. Came out of the manhole flowing into a county ditch that was plugged and collected with rain water. Cleaned up by DPW and Plummers Environmental.</p> <p>05-31-18, 223 East Division. Gallon jug of motor oil run over and tracked down street. Cleaned up by DPW Crew.</p>
Please list the status and schedule for elimination for any illicit discharges identified but not eliminated during this reporting period. Also, report the status of any illicit discharges identified but not eliminated during previous reporting periods.
All identified illicit discharges have been identified and eliminated by DPW Crew.

<p>Please describe actions taken when indications of illicit discharges have been identified, if any.</p>
<p>They are reported to the DPW and the crew follows up with action.</p>
<p>Please provide:</p> <ul style="list-style-type: none"><li>• An estimated quantification of the number of discharges eliminated, and</li><li>• An estimated quantification of the volume of illicit flow eliminated (<i>For large spills or, where the amount discharged is possible to estimate</i>).</li></ul>
<p>4 illicit discharges eliminated, About 6000 gallons eliminated.</p>
<p>Identify any specific coordination with the health department in response to illicit discharge elimination for failed or failing septic fields.</p>
<p>The Village had two SSO's were the health department and DEQ were notified per procedure.</p>

**New sewer hook ups**

Country Meadows: Lots 94,87,81,82,58,62,66,70,74,78,82,86,144,1478,152,156,137,141

Liberty Street: addresses' 230,190,160,170,180

**Sewer Main Repairs**

2-22-18 Pine and Gardner collapse, 3-1-18 Prospect and Division collapse, 7-10-18 Gardner and Park Street collapse

**Sewer Lateral Repairs**

155 White Street, 51 South Elm St., 155 Carrie St, 308 Grove Street

**Storm Cave-in Repair**

28 Prospect, 299 S. Elm Street, 370 Hickory, 249 Anderson, 12 Mile and South Union, 253 W. Gardner, 108 Amelia, 474 Applewood

Describe the effectiveness of the program to prevent illicit discharges and the method used to assess effectiveness.

The public education must be working because they are the ones who notice the issues and call it in to have the DPW Storm water crew fix it.

## **PART 5 - New Point Source Discharges of Stormwater**

Do you own or operate any NEW or previously unidentified stormwater discharges?

☐ Yes ☒ No If "yes," please indicate which discharge points are new on your outfall map or list.

Is your stormwater discharge point map attached or provided electronically?

☐ Map is attached ☒ Map is provided electronically ☐ Other. Please explain in comments section.

Is your stormwater discharge point list attached or provided electronically?

☐ List is attached ☒ List is provided electronically ☐ Other. Please explain in comments section.

Comments:

Map and list were submitted to MDEQ as Appendix 2 in Illicit Discharge Elimination Plan revision, July 30, 2013. Updated lists were submitted to the MDEQ as part of the 2016 MS4 Permit Application which is currently under review.

## PART 6 - Nested Drainage System Agreements

Please list all nested jurisdictions with whom you have a cooperative agreement:		
Name of Nested Jurisdiction	Agreement previously provided to MDEQ	Agreement attached
N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comments:		

## PART 7 - Other Actions

Please list any extra efforts your community has conducted above and beyond your commitments recorded above (e.g., stream buffer ordinance adoption, new management techniques, invasive species control, habitat enhancement/protection, logjam removal, stream/beach clean-ups, etc.) that have helped implement the **Lower Grand River Watershed Management Plan**:

Please see attached photos and documentation.

Please list any other actions your community has conducted to reduce stormwater pollution

The Village of Sparta enforces the current storm water ordinance to reduce storm water pollution.

## PART 8 - Revisions to the SWPPI

Based on your evaluation of the effectiveness of your stormwater BMPs, are there any commitments that should be added to or removed from the SWPPI?

☒ No, the SWPPI does not need any revisions

☐ The following revisions to the SWPPI could be considered:

Original SWPPI Section/Subsection	Revision



## **Additional Documentation**

2



## Alice In Wonderland in Sparta!

Come down the rabbit hole with Sparta while we celebrate National Reading Month in March. Downtown Sparta will be kicking off spring with an Alice in Wonderland theme for some March Madness. Be on the lookout for the white rabbit in town because as the Cheshire Cat says "every adventure requires a first step" and our Sparta adventure will lead you to our local businesses for their own very merry unbrithday!



**Beuschel**  
Funeral Home

5018 Alpine Avenue  
Comstock Park, MI 49321  
Phone: 616 785-3863  
Email:  
[brent@beuschelfuneralhome.com](mailto:brent@beuschelfuneralhome.com)



*Love*  
Vendor

Looking for something to do? You're invited to come out and Love Yourself Vendor Blender. a direct sales company as a source for the product that you love or would enjoy. Sparta Civic Center on February 10th - 2PM.

High School  
Remove Japan  
Honeysuckle  
Sparta Trails

**24/7**

**Family**  
Fitness  
Centers



SHS Youth Advisory Committee advisor, Mr. Blake Schanski, stood in the rain with Sue Blackall noticing how invasive Japanese honeysuckle lines the entry of Sparta Trails. He said, "We are trying to make Sparta Trails a long-term community service project. How can we help?"

