Lower Grand River Watershed Progress Report Kent County Road Commission

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



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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

KGDG Koot County Drain Commissions

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

Contact Information for	Michigan Department of Environmental Quality (MDEQ):
Please provide current conta	act information for MDEQ to use regarding stormwater issues.
Permit Application Conta	ct
Name	Wayne Harrall
Title	Deputy Managing Director of Engineering
Address	1500 Scribner Avenue, NW
City, State, Zip	Grand Rapids, MI 49504
Telephone (with area code)	616-242-6914
Fax (with area code)	616-242-6974
E-mail	wharrall@kentcountyroads.ent
Stormwater Program Ma	nager
Name	Wayne Harrall
Title	Deputy Managing Director of Engineering
Address	1500 Scribner Avenue, NW
City, State, Zip	Grand Rapids, MI 49504
Telephone (with area code)	616-242-6914
Fax (with area code)	616-242-6974
E-mail	wharrall@kentcountyroads.ent
Stormwater Permit Fee B	illing Address
Name	
Title	
Address	1500 Scribner Avenue, NW
City, State, Zip	Grand Rapids, MI 49504
Telephone (with area code)	
Fax (with area code)	
E-mail	

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.

Table 1. LGROW Committee Mer	mbership List as of July 31,	2018					
Community	Representative	Public Engagement	Stormwater Ordinance	Technical	Sustainability	Fund Development & Membership	LGROW Executive
Cascade Charter Township	Mr. Steve Peterson						
East Grand Rapids, City of	Mr. Brian Donovan					X	Х
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			Х			

Table 1. LGROW Committee Mer	mbership List as of July 31, 2	018		1	ı	1	
Community	Representative	Public Engagement	Stormwater Ordinance	Technical	Sustainability	Fund Development & Membership	LGROW Executive
Grand Rapids, City of	Ms. Carrie Rivette	Х	Χ		Х	X	Х
Grand Rapids, City of	Mr. Michael Staal	Х	Χ		Х		
Grand Rapids, City of	Mr. Dan Taber		Х	Х			
Grandville, City of	Mr. Ken Krombeen		Х			X	X
Grandville, City of	Mr. Todd Wibright			Χ			
GVSU*							
Hudsonville, City of	Ms. Jill Frielink	X					
KCDC	Mr. Brad Boomstra		Х				
KCRC	Mr. Bruce Schutte	X					
Kent County Health Department*	Mr. Brendan Earl	Х					
Kent Resource Recovery*	Ms. Megan Kretz	Х					
Kentwood, City of	Mr. Jim Beke		Х	Х			
Kentwood, City of	Mr. Dan Vanderheide		Χ				
Kentwood, City of	Ms. Kelsey Sloan	Х		Х			
MDEQ*	Ms. Amanda St. Amour						
MDEQ*	Ms. Michelle Storey	Х				Х	
MDEQ*	Ms. Dana Strouse	Х		Х			
OCWRC	Mr. Dennis Cole	Х	X				
OCWRC	Ms. Angela Walachovic	Х					
OCRC	Mr. Jerry Olman	Х					
Plainfield Charter Township	Mr. Rick Solle		Х				
Plainfield Charter Township	Ms. Mary Trapp-Gunst	Х					

Membership List as of July 31, 2	2018					
Representative	Public Engagement	Stormwater Ordinance	Technical	Sustainability	Fund Development & Membership	LGROW Executive
Ms. Chris Burns						
Mr. Scott Conners		Χ			X	Χ
Ms. Rachell Nagorsen	Х	Χ	Χ	Х		Χ
Mr. Aaron Vis	X		X			X
Mr. Myron Erickson		Х				
	Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen Mr. Aaron Vis	Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen X Mr. Aaron Vis X	Representative Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen X Mr. Aaron Vis X	Representative Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen X Mr. Aaron Vis X X	Representative Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen X Mr. Aaron Vis X X Mr. Aaron Vis	Representative Ms. Chris Burns Mr. Scott Conners Ms. Rachell Nagorsen Mr. Aaron Vis X X Mr. Aaron Vis X X X X X X X X X X X X 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 accesses 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:

- 15th Annual Grand River Spring Forum
 - Held on May 11, 2018 at the Cascade Library
- Stormwater General Awareness and IDEP
 - o Offered May 22 and 23, 2018 in both Kent and Ottawa Counties
- Lunch and Learn
 - o 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 (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
- 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.





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,-

Water Quality Index Grand River and Tributary Sampling Sites

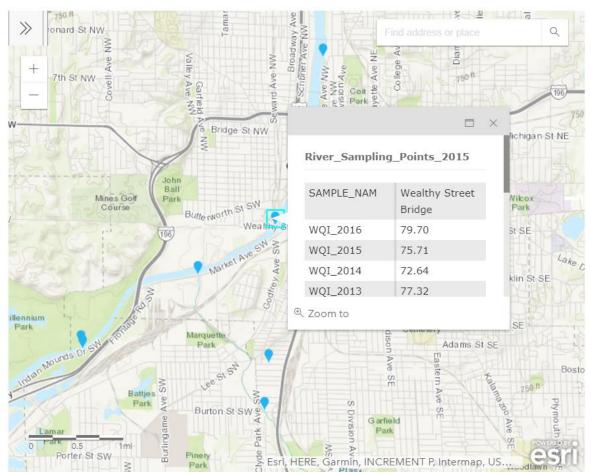


Figure 1 Grand Rapids Water Quality Index Web Interface

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.

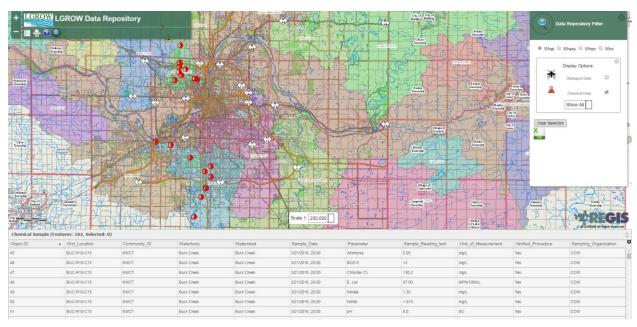


Figure 2 LGROW Data Repository

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.

	Part 91 Co	ntact Info		Uti	lizes C	EA	
Community	Name	Phone	MEA	Kent	Muskegon	Ottawa	APA
Cascade Charter Township	KCRC	616-242-6914		Х			
East Grand Rapids, City of	KCRC	616-242-6914		Х			
Ferrysburg, City of	OCWRC	616-994-4530				Χ	
Forest Hills Public Schools	KCRC	616-242-6914		Х			
Fruitport, Village of	Muskegon County DPW	231-724-6411			Х		
Georgetown Charter Township	OCWRC	616-994-4530				Χ	
Grand Haven, City of	OCWRC	616-994-4530				Χ	
Grand Rapids Charter Township	KCRC	616-242-6914		Х			
Grand Rapids, City of	Environmental Services Dept.	616-456-3057	Х				Х
Grandville, City of	KCRC	616-242-6914		Х			
Hudsonville, City of	OCWRC	616-994-4530				Χ	
Kent County Drain Commissioner & Administration	Deputy Drain Commissioner	616-336-3688					Х
Kent County DPW	Kent Co. DPW	616-336-3694					Х
Kent County Road Commission (Kent County CEA)	KCRC	616-242-6914		Х			Х
Kentwood, City of	Engineering Dept.	616-554-0737	Х				Х
Ottawa County Water Resources Commissioner & Administration (Ottawa County CEA)	OCWRC	616-994-4530				Х	Х
Ottawa County Road Commission	Engineering Dept.	616-842-5400					Х
Plainfield Charter Township	KCRC	616-242-6914		Χ			
Rockford, City of	Public Services Dept.	616-866-9631	Х				
Sparta, Village of	KCRC	616-242-6914		Χ			
Spring Lake, Village of	OCWRC	616-994-4530				Χ	
Walker, City of	Engineering Dept.	616-453-6311	Х				
Wyoming, City of	KCRC	616-242-6914		Х			

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.

Appendix 2-B – Inventory of Storm Water Controls

Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Retention Basin	Twice/year	As needed - Repair outfall erosion and remove sediment	The most recent inspection was completed on July 31, 2017. A copy of the Municipal Property Inspection is on file.	Outfall is stable. Sediment removal not necessary at this time. High water due to recent rain.
Covered Salt Storage - Salt and Liquid Chloride stored in building	Twice/year	Regular sweeping	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Area around west side of salt storage looks good. Catch basins currently protected with fabric.
Catch Basin Sumps - 10 catch basins within paved parking/drives	Twice/year	5-year cycle or as needed	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Need sweeping adjacent to catch basins.
South Complex	(4949 South Cor	mplex Drive)		
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Covered Salt Storage - Salt stored in dome cover	Twice/year	Regular sweeping	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	All contained at the time of the inspection. Surrounding area needs sweeping.
Catch Basin Sumps - 8 catch basins within paved parking/drives	Twice/year	5-year cycle or as needed	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Minimal sediment accumulation. Need sweeping around some basins.
Outside Material Bins & Piles	Twice/year	Regular grading	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Material well contained in block bins, gravel area.

Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Covered Salt Storage - Salt stored in dome cover	Twice/year	Regular sweeping	The most recent inspection was completed on July 23, 2018. A copy of the Municipal Property Inspection is on file.	All contained at the time of the inspection. Surrounding area should be swept.
Secondary Containment of Liquid Chloride	Twice/year - General housekeeping; inspect containment ring	As needed	The most recent inspection was completed on July 23, 2018. A copy of the Municipal Property Inspection is on file.	Visual inspection. Containment area looks good.
Holding Tank - Between Salt Dome and Liquid Chloride; collects surface water	Twice/year	Pump when full; as needed	The most recent inspection was completed on July 23, 2018. A copy of the Municipal Property Inspection is on file.	Pumping not required at the time of inspection.
Catch Basin Sumps - 10 catch basins within paved parking, storage and drives	Twice/year	5-year cycle or as needed	The most recent inspection was completed on July 23, 2018. A copy of the Municipal Property Inspection is on file.	All basins were pumped in February 2018. Pavement areas need sweeping.
Sanitary Sewer - Surface runoff from majority of outside storage drains to sanitary sewer system	Twice/year	As needed	The most recent inspection was completed on July 29, 2017. A copy of the Municipal Property Inspection is on file.	Visual inspection. Pavement areas need sweeping. Sanitary was videotaped in February, 2018 to verify condition and location.
Outside Material Bins & Piles	Twice/year	Regular sweeping and grading	The most recent inspection was completed on July 29, 2017. A copy is on file.	Material well contained in block bins or concrete barrier segments. Large pile of asphalt millings and large pile of woodchips have barrier wall containment between piles and river bank.

