# Lower Grand River Watershed Progress Report City of Hudsonville

Reporting Period: August 1, 2013- July 31, 2014



# **Lower Grand River Watershed Progress Report**

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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
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

LGROW Lower Grand River Organization of Watersheds

LGRW Lower Grand River Watershed LID Low Impact Development

MDEQ Michigan Department of Environmental Quality
MS4 Municipal Separate Storm Sewer System
MSUE Michigan State University Extension

NOAA National Oceanic and Atmospheric Administration

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

TSS Total Suspended Solids

USEPA U.S. Environmental Protection Agency

WMEAC West Michigan Environmental Action Council

WMP Watershed Management Plan

WQI Water Quality Index

# **PART 1 - Contact Information**

Table 1 - Contact Information for Michigan Department of Environmental Quality (MDEQ):				
Please provide current contact information for MDEQ to use regarding stormwater issues.				
Permit Application Contact	ct			
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Fax (with area code)	616-669-2330			
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Stormwater Permit Fee B	illing Address			
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Title	DPW Executive Assistant			
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City, State, Zip	Hudsonville, MI 49426			
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Fax (with area code)	616-669-2330			
E-mail	aeckerthowe@hudsonville.org			

# PART 2 - Municipal Stormwater Pollution Prevention Initiatives (SWPPI) Commitments

# **SWPPI Implementation**

Committees have been working to address different subject areas to make program implementation as efficient as possible. Every participating MS4 has a representative on at least one committee. 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:

- Stormwater Education Committee (PAM/PEP)
- Stormwater Ordinance Committee
- Data, Information, and Procedures (DIP) Committee

The list of committee members who have served on the committees during this reporting period are indicated in Table 2 below.

Table 2 - LGRW Committee Membership List as of July 31, 2014

Community	Representative	PAM/PEP	Stormwater Ordinance	Data, Information & Procedures
Cascade Charter Township	Mr. Steve Peterson	Х	Х	
East Grand Rapids, City of	Mr. Joe Slonecki			X
Ferrysburg, City of	Mr. Craig Bessinger			Х
Forest Hills Public Schools	Mrs. Lea Sevigny	X		
Georgetown Charter Township	Mr. Mike Hatkowski			
Nested: Jenison Public Schools	Ms. Kim Hansen	Х		
Grand Haven, City of	Mr. Bill Hunter	V		
Grand Haven, City of	Ms. Cheryl Davidson	Х		
Grand Rapids Charter Township	Mr. Bob Versluys		Х	
Grand Rapids, City of	Mr. Chuck Schroeder			Alt
Grand Rapids, City of	Mr. Mike Lunn	Alt	Х	Alt
Grand Rapids, City of	Ms. Carrie Rivette	Х	Х	
Grand Rapids, City of	Mr. Dan Taber			Χ

Community	Representative	PAM/PEP	Stormwater Ordinance	Data, Information & Procedures
Grandville, City of	Mr. Ken Krombeen		Х	
Grandville, City of	Mr. Ron Carr	X		
GVSU*	Mr. John Koches (Chair)			Х
Hudsonville, City of	Ms. Amber Eckert-Howe	Х		
KCDC	Mr. Bill Byl		Х	
KCDC	Mr. Brad Boomstra		Х	
KCDC	Mr. Doug Sporte		Х	
KCDC	Ms. Angie Latvaitis			Χ
KCDC	Ms. Lani Brown	Х		
KCRC	Mr. Dave Beck	X		
KCRC	Mr. Dave Bennett	^		
KCRC	Mr. Wayne Harral		Х	
Kent County Health Department*	Ms. Sarah Simmonds			Х
Kent Resource Recovery*	Ms. Kristen Wieland	Х		
Kentwood, City of	Mr. Jim Beke		Х	Х
Kentwood, City of	Mr. John Gorney	Х		
MDFO+				.,
MDEQ*	Ms. Amanda St. Amour	X	Х	X
MDEQ*	Ms. Dana Strouse	X		Х
OCWRC**	Mr. Dennis Cole		Х	
OCWRC**	Ms. Linda Brown	Х		
OCWRC	Ms. Angela W	Х		
OCRC**	Mr. Jerry Olman		Х	
Plainfield Charter Township	Mr. Rick Solle		Х	
Plainfield Charter Township	Ms. Mary Trapp-Gunst	Х		
Rockford, City of	Mr. Mike Bouwkamp	X		
. 5:		-		

Community	Representative	PAM/PEP	Stormwater Ordinance	Data, Information & Procedures
Sparta, Village of	Mr. Miles Ring			
Spring Lake, Village of	Ms. Chris Burns	Χ		
Spring Lake, Village of	Mr. Roger Belknap			Χ
Walker, City of	Mr. Scott Conners		Χ	
		·		
Wyoming, City of	Mr. Aaron Vis	Χ		Χ
Wyoming, City of	Mr. Myron Erickson		Х	

## **PAM/PEP Committee**

The PAM/PEP Committee met on August 14, 2013, January 8, 2014, March 12, 2014, May 14, 2014 and durina Minutes July 9. 2014 the reporting period. and Agendas were posted http://www.lgrow.org/MS4pampep. Throughout the reporting period, the group focused on implementation of the updated Public Education Plan (PEP) approved in February of 2013 which is available here: http://www.lgrow.org/MS4information#publiceducationplan.

In January of 2014, the Public Awareness and Marketing Committee of the Lower Grand River Organization of Watersheds (LGROW) and the MS4 Public Education Plan Committee merged to form one group. Since the goals of LGROW, the Lower Grand River Watershed Management Plan and the MS4 Public Education Plan align closely, this will serve to increase both the efficiency and effectiveness of both group's goals by combining their efforts. The end result will be a larger group of involved stakeholders, who are focusing on the common goal of raising awareness about the Lower Grand River Watershed and improving the stormwater quality within that watershed. During this reporting period, the group focused on selecting outreach events and activities which provided access to the target audiences identified in the PEP. A detailed list of these events and the outreach conducted is provided in Part 3.

#### **Stormwater Ordinance Committee**

The Stormwater Ordinance & Strategy Committee met on April 28, 2014; June 2, 2014; June 30, 2014 and July 28, 2014 during the reporting period. Meetings were focused on developing a new post-construction stormwater control model ordinance that meets requirements outlined in the 2016 NPDES

Permit Application. Minutes and agendas for the meetings are available at <a href="http://www.lgrow.org/MS4pccord">http://www.lgrow.org/MS4pccord</a>.

The committee has begun working on the individual ordinance requirements outlined in the draft permit and technical guidance provided by MDEQ. Sub-committees are working on water quality treatment performance standard, channel protection performance standard, operation and maintenance requirements and linear projects. The committee is also working with agency staff to explore a proposed alternative approach for the channel protection performance standard in poorly drained soils.

#### **DIP Committee**

The DIP Committee met on September 18, 2013; November 20, 2013; January 15, 2014; March 19, 2014; April 16, 2014 and June 18, 2014 during this reporting period. Agendas and minutes from the meetings are available at the following site: <a href="http://www.lgrow.org/MS4dip">http://www.lgrow.org/MS4dip</a>.

This is a joint committee with LGROW. Mr. John Koches, Annis Water Resources Institute (AWRI), is chairman of the committee. Through the end of 2013, DIP Committee meetings focused on the Illicit Discharge Elimination Plan (IDEP) approval, implementation and follow-up. The revised IDEP, which was approved in August 2013, included the prioritization of discharge points, dry weather screening procedures, and measures of effectiveness. IDEP implementation is covered in detail in Part 4 of this report.

In January of 2014 the committee shifted its primary focus. Aaron Vis with the City of Wyoming is leading this effort through development of a new focus detail document titled "Watershed Monitoring to Evaluate Effectiveness of Nonpoint Source Pollution and Municipal Stormwater Runoff Controls and Practices." During 2014, the group worked to refine the new DIP Committee focus detail and began working through the objectives set forth in the document. As of the close of this reporting period, the committee is working on the development of data collection and screening procedures as well as looking ahead to secure partners and funding to conduct the actual sampling through a CMI grant application.