The purpose of the YAC group is philanthropy. They support programs that help youth by funding grants and





SpartaTODAY

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Chromebooks in  
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## Students learn about preservation

Mrs. Hurley's third grade class had the opportunity to visit Hoffmaster State Park. Students learned about the importance of preserving the beautiful Great Lakes and the precious sand dunes of their shores. From climbing large sand dunes to exploring magnetic sand, students were able to connect their science and social studies learning to this great experience!





gan to 40 different restaur-  
Brewing Company made the  
llar made the list with the  
o and garlic parmesan. One  
DULD! They are amazing!"

## TALS

needs. Just head to www.  
r and to reserve through

## A Crowd own



joyed the "Magic of Harry



everything that the big city  
does, just not as often. I  
have been on everything  
from homicide, helping  
delivering a baby, and  
saved a person with CPR  
giving the victim a few more  
weeks to say good bye to his  
family," he recalls. The most  
satisfying part of his job is  
"recovering peoples proper-

they would see again." H  
affirms Law Enforcement  
in Kent County is second  
to none. In 1994, he was  
almost recruited by the K  
County Sheriff's Depart-  
ment, but he stated "I am  
glad that I chose to stay in  
Sparta, the Village has bee  
good to me."



Pictured here: Sue Blackall pointing out changes to  
Nash Creek to one of her classes she has brought  
onsite to help clean up litter, plant flowers, and learn  
about native plants along the banks.

# Nash Creek transformation

If you've noticed a wonderful transformation to the banks al  
Nash Creek near the Balyeat Bridge, you are not alone. Thanks t  
the leadership of Sparta's own Sue Blackall, the once overgrown,  
litter and debris catching banks are removed of invasive species  
and newly native species planted thanks to the help of several



## Upcoming plans for Sparta Recreation Authority

Spring is definitely in the air and with that comes many projects at the Sparta Recreational Sports Park. Installation has been completed on the underground plumbing or the concession stand and the immigration system will continue to be installed in mid April. Also during the last SRA meeting it was approved to purchase the remaining Disc Golf equipment. This was a 50-50 purchase agreement with a local Disc Golf organization.

The next phase of construction will include the ball fields, team benches, bleachers, scoreboards, etc. These items are part of a recent grant that was awarded by the State. Unfortunately, the grant process requires the plans to be submitted and approved by the State and this process can take between 30 to 45 days.

Waiting for those plans to be approved certainly hasn't stalled the project from moving forward. The planning committee is busy pursuing

another grant. SRA has been recommended to receive a grant that would help cover the cost of paving the road, parking lot and some of the walking paths. This is very exciting news!

The Communications Committee is busy organizing events at the property for this Summer. Since the park is not officially open and cannot be used for organized ball games, the events will be used to showcase the park and all of the advancements and improvements being done at the property. It will be "sneak peak" of things to come. The dates, times and upcoming events will be posted on our new facebook page (Sparta Recreational Authority) as well as the Sparta Today newspaper.

SRA meetings are the first Thursday of every month at 7pm in the Township basement. Also anyone wishing to make a donation can contact the SRA fundraising committee at 616-887-7570.

## Updates from the Sparta Chamber

*Written by Elizabeth Morse, Director*

The Sparta DDA, Chamber of Commerce, and Sparta Events groups are excited to unveil the NEW 2018 logo that combines the efforts and energies of all the vibrant activities in our community that are under one roof! We have so much to tell you about, so follow us on facebook [www.facebook.com/sparta.michigan](http://www.facebook.com/sparta.michigan), our new Instagram page Sparta TODAY, or our website [www.sparta-chamber.com](http://www.sparta-chamber.com) to keep up to date on what is going on in Sparta! Here are few highlights to hold you over until our 2018 I LOVE SUMMER IN SPARTA presented by ChoiceOne Bank is in your hands, which will be in May!

--The Downtown Farmers Market is moving to the Civic Center Parking Lot.... Not ONLY to be closer to the bathrooms (hey, that is a legit reason!!!), but also to have a closer relationship to the vibrancy of Concerts in the Park! The new time of the market is from 4-8 pm on Wednesdays, I hope you will come check it out, perhaps again for the first time!

--Our crew has worked hard to secure a dynamic lineup of concerts and the full schedule

will be unveiled by May 1! The first concert up is June 6 featuring the Crane Wives (Indie Music) that has a great following! I hope to see you there!

--Town & Country Day has reserved a BLEACHED SYSTEM for the week and have seating to accommodate the crowds this year! The full program of events will be updated mid-May online and the programs will be available to browse through, too!

--Our first mega Food Rally is scheduled for Saturday June 23 on North Union Street during our Potter Park event. We recommend purchasing your tickets for the Park Event online ahead of time as tickets DO sell out. However, the Food Trucks will be open to the public to enjoy and also feature a Harry Potter Theme menu!

--Seeking all Volunteers! I am delighted to announce we are officially signing up volunteers for our annual event through an online system at [signup.com](http://signup.com). There are opportunities for all ages - everyone from helping clean up litter to an event to hosting the information booth!

-- And a very fun piece of news.... Drum roll please!!