Appendix 2-B - Storm Water Controls Inspection, Maintenance and Effectiveness August 1, 2017 to July 31, 2018

Structural	Inspection	Maintenance	Increation and	Effectiveness of
Storm Water Control	Frequency	Schedule	Inspection and Maintenance Conducted and Location of Inspection Log (if applicable)	Control and Support Documentation
Detention Basins - North and South Ponds	Twice/year	Remove sediment as needed	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Dry - No noticeable sediment.
Covered Material Storage - Salt and Liquid Chloride Storage in covered building	Twice/year	Regular sweeping	The most recent inspection was completed on July 20, 2018. A copy of the Municipal Property Inspection is on file.	Pavement is clean, sweeping not required at this time. Self-contained and indoor loading. Small pile of asphall millings - contained
Outside Material Bins	Twice/year	Regular sweeping	Most recent inspection was completed on July 20, 2018.	Material well contained in block bins. Pavement clean.
BMP for Catch	Basins			
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Catch Basin Sumps	Every 5 years or as needed	Annual Contract for approximately 2000 basins/year (10,400 total)	Catch Basin Cleaning Logs are kept in the Maintenance Division office. 2,915 catch basins were pumped in the following townships: Alpine = 624 Plainfield = 2,134	Log books document the estimated depth of sediment and distance between the outlet and the top of sediment.

BMP for Street	Sweeping			
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Street Sweeping – 41 Bridge Decks 173.71 miles of Road	Annually or as needed	Annually	Annual sweeping. Contracts are set up in areas. Inspection is done by our Maintenance Division.	All sediment collected is disposed of and does not enter catch basins, storm sewers or waters of the State.

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

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

larch 21, 2012 larch 21, 2012 larch 21, 2012 larch 21, 2012 larch 21, 2012	
March 21, 2012 March 21, 2012 March 21, 2012 March 21, 2012	
March 21, 2012 March 21, 2012 March 21, 2012	
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1	larch 21, 2012 larch 21, 2012

Staff and Contractors Training on Pollution Prevention and Good Housekeeping Completed August 1, 2017 to July 31, 2018 Appendix 2-D –

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	Maintenance Superintendents and	Biennial Planned for	Written O&M Procedures
	Foreman; Project Inspectors	2018.	Storm Water Pollution Prevention - A Drop in the Bucket - DVD from Excal Visual, LLC
			"Best Management Practices for Municipal Operations" Training Session – Live Presentation
Training completed:			Proper storage and disposal of materials, risks and hazards associated with improper storage and disposal
Controls on streets, parking lots,	Building &	Biennial	Hazardous Chemicals and Material. Proper
maintenance garages, and storage yards	Grounds/Equipment, Maintenance	Planned for 2018.	Storage, Use and Disposal
	Superintendents and Foreman		Fueling Facility
			Flammable Liquid Storage
			Fueling Trucks
Training completed:			Regulatory Requirements for Waste Disposal — Live Presentation
Storing and handling flammable liquids.	Mechanics, Laborers and Drivers	February 21 to February 28, 2018	Hands on training with Safety Superintendent and Garage Foreman

Fueling Training completed: Disposal of O&M waste Training completed:	Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
catch Basin and Street Sweeping Contractors; KCRC oversight frol Engineer; Building and Grounds Building & Grounds; Lawn Care Contractor; Construction Project Restoration Contractor All Employees Utility Contractors and Ut			April 17 - 20, 2018	Fueling Facility & Equipment. Proper safety procedures and what to do if a spill occurs.
eted: Itrol Plat Review Staff Engineer; Building and Grounds Grounds Building & Grounds; Pamphlet as Lawn Care Contractor; Construction Project Restoration Contractor All Employees Utility Contractors and Utility Company In-house utility oversight. In-house utilit	Disposal of O&M waste	Catch Basin and Street Sweeping Contractors; KCRC oversight	Biennial or beginning of 2018 new contract	Regulatory Requirements for Waste Disposal – Proper Material Storage, Containment and Disposal – Live Presentation
eted: Engineer; Building and Grounds Building & Grounds; Lawn Care Contractor; Construction Project Restoration Contractor All Employees Utility Contractors and Utility Company In-house utility oversight. Biennial Planned for 2018. Pamphlet as Lawn Care Contractor; needed. Construction Project Restoration Contractor Container Labeling 12/15/17 In-house utility oversight. B a.m. & 9:30 Employees (55 people) 3.luly 24, 2017 2 Employees Grading gravel roads Grading gravel roads	Training completed:			
Building & Grounds; Pamphlet as Lawn Care Contractor; Construction Project Restoration Contractor All Employees Container Labeling Labeling Lutility Company In-house utility oversight. Employees (55 people) July 24, 2017 Duly 24, 2017 Annual Meeting 12/15/17 In-house utility oversight. Employees (55 people) July 24, 2017 Annual Meeting 12/15/17 Annual Meeting Annu	Water quality protection in flood control projects (detention basins, dams)	Plat Review Staff Engineer; Building and Grounds	Biennial Planned for 2018.	Retrofitting Detention Ponds for Water Quality – Live Presentation
Building & Grounds; Lawn Care Contractor; Construction Project Restoration Contractor All Employees Container Labeling Utility Contractors and Utility Company In-house utility oversight. Employees (55 people) July 24, 2017 Semployees Container Labeling 12/15/17 In-house utility oversight. Employees (55 people) July 24, 2017 Con-going 2 Employees Capading gravel roads Raintenance Staff As needed	Training completed:			
All Employees SDS Sheet for Container Labeling Utility Contractors and Utility Company I2/15/17 In-house utility oversight. 8 a.m. & 9:30 Employees (55 people) a.m. July 24, 2017 On-going Mic 2 Employees Grading gravel roads Micromance Staff As needed Micromance Staff Grading gravel roads	Controls to reduce discharge of pesticides, herbicides, and fertilizers	Building & Grounds; Lawn Care Contractor; Construction Project Restoration Contractor	Pamphiet as needed.	LGRW_LandscapingContractorTrainingBrochure2011-08-01.pub
Utility Contractors and Utility Company In-house utility oversight. Employees (55 people) July 24, 2017 Semployees Mic 2 Employees Grading gravel roads Utility Contractors and Annual Meeting Rea 12/15/17 8 a.m. & 9:30 a.m. On-going Mic 2 Employees		All Employees	SDS Sheet for Container Labeling	
Utility Contractors and Utility Company I 12/15/17 In-house utility oversight. 8 a.m. 8 9:30 Employees (55 people) a.m. July 24, 2017 Z Employees Mic As needed Mic Grading gravel roads	Other Topics			
ter July 24, 2017 On-going 2 Employees Maintenance Staff As needed Grading gravel roads	Construction site stormwater runoff / erosion controls	Utility Contractors and Utility Company In-house utility oversight. Employees (55 people)	Annual Meeting 12/15/17 8 a.m. & 9:30 a.m.	Required training for their annual permit to work within KCRC right-of-way. Include traffic controls, as well as restoration and stabilization of work areas, stormwater and erosion control.
Maintenance Staff As needed Mi	Catch Basin and Stormwater Management	July 24, 2017 2 Employees	On-going	Michigan LTAP – 2016 Focus Group Webinar – Catch Basin and Stormwater Management
1/24/17 - 4/6/17 • In-House Training	Gravel Road Maintenance	Maintenance Staff Grading gravel roads	As needed 1/24/17 – 4/6/17	Michigan LTAP Center for Technology and Training provided training as requested by agencies — Motor Grader Training In-House Training

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Training completed:	Operators 14 Employees	As Needed 1/24/17 – 4/6/17	In-House Training
ΠD	None planned at this time.	None planned at this 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:			
IDEP	Maintenance Supervision; Building & Grounds; Outfall Inspectors	Biennial Plan for 2018.	WaterPollutionReportForm.doc Article_City_Employees.doc
Training completed:	1 Intern	May 2018	1 outfall intern (Jack Hill) completed training. Other intern (Cal Morgan) has previously completed training.
General Storm Water Education	New Employees	As appropriate	"Back to Basics" Storm Water Training - Live Presentations.
Training completed:	23 New or seasonal employees	May 15 to May 21, 2018	Hazardous Materials Fueling Station Procedures Confined Space PPE Emergency Situations

Appendix 2E -

Post Construction Controls Activities Completed August 1, 2017 to July 31, 2018

KCRC is in the process of updating the "Requirements and Specifications for Plat Development" and anticipates Board approval by December 31, 2018. This will include new stormwater rules and requirements as referenced in the "Design Standards Manual".

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

All Site Condominiums (public and private) are required to provide a Stormwater Maintenance Agreement in accordance with the appropriate Township Ordinance or rules, portions within a public street ROW are enforced by KCRC, portions outside public Road ROW are enforced by the Township. Public Plats detention areas are taken into the County Drain System and are accepted and maintained by the Drain office under the appropriate drain rules.

All new public streets are required to clean and pump storm sewer lines and catch basin sumps prior to being accepted as part of the Public Street system.

KCRC works with all Townships and the Drain office with any Stormwater management elements occurring outside the road ROW, which impact the ROW.

Over the past 2 years KCRC has video-taped approximately 50 miles of older storm sewer lines to evaluate condition, as well as identifying any previously unknown connections or utility bore damage.

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

In December 2017, portions of 7 plats were approved for takeover totaling approximately 3 miles. These included: Arlington Park, Hanna Lake Trails, Northbrook, Planters Ridge, Planters Row No. 8, Stony Bluff and Summit Crest. All PCC are under Drain Office control, with exception of all catch basins and storm sewer within roadway are under KCRC control.

Have any long-term operation and maintenance agreements been signed? *None*

How many inspections or enforcement/compliance of O&M agreements were conducted? Inspections were completed on all prior to takeover. All catch basin cleaning was completed. Detention pond maintenance as required by Drain Commission.

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.

KCRC works with all Townships as it relates to both public and private street developments. Street layouts are typically modified in order to protect sensitive areas. We encourage maximizing open space, as well as reducing area of concentrated and piped storm water by encouraging sheet flow and backyard swales draining away from the street and infiltration where soils are appropriate.

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:

Agency	Representative	
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, <u>www.lgrow.org</u>. 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.