#### **Training**

GVMC staff distributed several new and revised training documents for permitee use during the reporting period and hosted several training events including:

- 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
- Stormwater Information for Landscapers (brochure)
- Green Infrastructure and Stormwater Retrofits (webinar)
- Reimagining Parking Lots and Roadways as a Stormwater Practice (webinar)
- Introduction to the DEQ's Soil Erosion & Sedimentation Control and Construction Storm Water NPDES permit Programs (webinar)

**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 (141/4 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)

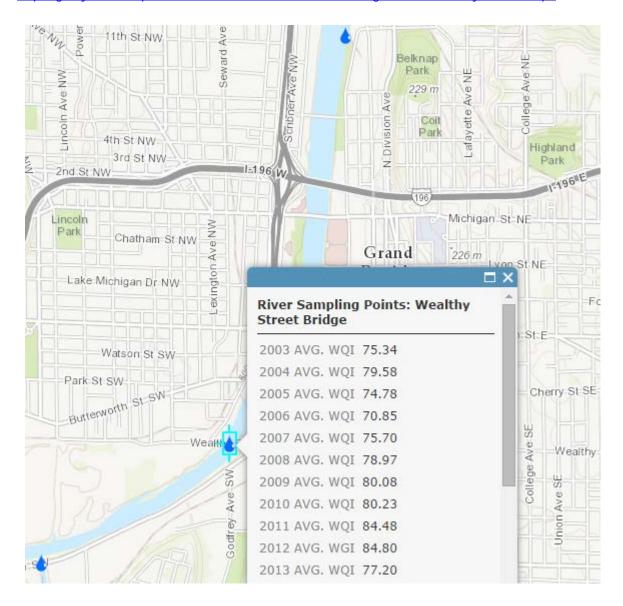
- Reduce Runoff: Slow It Down, Spread It Out, Soak It In
  9 Minutes
- RiverSmart Homes: Getting Smart about Runoff 12 Minutes
- Building Green: A Success Story in Philadelphia 11 Minutes
- After the Storm 22 Minutes

FILLING THE GAPS: Environmental Protection Options for Local Governments, 2nd Edition, revised December 2010 (including appendices on CD) (90 Pages)

# 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 is 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 recent sampling events can be viewed as follows:

http://grcity.us/enterprise-services/Environment-Services/Pages/Water-Quality-Index2.aspx



# **MDEQ Program Audits**

MDEQ is expecting to perform Municipal Separate Storm Sewer System (MS4) Program Audits in all MS4 communities within 5 years. During this reporting period, MDEQ performed audits on the following LGRW communities:

August 2, 2013 Forest Hills Public Schools

August 21, 2013 Kentwood/ Kentwood Public Schools

September 19, 2013 City of Grand Haven

March 12, 2014 Plainfield Charter Township
March 14, 2014 Cascade Charter Township

May 5, 2014 City of Walker

June 3, 2014 Kent County Administration & Drain Commissioner

GVMC assisted the communities in preparing for the audits, participating in the audits, and in addressing any deficiencies identified by MDEQ.

PART 2A LOWER GRAND RIVER WATERSHED MANAGEMENT PLAN PRIORITIZED OBJECTIVES: REGIONAL PARTICIPATION FOR AUGUST 1, 2013 - JULY 31, 2014

# **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 the 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 fields. Individual communities track this data in the Part 4 – IDEP of the progress report.

## **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 County has not passed an ordinance requiring point of sale septic system inspections. The permitted entities within Kent County rely on implementation of the illicit discharge elimination plan (IDEP) and reporting/enforcement through their stormwater ordinances and the Kent County Health Department to follow up on failing or failed septic systems. In the case of failed septic system, if a sanitary sewer connection is available within 200 feet, a connection to sanitary is required.

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 during the reporting period. 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 Appendix 2C.

Implement MDNR wildlife population management practices

Three communities are working with the MDNR on supervised programs to control populations of Canada

Geese. These programs include egg destruction (East Grand Rapids) Goose Relocation (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 and

are either actively installing goose deterrents 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 the 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.

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. The City of Grand Rapids has included information related to the maintenance and

upgrades of sewer infrastructure in Appendix 2B of the report.

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## **Implement Low Impact Development Practices**

Low Impact Development (LID) and green infrastructure are critical components in both the SWPPI and the PEP. Detailed information on the training related to LID practices and implementation is detailed in Appendix 2D, tracking of the installation and consideration of LID practices by permitees is tracked in Appendix 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. LGROW staff has given several presentations on Low Impact Development and Green infrastructure throughout the year.

### 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. Through the use of the model stormwater ordinance which has been adopted across the Watershed, the three zoned approach has been implemented to ensure that development in sensitive headwater areas (Zone A) provides the most stringent stormwater protection through post contraction controls. 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.

#### 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. The table below details which permitees work collaboratively with the county enforcing agent (CEA), which permitees administer their own program as a municipal enforcing agent (MEA) and which permitees have the authority to oversee their own projects as authorized public agencies (APA). MEA, CEA and APA programs implement 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.

The SWPPI includes training (Appendix 2D) on topics related to construction site stormwater runoff. This training ensures that even if a community does not oversee their own program, field staff will be

informed regarding what to look for on a construction site and who to report to if there is an offsite discharge or poorly maintained SESC measures.

Table 3 - LGRW Part 91 Administration Authority as of July 31, 2014

Community		Utilizes CEA		APA
		Kent	Ottawa	APA
Cascade Charter Township		Χ		
East Grand Rapids, City of		Χ		
Ferrysburg, City of			Х	
Forest Hills Public Schools		Χ		
Georgetown Charter Township			X	
Grand Haven, City of			X	
Grand Rapids Charter Township		Х		
Grand Rapids, City of	Х			Χ
Grandville, City of		Χ		
Hudsonville, City of			X	
Kent County Drain Commissioner & Administration		Χ		Χ
Kent County Road Commission		Х		Χ
Kentwood, City of	Х			Χ
Ottawa County Water Resources Commissioner and Administration			Х	Χ
Ottawa County Road Commission			X	Χ
Plainfield Charter Township		Χ		
Rockford, City of				
Sparta, Village of				
Spring Lake, Village of				
Walker, City of	Х			
Wyoming, City of		Χ		

# 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 is required to obtain a soil erosion control permit but 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 Appendix 2C and perform regular training as referenced in Appendix 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 permitee owned Properties as outlined in Appendix 2C. 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 Appendix 2D.

# PART 2B - STORMWATER CONTROLS INSPECTION, MAINTENANCE AND EFFECTIVENESS

	BMPs on Multiple N	/Junicipal Properties	<u> </u>		
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation	
Curbs/Gutters	1 X per year	As needed	Street Sweeping is done city wide at least one time per year	Street sweepings were disposed of 10/7/2013 to Waste Management (27.53tons)	
Storm Sewers	1 X per year	As needed			
Catch Basins	1 X per year	As needed	1 Quadrant is scheduled for cleaning each year	See map with cleaning schedule	
Detention/Retention Ponds	1 X per year	Every other year	1 Retention Pond, inspected quarterly	No issues	
Vegetated Swales	1 X per year	As needed	NA	Effective. BMPs are functioning adequately on current maintenance schedule	
Vegetative Buffer Strip	1 X per year	As needed	NA	Effective. BMPs are functioning adequately on current maintenance schedule	
NA''		I D T			
		ame and Property T			
Structural Storm		erry Ave Parking Lot		Cff a atily a maga	
Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation	
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled Spring 2015	Effective. BMPs are functioning adequately on current maintenance schedule.	
86			•		
	Municipal Property Common Name and Property Type  3338 VanBuren St - Gary Byker Memorial Library				
Structural Storm	Inspection	<i>y Byker Memoriai Li</i> Maintenance	Inspection and	Effectiveness	
Structural Storm	Hispection	Mannenance	i inspection and	Filectivetiess	