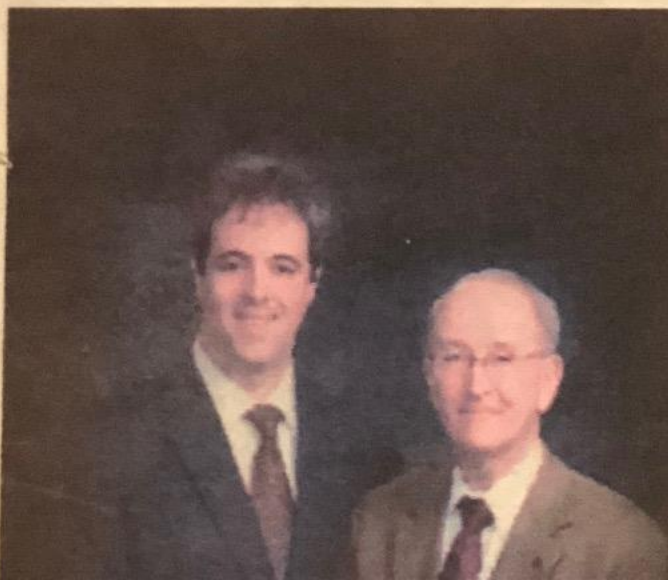
## 2018 Sparta Village & Town

Sparta Village and Township will be holding a Spring Clean-Up for the beginning on Thursday, April 19<sup>th</sup> and continuing through Saturday. Hours of operation for each day are as follows:

Day	Date	Start Time	End Time
Thursday	April 19, 2018	1:00 PM	8:00 PM
Friday	April 20, 2018	1:00 PM	8:00 PM
Saturday	April 21, 2018	9:00 AM	3:00 PM

The drop off site is located behind the DPW garage at 276 W. Division Street. The site is for household waste, rubbish (including a maximum of 4 tires), metal and appliances.





# BLAKESLEE ROP, PLC

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**Sheslek**  
Funeral Home

Pictured here volunteers helping at Nash Creek Clean Up with Sparta Rotary.

# Sparta Rotary Annual Nash Creek Clean Up

Boy Scout leader, Paul Nanzer, pointed towards a tangled jungle cascading down a steep bank of Nash Creek, giving directions, "Cut woody bushes and vines from the bridge all the way to the cement platform. And pick up trash along the way." It looked like an impossible task, but not for Sparta Rotary and Interact students, Boy Scout Troop 704, Cub Scout Pack 3280, and a few environmentally-minded citizens. The cleared site will be planted with native shrubs, wildflowers, and grasses. While beautiful for people to enjoy, they will also improve habitat and stream water quality.

We would like to thank those who improved our watershed during the clean-up: Pam and Ryan Skinner, Paul Nanzer, Damian Tharp, Eddie VanMaulsen, John and Jeremiah Rosema, Ian Gillespie, Evan Winger, John Kozal, Tom and Braden Lucas, Aydien Brefszynski,

Matt Spencer, Greg Peak, Sue Blackall, Julie Blodgett, Stacey Goebel, Sara Egner, Rodney and Aiden DuPont, Camie Murdock, Abby Way, Andrew DeHaan; Liz, Abby, and R.J. Morse; Matt, Kristy, and Ian Budacki; Jamie, Kate, Claire, and Collin Kober; Mark Shearer, Tina and Jaycob Miller.

Six year old, Jaycob Miller held up three fingers, "I been coming since I was three!" That is the kind of dedication we need to maintain the many wildflower gardens we have in our community! Please put our monthly Wildflower Work Bees on your calendar - the first Thursday (4:00-7:00) and/or Saturday (9:00-12:00) of the month, May - September. (Unfortunately, it has been difficult to find volunteers during the summer.) No experience is needed. Contact, Sue Blackall [sue.blackall@spartaschools.org](mailto:sue.blackall@spartaschools.org) or 616-460-2429

**DAVE COLE DECORATORS, INC.**



COMMERCIAL & INDUSTRIAL PAINTING & WALL COVERING



# Sue Blackall named Conservationist of the Year in Kent County



Local Sparta resident, retired Applevew Elementary teacher, and community leader Sue Blackall was honored by Kent Conservation District and Trout Unlimited last week with the Conservationist of the Year award.

Sue is an advocate for Sparta's local water resources in and out of the classroom. While imparting in her students a sense of respect and wonder for their natural environment, Sue also puts those principles to work in the field. Each year, over 1,000 Sparta students get the opportunity to go outside to their local creeks and forests

through activities that Sue organizes.

But Sue isn't just helping the students gain knowledge of Sparta's natural resources – she combines their lessons with hands-on service learning, providing students both the knowledge and experience they need to be good stewards of their



## 4th Annual Military Appreciation Game T-Shirt order

This fall will bring with it the fourth annual Military Appreciation Game hosted by the Kent City Football Program. Our largest fundraising event is now underway to raise money for the Grand Rapids Home for Veterans.

Below you will find an order form to purchase your 2018 Military Appreciation T-Shirt. Youth sizes to adult XL are \$12, and adult XXL and up will cost \$15. By purchasing a t-shirt you will be contributing to the GR Home for Veterans and you will gain free admission to our home game against CSAA foe White Crane at bill.