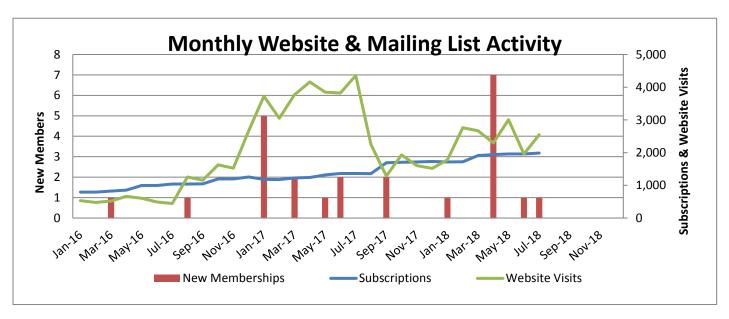
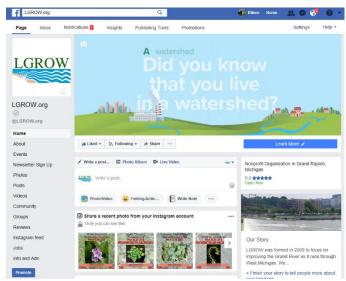


Figure 3. Page Visits to LGROW.org by Month

• 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.

Facebook Communication Data

25,000

20,000

20,000

15,000

15,000

10,000

5,000

Total FB 'Likes'

Engaged Users

Reach - Organic

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



• 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
 MS4

 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 Community	Event/ Activity	Date
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
,	Touch A Truck/DPW Behind the Scenes (with Kent Co DPW)	5/16/2018
Kentwood, City of	Buck Creek Cleanup	8/5/2017
recitivood, die, di	LGROW Focus Group	12/18/2017
	Grand River Spring Forum	5/11/2018

MS4 Community	Event/ Activity	Date
Ottawa County Administration and Water Resources	Ottawa County Water Quality Forum	11/30/2017
Commissioner	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
	Nash Creek Cleanup-Planting	4/18//2018
Sparta, Village of	Village Hazardous Waste Collection	4/19/2018
	Partnership with Sparta Schools	Ongoing
Spring Lake, Village of	Mill Point Park River Cleanup	5/12/2018
Spring Lake, village of	LGROW Focus Group	12/18/2017
	Grand River Spring Forum	5/11/2018
Walker, City of	Indian Mill Creek Cleanup	6/2/2018
•	KDL Reading Carnival	6/12/2018
	Buck Creek Cleanup	8/5/2017
	Partnership with Godwin and Wyoming Schools	Ongoing
Wyoming, City of	City Cleanup	4/21/2018
	Facility Tours	Ongoing
	Grand River Spring Forum	5/11/2018

> The Quiet Water Symposium promotes nonmotorized 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

> Superintendent of the City of Grand

WELCOME TO THE LOWER GRAND RIVER ORGANIZATION OF WATERSHEDS'

Grand River Spring Forum CASCADE TOWNSHIP LIRRADO

Agenda

8:00-8:30 8:30-8:45 8:45-9:05 9:05-9:35 9:35-9:55 assing of the Paddle 9:55-10:10 10:15-11:15 11:15-11:25 11:25-11:30 12:00 PM Boxed Lunch and Kayak Trip





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.

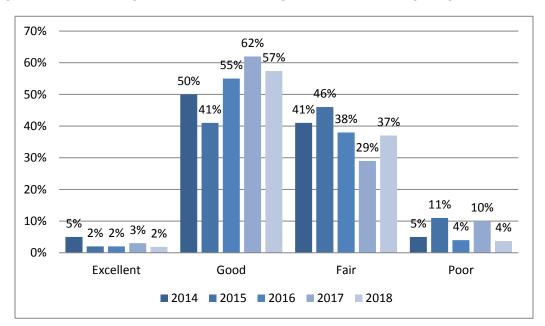


Figure 4. 2017 Survey Results: How would you rate the water quality in the Grand River?

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-ofcharge, 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



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

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-8ll=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.

REDUCE
Raking leaves prevents pollution by keeping them out of storm drains. Storm drains carry leaves directly to local takes and rivers. Decomposing we see contain accessive nutrients that can have our weeker quality. Leaves can also dog storm drains and cause flooding.

REUSE
MUCH
However, the extra nutrients such as nitrogen and phosphorus are great for leave first amplicate surject such as nitrogen and phosphorus are great for leave first such as nitrogen and spread them across your year.

RECYCLE
COMPOST
Instead of bagging leaves, compost them to use them as fartilizer later.

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.

Fall Seasonal Tips Flier

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



Storm drain markers

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.

- 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.

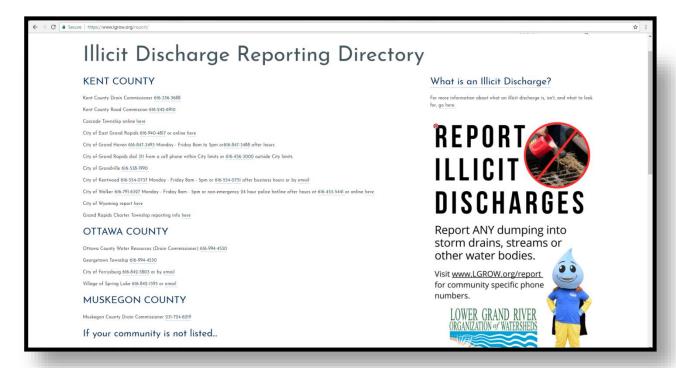
Target Audience: Residents, public employees, businesses, construction activities, industries, and septic system owners/haulers.

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.

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 and made available for customization by MS4 communities. The flyer can be downloaded at https://www.lgrow.org/ms4information.

<u>Public Education Topic 5 - Waste Management Assistance</u>

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 wasters, 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.

45

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

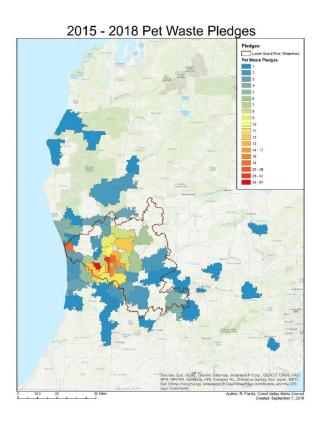


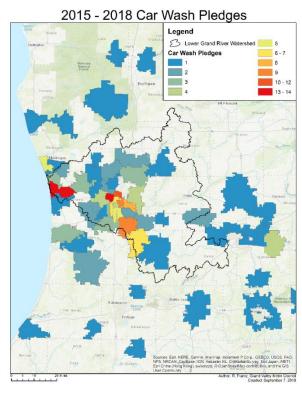
program is aimed at both shoreline and non-shoreline properties.

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	Municipal employeesAdults through schoolchildren
	 People living in apartment complexes LEED certified building owners Farmers
Reworking Messages	 Translating materials in to the language of the neighborhood Address 'why' citizens need to know the message presented Simplify messages
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

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**.

1. Which of the following general stormwater awareness/LGROW materials (brochure, flyers, giveaways)

Community Name: KENT COUNTY ROAD COMMISSION Brochures, Flyers, and Giveaways:

	did you order/distribute from GVMC this year:	
	 ☑ LGROW Brochures ☑ Grand River Infographic ☑ "Make your home the Solution to Stormwater Pollution" brochure ☑ "Do your part – be SepticSmart! brochure ☑ Household hazardous waste disposal guidelines from Kent County DPW ☑ Seasonal Tip Sheets (Fall, Winter, Spring, Summer) ☑ LGROW Water Bottles ☑ LGROW Chapstick ☑ "Keep your Lakes Great and your River Grand" dry bags 	 □ LGROW "magic scarf" □ LGROW Totebags □ "Keep your lakes Great and your River Grand" sticker □ Troutie coloring book □ Paint by number watershed map □ Watershed hand stamp □ "Report Illicit Discharges" magnet □ Trout stress ball with "Only rain in the drain – it leads directly to my home" □ Report Illicit Discharges beverage coaster □ Other:
2.	Have you given away all the materials (brochures, flyers \Box Yes \boxtimes No	, giveaways) you ordered from GVMC this year?
3.	Where did you distribute your materials? ☐ Government office ☐ Library ☐ Commutours	unity event $\ \square$ Other Public meetings, kid
4.	Approximately how many people did you interact with	during distribution of materials? 75
5.	What was the most popular giveaway from the material bag, stressball, scarf, and water bottles	s distributed in your community? Chapstick, dry
6.	What topics are of greatest interest to members of you How to report stormwater pollution Stormwater discharge locations/impacts Native vegetation/rain gardens/riparian buffers Proper vehicle care/motor oil disposal	r community? ☑ Proper use of pesticides/fertilizers/herbicides ☑ Proper yard waste disposal ☐ Proper septic system maintenance ☑ Household hazardous waste management
	☐ Proper vehicle care/motor oil disposal	management

Illicit Discharge Reporting

7. Did you distribute illicit discharge reporting materials to your residents?

2017-2018 MS4 Progress Report ☐ Hard copies of "Citizens Reporting Brochures" from the IDEP – Number distributed: □ Link to LGROW's reporting page posted to your website https://www.lgrow.org/report/ □ Report Illicit Discharge magnets – Number distributed: 30 Please describe any interest, comments, or discussion generated from the brochure, magnet or website https://www.lgrow.org/report/: Keep information displayed on an open-unmanned table at the Road Commission office How many complaints were received from the general public regarding illicit discharges? 1 **Newsletters, Banners, and Displays** 8. 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): ☑ Did not order or display lamppost banners 9. Did you distribute stormwater focused newsletter articles to your residents? □Yes 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: c. If applicable, how many residents received your community newsletter? d. If applicable, how many total website hits did you receive for your online newsletter articles or stormwater information website? 79 10. Did you use any of the following materials or activities at events during the reporting period? Stormwater poster board display ⊠Yes, Date: 8/1/17-7-31-18 \square No EnviroScape interactive stormwater model ☐Yes, Date: \square No Watershed map with pushpins ☐Yes, Date: \square No Stormwater mural banner and scavenger hunt ☐ Yes, Date: \square No Major Runoff stormwater mascot ☐Yes, Date: \square No Interactive Corn Hole Board ☐Yes, Date: \square No Interactive catch basin demos ☐Yes, Date: \square No **Events and Pledges** 11. Did you host a seed bomb or native plant workshop? \square Yes, on: \square No 12. Did you distribute any additional educational materials on native plants? ☐ Yes (Describe): □No 13. Please describe any interest, comments, or discussion generated from native plant workshops or giveaways: 14. Did your community collect pet waste pledges distributed with the public education materials? ☐Yes, Number: $\bowtie No$ 15. Did your community collect car wash pledges distributed with the public education materials? ☐Yes, Number: $\boxtimes N_0$ Please describe any interest, comments, or discussion generated from either of the pleages and associated giveaways. 16. Did you implement a storm drain awareness activity between August 1, 2017 and July 31, 2018? (streets) on ☐ Yes: (dates)