	BMPs on Multiple N	Municipal Properties		
Water Control	Frequency	Schedule	Maintenance Conducted and Location of Log (if applicable)	of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled Spring 2017	Effective. BMPs are functioning adequately on current maintenance schedule.
Municipal P	roperty Common N	lame and Property T	ype	
		Hudsonville City Ha		
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Detention Pond	1 X per year	Every Other Year	Scheduled Spring 2015	Effective. BMPs are functioning adequately on current maintenance schedule.
		lame and Property T dsonville DPW Build		
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled July 28, 2014	CB's cleaned 7/28/2014 – waiting on invoice and documentation from Plummers
Municipal P	roperty Common N	lame and Property T	ype	
		h Gravel Shoulders	J1 -	
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm	1 X per year	As needed		Effective. BMPs are functioning

	BMPs on Multiple N	/Junicipal Properties		
sewers				adequately on current maintenance schedule.
Municipal P		ame and Property T	ype	
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled July 28, 2014	CB's cleaned 7/28/2014 – waiting on invoice and documentation from Plummers
Municinal P	ronerty Common N	ame and Property T	vne	
- Warnerpar F		Streets	JP~	
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	The NE Quad was completed July 2014	1 Quad will be cleaned each year
Municipal P	roperty Common N	ame and Property T	ype	
-		r – Hillside Park		
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled Spring 2017	Effective. BMPs are functioning adequately on current maintenance schedule.
557				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled Spring 2017	Effective. BMPs are functioning adequately on

	BMPs on Multiple N	<b>Nunicipal Properties</b>			
				current maintenance schedule.	
Municipal P	roperty Common N	lame and Property T	ype		
-	2800 New Holland	St – Nature Center			
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation	
Curb, gutter, catch basins, storm sewers	1 X per year	As needed	Scheduled Spring 2016	Effective. BMPs are functioning adequately on current maintenance schedule.	
See corresponding map that shows the cleaning schedule for each quadrant					

# **PART 2C - PROCEDURES STATUS**

The following Pollution Prevention and Good Housekeeping procedures are used by Georgetown Charter Township staff to control storm water quality. The Township has developed and adopted Best Management Practices (BMPs) that are used at each municipal property or for specific job functions that could impact stormwater quality. Dates of revised procedures are listed and revisions attached.

Procedure	Date Adopted	Date Revised (if needed)
Procedure to Ensure Protection of Drainage Systems from	August 16, 2010	N/A
Construction-Site Runoff		
Procedure to Dispose of Storm Sewer System Operation and	August 16, 2010	N/A
Maintenance Waste		
Procedures to Construct, Operate, and Maintain Streets,	August 16, 2010	N/A
Roads, Highways, and Parking Lots		
Procedure to Reduce Runoff of Total Suspended Solids (TSS)	August 16, 2010	N/A
Procedure to Prevent Salt and Sand from Entering Receiving	August 16, 2010	N/A
Streams		
Procedure to Control Dust and TSS in Runoff	August 16, 2010	N/A
Procedure for Managing Vegetation on Municipal Properties	August 16, 2010	N/A
Procedure for Using Fertilizers on Municipal Properties	August 16, 2010	N/A
		No Changes

# PART 2D - STAFF AND CONTRACTORS TRAINING ON POLLUTION PREVENTION AND GOOD HOUSEKEEPING

Where a meeting was attended for training, attached are sign in sheets listing the training topic, date of the training and the number of attendees. Also attached are a copy of the handouts (if any) that were distributed at the training meeting.

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Required Topics			
Maintenance activities, maintenance schedules, and inspection procedures	Public Work Employees	One Time	Written O&M Procedures
Solicadies, and inspection procedures		One Time	Storm Water Pollution Prevention - A Drop in the Bucket - DVD from Excal Visual, LLC
		One Time	"Best Management Practices for Municipal Operations" Training Session – Live Presentation
Training completed:	DPW New Hire DPW Crew	One Time	New hire for DPW, watched A Drop in the Bucket, November 2014 Provided The Pollution of Stormwater Runoff: Some Causes and Responses July 2014
Controls on streets, parking lots, maintenance garages, and storage yards	Public Works Employees	One Time	Storm Watch - Municipal Storm Water Pollution Prevention - DVD from Excal Visual, LLC
	Police Department	One Time	Spills & Skills - Non-Emergency HazMat Spill
	City Hall Employees	One Time	Response - DVD from Excal Visual, LLC
			MDEQ Storm Water Employee Training
Training completed:	DPW New Hire DPW Assistant DPW Crew	One Time	Provided Protecting Water Quality from Urban Runoff Brochure to new hire, July 2014 DPW Assistant - Webinar MS4 -Putting the Pieces Together, March 2014 and reported back to field staff the summary and such. Provided Article "Guide to Household Hazardous Waste
			Provided Article "Guide to Household Hazardous Waste Disposal" to employees July 2014

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Disposal of O&M waste	Public Works Employees	One Time or as they change	Regulatory Requirements for Waste Disposal – Live Presentation
Training completed:			No training completed this reporting period
Water quality protection in flood control projects (detention basins, dams)	Public Works Employees	One Time	Retrofitting Detention Ponds for Water Quality – Live Presentation
Training completed:			No training completed this reporting period
Controls to reduce discharge of pesticides, herbicides, and fertilizers	Contractual Employees	At time of contract signing and annually for contracts that span multiple years.	LGRW_LandscapingContractorTrainingBrochure _2011-08-01.pub
Training completed:	All contracted employees	One Time	Enforcement sent letters our reminding contractors of our policy, along with letters they included the brochure. We distributed 12.
Other Topics			
Construction site stormwater runoff	Public Works Employees  Contractual Employees	One Time  At the time of contract signing and annually for contracts that span multiple years.	Ground Control - Storm Water Pollution Prevention for Construction Sites - DVD from Excal Visual, LLC LGRW_ContractorTrainingBrochure_2011-09- 16.pub
Training completed:	DPW Employees		DPW Crew Have reviewed the contractor brochure.

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Gravel Road Maintenance	N/A – the City of Hudsonville does not have gravel roads.		Keep An Eye On It! - Environmental Awareness for Gravel Road Maintenance - DVD from SEMCOG & Road Commission for Oakland County
Training completed:	N/A		No Gravel Roads in Hudsonville
LID	Public Works Employees City Hall Employees	One Time One Time	Reduce Runoff: Slow It Down, Spread It Out, Soak It In - DVD from USEPA RiverSmart Homes: Getting Smart about Runoff - DVD from USEPA Building Green: A Success Story in Philadelphia - DVD from USEPA After the Storm - DVD from USEPA BMP Tour of GVSU Campuses - Walking Tour
Training completed:	DPW Employees (7)		10/17/2014 Watched Reduce Runoff, Building Green and RiverSmart Homes
IDEP	All Employees	Annually in their paychecks	WaterPollutionReportForm.doc Article_City_Employees.doc
Training completed:	All Employees	Distributed to each dept head for employees	April, 2014
General Storm Water Education	Municipal officials	One Time as new officials take office.	"Back to Basics" Storm Water Training – Live Presentations
Training completed:			Presentation scheduled for September Commission meeting

### PART 2E - POST CONSTRUCTION CONTROLS ACTIVITIES

The City of Hudsonville has adopted the Kent County Model Storm Water Ordinance for Storm Water Controls with some minor adjustments to fit our community.

#### ARTICLE IV. STORMWATER CONTROL

\*Editor's note: Ordinance No. 04-249, adopted 12-14-04, amended Art. IV in its entirety to read as herein setout. Former Art. IV pertained to similar subject matter and derived from Ord. No. 92, Arts. I-XI, adopted 7-13-82.