### Military Appreciation Game T-Shirt Sale Order Form

The game will be played on Friday September 7th



All funds raised are donated to the G. R. Home for Veterans.

Shirts are \$12 for youth sizes to adult XL, \$15 for adult 2X and up

Sizes Available—Youth XS to Youth XL; Adult Small to 5X

Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Size	Quantity	Price	Total
		\$12 or \$15	\$
		\$12 or \$15	\$
		\$12 or \$15	\$
		\$12 or \$15	\$
		\$12 or \$15	\$
Make checks payable to Kent City Football			Total
			\$

Order forms are due by Tuesday August 28th. All forms may be turned into the Kent City High School main office or Middle School main office.

If you have any questions, please email Coach Crane at [bill.crane@kentcityschools.org](mailto:bill.crane@kentcityschools.org)

## Your Local Watershed and You: How You Can Help Reduce Pollution Entering The Grand River.

Stormwater is rain water that isn't soaked into the ground during a rain event. As stormwater passes over impervious surfaces like streets and parking lots, it picks up pollutants such as oil and grease from parking lots and roadways, excess fertilizer from lawns, and pet waste. Locally, this stormwater is not treated; rather it is discharged to the Grand River and its tributaries via storm sewer systems and drainage ditches. Find out where stormwater from your property goes by using the Lower Grand River Watershed Map at [LGROW.org](http://LGROW.org).

### Here are a few ways YOU can reduce stormwater pollution from entering the storm sewer system in your community:

- Reduce stormwater by planting rain gardens and using rain barrels in your gardens to prevent water from leaving your property.
- Keep storm drains near your home clear of litter by disposing of trash and recyclables in proper containers.
- Collect yard waste to prevent grass

Hello!! My name is I am very excited to be j parta community and s perintendent!!

I have worked in publi Michigan for 27 years, r eleven years as a class achng primarily high sc the communities of Rog well. I then served for fi the athletic director and gh school principal in Ce fore serving seven years a tool principal in Coopers e last four years I have be superintendent at Coloma C hools. Our family is looki o moving to the area over tl month and becoming active in our community.

Speaking of my family, I married to my wife, Rebecca /ears, and we have two child 14. who will be a freshman a









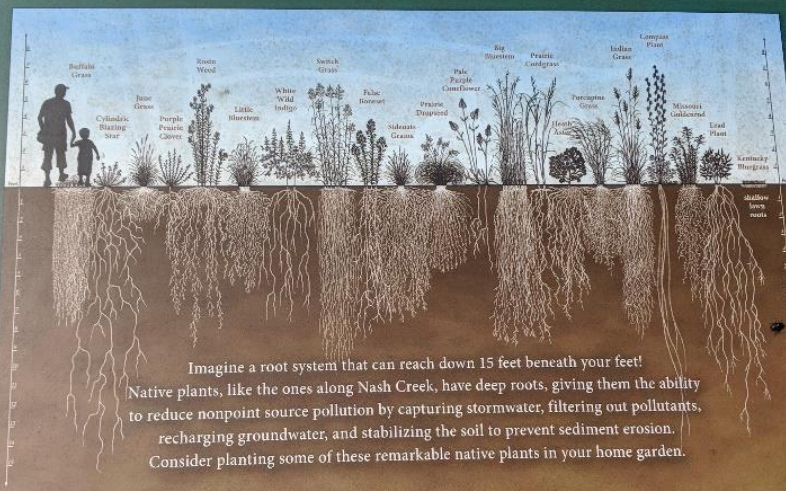
Monarch  
*Danaus plexippus*



Tiger Swallowtail  
*Papilio glaucus*

## ROOT SYSTEMS

Native Plant Root Systems Run Deep



Imagine a root system that can reach down 15 feet beneath your feet! Native plants, like the ones along Nash Creek, have deep roots, giving them the ability to reduce nonpoint source pollution by capturing stormwater, filtering out pollutants, recharging groundwater, and stabilizing the soil to prevent sediment erosion. Consider planting some of these remarkable native plants in your home garden.



Culver's Root  
*Veronica virginiana*



Joe-Pye Weed  
*Euthyia purpurascens*



Foxglove Beardtongue  
*Penstemon digitalis*



Big Bluestem  
*Andropogon gerardi*



Purple Coneflower  
*Echinacea purpurea*



Blue Lobelia  
*Lobelia siphilitica*

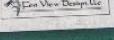
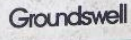


Sneeze Weed  
*Melilotus alba*



New England Aster  
*Aster novae-angliae*

Special Thank You To Our Generous Sponsors Listed Below



The 100th Anniversary of the 19th Amendment to the U.S. Constitution is celebrated in 2020. The 19th Amendment granted women the right to vote. It is a landmark in the history of the United States. The 100th Anniversary is celebrated in 2020. The 19th Amendment granted women the right to vote. It is a landmark in the history of the United States. The 100th Anniversary is celebrated in 2020. The 19th Amendment granted women the right to vote. It is a landmark in the history of the United States.



# Story Time

**Sparta Carnegie Township Library**  
**80 N. Union**  
**Sparta, MI 49345**

Children ages 5 and under are invited to share story time with Miss Nicole. She invites you and your caregiver to listen to stories, sing songs, and share in activities.