Kent County Road Commission Lower Grand River Watershed

	 ☐ Yes, we held a storm drain stenciling event on (dates) and stenciled (streets) ☐ Yes, we have approximately (#) pre-marked catch basin backs/grates with the message "No dumping, drains to waterway" ☐ Yes, we hung door knob flyers on (streets) on (dates)
17.	Please describe any interest, comments, or discussion generated from the activities above: Have you noticed a reduction in storm drain dumping? \Box Yes \Box No Describe: Please describe any interest, comments, or discussion generated from these materials/activities:
18.	Did you participate in any community stormwater events? (check all that apply)
19.	 □ Rain barrel workshop □ Rain garden/Green Infrastructure Workday □ Date: □ Number of attendees: □ Rain garden/Green Infrastructure Workday □ Date: □ Number of Attendees: □ Ottawa County Water Quality Forum – November 30, 2017 □ MWEA Watershed & Stormwater Seminar – December 5, 2017 □ MWEA Watershed Summit – March 28, 2018 □ Earth Day at Blandford Nature Center – April 21, 2018 □ Isth Annual Grand River Spring Forum – May 11, 2018 □ Grand River Water Festival – June 24, 2018 □ MWEA Annual Conference – June 25-27, 2018 □ West Michigan WhiteCaps Concourse Table – July 26, 2018 □ Other: □ Date: Number of Attendees: Describe any materials distributed, number of attendees, messages used at these events:
20.	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.
	Kent County Road Commission conducted 9 elementary school tours of our Maintenance facilities throughout the year.
	The Tours were conducted on October 20, 2017; November 1, 2017; February 12, 2018; February 21, 2018; February 22, 2018; March 22, 2018; May 15, 2018; July 11 2018; July 13, 2018

The tours discuss KCRC equipment, our facilities, winter operations and how we minimize impacts to he environment

The webpage had 79 web page hits from May -July 2018 after the page was modified. Web visits were not documented prior to May of 2018.

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.

KCRC utilized 2 interns to perform dry weather screening on our outfalls. The work has progressed by Township. We have currently completed our entire system with the exception of approximately 30 outfalls around Lake Bella Vista in Cannon Township. Prior to July 31, 2018 we completed Ada, Algoma, Alpine, Courtland, Grand Rapids, and Plainfield Townships. Since August 1, 2018 we have completed Bryon, Caledonia, Cascade and Gaines Townships. Cannon should be wrapped up before the end of September 2018.

So far we encountered one site that had very high chlorine levels. After follow-up it was in an area that was being heavily sprinkled with Plainfield Township water.

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.

Incident #1

Around May 31, 2018 MDEQ Law Enforcement Division observed what they perceived as illegal "decanting" by KCRC catch basin cleaning contractor in Alpine Township near 4805 Westshire Drive. On June 27, 2018 Amanda St. Amour forwarded the report and video tape to KCRC (Wayne Harrall).

KCRC Maintenance Division was notified of the incident and reviewed the videos of the incident. After the review it was determined that the Contractor was following proper catch basin flushing and decanting procedures. This was reported to MDEQ and no further correspondence has transpired.

Incident #2

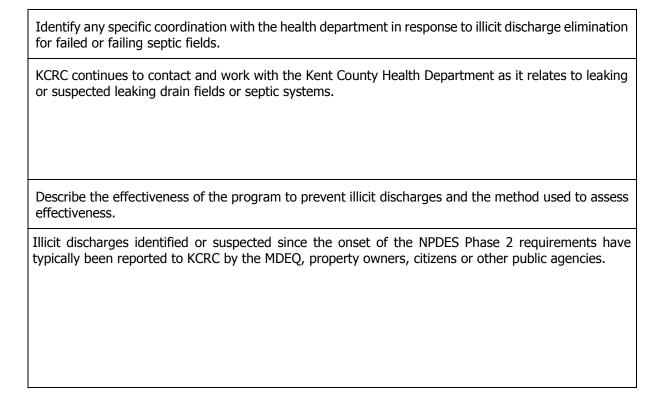
In Mid-July 2018, KCRC was asked by Solon Township supervisor to review a site at 13880 Northern Springs Drive, Section 34, Solon Township for concerns of soil dumping and the potential need for a soil erosion permit. Wayne Harrall visited the site and determined that Advance Hydrovac which has been wasting liquefied soils on property they owned in this Industrial Park south of 17 Mile Road and west of US-131, had over an acre of unvegetated soils and a SESC permit was required. The owner was responsive and obtained the permit. On August 1, 2018 concerns on the site changed to what was in the soils being dumped on the site (primarily due to the recent PFAS concerns). Senator Pete MacGregors office was contacted which resulted in the involvement of MDEQ staff from the Grand Rapids office. Tim Unseld, MDEQ Solid Waste Engineer, visited the site on August 6, 2018 and also called and spoke with Mr. Matt Bailey, the owner of Advanced Hydrovac, and determined that there was no concern of contaminated solid waste being dumped on the site.

SEDSC inspections will continue on the site in accordance with Part 91, however no additional illicit dumping follow-up should be necessary unless the contractor's procedures change.

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.

There are no follow up sites that we are aware of.

Please describe actions taken when indications of illicit discharges have been identified, if any.
KCRC follows up with the appropriate MDEW staff to make them aware of the incident or suspected incident and does due diligence within our jurisdiction to determine if there is or was an illicit discharge, where the source is and work with other local agencies and property owners to eliminate future illicit discharges.
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).
None this reporting period. Both incidents were confirmed not to be illicit discharges.



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.
KCRC outfalls are available in the REGIS database.

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	Yes No	Yes No
	Yes No	Yes No
	☐Yes ☐No	☐Yes ☐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**:

IN December 2016 we presented our Board with Draft Stormwater policy and stormwater BMP's which are intended to be adopted after MDEQ approves.

A MDEQ audit of KCRC stormwater program was conducted on January 24, 2018. The audit was overall positive with 3 items to address by March 20, which KCRC complied with. Supporting documentation is attached to this report.

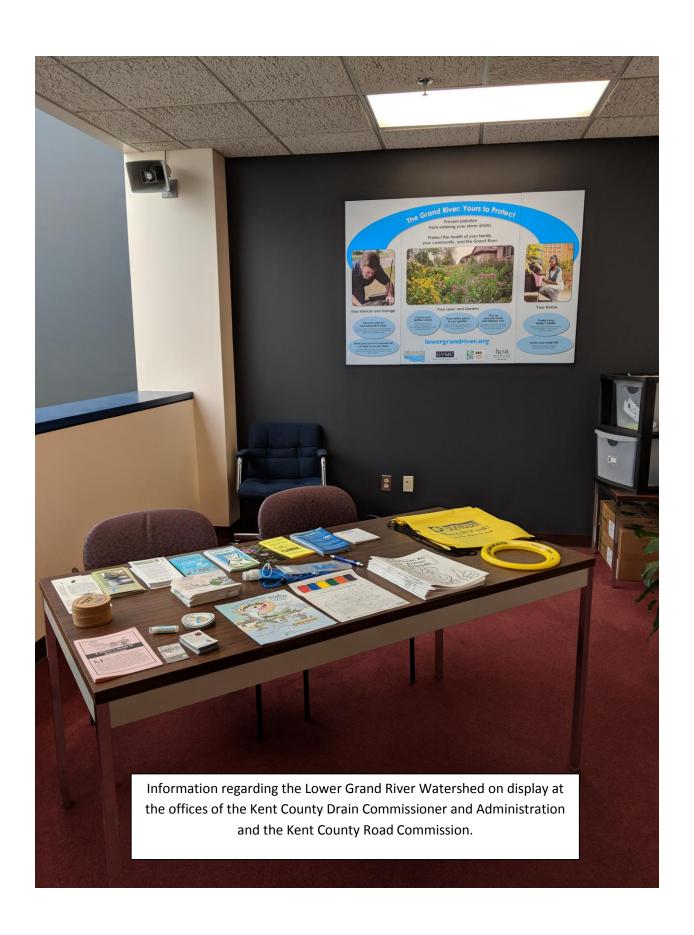
Please list any other actions your community has conducted to reduce stormwater pollution

- The KCRC works to reduce the use of chlorides (salt) as a part of our winter maintenance operations. We adapt our equipment and train our employees to apply minimal amount of deicing material toward the centerline of the roadway and allow traffic to spread it as opposed to some agencies that apply deicing material the full width of traveled lanes. We continue to refine this process to reduce the use of chlorides on our roads and bridges.
- Our public street standards require 3-foot deep sumps in catch basins.
- We continues to utilize leaching (infiltration) storm sewers and leaching catch basins where vertical grades and soil types make feasible and functional.
- Maintenance supervision also attended the CRA Winter Operations Conference and were shown methods to maximize effectiveness of deicing chemicals and chlorides while decreasing the amount of material discharged or used.

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





STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENTAL QUALITY





February 15, 2018

Mr. Wayne Harrall, Storm Water Program Manager Kent County Road Commission 1500 Scribner Avenue NW Grand Rapids, Michigan 49504

Dear Mr. Harrall:

SUBJECT:

Municipal Separate Storm Sewer System (MS4) Audit

National Pollutant Discharge Elimination System (NPDES)

Certificate of Coverage (COC) No. MIG610129

Designated Name: Kent CRC MS4

On January 24, 2018, staff from the Department of Environmental Quality (DEQ), Water Resources Division (WRD) conducted an audit of Kent County Road Commission's (KCRC) MS4 Program. The purpose of the audit was to determine compliance with Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and NPDES MS4 Watershed Based General Permit No. MIG619000, and KCRC's NPDES COC No. MIG610129.

Based on the audit, there are permit requirements that need improvement. The findings of the audit are detailed in the enclosed report.

By March 20, 2018, please provide a written response detailing the steps that KCRC will take to ensure that all eligible departments and facilities are in compliance with COC No. MIG610129. As a minimum the response should include the following:

- 1. A blueprint, site plan, or detailed investigation results to show the discharge point of the storm sewer system surrounding the salt dome/materials storage area at the Central Complex.
- 2. A timeline to provide Illicit Discharge identification training to staff who have the opportunity to witness unusual discharges or illicit dumping during the course of their work.
- 3. A management plan to effectively eliminate the potential for discharges from dumpsters to the storm sewer.

WRD staff appreciates the cooperation and assistance that KCRC provided as a part of this audit process. If you have any questions or concerns regarding this letter, please contact me at 616-356-0215; stamoura@michigan.gov; or at the address below.

Sincerely,

Amanda St. Amour

Senior Environmental Quality Analyst

manda 8t amour

Enclosure:

Audit Report

Kent CRC MS4

MS4 - Areas Evaluated

Inspector: Amanda St. Amour Start Date: 01/24/2018

Areas Evaluated

- 1. Certified Operator
- 2. Complaint Investigation
- 3. Construction Activities
- 4. Construction Storm Water Runoff Controls

Construction Site runoff controls will be evaluated during a review of the Part 91 Authorized Public Agency program.