**Cross references:** Plumbing code, § 6-51 et seq.; drainage improvements and subdivisions, § 21-42. The City requires specific practices for water quality and stream protection as follows:

### Sec. 23-142. Stormwater discharge rates and volumes.

The city shall utilize the drain commissioner's minimum design standards for stormwater discharge release rates. However, if the city commission makes a specific finding that the drain commissioner's standards are insufficient, the city may establish minimum design standards for stormwater discharge release rates and 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 Section 8 of the Ordinance, the City 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 Township.

The Storm Water Ordinance includes regulations that adhere to the Floodplain Ordinance and the Soil Erosion and Sedimentation Control program of the City. When a site plan approval is requested, we require the following pieces of information in relation to Storm Water Controls found in our Zoning Ordinance as referenced:

15-9.B.9

The description of measures to be taken to control soil erosion and sedimentation during and after completion of grading and construction operations. This description shall include the location of proposed retaining walls, dimension and materials of same, fill materials, typical vertical sections, and plans for restoration of adjacent properties, where applicable;

15-9.B.11

The location and elevations of existing water courses and water bodies, including county drains, and manmade surface drainage ways, 100-year floodplains, and all wetlands;

15-13.C

Standards for Site Plan Review Regarding Drainage provisions. Special attention shall be given to proper site drainage so that removal of storm waters will not adversely affect neighboring properties or overload watercourses in the area.

The City of Hudsonville's current Storm Water Ordinance (Chapter 23, IV, sections 110-203) requires a developer to provide the City with a "Maintenance Plan" that addresses long term maintenance on the drain or retention/detention pond. This Maintenance Plan must address who is responsible for the maintenance, what kind of maintenance will be required and how often. The engineers then determine if the Maintenance Plan is adequate and either approve or approve with corrections at the site plan approval phase.

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

City employees and citizens of Hudsonville can file concerns with the Department of Public Works or the Planning/Zoning Department. All concerns filed are handed over to the Planning/Zoning Department and a field inspection is done. If further enforcement is needed a letter and appropriate actions are taken.

When a new area is being developed it is inspected initially by the Planning/Zoning Department to insure it is in compliance with ordinances.

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

11 Site Plans were submitted for reviews that were required to have storm water controls approved.

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

11 all private properties are responsible for the stormwater maintenance and operations. Sec. 23-140. - Management of and responsibility for stormwater system. "The city is not responsible for providing drainage facilities on private property for the management of stormwater on said property. It shall be the responsibility of the property owner to provide for, and maintain, private stormwater runoff facilities serving the property and to prevent or correct the accumulation of debris that interferes with the drainage function of a water body."

How many inspections or enforcement/compliance of O&M agreements were conducted? Field visits were completed for each site, no enforcement was needed.

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

City of Hudsonville is all Zone B.

PART 3 - PEP

**REGIONAL PEP** 

The updated 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, 2013, and July 31, 2014.

A. PUBLIC EDUCATION COMMITTEE

A LGRW Stormwater Education 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. The 2013/2014 PAM/PEP Committee consists of the following participants:

Steve Peterson - Cascade Charter Township

Lea Sevigny – Forest Hills Public Schools

Kim Hansen - Jenison Public Schools

• Cheryl Davidson - City of Grand Haven

Carrie Rivette - City of Grand Rapids

Ron Carr – City of Grandville

• Amber Eckert-Howe – City of Hudsonville

Lani Brown - Kent County Drain Commissioner's Office (KCDC)

Dave Beck - Kent County Road Commission (KCRC)

Kristen Wieland - Kent County Resource Recovery

John Gorney - City of Kentwood

Amanda St. Amour - MDEQ

Andrea Walachovic - Ottawa County Water Resource Commissioner's Office (OCWRC)

Mary Trapp - Plainfield Township

Mike Bouwkamp - City of Rockford

Chris Burns - Village of Spring Lake

Nichol DeMol – Trout Unlimited

• Ms. Becky Brown - WMEAC

Ms. Becky Huttenga - Ottawa Conservation District

Mr. Aaron Vis - City of Wyoming

Ms. E. Wendy Ogilvie – GVMC

Ms. Bonnie Broadwater –GVMC

• Mr. Brian Zuber - GVMC

**B. PEP IMPLEMENTATION IN YEAR 11** 

This section describes the public education activities implemented by the Permittees in the eleventh year of PEP implementation, August 1, 2013, and July 31, 2014. The following report is according to the updated PEP, which meets 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: Watershed residents, community groups, business associations, and city and township

officials.

Content of Message: You live in the Grand River Watershed, which flows into Lake Michigan. Water quality in lakes and streams is greatly affected by our everyday activities. By taking water quality

protection personally, you will help improve our community's water resources.

Delivery Method:

A link from the Permittees' websites to the LGROW's website, <u>www.lgrow.org</u>, was maintained or was
established. The watershed website provides information on nonpoint source (NPS) pollution, local

watershed issues, water science education, and watershed management.

 LGROW established a Facebook page and a regular posting schedule including, Watershed Wednesdays, upcoming events, and volunteer opportunities. As of the end of the reporting period, the page has reached over 100 likes.

Permittees distributed the following LGROW and watershed education materials to residents in the

LGRW at multiple events and venues:

➤ 1000 Troutie Coloring Books

> 1992 Color Your Own Fish Hat

500 Packages of Crayons with LGROW logo

➤ 1000 Stress Ball Fish with LGROW logo

> 1000 Tote bags with LGROW logo

> 788 Dew Drop Rain gauges with LGROW logo



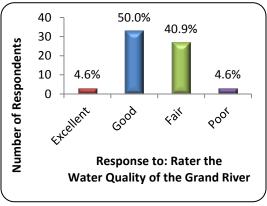
- > 1023 Fish magnets
- > 1044 Fish Post-its
- > 300 Flash Drives, with the LGROW logo, pre-loaded with PEP Materials and watershed information.
- Through cooperation of staff at permitted MS4 communities, PEP committee participants, GVMC staff and other members of LGROW, the following events were either hosted or included a watershed education component for personal watershed stewardship:
  - ➤ The Annual Science, Technology, Engineering and Mathematics (STEM) student evening was hosted at the Grand Rapids Public Museum this year on February 19, 2014. LGROW provided
    - a 10 minute demonstration for small groups throughout the day utilizing the Kent County Drain Commissioner's Enviroscape model. The demonstration focused on non-point source water pollution and its impacts on stormwater. Each group of approximately 6-10 students watched the demonstration and then engaged in a discussion about what actions can be taken to reduce the impacts of



non-point source pollution on stormwater and what they, as individuals, could do. Approximately 150 students attended the event from several Grand Rapids Public Schools and cycled through the LGROW station during the course of the event.

▶ LGROW hosted the 11<sup>th</sup> Annual Grand River Forum on May 2, 2014. The half-day event had

72 attendees and featured speakers on Michigan's Water Strategy, the Blue Economy, the Restore the Rapids Project, the Hubbardston Dam removal and a tour of the Grand Rapids Museum Grand River Exhibit Renovation which is in progress. Forum participants were asked to complete a survey after both registering and attending the event these questions will be reused in subsequent



years to see if there is a measurable change in people's attitude toward and perception of the river.

> The Party for the Planet was held at the John Ball Zoo on Saturday, May 3, 2014. The event

brought the public together with environmentally conscious groups. A total of 2,143 people visited the event with at least 707 interacting with our tables. LGROW, the City of Grand Rapids, Kent County Drain Commissioner's Office, and WMEAC coordinated for the event with a theme of stormwater education. Public



feedback was overwhelmingly positive with many children expressing that they learned something valuable. Interaction was largely required for the public to receive give-away items. The following items were distributed: 112 rain gauges, 240 fish post-its, 325 fish

magnets, 325 squishy fish, and 95 bags.