## Winter Session 2018

**Tuesday at 10 am, Wednesday at 9:30 am in the library conference room.**

Feb. 6th, 7th, 13th, 14th, 20th, 21st, 27th, 28th  
 Mar. 6th, 7th, 13th, 14th, 20th, 21st

Please visit the library or call us at (616) 887-9937 to register your child for story time. Registration is required. Each session is limited to 15 children. You may register for the whole session or just one week at a time. Signing up allows us to prepare for the number of kids coming. You can sign up at the front desk.

If you have any questions, please call Miss Nicole at 887-9937 or visit our website at [www.sparta.lcoop.org](http://www.sparta.lcoop.org) or email Nicole at [spans@lcoop.org](mailto:spans@lcoop.org).

We are also on facebook!

## Trout Unlimited

Since 2014, Trout Unlimited has been working with Sparta Area Schools to improve the quality of the waterways in Sparta. This initiative was spearheaded by Appleview Elementary teacher Sue Blackall, who brought together partners and funding to invest in Sparta's natural resources and the environmental education of its students. Their hallmark project to restore the banks of Nash Creek began in 2015 and is still

ongoing, engaging over 1,800 elementary, middle, and high school students in hands-on projects to date. Restoring the banks of Nash Creek, a tributary to the Rogue River, with native wildflowers, trees, and shrubs, helps protect the banks from erosion which harms fish habitat. Trout Unlimited is thankful for the Sparta Community for embracing the project and hopes to continue to improve water quality for its citizens.

• PROTECT OUR WATERSHED •

## WINTER TIPS



### SHOVEL

Shovel snow early, frequently. Shovel and plow early and often. Use a shovel to clear snow from your driveway, walkways, and parking areas. Do not pile snow on lawns or gardens.



### PLAN AHEAD

Shovel and plow early and often. Use a shovel to clear snow from your driveway, walkways, and parking areas. Do not pile snow on lawns or gardens.



### USE LESS

A little salt goes a long way. Apply sparingly, and remove salt from the snow melters to prevent refreezing.



### RECYCLE

Recycle your old tires, oil, and other household items. Do not throw them away. Recycle your old tires, oil, and other household items. Do not throw them away.



### STORAGE

Practice good housekeeping. Do not pile up debris. Do not pile up debris. Do not pile up debris. Do not pile up debris.



### VEHICLES

Practice good housekeeping. Do not pile up debris. Do not pile up debris. Do not pile up debris. Do not pile up debris.

• VISIT [WWW.LGROW.ORG](http://WWW.LGROW.ORG) FOR MORE INFO •

## SPECIAL THANK YOU!

Special thank you to Down-town Trini's and Margarita Joe's for hosting the Food for Thought Sparta Education Foundation fundraiser on January 16! Through tips and earnings on 10% of sales, the SEF was able to raise \$648! Thank you to everyone who came out!

## SPRING CLEANING

### ACCEPTED ITEMS:

- Appliances - Refrigerators will have to have coolant removed w/certificate from HVAC Co.
- Computers, and electronics
- Scrap Metal
- Furniture, Mattresses
- Miscellaneous large items
- Tires (limit of 4 per house hold)

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## Italian Night FUN-RAISER

### Menu

## ALL-YOU-CAN-EAT Pasta Buffet



125 N State St - Sparta, MI

**3 Pasta Dishes**  
 (including Mac & Cheese)  
 Bread Sticks - Salads  
 Pop & Coffee

**\$8.99**

5 yrs & under  
 Eat for Free

**MONDAY,**  
**February 5, 2018**  
**4 - 8 pm**

"TO GO" Orders Available  
 616-887-9951

**All TIPS go to Support**  
**SPARTA EDUCATION FOUNDATION**

The Thrifty

\$5.00

Who



## Bank's Project

The Project is a 7 Alpine Elementary Teacher, Hadley. Kids will be doing gifts for their parents. O'Brien explained. Canvas project, the clay project. The king with clay." Bank donated Art Teacher Hadley art supplies needed project. There are 400 to 450 students participate in the Holiday



**TA Towing & Recovery**  
 616-887-8008  
 24/7  
 24/7

**Towing & Recovery**  
 231-492-8556 Newzys  
 231-834-8514 Grant

**COLDWELL**

# 2017 Focus Group Report for the NPDES MS4 Public Education Plan in the Lower Grand River Watershed

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**December 2017**

**Grand Valley Metropolitan Council**



## Introduction

A focus group was held on December 18, 2017 as part of the compliance activities associated with the National Pollution Discharge Elimination System (NPDES) Stormwater Regulations watershed-based permit for communities in the Lower Grand River Watershed (LGRW). The focus group served as an evaluation tool for the LGRW Public Education Plan (PEP), an integral part of the NPDES Municipal Separate Storm Sewer System (MS4) permit. In 2003, twenty three entities made up of county, city, village, township, university, and local school districts collaborated under the guidance of Grand Valley Metropolitan Council (GVMC) to apply for a watershed-based stormwater permits. The Lower Grand River Organization of Watersheds (LGROW) was officially formed as an agency of GVMC in 2009 to coordinate the implementation of the permits and provide basin-wide oversight, conduct watershed-wide initiatives, and prioritize water quality concerns.