5. Containment Area

6. Exposure

Un-Satisfactory

KCRC has been unable to demonstrate that the storm sewer system surrounding the salt storage area at the central complex is connected to the sanitary sewer. Plans that were supplied via email on January 20, 2018, did not include this information and follow-up requests for a more complete drawing have not been fulfilled.

7. Illicit Discharge Detection and Elimination

Satisfactory

KCRC has prioritized MS4 discharge points. Dry weather screening is scheduled for Summer 2018.

It appears that KCRC staff do not receive training in awareness and identification of illicit discharges and illicit connections. In addition to awareness of materials handling at KCRC complexes, staff that travel the county should be aware of the illicit discharge elimination program and associated reporting procedures.

- 8. Maintenance Activities
- 9. Non-Structural Controls

Satisfactory

Bridge decks and curb/gutter roads are swept annually. Waste from this activity is transported to an appropriate landfill facility.

KCRC uses pre-wetted salt/sand mixture for deicing. Trucks are calibrated for direction and rate. As a result of updated practices and controls, KCRC generally uses about 1/3 of the amount of deicing material that was used previously (10-15 years ago).

KCRC expects road maintenance foremen to be aware of Best Management Practices on maintenance jobs. Foremen and inspectors are trained in Soil Erosion and Sedimentation Control as well as NPDES construction site storm water control. Contractors and utility companies are made aware of BMPs during pre-construction meetings.

10. Other

Kent CRC MS4

MS4 - Areas Evaluated

Inspector: Amanda St. Amour Start Date: 01/24/2018

Areas Evaluated

11. P2 Good Housekeeping

Marginal

Fueling areas and vehicle maintenance bays are equipped with spill kits. Vehicle storage and maintenance occurs at each garage where interior drains are plumbed to sanitary sewer. Interior floor drains and oil/grit separators are cleaned on a regular basis.

Dumpster areas collect standard buildings operations waste as well as debris that has been retrieved from the roadsides including roadkill. Uncovered dumpsters were identified as a deficiency during an inspection in 2011. Dumpsters are still uncovered and remain in locations that drain to the storm sewer system.

- 12. Permit Review
- 13. Post-Construction Controls
- 14. Program Management
- 15. Public Education

Satisfactory

KCRC cooperates with LGROW in the watershed-wide Public Education Program. In addition, KCRC provides education materials in the permits office and during public meetings.

- 16. Public Education and Participation
- 17. Public Participation
- 18. Structural Controls

Satisfactory

KCRC inspects and cleans catch basins on a 5-year cycle. Catch basin cleaning waste is transported to appropriate landfill facilities. This schedule applies to 10k catch basins and 6k manholes. KCRC has been monitoring the depth of sediment in catch basins for several years. During the audit, it was suggested that the Road Commission evaluate this data in order to refine the catch basin cleaning schedule according to accumulation rates.

19. SWPPP

Harrall, Wayne

From:

Harrall, Wayne

Sent:

Tuesday, March 20, 2018 3:09 PM

To:

StAmour, Amanda (DEQ) (STAMOURA@michigan.gov)

Cc:

Schutte, Bruce; Schmuker, Sharon

Subject:

MS4 Audit Response

Attachments:

MS4 Audit Ltr.pdf

Amanda,

Attached is KCRC's response to areas of concern that you pointed out in your February 15 letter. The sanitary sewer plan connection at our Central Complex was e-mailed previously.

We are also planning to compile past year CB pumping data to better determine the ideal schedule for our catch basin cleaning.

Thank you for your work and assistance you provide us in our MS4 program.



Wayne Harrall, P.E.

Deputy Managing Director of Engineering o. (616) 242.6914 | f. (616) 242-6974 wharrall@kentcountyroads.net

Kent County Road Commission 1500 Scribner Avenue NW, Grand Rapids, MI 49504 kentcountyroads.net



March 20, 2018

Ms. Amanda St. Amour Senior Environmental Quality Analyst Michigan Department of Environmental Quality 350 Ottawa Avenue NW Unit 10 Grand Rapids, MI 49503

Re: Municipal Separate Storm Sewer System (MS4) Audit

Dear Amanda,

In response to your letter dated February 15, 2018, the Kent County Road Commission offers the following:

- 1) We have done a thorough review of our salt dome surface water collection system and determined the two open grates in the northerly portion of our storage yard discharge to the city sanitary sewer system. We are attaching an aerial with the sanitary system layout. Also enclosed is our permit to hook up to the city sanitary sewer system. Lastly, we have scheduled televising this line by the end of March 2018.
- 2) As it relates to training employees in order to improve "in-house" recognition of illicit discharges, we are planning the following training opportunities:
 - New employee & seasonal employee orientation to include illicit discharge identification training.
 - Modify our Hazardous Material training to include information pertinent to identifying unusual discharges or dumping.
 - Construction Inspection Training planned for late April 2018 will include a segment related to recognition of unusual discharges or illicit dumping
- 3) Due to inefficiencies with operational and safety concerns with covered trash dumpsters, we plan to make the following modifications at our Central and Southwest Complexes, related to containing all discharge from these dumpsters. At the Central Complex we will construct a short curb to retain any seepage and collect it in a small basin that will be pumped periodically. At the Southwest Complex we are planning to relocate the trash dumpster to an area that does not drain to the storm sewer.
- 4) Also, as we discussed during the audit, we have made updates to our website and added a link to "Report a Spill".

Please call if you have any questions or if you need additional information.

Sincerely

Wavne Harrall

Director of Engineering

Kent County Road Commission

Permission is hereby granted by the

NEIGHBORHOOD IMPROVEMENT DIVISION GRAND RAPIDS, MICHIGAN

EORM 564 CONTRACTORS	· · ·			H	30/41
Kent	County Pub	lic Work	8		
OWNER					
ADDRESS	County Roa	o Comuls	sion (Conorete A	Selt Stormege)
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PLUMBING:	Sewer	Water	Inspection	Repair in yard	PRICE
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(1)	PERMIT APP	LICANT AC	GREES TO C D CODES.	OMPLY WITH	1 ALL

Fueling Equipment

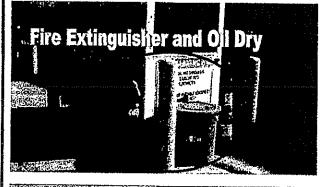
George Smith, Employee Safety Superintendent

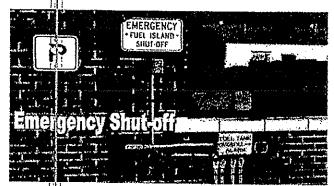


There are some obvious and not-so-obvious safety rules to observe while refueling a vehicle or other piece of equipment at work or at home. Here is an overview of the precautions to keep in mind anytime you are refueling a vehicle or piece of equipment.

- NO SMOKING! The burning cigarette can ignite flammable vapors that are emitted from the liquid fuel, causing a flash fire or explosion to occur. Also make certain there are no other potential sources of ignition, such as open flames or spark-producing equipment operating in the area, as they too can ignite a fire or explosion.
- Use only safety cans or other approved portable fuel containers, such as those marked DOT approved, for transporting and transferring fuels or refueling vehicles and equipment. Unapproved containers can easily leak, spill fuel, or rupture, leading to a potentially dangerous situation.
- Always kill the engine of the vehicle or equipment before you refuel. Also, be certain to let portable equipment such as lawn mowers, generators, chain saws, blowers, trimmers, or anything else with a fuel-powered engine cool down before adding fuel to the tank. Spilling liquid fuel on a hot motor instantly creates a cloud of highly flammable vapor, which can easily catch fire or explode.
- Before dispensing fuel into your car or truck, be sure to touch a metal part away from the fuel tank on your vehicle or equipment with your bare hand. This helps dissipate any static build-up on your body cleated when you slid out of the vehicle. Also, touch the gas dispenser nozzle or hose to the fill tube on the gas tank before you start to add fuel to the tank and keep it in contact throughout the entire refueling process. This step helps prevent hazardous static electricity from building up and causing a spark in the vapor area as you refuel;
- Never dispense fuel into a can or other portable container while it is sitting in your vehicle, truck or truck bed. Doing so allows hazardous static electricity to build up. Instead, sit the container on the ground and then add the fuel.
- Be sure you know where the emergency shut offs, fire extinguishers, oil dry, and absorbent socks are before fueling.

Central Complex

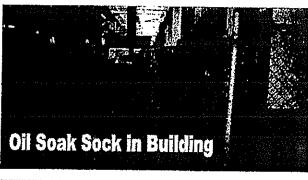


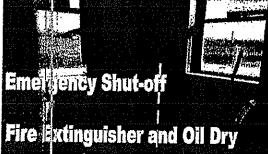


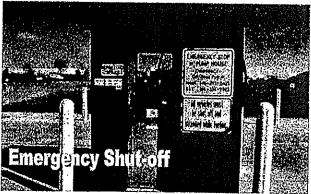


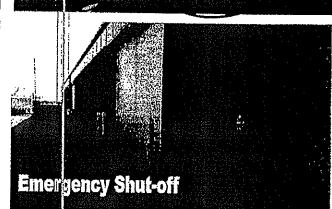


South Complex

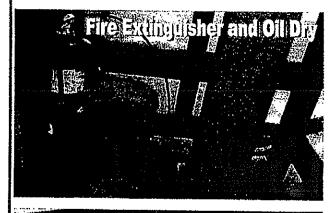


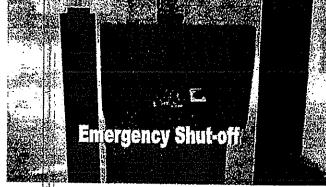




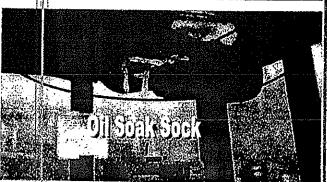


North Complex

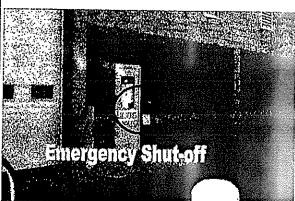








Southwest Complex



Inside Building

- Oil Soak Sock
- Fire Extinguisher



TOPIC: Potting Arrows File Stations LOCATION: Southwest

DATE: 4

		11/ 2018
NAME	EMPLOYEE#	SIGNATURE
Todd Rutledge Matt Stedman	1901	201/
Matt Stedman	6999	Walthe Solum
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TOPIC: Fueling Equipment LOCATION: NORTH