➤ LGROW hosted a booth at the Rockford Farmer's Market on June 21, 2014 during the Rogue River Expedition which ran from June 19, 2014 through June 21, 2014. The booth featured a newly created map which asked "Where do you live in the Watershed?" Visitors who



stopped by the booth were given a push pin to add to the map. Over 50 visitors added pins to the map and more than half of the visitors to the booth already understood the concept of a watershed. LGROW brochures and giveaways were provided to those who participated in the map activity. GVMC staff represented LGROW and also spoke with booth visitors about the ongoing Rogue River expedition. The expedition visited the farmer's market during the event while portaging the Rockford Dam.

> LGROW also attended the following professional events on behalf of the MS4 permitees

during the reporting period and staffed an outreach booth with stormwater and watershed

information:

MWEA Watershed Seminar December 5, 2013 (55 attendees)

**★** 19<sup>th</sup> Annual Quiet Water Symposium March 1, 2014

**★** MWEA Watershed Summit March 26, 2014 (120 attendees)

Green Roofs for Healthy Cities March 27, 2014

Michigan Green Infrastructure Conference May 8-9, 2014

• Permittees displayed their lamppost banners purchased in 2012 to advertise the presence of the

Grand River, Rogue River and Plaster Creek Watersheds. The banners featured the LGRW logo and

the message "Yours to Protect."

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

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, Teachers,

Schools, Businesses, and Girl/Boy Scouts.

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.

Delivery Method:

• Eleven permitees ordered a total of 1500 storm drain markers; 500 cast metal markers from Almatek

and 1,000 plastic makers from Das Manufacturing. Markers advertise the message "No Dumping.

Drains to Waterway", "No Dumping. Drains to Lake." And "No Dumping. Drains to River." Permittees

installed these markers near catch basins to discourage illicit dumping.

Door hangers were also distributed with the drain markers to alert residents in neighborhoods where

drain marking had occurred. A total of 500 door hangers were distributed with the drain markers for

storm drain marking events. The hangers included information on pollution prevention, reporting illicit

discharges and LGROW.

Five interior ad panels on Harbor Transit busses and trolleys were posted from July 1, 2013-

September 30, 2013.

These banners shared the message that anything entering a storm drain goes directly into the Grand River as shown here:



# <u>Public Education Topic 3 - Public Reporting of Illicit Discharges</u>

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, and Businesses.

*Content of Message*: Report illicit discharges to your city or township to prevent pollution from entering your storm drains and protect the health of your family, your community, and the Grand River.

## Delivery Method:

- Permittees distributed copies of the "Citizen Report Form" to their residents. This form included
  information on how to report illicit discharges and connections to one's community. Permittees
  individually customized these brochures for their residents.
- A public service message discussing what an illicit discharge is why it is harmful to stormwater and receiving waters aired on WYCE.
- Door hangers distributed during storm drain marking events included information in reporting illicit discharges.
- 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.

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

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, Teachers,

Students, Landscaping/Lawn Care Companies, Commercial Power Washers, Carpet Cleaning Companies,

and Golf Courses.

Content of Message: 1) Avoid scorching your lawn. Use slow-release fertilizers only 2 to 3 times per

year. Non-phosphorus types are best for the environment. 2) Lower your water bill. Install a rain barrel to

capture and reuse your stormwater. 3) Wash your car at a commercial car wash or on your lawn.

Otherwise, dirty, oily water on your driveway will flow to your storm drain and eventually your local lake

or stream. 4) Pick up your pet waste and dispose of it properly; otherwise, it could end up in the Grand

River and on your favorite Lake Michigan beach.

Delivery Method:

Permittees distributed the newsletter article "New Michigan Law Restricts Phosphorus Fertilizers" to

their residents via their webpage or community newsletter. This article describes the new Michigan

fertilizer law and encourages homeowners to use phosphorus-free fertilizer. This article was made

available to permitees via the USB drives distributed with PEP materials.

Permittees sent eco-friendly car wash letters containing tips on ways to protect our local lakes and

streams, the Grand River, and Lake Michigan, during car wash fundraisers.

Permittees electronically distributed the newsletter article "How You Can Help Reduce Pollution

Entering the Grand River" to their residents via their webpage or community newsletter. This article

encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not

in the storm drains.

Permittees electronically distributed the USEPA article "The Solution To Stormwater Pollution" which

details healthy household habits for clean water, topics include; vehicle and garage care, lawn and

garden care, home repair and improvement, pet care, swimming pool/spa care, and septic system

use and maintenance.

Permittees electronically distributed the article "Are Your Ready for Spring?" with tips to help

residents prepare for the spring thaw, reduce flooding impacts and keep harmful materials out of

rivers and streams.

Several communities hosted rain barrel events as detailed in their PEP Questionnaires.

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Public Education Topic 5 - Waste Management Assistance

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, and Auto Repair

Shops.

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.

Delivery Method:

WYCE aired a "Water Spot" on the topic of property disposing of household hazardous waste to keep

it out of the storm drains.

Permittees distributed the newsletter article "How You Can Help Reduce Pollution Entering The Grand

River" to their residents via their webpage or community newsletter. This article encourages residents

to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.

Permittees electronically distributed "West Michigan, Take Back Meds," to their residents. The

pamphlet encourages the proper disposal of unused/unwanted/expired medications and lists locations

for disposal.

Permitees distributed their county's household hazardous waste guide or flyer in both Kent and

Ottawa counties

Public Education Topic 6 - Septic System Maintenance

Target Audience: Septic System Owners and Local Units of Government.

Content of Message: 1) If you have a septic system, have it pumped out every 3 to 5 years to avoid a

costly septic system failure. Failing septic systems can leak bacteria into your local stream, the

Grand River, and eventually Lake Michigan, causing beach closures.

Delivery Method:

Permittees distributed 500 copies of USEPA's A Homeowner's Guide to Septic System brochure to

their residents. This brochure describes what a septic system is, how it works, and how to maintain

it.

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Permittees distributed the newsletter article "Do You Know Where Your Septic System Is?" to their
residents via their webpage or community newsletter. This article encourages residents to regularly
pump their septic tanks, warning signs of a failing drain field and the environmental consequences of
a failed or improperly maintained septic system.

<u>Public Education Topics 7 and 8 - Benefits of Native Vegetation and Management of Riparian</u>
<u>Lands</u>

*Target Audience*: Residents, Visitors, Riparian Landowners, Local Units of Government (e.g. Parks Departments), Teachers, Students, and Faith-based Organizations.

Content of Message: Plant native plants in your yard or garden. Natives naturally need less water, fertilizers, and pesticides saving you time and money.

Delivery Method:

Permittees distributed the brochure "What Every Landscaper Should Know, to their subcontractors
and facilities staff. These brochure details BMPs for fertilizer and pesticide application, lawn care, and
native plantings.

**Public Education Topic 9 - Entity of Specific Pollutants** 

*Target Audience*: Local Units of Government (e.g. County Road Commissions, Department of Public Works [DPW]), and Restaurants.

Content of Message: Prevent pollution from entering your storm drains and protect the health of your family, your community, and the Grand River.

Delivery Method:

- Permittees distributed the newsletter article "How You Can Help Reduce Pollution Entering the Grand River," to their employees at department meetings. This article encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.
- Permittees electronically distributed the pamphlet "West Michigan, Take Back Meds," to their residents. The pamphlet encourages the proper disposal of unused/unwanted/expired medications and lists locations for disposal.

### C. EVALUATION MEASURES

This section includes a description of the quantitative and qualitative evaluation measures of PEP effectiveness implemented between August 1, 2012, and July 31, 2013.

### Community Quantitative and Qualitative Evaluation Measures of Effectiveness

Permittees completed PEP Questionnaires to provide a quantitative and qualitative evaluation of their individual stormwater education efforts. Based on the input provided by the Permittees, the most popular brochure topics were those household hazardous waste and septic system care.

The four WYCE radio spots aired a total of 40 times during the reporting period. audience of 1,500-2,000 during each airing, these ads were heard by up to 60,000 people within the broadcast range. In 2010 WYCE expanded their broadcast range with system upgrades. The map to the left shows the expanded coverage area in blue, which encompasses the entire regulated watershed area.