The PEP was created for the participating communities in Kent, Ottawa, and Muskegon Counties and is intended to educate the public on stormwater pollution reduction. Successful implementation of the PEP will form partnerships with agencies and organizations that have existing programs and use educational materials and strategies familiar and relevant to the area residents. LGROW is the mechanism used to promote PEP programs and materials.

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 their community's water resources. Most citizens recognize the recreational and aesthetic benefits they receive from water, and also recognize that water quality degradation is a serious concern in the Great Lakes Region. Most 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 this regional watershed-based initiative is the cooperation and resource sharing that is developed between the participating communities. Implementing a successful PEP takes funding and preparation time that one community may find impossible to do alone. However, when coordination develops between many communities in the watershed, these resources can be shared, and a larger audience can be reached at a lesser cost per contributing community. Since the overall aim is to encourage pollution prevention by coordinating a regional effort, it makes sense to pool all available resources and delegate tasks to the communities that will be the most efficient at accomplishing their responsibilities.

The last focus group held to evaluate the PEP was in 2009 at Fishbeck, Thompson, Carr & Huber (FTC&H) in Grand Rapids. The purpose of the focus group was to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts in 2008 and 2009. Results of that session were used by GVMC and the LGROW Public Engagement Committee to further enhance the goals, objectives, and deliverables of the MS4 program.

The 2017 focus group was held at the offices of GVMC with the purpose to determine changes in the awareness, education, and behavior of the public as a result of stormwater education efforts since 2009.

In this report the results of the focus group will be evaluated, and recommendations given by participants will be used to edit and update the current LGRW MS4 PEP.

## Methods

Focus group participants were nominated by local units of government that maintain MS4 permits. Each participating local unit of government was asked to submit two potential participants that meet the following criteria:

1. The nominees must live in Kent or Ottawa Counties, specifically in the Lower Grand River Watershed, preferably in the community they are representing
2. The individuals do not manage or have direct involvement with your community's MS4 Permit
3. The nominees have had the potential to encounter LGROW deliverables (examples: events, educational outreach, brochures or fliers, LGROW website or Facebook page)

GVMC staff administered the 1.5 hour long focus group session on December 18, 2017. Twelve invited individuals were present, representing Kent and Ottawa Counties. Eleven of the 23 municipalities that GVMC works with regarding MS4 permits were represented. There was a diverse demographic represented among the group.

## Focus Group Dialogue

All participants were asked to fill out the following questionnaire before discussion began:

Table 1 – Questionnaire
1. Name?
2. Affiliation or workplace?
3. What community (city, township, or village) do you live in?
4. What local parks do you most often go to?
5. What community do you work in?
6. What is the zip code where you live?

The results of this questionnaire indicated that all twelve participants live in the Lower Grand River Watershed and subwatersheds of the Lower Grand (Plaster Creek, Lower Rogue, Indian Mill Creek, and Spring Lake). Half of the participants worked for the municipality that they were representing for the focus group, although only one of those six work directly to manage their municipality's MS4 permit.



Discussion began with introductions of everyone present and an ice breaker question. The conversation followed six dialogue questions led by GVMC. The dialogue questions were as follows:

Table 2 – 2017 Dialogue Questions
1. What do you know about LGROW?
2. What LGROW information have you seen, heard, or read?
3. Did the message (that you have seen, heard, or read) influence you? If so, how?
4. Have you seen any stormwater or pollution prevention messaging at your workplace? Who was the message from? (LGROW, employer, other org.)
5. How could LGROW project deliverables be improved?
6. Where and how do you get information on community activities?

### **Question #1: What do you know about LGROW?**

In all correspondence with participants prior to the focus group, the words ‘Lower Grand River Organization of Watersheds’ were not used. This was in order to determine the reach of the organization. When asked what they knew about LGROW, participants could not specifically spell out what LGROW stands for, but did display knowledge of watershed concepts and understand that the organization had something to do with watershed protection. One participant identified LGROW as the Lower Grand River Association of Watersheds and correctly described it as “a watershed partner for the larger area.” Once told what LGROW stood for, participants were able to identify events and projects that LGROW partners and participates in, such as the Mayor’s Grand River Cleanup (led by the West Michigan Environmental Action Council, WMEAC), Basin Buddy program and Stormwater Oversight Commission (City of Grand Rapids), MS4 permit management (GVMC/LGROW) and pet waste pledges (LGROW).

After topics for Question #1 were exhausted, GVMC staff explained the purpose of this focus group as it relates to the MS4 permitting process and explained the history of LGROW.

### **Question #2: What LGROW information have you seen, heard, or read?**

The purpose of this question was to learn which materials LGROW had successfully administered to the communities. Some participants mentioned school activities, rain barrel workshops, and tours/events at breweries. Others described activities that their individual communities completed as part of MS4 compliance, including displays at city hall, e-newsletters, no dumping signs on catch basins, and touch-a-truck events where the DPW conducts outreach. Representatives from Grand Haven discussed their community’s work with schools focusing on source water protection and recognized materials with LGROW’s older “Keep it Pure: Yours to Protect” messaging. One participant was familiar with the LGROW Spring Forum and encouraged others to attend.