DATE: 4-19-18

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NAME	EMPLOYEE #	ATTENDED
Bass, Aaron	7100	
Butler, Nate	9495	Marbuth
Calions, Trever	4185	THAN CALLLO
Fisher, Paul	1265	Fouldish
Frey, Jake	4847	1 19 Car - 19 Car 7
Huisken, James	6251	stone Lean
Johnson, Tom	5146	Colonia Coloni
Lombard, Marc	5263	Ooic /
Menke, Dennis	1247	- FIRMEN
Tiobe, Dave	1263	Africa Chia
STATE OF THE STATE		
McCuair Tony	5286	Josep Miching
Huisken, Jase	7940	1200 201 - 40 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

4/19/18





TOPIC: FLETING EQUIP LOCATION: North DATE: 4-19-18

DATE:	4-14-18	, ,
EMPLOYEE	EMPLOYEE#	\ ATTENDED,
Armock, Mike	7244	Made Dung
Bailey, David	4751	aluel Erely
Baird, Melvin	8772	Melles Fait
Barber, Nicholas	9716	WCK Bur Ber
Blain, Mike	3296	
Blossom, Steve	4110	MIGRIPH, auto-
Boluyt, Robert	2064	Kolyn Bland
Bouwer, Mike	1750	Whichard a. Brown
Brandt, Paul	5978	
Christensen, Lee	8220	Suf Choin
Coalter, Ken	8139	
Davidson, Harley	9976	the land
Dochod, Linda	216	
Fegel, William	118	1/2/2001
Feutz, Dale	2063	Con San San San San San San San San San Sa
Fonger, Neal	8248	Farger ment
Graham, Sidney E	680	Sid Corelmina.
Kilts, Allen	9492	100000
Lange, Ernie	9664	7 7 7
Larson, Mark	4360	mar 6 1 20
Meernik, Gary	1320	- Company
Murphy, Paul	9780	D. o mush
Myers Jr., Alan	1800	10 me
Oakes, Tyler	5340	- Carlon -
Pant, Gordon	9330	Maril / I
Powell, Steve	9234	59eu = 10 W = 11
Raisch, Mike	· 8912	With the Mind
Reed, Jeffery	1200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Sharp, Andrew	9958	1 W 3 - 1
Sias, Joshua	500 0	front dies
Smith, Heath	9911	Sent 0 5 11
Smith, Jesse	9972	1 min
Smith, Trevor	198	900 - S. 140
Smith, Tyler	3200	- Final Control of the Control of th
Twichell, Chris	1761	Jane
Wheeler, Randy	+3+9	
Yancey, Harold	:557 :515	11/1/2
runcoy, manora		Aus
	SEASONANA ERA	TO THE PROPERTY OF THE PROPERT
Dudley, Matthew	The state of the s	61:11:11:11:11
Powell, Steve II	71.1	State
Campbell, Skylour		
Westbrook, Spencer	3.6	Safen (in cit)
AA COURTONY ODELICES		Savar Boran
		<u>'</u>







LOCATION: South Complex Maintenance

T 10: Fueling Spoipment

EMPLOYEE# **EMPLOYEE** ATTENDED Baker, Rich 2008 RICH BOKY Anderson, Philip Benjamin, Darius Boerson, Thomas Bond, Robert Brown, Corey Calkins, Brian Crumback, Brandon Crumback, Dwayne Dochod, Linda Farrell, Clyde Jr Flier, David Hardy, Anthony Hawley, Justin Hendrick, Dave Hollemans, Brooks Karasinski, Paul Koehl, Rob Kreps, Alan Lastocy, John JR Lucas, Andy Martin, Michael Moody, Johnie Moody, Robert O'Brien, Todd Porritt, Chandler Rivera, Jasper Rogers, Brian Roth, Randy 7Coth Scoby, Landon Seher, Kevin Shaffer, Richard Simmons, Dan on Simmons Smith, Eddie Tanner, Andy Thomas, Ron Thomas, Steve Thome, Dan Tichelaar, Adam Wester, Andy Ziegler, Jon Belliel, Justin Cook Book A Doughtery, Cody

4/18/18

75



LOCATION: South Complex Maintenance

TOPIC: Fueling Equipment

DATE: 4-18-18

EMPLOYEE	EMPLOYEE #	ATTENDED
Bond, Robert	9146	
Crumback, Brandon	7965	Bulan Clahar
Koehl, Rob	6734	CIVI Basel
Kreps, Alan	5931	at
Porritt, Chandler	7938	
Rivera, Jasper	7633	2627
Smith, Eddie	5023	Eddie Smith
Tanner, Andy	6422	Qu
Tichelaar, Adam	7950	
	SEASONAL	
Beltz, Jim	122	The state of the s



TOPIC: Feling Equipment LOCATION: South GARAGE

DATE: 4-18-18

EMPLOYEE #	ATTENDED
South	
1261	
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2329	Stranger
853	7/M/7/
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3239	Allian Lell
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	South 1261 2038 2329 853 977 2366 1264 9153 1262 7170 Seasonal 347 3730



TOPIC: FUELING EQUIP.

FACILITATOR: TOMT.
LOCATION: CENTRUL REPAIR
DATE: 4-20-18

NAME	EMPLOYEE #	SIGNATURE
Bergman, Ronald	2330	Renall Beam
Breen, Ted	5367	To la Carlos
Rykse, Joe	6313	Clar KyKI
Companion, Brett	1358	Blett Companier
Holbrook, TJ	6741	11
Jansma, Joe	1213	12 am
Ottenwess, Ronald	1550	hond Co temos
Preston, Glenn	1504	Lloon His Dre Dim
Rogers, Dan	5012	Halor
Thompson, Tom	9399	Ton Flory 250N
Walton, Stanley	3240	STPS WALTON
Whetzel, Ray	8059	Bay white of
Wienand, Jack	9080	Jus Williams
Robinson, Cody	1477	
Harwood, Andrew	1953	andy tourson
Sottovia, Steve	8249	272.77
	Seasonal	
Wieten, Dave	82	DONE WIETEN
Nielsen, Scott	7652	Cost Mille
Alex Nordstren	10	Me Block
74/mi		



LOCATION: Central Complex Maintenance

TOPIC: Fulling Equipment

Glenn D Fankhawr DA EMPLOYEE	TE: 4) 19 18 134	Alken I Staken
Albertson, Andrew	EMPLOYEE #	ANA ATTENDED
Alderink, Ron	9598	
Antor, Ronald	1315	Ohn lings
Bitely, Andy	1640	
Bouwer, Austin	4678	Andy Bot
Bylsma, Mike	5229	
Byrne, Bill	1170	- 40
Byrne, Jacob	8316	Wyme
Chalmers, Cameron	6780	415,000
Chalmers, Craig	8329	000
Cisler, Steve	1449	(tale
Clifford, Donald	8250	Steel Who
Cvanciger, Mark	9377	
Cvanciger, Tyler	9130	
Dochod, Linda	13	
lipse, Jody	216	
lawley, Justin	1645	
loutman, Brent	3652	
angeland, Cory	1749	1000
opez, Matt	2768	Low the almand
fills, Jeff	7824	-
lobley, Gregory	6932	
ordstrom, Alex	3555	Gregory DT//ofly
aisch, Michael JR	10 /	
oda, Scott:	6381	A Tre of the same
wendroski, Alex	6850	1 Scott Hocks
idd, Jason	8444	Ken Lowers Co.
anderMaas, Bert	1136	
anLangen, David	9960	
enhuizen, Tom	5800	Dave Janlangen
ork, Terrence	2524	Joan Ventring
	4848	Town York 1
halmers, Colin	SEASONAL	
agenah, JC	58	1 Club
awkes, Matthew	9833	
ee, Joseph	155	
ourer, Anthony	149	
nith Michelle	90	
ellary Mille	7963	Jusah M John
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The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

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Tra	Н	HIL	u.

Date Conducted: 5/15/18

- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Name (Print)

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

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Tra	ini	na:

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All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Steff Wielren

Employee Name (Print)

mployee Signature

Training:	Date Conducted: 5	-15-18
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All KCRC tools, equipment, clothing, etc.	must be returned on the last day of e	employment.
Cade Johnson Employee Name (Print)	Cardle Julyana Employee Signature	5-15-18 Date

Training:	Date Conducted:_	5-15-19
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All KCRC tools, equipmen	t, clothing, etc. must be returned on the last d	lay of employment.
Bryan Bigelov	from kin	S-15-18
Employee Name (Print)	Employee Signature	Date

Training:	Date Conducted: 5-15-18
1. PPE (Personal Protective Equipment) For Job Tasks 2. Hazard Communication (MSDS) 3. Hazardous Waste Procedure (Trash Pickup) 4. Traffic Regulating 5. Chainsaw / Tree Cutting Hazards 6. Confined Space Entry 7. Poison Ivy	
All KCRC tools, equipment, clothing, etc.	must be returned on the last day of employment.
TeHkey 5 Blossom Employee Name (Print)	Employee Signature Date

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Date Conducted: 5-15-18

Training:		
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- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Shylour Camp bell Employee Name (Print)

Training:	Date Conducted: O5 / Is / I§
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All KCRC tools, equipmen	t, clothing, etc. must be returned on the last day of employment.
Nathanial Kozycki	Latinal Moya, - 05/15/18 Employee Signature Date

Training: Date Conducted:	5115/18
Training: Date Conduction	ted:

- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison Ivy

All KCRC tools, equipment, cic	thing, etc. must be returned on the last day o	of employment.
avidson st Jean		> 5/15/18
Employee Name (Print)	Employee Signature	Date

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

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Training:	Date Conducted: 5//	5/1	8
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- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)

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- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Austin Lanninger Was 2 5/15/18
Employee Name (Print) Employee Signature Date

Training:	Date Conducted: <u>C</u>	5/15/18
 PPE (Personal Protective Equipment) For Job Hazard Communication (MSDS) Hazardous Waste Procedure (Trash Pickup) Traffic Regulating Chainsaw / Tree Cutting Hazards Confined Space Entry Poison Ivy 	Tasks	÷.
All KCRC tools, equipment, ck	othing, etc. must be returned on the last day	of employment.
Carter Yor	Cortice You	5-15-18
Employee Name (Print)	Employee Signature	Date

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

Training:	Date Conducted: 5/15/18
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All KCRC tools, equipment, c	lothing, etc. must be returned on the last day of employment.
Dathan Farniver Employee Name (Print)	Nathan Journin 5/15/18 Employee Signature Date

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

Training:

Date Conducted: 5/15/10

- PPE (Personal Protective Equipment) For Job Tasks
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- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Name (Print)

Employee Signature

Dafe

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

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- PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry:
- 7. Poison Ivy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Name (Print)

mplovee Signature

Date Conducted: 5/15/18

Training:	Date Conducted:	5-15-18
 PPE (Personal Protective Equipment) For . Hazard Communication (MSDS) Hazardous Waste Procedure (Trash Pickup Traffic Regulating Chainsaw / Tree Cutting Hazards Confined Space Entry Poison Ivy 		
All KCRC tools, equipment,	clothing, etc. must be returned on the last day	of employment.
Quinn Koomen Employee Name (Print)	Employee Signature	5-15-18 Date

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

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- 1	ובז	Πi	Dσ

- PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 3. Confined Space Entry
- 7. Poison lyy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Name (Print)

Employee Name (Print)

Employee Signature

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	10	411	111	ıg:

- Date Conducted: 4/17/18
- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Norse (Drive)

Employee Signature

9-17-18 Date

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Training:

- Date Conducted: 5/15/18 4-17-18
- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
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- 7. Poison lvy

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Employee Name (Print)

imployee Signature

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Trans	nina:
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- Date Conducted: 5/15/18
- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Wyatt Kadakovitz

Employee Name (Print)

Employee Signature

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- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 3. Confined Space Entry
- 7. Poison Ivy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Employee Name (Print)

Emphyee Signature

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Training:

- Date Conducted: 5/31/18
- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

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Employee Name (Print)

Employee Signature

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- 4. Traffic Regulating
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	T 71	r13	п	Π.