The Harbor Transit bus & trolley advertising was posted for two months of the reporting period August 1, 2013-September 30-2013. This time

period was selected to correspond with the increased ridership during the summer tourist season, and specifically during the Coast Guard Festival which was July 26 - August 4, 2013. During the two month display period five interior panels located on three busses and two trolleys were displayed. With ridership estimated at 7,545 for the trolleys and 9,207 for the busses. In total, approximately 16,752 people viewed the message.

With an estimated

# 2014 Stormwater Public Education Plan (PEP) Questionnaire

Reporting Period of August 1, 2013, to July 31, 2014

# 2014 Stormwater Public Education Plan (PEP) Questionnaire Reporting Period of August 1, 2013, to July 31, 2014

gg,,,,							
Please complete this questionnaire to provide an evaluation of the stormwater education activities you have implemented between <b>August 1, 2013, and July 31, 2014</b> . GVMC will include this information, along with watershed-wide measures of effectiveness, in your 2014 Progress Report. <b>Please return this form to GVMC by August 15, 2014</b> .							
Community Name: City of Hudsonville							
Brochures, Flyers, and Give-a-ways (distributed to Permittees in May 2014)							
Have brochures, flyers, and give-a-ways been distributed?							
2. Where did you distribute your brochures, flyers, and give-a-ways?  ☐Government office ☐Library ☐Community event ☐Other							
3. Describe any interest, comments, or discussion generated from the brochures, flyers, and give-a-ways. People like the give a ways and landscaping information							
4. What was the most popular give-a-way from the materials distributed in your community? $\underline{\text{Color books and stress}}$ $\underline{\text{fish}}$							
5. What brochure topics have historically been in the highest demand in your community?  How to report stormwater pollution  Stormwater discharge locations/impacts  Native vegetation/rain gardens/riparian buffers  Proper vehicle care/motor oil disposal  Proper use of pesticides/fertilizers/herbicides  Proper yard waste disposal  Proper pet waste disposal  Proper septic system maintenance  Household hazardous waste management							
Illicit Discharge Reporting (brochure available at: www.lgrow.org/uploads/files/Citizens_Reporting_Brochure_withnote.pdf							
6. How many "Citizens Reporting Brochures" were customized and distributed to your residents? 5 were taken, forms were available at City Hall, Library, Community Events and on our website  Was the "Citizens Reporting Brochure" posted to your city website?   Yes, at <a href="https://imageserv10.team-logic.com/mediaLibrary/294/2013_04_04 Citizens Reporting.pdf">https://imageserv10.team-logic.com/mediaLibrary/294/2013_04_04 Citizens Reporting.pdf</a> (url) □No  Please describe any interest, comments, or discussion generated from the brochure:							

Lamppost Banners
7. Did you display your lamppost banners provided to you in 2009- 2013?  \[ \textstyle Yes, at \textstyle Downtown area Cherry and Allen (streets) on \textstyle Throughout the summer, April - November (dates). Please describe any public feedback generated \textstyle None \[ \textstyle No, but we will display our banners at \textstyle (streets) on \textstyle (dates) \] \[ \textstyle We did not order lamppost banners
Newsletter Articles (available at: <a href="http://www.lgrow.org/MS4information#brochuresandfliers">http://www.lgrow.org/MS4information#brochuresandfliers</a> and distributed on flash drives)
8. Did you distribute these newsletter articles to your residents?  \[ \textstyres, on \( \textstyres \) (date); Via: \( \textstyres \) print \( \textstyres \) web \( \textstyres \) other  \[ \textstyres \textstyres \) No, but we will on \( \textstyres \) (date)
9. Please describe any interest, comments, or discussion generated from the articles NA
10. If applicable, list the newsletter name or webpage address used to distribute the articles <u>Hudsonville Hometown</u> <u>News and Hudsonville.org</u>
11. If applicable, how many residents received your community newsletter? All residents receive the newsletter
12. If applicable, how many total website hits did you receive for your online newsletter articles? 81 people visited
Hold Messages
<ul> <li>13. Did your community utilize the hold messages distributed with the public education materials? ☐Yes ☒No</li> <li>14. Please describe any interest, comments, or discussion generated from the messages: no comments</li> </ul>
Website
15. Is there a web link to www.lgrow.org on your community's website?  Yes, please describe any interest, comments, or discussion generated from the website No comments  No, but we have a web link to  No
15. Is there a web link to www.lgrow.org on your community's website?  Yes, please describe any interest, comments, or discussion generated from the website No comments  No, but we have a web link to
15. Is there a web link to www.lgrow.org on your community's website?  ∑Yes, please describe any interest, comments, or discussion generated from the website No comments  No, but we have a web link to  No  16. If you have developed your own stormwater webpage, please list the web address:
15. Is there a web link to www.lgrow.org on your community's website?  \[ \textstyres, please describe any interest, comments, or discussion generated from the website \textstyres \text{No comments} \\ \textstyres \text{No}, but we have a web link to \( \textstyres \) \\ \textstyres \text{No} \]  16. If you have developed your own stormwater webpage, please list the web address: \( \text{http://www.hudsonville.org/Storm-Sewer-Information/} \) (url)

☐Yes, on (dates) at (location); ☑No
Storm Drain Awareness Activities
19. Did you implement a storm drain awareness activity between August 1, 2013, and July 31, 2014?  Yes
20. Please describe any interest, comments, or discussion generated from the activities above. No real interest expressed
21. Have you noticed a reduction in storm drain dumping?  \[ \textstyle \textstyle Yes, if so, please describe \textstyle People are becoming more aware. We have noticed that debris is not as bad; \textstyle \textstyle No, if so, please describe \textstyle \textstyle \textstyle No, if so, please describe \textstyle \t
Additional Efforts
22. Did you participate in any community stormwater events? (check all that apply)
Rain Barrel Workshop Date: 5/1/2014 Number of Attendees: 10, 11 barrels completed Rain Garden Installation Date:/ Number of Attendees:  STEM (at Grand Rapids Public Museum) 2/19/2014 Grand River Clean up 9/14/2013 Grand River Green up 4/26/2014 Rogue River Expedition 6/21/2014 Michigan Green Infrastructure Conference 5/8/2014 John Ball Park Party for the Planet 5/3/2014 MWEA Watershed Summit 3/26/2014 MWEA Watershed Seminar 12/5/2014 Green Roofs for Healthy Cities Symposium 3/27/2014 Other: Date:/ Number of Attendees:
Describe any materials distributed, number of attendees, messages distributed: Those who attended the rain barrel workshop received a rain gage and information on how to landscape. The Ottawa Conservation District helped us with our workshop and we received many comments about how attendees enjoyed and appreciated the class.
23. If applicable, please describe any other stormwater public education activities your community implemented beyond the requirements described above. (Submit any relevant documentation.) Had a booth at the Hudsonville showcase to educate the community of storm water and advertise our rain barrel workshop. We handed out doggie waste bags and other storm water educational material, including brochures.

### PART 4 – IDEP

### **Regional IDEP Activities**

During the previous reporting period, the DIP Committee worked with MDEQ on IDEP revisions. The Illicit Discharge Elimination Plan (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 Municipal Separate Storm Sewer Systems (MS4). 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.

Outfall sampling was conducted during the summers of 2013 and 2014 for regulated communities in Kent and Ottawa County respectively. On May 15, 2013 a training event was held for staff who would be conducting outfall sampling. This event ensured that the methodology would be consistent for all Lower Grand River Watershed Permitee outfall sampling. The sampling crews were a combination permitted community staff, and interns that worked in multiple communities. These interns conducted outfall sampling through cooperative agreements with the Kent County Road Commission and the Ottawa County Water Resource Commissioner's offices. Additional interns were utilized by the City of Grand Rapids. All field crews adhered to the sampling procedures as outlined in the approved IDEP. The training also covered field recognition of illicit discharges and reporting. Table 5 details the findings of the outfall sampling. In total, over 2000 outfalls were sampled in the urbanized area of the Lower Grand River Watershed. Of those outfalls, only 13, or 0.5% required high priority or immediate follow-up. By comparison, 41 illicit discharges not associated with outfall testing were identified either by public reporting or staff identification during the reporting period. This shows that training the public and the staff of permitted communities to identify and report is a far more effective method of eliminating illicit discharges than outfall sampling. A detailed description of the IDEP activities undertaken on an individual basis is included below. The 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.