Participants wondered if LGROW ran a Master Rain Gardener program and asked about LGROW’s connection to WMEAC and to Plaster Creek Stewards. The only LGROW-specific information that participants were able to relay was storm drain markers and pet waste signs.



Discussion for this question also raised participant concerns regarding combined sewer overflow (CSO) that reaches the Lower Grand River from upstream communities and its local effects. Participants also questioned if there would be opportunity for LGROW to do outreach concerning PFAS drinking water contamination.

All participants received re-usable LGROW tote bags that contained LGROW promotional and public outreach materials. GVMC staff also presented a power point presentation that contained pictures of other LGROW materials that were used in the past, materials that could not fit into the tote bags (ex: storm drain stencils), and pictures from events or festivals that LGROW has been present at.

### **Question #3: Did the message (that you have seen, heard, or read) influence you? If so, how?**

The discussion regarding Question #3 didn't focus on how the stormwater messages changed behavior in participants, but instead focused on the content of messages. Participants did indicate that they had seen 'Entering the [Lower Grand River] Watershed' signs, but discussion did not cover how that information affected their behavior. Most participants agreed that placing these signs at watershed boundaries is better than only along the stream, but one participant thought the signs were not useful because people ignore them on busy streets.

Storm drain markings were discussed at length, and the general group consensus was that storm drain markers are good to have. However, the way that the storm drains are marked can affect the purpose of the marking. For example, the group seemed to be in agreement that the circular LGROW drain markers are hard to read, and therefore the message they are trying to convey (no dumping, drains to local waterway), gets lost. Also, if all drain markers are in English, and they are used in a neighborhood that isn't predominately native English speakers, the message gets lost. Excellent points were made by focus group participants asking about LGROW's outreach in different languages, and approaching citizen perspectives from different cultural point of views. If someone is from a culture where it is common practice to dump things down the storm drain, they may need different educational messages than those who understand how local stormwater infrastructure works.

### **Question #4: Have you seen any stormwater or pollution prevention messaging at your workplace? Who was the message from (LGROW, employer, other org.)?**

One participant shared that unless you are working for a DPW directly with the stormwater permit, one would not receive official stormwater training. However, in that community, there is stormwater education provided to employees, especially if their daily job encounters stormwater management best management practices (BMPs). The general consensus from the focus group was that participants hadn't seen much information about stormwater in their workplace, or couldn't specifically recall any stormwater messaging at work.

### **Question #5: How could LGROW project deliverables be improved?**

Participants offered helpful and realistic ways for deliverables to be achieved, how to improve messaging and improved methods of outreach. One suggestion was to connect watershed education with drinking water quality. Citizens are often more concerned with the quality of drinking water than surface water and stormwater runoff. If a connection between stormwater and drinking water can be made, citizens may become more invested in stormwater messaging.

There were many ideas about the methods used to reach people. The general consensus was that LGROW needs a broader reach and more people need to be aware of stormwater messaging. Participants mentioned that they would like to see messages on billboards, on physical print materials such as newspapers or magazines, and/or in promotional videos that offer watershed education messaging.

New audiences and topics for outreach were also suggested, including educating residents of apartment complexes on their current impacts as well as how they can manage future properties, and educating owners of LEED buildings on maintenance of their green infrastructure.

One participant mentioned that communication with local governments is crucial. For example, LGROW has been encouraging people to wash their car on their grass (or at a commercial car wash) in order to avoid runoff polluted with soap and automobile fluids entering the storm sewer system through storm drains. However, it was mentioned that it is against some city codes to park your vehicle on the lawn and residents can get ticketed.

#### **Question #6: Where and how do you get information on community activities?**

Many participants received community information from the internet. Internet and social media sites mentioned included: Facebook, Instagram, Nextdoor, municipal websites, Experience Grand Rapids website, and Eventbrite.

Other sources include community newsletter and mailers, water bill mailers, and word of mouth. It was mentioned that word of mouth is extremely important in communities where people do not have access to the internet or smart phones. Also, participants expressed that it isn't enough to tell people about the watershed or stormwater pollution prevention, you also need to tell them why they should care about information you are presenting.

#### **Other Discussion**

GVMC staff asked for other suggestions for new LGROW promotional materials and giveaways that would help promote stormwater messaging. New ideas from the focus group participants included: phone accessories such as PopSockets, water bottle stickers to get free water refills (similar to a program Art Prize has used in Grand Rapids), conducting storm drain marking events with private neighborhood associations who would not otherwise have their drains marked by a municipality, pencils for kids at schools, politicians spreading the word when they go door-to-door during campaign season, and attending farmers markets to partner with farmers who could hand out information on LGROW's behalf.

#### **Results**

This focus group ended up being a very educational experience for its participants while providing valuable feedback on LGROW outreach activities. The mixed demographic of participants and the number of MS4 communities participating provided a fairly diverse view of LGROW's reach into the watershed, and participants shared many ideas to improve LGROW messaging.

.