Date Conducted: May 21, 2018

- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison Ivy

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Counter Wilson
Employee Name (Print)

Employee Signature

05/21/2018

Date

The training list below is provided to the undersigned employee to inform him/her of the commitment the Kent County Road Commission has to their safety. As an employee of the Kent County Road Commission, you will receive the following training as well as additional instructional training on a number of operations and/or equipment.

Training:	Date Conducted: 5/15/18
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- 1. PPE (Personal Protective Equipment) For Job Tasks
- 2. Hazard Communication (MSDS)
- 3. Hazardous Waste Procedure (Trash Pickup)
- 4. Traffic Regulating
- 5. Chainsaw / Tree Cutting Hazards
- 6. Confined Space Entry
- 7. Poison lvy

All KCRC tools, equipment, clothing, etc. must be returned on the last day of employment.

Spencer west brook Strew westwarm 5/15/18
Employee Name (Print) Employee Signature Date



ANNUAL UTILITY MEETING

AGENDA December 15, 2017

- 1. Introductions
- 2. Safety
 - Work Zone Traffic Controls
 - Work Site
- 3. Soil Erosion Control / Stormwater
- 4. Winter Work
- 5. Permits
 - Annual
 - Site Specific
- 6. 2018 Projects



ANNUAL UTILITY MEETING

TO:

Karen McCarthy - Consumers Energy Deborah Nichols - Consumers Energy

Troy Hall – Consumers Energy Aaron Konn – Consumers Energy Dale Thompson - Consumers Energy

Bill Burns - Consumers Energy Kathy Murchison – Consumers Energy lan Meredith - Consumers Energy Aaron Fisk – Consumers Energy Michele Andree - Consumers Energy

Aaron Mayle – Trees Inc. Bill Grauman – Trees Inc.

Jeremy Beard - Consumers Energy Gas Kyle Oak - Consumers Energy Gas Randy Miller - Consumers Energy Gas

Jason Bigelow - AT&T Patti Kaliniak – AT&T Dean Miller - AT&T Cory VanTil - AT&T Andrew Sharp - AT&T

Scott McDonald - Utility Contracting

Brent Eurich – TDS Metrocom Rick Chalmers – MCI Metro Gary Gould - ACD.net Mitch Flachs - Double K

Jason Tanner - Great Lakes Energy Nick Jibson - Great Lakes Energy

Jacob Rodriguez - 123Net Steve Herald – Fibertech, Inc. Charlie Olszewski – US Signal

Dale Smith - Level 3 Kerwin Keen – MDOT Mike Lamancusa - MDOT

Tom Byle – KCRC Dave Beck - KCRC Brian Harmon – KCRC Ron Stingle – KCRC Sharon Schmuker - KCRC George Smith – KCRC

Karyn Boyd - Michigan Electric Trans.

Floyd Siegel - Everstream Chris Fowler - Verizon

DATE:

Friday, December 15, 2017

TIME:

8:00 a.m.

LOCATION: Kent County Road Commission First Floor, Board Room 1500 Scribner Avenue NW Grand Rapids, MI 49504

The purpose of this meeting is to discuss utility work within the right-of-way, including permit application information, plan changes, work zone safety, lane closures, communication, open cuts, erosion controls, restoration and work during snow and ice conditions. Attendance by crew superintendents and/or contract agencies involved with the actual work performed within the right-of-way is encouraged. In addition, please come prepared to discuss any major expansion or replacement projects planned for 2018.

Attendance is required for approval of your 2018 Annual Blanket Permit.

If you or your representatives cannot attend this meeting, please contact this office at 242-6910.

Wayne Harrall, P.E. Deputy Managing Director of Engineering (616) 242-6914

Kent County Road Commission Annual Utility Meeting - December 15, 2017

ï	Phone	4 03/-533.262/	616-233-7140	616 233 7191	010	(a [8-1 8-1])	16.16-71.55.0433	(1) 122 210	616.431-5004	616-893-4597	1348 -010-019	616 3580011	H.16 -260 - 11.26	7220-012-212	74401740	5152115 115	18430 8313
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8:00am Representing	(AMMINION ENGLAND		US Signal		Consumers Energy	ITC OF	CONTINUES TORRESY	CONSUMERS INESSY			Tilen UL	Tures Inc	Traves 11c	E. bectech	S BYERGY	1+1 Y Zaman	Double K Value gad
Name	Michele andres		114an Medema	(Marie Olszewsz)	Eric Egan	Savin Boyd	NATURA POTANAURZ	HELLIN LONN	B. H. M.	1011	When Swangarthe	Jaal Chase	Sayon Heltsley	Levi Schopflor	1	Con Varilit Checy Bonny	Tevez Chrisum

Kent County Road Commission Annual Utility Meeting - December 15, 2017

	E-Mail Address	Kyle. Oak Bount every con 248-249-7175	St 3253 @ att. Con 1/1/ 881-21/17		KEENKZ @ MICHIGAN, QN (016 464-1814	1287690att.com 6/6-246-0643	stanner glenergy, com 331-459-5277	103173 @ att.com 614-244-732 B	dentscher. gland acd. not 517-999-3267		
8:00am	Name Representing	Kyle Cak Consomers Everage	Shulley Hooley ATET	Jeanine Dassinger ATET	KREWY KEEN MOOT	Joseph Ziezin) ATT	Jason Tonner Greatlakes Energy.	edrávez ATVI	GLENN Dantscher KEPS Tod.		

23 pape (8AM)



ANNUAL UTILITY MEETING

TO: George Haga – Ada Township

Matt Weldon – Plainfield Water Rick Solle – Plainfield Water Kristi Dougan – Village of Sparta Dennis Brinks – Village of Sparta Phil Vincent – City of Rockford

Mike Ferris – City of East Grand Rapids Doug LaFave – City of East Grand Rapids Mike Kortman – Byron-Gaines Utility

Scott Schoolcraft - North Kent Sewer Authority Brian Harmon - KCRC

Gary Seger – North Kent Sewer Authority Arden Postma – City of Grand Rapids Brian Baskerville – Miller Pipeline Brandon Jones – Miller Pipeline Ryan Peel – Vergennes Broadband

Dave Young – Charter Communications
Mike Reinink – Comcast
Jim Zawacki – Comcast

Steven Ryan – Ryan's Municipal Services Tom Stressman – City of Cedar Springs

Colleen Giamo - Caledonia Charter Township

Scotty Kehoe – DTE

Eric Jonker - DTE Andre Diaz - DTE Michael Beaver - DTE

David Tejeda – DTE Bill Gee – Casair Tom Byle – KCRC

Paul Sruba – KCRC George Smith – KCRC Brian Harmon – KCRC Ron Stingle – KCRC

Dave Beck - KCRC

Rich LaBombard – City of Lowell Tom Russo – Lowell Power & Light Mark Droog – Lowell Power & Light John Gorney – City of Kentwood Dave Harran – City of Grand Rapids

Kerwin Keen – MDOT Mike Lamancusa – MDOT Mark Koning – City of Walker

DATE:

Friday, December 15, 2017

TIME:

9:30 a.m.

LOCATION: Kent County Road Commission

First Floor, Board Room 1500 Scribner Avenue NW Grand Rapids, MI 49504

The purpose of this meeting is to discuss utility work within the right-of-way, including permit application information, plan changes, work zone safety, lane closures, communication, open cuts, erosion controls, restoration and work during snow and ice conditions. Attendance by crew superintendents and/or contract agencies involved with the actual work performed within the right-of-way is encouraged. In addition, please come prepared to discuss any major expansion or replacement projects planned for 2018.

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Wayne Harrall, P.E. Deputy Managing Director of Engineering (616) 242-6914

Kent County Road Commission Annual Utility Meeting - December 15, 2017 9:30am

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	t-Wall Address	CHAGAG APATOWNSHIPMINON 616-676-9191	la ate Blabachitens	Chose hess @ and	·	100 /FORD S. A. S. HANTWOOD, W 45 616 656551)		terry. double & es alua: / . com	Michael. BEINER	brian, baskaruille & millarpipeline, com	Jim Jawackifkahl-concert.com	dana dember Comerss. ea		david tejeda adveneray.com 6/6 677-2804	Milewskib @ Phinfidd Mi, org	Weldormaplainkieldmi org
9:30am	Representing	A GOA TWR	Kinsi Makasa Ewar	Rygns Municipy Sen!	Chizon	City of Kentward	Noeth Kenc Soware Aigh.	Double K Undergloned		miller Classins.	Comcast	Concast	276		Plaw Fidd water	PLAINFIELD WATER
	alle	GEORGE HAGA	Thice Confront	Charle 1250	Chris Centre	Sim Inblibas	Galey Select	Terry Chrisana	MIKE BEAUE	BRIAN BASKERWILE	Jim Geworki	Dance Duban	Glase Mathers	David Tejeda	Brian Milewski	MATT WELDOW