		Table	5 - IDEP Dr	y Weather So	reening	Analysis	s:				
	Outfalls	Outfalls	Total Couldn't		Priority	Level:		Outfalls	High Ammonia	Very High/Low	Total New
Location:	Expected	Surveyed	Locate	Immediate	High	Low	None	With Flow	Levels	pH Levels	Outfalls
Cascade	7	7	2	0	0	3	4	1	0	0	0
East Grand Rapids	64	64	4	2	0	10	52	4	1	0	0
Ferrysburg, City of	28	28	0	0	2	2	26	8	0	2	0
Forest Hills Public Schools	10	10	0	0	0	0	10	0	0	0	0
Georgetown Charter Township	2	2	0	0	0	0	2	0	0	0	0
Grand Haven, City of	20	20	0	0	2	10	8	8	0	6	0
Grand Rapids Charter Township	1	1	0	0	0	0	1	0	0	0	0
Grand Rapids, City of	364	364	0	0	3	4	355	97	2	3	0
Grandville, City of	87	40	10	0	0	11	25	1	0	0	0
Hudsonville, City of	62	50	12	0	0	12	50	16	0	0	0
Kent County Drain Commissioner	522	519	3	1	0	113	410	123	3	0	5
Kent County Road Commission	373	333	40	0	2	89	282	10	4	0	2
Kentwood	345	345	0	0	0	27	318	108	0	1	0
Plainfield	4	4	3	0	0	3	1	0	0	0	0
Rockford	53	54	3	0	0	8	49	15	0	0	4
Sparta	29	26	2	0	0	7	19	3	0	0	0
Spring Lake, Village of	16	16	0	0	0	1	15	2	1	1	0
Walker	139	140	5	0	1	25	113	22	1	0	6
Wyoming	159	148	11	0	0	5	143	27	1	2	0
Totals:	2285	2171	95	3	10	330	1883	445	13	15	17
			4%	0.14%	0.46%	15%	87%	20%	1%	1%	

Please describe any dry-weather screening conducted during the reporting period and the findings of that screening.

City of Hudsonville conducted dry-weather screening on 65 outfalls in July of 2014. Two sites were identified for follw-up, one low priority and one high.

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.

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.

We had 1 known illicit discharge. A business was washing their fleet in their parking lot without covering storm drains or taking precautions. The fleet consisted of small and large trucks (semi)

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.

Eliminated - The business was notified by letter to stop the truck washing on their property and since then they have hired a company that specifically washes fleets. This company comes in and covers all storm drains, vacuums up the waste water and disposes the waste water at a disposal facility. We required a letter from the washing company that recognizes and acknowledges our storm water guidelines and that states the business will not make any changes to the fleet washing without submitting, in writing, the changes they would like to set in place.

Please describe actions taken when indications of illicit discharges have been identified, if any.

When an illicit discharge is identified the owner of the property is contacted either by letter or site visit. They are instructed to stop the actions taking place and we explain to them why. We have found that many businesses and owners are not aware of the impacts they have on the storm water system and our water bodies. It is for that reason that we find it necessary to educate and not just instruct.

After letters are sent out we follow up with a site visit to ensure the actions have stopped. We then work with the company, if needed, to come up with a solution.

Please provide:
An estimated quantification of the number of discharges eliminated, and
• An estimated quantification of the volume of illicit flow eliminated (For large spills or, where the amount discharged is possible to estimate).
1 eliminated
There is not an amount noted for this elimination
Identify any specific coordination with the health department in response to illicit discharge elimination for failed or failing septic fields.
No issues here
Describe the effectiveness of the program to prevent illicit discharges and the method used to assess effectiveness.
People have been responding well to our educational efforts. We get questions when at events and have received questions

## **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.

### **PART 6 - Nested Drainage System Agreements**

Table 4 - LGRW Communities with Nested Drainage System Agreements

MS4 Permitted Community	Nested Drainage System
Georgetown Charter Township	Jenison Public Schools
Grandville, City of	Grandville Public Schools
Kentwood, City of	Kentwood Public Schools
Walker, City of	Kenowa Hills Public Schools

Please list all nested jurisdictions with whom you have a coop	perative agreement:	
Name of Nested Jurisdiction	Agreement previously provided to MDEQ	Agreement attached
	□Yes □No	□Yes □No
Comments: No nested jurisdictions.		

### **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 <b>Lower Grand River Watershed Management Plan</b> :
None
Please list any other actions your community has conducted to reduce stormwater pollution
None

### **PART 8 - Revisions to the SWPPI**

_	n of the effectiveness of your stormwater BMPs, are there any commitments that emoved from the SWPPI?
No, the SWPPI does	not need any revisions
☐ The following revision	ns to the SWPPI could be considered:
Original SWPPI Section/Subsection	Revision





### GRAND VALLEY METROPOLITAN COUNCIL

ADA TOWNSHIP • ALGOMA TOWNSHIP • ALLENDALE TOWNSHIP • ALPINE TOWNSHIP • BELDING • BYRON TOWNSHIP • CALEDONIA TOWNSHIP • CANNON TOWNSHIP • CASCADE TOWNSHIP • CEDAR SPRINGS

COOPERSVILLE • COURTLAND TOWNSHIP • EAST GRAND RAPIDS • GAINES TOWNSHIP • GEORGETOWN TOWNSHIP • GRAND RAPIDS • GRAND RAPIDS TOWNSHIP • GRANDVILLE • GREENVILLE • HASTINGS

HUDSONVILLE • IONIA • JAMESTOWN TOWNSHIP • KENT COUNTY • KENTWOOD • LOWELL • LOWELL TOWNSHIP • MIDDLEVILLE • OTTAWA COUNTY • PLAINFIELD TOWNSHIP • ROCKFORD

SAND LAKE • TALLMADGE TOWNSHIP • WALKER • WAYLAND • WYOMING

July 11, 2014

Ms. Amber Eckert-Howe DPW Executive Assistant City of Hudsonville 3275 Central Boulevard Hudsonville, MI 49426-1450

Re: GVMC Authorization for NPDES Stormwater Regulation Submittals

Dear Amber:

Grand Valley Metropolitan Council is in the process of preparing progress reports for each of the NPDES Municipal Separate Storm Sewer System (MS4) permitted communities in the Lower Grand River Watershed. We look forward to continuing to work with the City of Hudsonville as we begin the application process for individual permits this fall under Michigan Department of Environmental Quality (MDEQ)'s new requirements for the MS4 program. In order for GVMC to submit reports, applications and other relevant permit documentation on behalf of your community, MDEQ requires authorization from you to do so. Please sign in the space designated below to indicate your authorization.

If you have any questions regarding your progress report, the upcoming permit application or any other component of the MS4 program for the Lower Grand River Watershed, please do not hesitate to ask. My contact information is listed below. Thank you, in advance, for your prompt response and I look forward to working with you.