### *New Target Audiences*

- *Municipal employees*
- *Adults through schoolchildren*
- *People living in apartment complexes*
- *LEED certified building owners*
- *Farmers*

Much of the focus group time was spent explaining to participants what LGROW does and why, instead of gaining insight on how to improve specific LGROW messages and materials. The fact that many of the participants were employees of municipalities participating in the MS4 program suggests that LGROW may need to emphasize improvement of outreach to these communities in order to extend our reach into the wider watershed community. Since these communities are meant to be assisting in spreading LGROW's stormwater messaging and materials, it is important that their employees understand LGROW's work. More stormwater messaging needs to be available to municipality employees regarding that municipality's stormwater permit and program. Focus group participants were not opposed to learning more about their municipality's program, instead they seemed genuinely interested to know more about it and seemed willing to share that information with others. LGROW needs to find a more effective way for municipalities to share stormwater program information with municipality employees.

Frequently, LGROW focuses its attention on educating school children. It was suggested that information could be given to children at school for them to take home to their parents. Adults may become more invested in the messaging if it comes to them from their children. One participant suggested that LGROW spends a lot of time educating children, and should focus on targeting its messages to adults. An effective way to reach many adults at one time would be to expand messaging to apartment complexes. After this comment was made, other participants agreed, and suggested that private home associations, or subdivisions be brought into the loop in order to reach many adults who have a vested interest in the watershed, but aren't receiving messaging from another source. Other target audiences suggested were the owners of local LEED certified buildings. It is a good idea to reach out to these owners because they may need education on how to maintain their green infrastructure (GI).

### *Reworking Messages*

- *Translating materials in to the language of the neighborhood*
- *Address 'why' citizens need to know the message presented*
- *Simplify messages*

Participants stressed the importance of materials being available in the language of citizens that LGROW is wishing to serve. There is a large Hispanic population in West Michigan, and in order to reach those people, materials in Spanish should be available. It is also important to take into consideration cultural values because many people may not understand how their local stormwater infrastructure works. While educating people on how the storm sewer works, focus group participants also mentioned that it

is important to explain to people why LGROW messages are important and how stormwater affects their everyday life. Messages should also be simple, in order to ensure understanding and avoid confusion.

#### *Delivery Mechanisms*

- *Placement of watershed information (placement of 'Entering the Watershed' signs, more signs for GI)*
- *Tours of municipalities and events at breweries*
- *Word of mouth*
- *Presence at festivals*
- *Advertising in churches in the watershed*

There was excellent discussion by the group about ways that they would like to receive more information regarding stormwater messaging, and the places where they thought that messaging would be well received in the watershed.

'You are now entering the [Lower Grand River] Watershed' signs were deemed helpful by participants. Only one participant expressed that these signs are not helpful to citizens, because if you drive past them frequently in your neighborhood, you quickly become immune and ignore them. There was discussion about the placement of the watershed signs, and the group seemed to agree that it is helpful to have the signs placed at watershed boundaries, not directly at river or stream crossings. However, it was suggested that if signs were placed along bike or walking trails, there would be an opportunity for people to stop and read the sign and any other information provided with it. It is not practical for a driver of a car or passenger to read the whole sign while driving by. It was suggested that LGROW consider placing more signs in parks with watershed information, where interested parties will stop and read. Participants also noted that you might reach more people if you have a sign on a roadside versus a trail based on how busy that road or trail is.

Participants noticed that stormwater education is often given during facilities tours at municipalities, and that is a good place to get information to a captive audience. Also, many people have an interest in local breweries, so events or messaging promoted at breweries would also be successful.

Word of mouth is extremely helpful in communities for people who do not have internet access or smartphones. It was suggested that LGROW find a community leader and use them to spread educational messages.

Attending festivals is another mechanism that was suggested during the focus group, and advertising events or stormwater messaging in churches was also mentioned. Festivals and churches usually contain many local leaders, and this would be a great way to get active community members involved.

Key take-aways for LGROW from the focus group are summarized in the following table:

How LGROW messages can be improved	
New Target Audiences	<ul style="list-style-type: none"><li>• <i>Municipal employees</i></li><li>• <i>Adults through schoolchildren</i></li><li>• <i>People living in apartment complexes</i></li><li>• <i>LEED certified building owners</i></li><li>• <i>Farmers</i></li></ul>
Reworking Messages	<ul style="list-style-type: none"><li>• <i>Translating materials in to the language of the neighborhood</i></li><li>• <i>Address ‘why’ citizens need to know the message presented</i></li><li>• <i>Simplify messages</i></li></ul>
Delivery Mechanisms	<ul style="list-style-type: none"><li>• <i>Placement of watershed information (placement of ‘Entering the Watershed’ signs, more signs for GI)</i></li><li>• <i>Tours of municipalities and events at breweries</i></li><li>• <i>Word of mouth</i></li><li>• <i>Presence at festivals</i></li><li>• <i>Advertising in churches in the watershed</i></li></ul>

### Future Action Steps

Using the information provided from the focus group, the PEP for the LGRW communities can be edited to better serve the public. The challenges, successes, and recommendations communicated in this report will be evaluated to modify the PEP as needed. The updated PEP will result in a more effective public outreach campaign to reduce stormwater pollution and raise MS4 awareness during the next permit cycle.

## Photos