Kent County Road Commission Annual Utility Meeting - December 15, 2017

9:30am

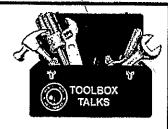
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	Similar de la companya de la company	E-IVIAII Address	Phone
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LERWIN KEEN	MDOT	KEENKZEMICHGAJ, GOJ	(G16) 440-1814
Dave Johnson	City of East Grand Rabida		400000000000000000000000000000000000000
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Jay Brinks	DTE FINERAL		1.00.1
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Drawon Joacs	Miller Pibline	Grandon, jones B. Miller P. 18 Live Com	818-294-7039
Ryan Teachwonth	Lowell Light and Power	rteachwerth atowell-light.org	C16-400-603/
Dennes Brinks	Village of Sports.	Ahrink Oras Paning	(16 8879303
MIKEKORTMAN	BYROW-GAINES UTENT AUTHORITY	M. Kertman (D Dava.of)	2000-112 919)
DAN HAKKEMA	Bound		1919 - HAGD-CERTY
		D, not Kome @ Dagua, Ora	(616) 211-1044 Cen
CHAD ROWN	GRUND RODIES	CREWE P. GRCITY, COB	616-961-9528
HRDEN FOSTMA	CITY OF GRAND RAPIDS	a postma a greity. us	10ch -319
KyAN PEEL	Vergennes Broadland	fyanpeel agmail. com	7925 - 168-919

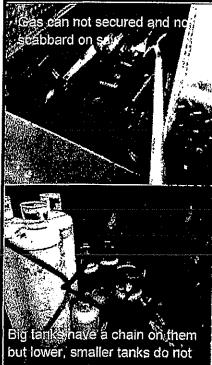
Kent County Road Commission Annual Utility Meeting - December 15, 2017

616-79-6854 8/19-161-919 Phone 7 00 ··· gpostenewalkercit trabry@walker.eity E-Mail Address 9:30am city 05 Waller CERY OF WALLER Representing Costma Name

Storing and Handling Flammable Liquids

George Smith, Employee Safety Superintendent





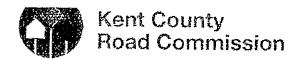
Keep in mind that all fuel cans, propane tanks (including smaller hand held torch tanks), oxygen tanks, and acetylene tanks must be secured when in transit. For example, I use a piece of plastic pipe secured to the bed of my truck to hold my gas can in place. When in storage, containers must be stored at a minimum of 50 feet from any entrance and exit doorways and secured with something to prevent them from tipping. For example, we use a chain for our propane tanks. If you unhook a chain to get a tank out, make sure it is hooked back up when your are done. It is very important not to store or use flammable liquids around an ignition source. The vapors, not the liquid itself, ignite. Ignition sources for flammable liquids can be any open flame including a lit cigarette, a lighter, and turning a light switch on or off. Static electricity, which can be caused simply by walking, is another source of ignition.

Make sure all storage drums are grounded whenever you transfer liquids from one container to another. If you keep the storage drum permanently in one place, it should be grounded at all times. Grounding the drum prevents ignition from static electricity. To ground a drum, drive a steel rod into the ground and attach a wire to both the drum and the grounding rod.

Place fire extinguishers near any area where flammable liquids are used or stored. Training in the proper use of a fire extinguisher is necessary.

Always use flammable liquids in a well ventilated area unless respiratory protection is available. Don't use the liquids unless you've been properly trained to do so. Take the following safety precautions whenever you handle flammable liquids:

Never fill a container completely; rather, fill the container to 80% capacity. If the
container is labeled as one gallon, only put a maximum of one gallon of liquid into it, even if there is extra space left in the container. Leaving a vapor space in
the can will allow the liquid to expand when the temperature changes. An explosion could result if the container is completely full.



LOCATION: North Complex Maintenance Nights

TOPIC: Storing Flommable Liquids

DATE: 2/21/2018

EMPLOYEE	EMPLOYEE#	ATTENDED /
Bouwer, Mike	1750	Wilher to brewn
Fegel, William	118	1 Dilling
Lange, Ernie	9664	9 14
Reed, Jeffery	1200	Wang
Sias, Joshua	5000	
Skrabis, Luke	1458	Holla Sees
Smith, Tyler	8200	Tulingon
Wheeler, Randy	3339	Randy Wheeler.

Rb 21,2018





TOPIC: Storing Flammable Liquids

NAME	EMPLOYEE #	ATTENDED
Bass, Aaron	7100	
Butler, Nate	9495	naty, Butter
Calkins, Trever	4185	num Calvo
isher Paul	1. 12 1. 1265	4 gul Fialu
rey, Jake	4847	my my
iuisken; James	6251	Mr. Comment
ohnson, Tom	5146	
ombard Mare	5263	BACK THE RESERVE TO THE RESERVE TO THE RESERVE TO
Menke, Dennis	1247	Manhy Winn
abbe, Dave	1263	Man bor
McCuaig, Tony	5286	7m W. Chring
luisken, Jase	7940	Bash sussan
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e de como de la como de como d		Brist Brist Standard Charles and Harry
	COMPANIE CONTRACTOR	Bedrothianski stoletik i i stolet
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Pelo 21,2018



TOPIC: Flammable Liquids LOCATION: SOUTH GARAGE

DATE: 2-22-18

NAME	EMPLOYEE #	ATTENDED
	South	
Anderson, Philip	1261	1 1 Miss All to 224
Austhof, Adam	2038	Wall work
Austhof, Steven	2329	Star anno
Crosby, Chad	853	Mil Pm
Crosby, James	977	
DeLange, Jon	2366	1900
Jones, John	1264	Am whet
VanDerMeer, Dale	9153	Bule
Rykse, Joe	1262	The Rubse
Weber, Brian	7170	
	Seasonal	week of
Brown, Clayton	347	VINA WIN
Colley, Alexandria	323 9	ALLIN COULDS

Feb 22,2018 (11)



TOPIC: FLAMABLE liquids Cotoring + HANDLING LOCATION: CENTRAL Repair

DATE: 2-23-18

NARAE	ENADLOYEE #	
NAME	EMPLOYEE #	ATTENDED
	Central	<u> </u>
Bergman, Ronald	2330	
Breen, Ted	5367	Jan Bre-
Companion, Brett	1358	1 Jack 6-3
Holbrook, TJ	6741	114
Jansma, Joe	1213	200
The same properties of	5263	dia.
Ottenwess, Ronald	1550	Nor Often
Preston, Glenn	1504	Mann of Onew or
Robinson, Cody	1477	Code
Rogers, Dan	5012	Ita Boot
Sotovia, Steve	8249	Stan Molling
Chadren Makkarris	6999	
Thompson, Tom	9399	JOMIT-
Walton, Stanley	3240	BIRN WALTON
Whetzel, Ray	8059	7
Wienand, Jack	9080	Just Meaning
	Seasonal	
Nielsen, Scott	7652	South nebrur
Wieten, David	82	DAVE SOOT - 20
Hex Nordstram	10	Mert 1 trols
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Feb 23,2018 (



Contamers TOPIC: STORAGE LOCATION: North DATE: 2/23/18

TIMEST ATTENT	ELEDIONEE #	A STATE OF A PARTY.
EMPLOYEE	EMPLOYEE #	ATTENDED
Armock, Mike	7244	
Bailey, David	4751	DR.
Baird, Melvin	8772	Mely Bors
Barber, Nicholas	9716	Buch
Blain, Mike	3296	0
Blossom, Steve	4110	Marce Bloom
Boluyt, Robert	2064	Roberts)
Bouwer, Mike	1750	
Brandt, Paul	5978	Jan Siourd
Christensen, Lee	8220	/ser-j
Coalter, Ken	8139	Jen -
Davidson, Harley	9976	Harter & mideal
Dochod, Linda	216	
Fegel, William	118	·_
Feutz, Dale	2063	Dram
Fonger, Neal	8248	ned Forge
Graham, Sidney E	680	510
Kilts, Allen	9492	dels feels
Lange, Ernie	9664	
Larson, Mark	4360	MARKINSON
Meernik, Gary	1320	Lun
Murphy, Paul	9780	P. M.
Myers Ir., Alan	1800	2.(4
Oaks, Tyler	5340	73
Pant, Gordon	9330	91.1/24
Powell, Steve	9234	andrews of
Raisch, Mike	8912	Mille
Reed, Jeffery	1200	144
Sharp, Andrew	9958	Andy 51000
Sias, Joshua	5000	1 2 2 3 Mar P
Smith, Heath	9911	H.C. A
Smith, Jesse	9972	June Sauth
Smith, Trevor	198	-120 val 5 -10
Smith, Tyler	8200	1 teors 2 2 1 1
Twichell, Chris	1761	
Wheeler, Randy	3339	
Yancey, Harold	2515	A d I
Tancey, Ital Old	2313	The factor of the same of the
<u> </u>	SEASONAL	
Dudley, Matthew	7131	Matthew
Powell, Steve II	12	
rowell, sleve ii	12	14
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feb 23, 2018





LOCATION: South Complex Maintenance

TOPIC: Storing + Hardling Flammable Liquids

DATE: 2-27-18

EMPLOYEE	EMPLOYEE#	ATTENDED
Baker, Rich	2008	Kich Bahn
Boerson, Thomas	2631	
Calkins, Brian	2214	1 Box Coff
Crumback, Dwayne	498	Howard of
Dochod, Linda	216	Tringa Dochou
Farrell, Clyde Jr	505	Chronton
Hardy, Anthony	2510	11 M Shann Harely
Hendrick, Dave	8108	Children of the
Hollemans, Brooks	9831	Draks Hollan
Karasinski, Paul	6210	PANI KANAJIPUIG
Lucas, Andy	6976	Chief thread
Martin, Michael	3535	and hat maker
Moody, Johnie	1655	
Moody, Robert	2066	Kolut moody
Rogers, Brian	1720	BriAN KOCLIS
Roth, Randy	1250	
Scoby, Landon	715	proling pour
Seher, Kevin	6017	Market
Shaffer, Richard	6583	<u> [</u>
Simmons, Dan	2550	Dars, run
omas, Steve	1681	Stim lim
rríome, Dan	9043	Egg. Thoma.
Wester, Andy	8341	ash best
Ziegler, Jon	9742	
WAS COL	SEASONAL	
Beiliel, Justin	7218	() E 2 - N
Doughtery, Cody	7051	- more and

Feb 27,2018



LOCATION: South Complex Maintenance

TOPIC: Storing and Handling Flammable lights

DATE: 2-28-15

EMPLOYEE	EMPLOYEE#	ATTENDED
Bond, Robert	9146	900 BO
Crumback, Brandon	7965	Spanda Crumbock
Koehl, Rob	6734	TATE.
Kreps, Alan	5931	
Kreps, Alan Porritt, Chandler	7938	1 Contract of the second
Rivera, Jasper	7633	State .
Smith, Eddie	5023	Edge Smith
Tanner, Andy	6422	Can
Tichelaar, Adam	7950	mill
K. C.	SEASONAL	
Beltz, Jim	122	(billie

660 13, 2018