Sincerely,

Bonnie Broadwater

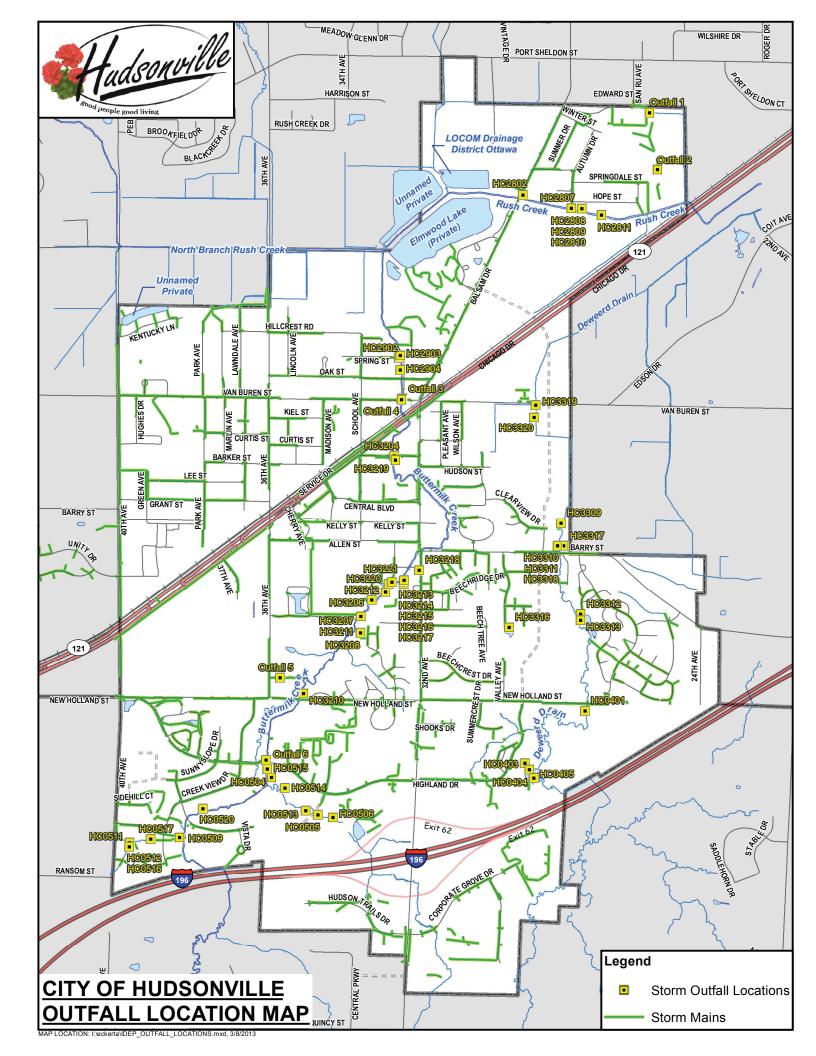
B. Broadwater

Stormwater Program Coordinator
Grand Valley Metropolitan Council
bonnie.broadwater@gvmc.org

(616) 776-7611

**Authorized Community Representative:** 

Amber D Eckert - Howe Name (Please Print)



# Appendix 2 - Hudsonville Prioritized List of Outfalls and Discharge Points

## City of Hudsonville OTTAWA COUNTY, MICHIGAN Discharge Point Identification March 2013

# QI	RECEIVING WATER	LATITUDE	LONGITUDE	PRIORITY
Outfall 3	Buttermilk Creek	42.870991	-85.862532	Medium-High Priority
Outfall 4	Buttermilk Creek	42.870927	-85.862569	Medium-High Priority
Outfall 6	Buttermilk Creek	42.85333	-85.871082	Medium-High Priority
Outfall 5	Ottawa County Drain	42.857341	-85.870251	Low Priority
Outfall 1	Unknown	42.885086	-85.846543	Medium-High Priority
Outfall 2	Unnamed Stream	42.88234	-85.845953	Medium-High Priority
HC0512	Buttermilk Creek	42.849	-85.88	Medium-High Priority
HC0516	Buttermilk Creek	42.849	-85.88	Medium-High Priority
HC0511	Buttermilk Creek	42.8492	-85.88	Medium-High Priority
HC0517	Buttermilk Creek	42.8494	-85.8786	Medium-High Priority
НС0509	Buttermilk Creek	42.8495	-85.8767	Medium-High Priority
HC0506	Buttermilk Creek	42.8506	-85.8666	Medium-High Priority

#QI	RECEIVING WATER	LATITUDE	LONGITUDE	PRIORITY
HC0505	Buttermilk Creek	42.8507	-85.8676	Medium-High Priority
HC0513	Buttermilk Creek	42.8509	-85.8684	Medium-High Priority
НС0520	Buttermilk Creek	42.8509	-85.8752	Medium-High Priority
HC0514	Buttermilk Creek	42.852	-85.8698	Medium-High Priority
HC0504	Buttermilk Creek	42.8525	-85.8707	Medium-High Priority
HC0405	Issac Creek	42.8527	-85.8534	Medium-High Priority
HC0515	Buttermilk Creek	42.8529	-85.871	Medium-High Priority
HC0404	Issac Creek	42.8531	-85.8537	Medium-High Priority
HC0403	Issac Creek	42.8534	-85.854	Medium-High Priority
HC0401	Issac Creek	42.856	-85.8501	Medium-High Priority
НС3210	Buttermilk Creek	42.8566	-85.8687	Medium-High Priority
НС3208	Buttermilk Creek	42.8596	-85.865	Medium-High Priority
HC3316	Unnamed Wetland	42.86	-85.8552	Medium-High Priority
НС3207	Buttermilk Creek	42.8604	-85.865	Medium-High Priority
HC3211	Buttermilk Creek	42.8604	-85.865	Medium-High Priority
HC3313	Deweerd Ext Drain	42.8604	-85.8505	Low Priority
HC3312	Deweerd Ext Drain	42.8607	-85.8505	Low Priority
НС3206	Buttermilk Creek	42.8612	-85.8643	Medium-High Priority
HC3212	Buttermilk Creek	42.8616	-85.8634	Medium-High Priority
HC3213	Buttermilk Creek	42.862	-85.8622	Medium-High Priority
		-	-	

# QI	RECEIVING WATER	LATITUDE	LONGITUDE	PRIORITY
нс3220	Buttermilk Creek	42.862	-85.8632	Medium-High Priority
HC3214	Buttermilk Creek	42.8621	-85.8622	Medium-High Priority
HC3221	Buttermilk Creek	42.8621	-85.863	Medium-High Priority
HC3215	Buttermilk Creek	42.8622	-85.8622	Medium-High Priority
HC3216	Buttermilk Creek	42.8622	-85.8622	Medium-High Priority
HC3217	Buttermilk Creek	42.8622	-85.8622	Medium-High Priority
HC3218	Buttermilk Creek	42.8627	-85.8612	Medium-High Priority
HC3310	Deweerd Ext Drain	42.864	-85.8521	Low Priority
HC3311	Deweerd Ext Drain	42.864	-85.8521	Low Priority
HC3317	Deweerd Ext Drain	42.864	-85.8517	Low Priority
HC3318	Deweerd Ext Drain	42.864	-85.8521	Low Priority
НСЗЗО9	Deweerd Ext Drain	42.8651	-85.8519	Low Priority
HC3219	Buttermilk Creek	42.868	-85.8629	Medium-High Priority
HC3204	Buttermilk Creek	42.8682	-85.863	Medium-High Priority
нс3320	Deweerd Ext Drain	42.8702	-85.8538	Low Priority
HC3319	Deweerd Ext Drain	42.8708	-85.8537	Low Priority
HC2904	Buttermilk Creek	42.8724	-85.8627	Medium-High Priority
НС2902	Buttermilk Creek	42.873	-85.8628	Medium-High Priority
HC2903	Buttermilk Creek	42.8731	-85.8627	Medium-High Priority
HC2811	Rush Creek Drain	42.8801	-85.8496	Low Priority

PRIORITY	Low Priority	Low Priority	Low Priority	Low Priority	Low Priority
LONGITUDE	-85.8516	-85.8509	-85.8509	-85.8509	-85.8548
LATITUDE	42.8804	42.8804	42.8804	42.8804	42.881
RECEIVING WATER	Rush Creek Drain				
# QI	HC2807	HC2808	HC2809	HC2810	HC2802

