Lower Grand River Watershed

City of Grand Haven
Progress Report

Reporting Period
August 1, 2011, through July 31, 2012

Progress Report Due Date:
October 1, 2013

Project No. F99511SW/G120878

Lower Grand River Watershed Progress Report

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LIST OF ABBREVIATIONS/ACRONYMS

AWRI	Annis Water Resources Institute
BMP	Best Management Practice
CES	Center for Environmental Study
CoC	Certificate of Coverage
DIP	Data, Information, and Procedures
DPW	Department of Public Works
FTC&H	Fishbeck, Thompson, Carr & Huber, Inc.
GVMC	Grand Valley Metropolitan Council
HD	Health Department
ICMA	International City/Country Management Association
IDEP	Illicit Discharge Elimination Plan
I&E	Information and Education
KCDC	Kent County Drain Commissioner
KCRC	Kent County Road Commission
LGROW	Lower Grand River Organization of Watersheds
LGRW	Lower Grand River Watershed
LID	Low Impact Development
MDEQ	Michigan Department of Environmental Quality
MDNRE	Michigan Department of Natural Resources and Environment
MS4	Municipal Separate Storm Sewer System

MSUE	Michigan State University Extension
NOAA	National Oceanic and Atmospheric Administration
NPS	Nonpoint Source
O&M	Operation and Maintenance
OCDC	Ottawa County Drain Commissioner
PCC	Post-Construction Controls
PEP	Public Education Plan
POS	Point-of-Sale
SEMCOG	Southeast Michigan Council of Governments
SESC	Soil Erosion and Sedimentation Control
SWPPI	Stormwater Pollution Prevention Initiative
TSS	Total Suspended Solids
USEPA	U.S. Environmental Protection Agency
WMEAC	West Michigan Environmental Action Council
WMP	Watershed Management Plan
WQI	Water Quality Index

PART 1 - Contact Information

Table 1 - Contact Information for Michigan Department of Environmental Quality (MDEQ):	
Please provide current contact information for MDEQ to use regarding stormwater issues.	
Permit Application Contact	
Name	William Hunter
Title	Director of Public Works
Address	519 Washington Avenue
City, State, Zip	Grand Haven, MI 49417
Telephone (with area code)	616-847-3493
Fax (with area code)	616-847-3470
E-mail	bhunter@grandhaven.org
Stormwater Program Manager	
Name	William Hunter
Title	Director of Public Works
Address	519 Washington Avenue
City, State, Zip	Grand Haven, MI 49417
Telephone (with area code)	616-847-3493
Fax (with area code)	616-847-3470
E-mail	bhunter@grandhaven.org
Stormwater Permit Fee Billing Address	
Name	William Hunter
Title	Director of Public Works
Address	519 Washington Avenue
City, State, Zip	Grand Haven, MI 49417
Telephone (with area code)	616-847-3493
Fax (with area code)	616-847-3470
E-mail	bhunter@grandhaven.org

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

SWPPI Revisions

All participating communities in the Lower Grand River Watershed (LGRW) reviewed and modified their SWPPIs to address the issues identified in the December 29, 2011, MDEQ violation notices. Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H) met weekly with the communities throughout the month of March in small groups. Kent County agencies, the City of Grand Rapids, other cities and villages, and townships met separately to develop SWPPI modifications to meet the requirements in the 2003 General Permit. MDEQ staff participated in these meetings, resulting in a revised SWPPI submittal on April 4, 2012. The SWPPIs received MDEQ approval on June 8, 2012. Most of the effort during the reporting period from August 1, 2011, through July 31, 2012, was directed at resolving this issue.

MDEQ Program audits

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

May 16, 2012	Village of Sparta
June 6, 2012	City of Ferrysburg

FTC&H assisted the communities in preparing for the audits and in addressing any deficiencies identified by MDEQ.

Lower Grand River Organization of Watersheds (LGROW)

A Watershed Management Plan (WMP) for the Lower Grand River was completed in 2011 and approved by MDEQ as meeting state and federal requirements. Through this WMP, LGROW aspires to affect all potentially polluting or destructive activities conducted throughout the entire LGRW. LGROW is in a unique position to join with other large-scale initiatives throughout West Michigan and bring a greater sense of water stewardship and improved quality to the entire region. LGROW already partners with many local organizations and the MS4 communities through its diverse membership and Board of Directors structure. LGROW can play a significant part in improving the quality and availability of waters throughout the entire state and region through their continued use of the WMP in the Lower Grand River.

The complete document can be viewed as follows: Lower Grand River Watershed Management Plan - AWRI Information Services Center - Grand Valley State University (http://www.gvsu.edu/wri/isc/lower-grand-river-watershed-management-plan-draft-312.htm).

Meetings

A meeting of all watershed partners was held on January 24, 2012. Much of the meeting dealt with resolving the violation notice issued by MDEQ on December 29, 2011. Meeting minutes are available at the website below:

http://www.ftch.com/lowergrandriverwatersheddocuments

Committees

To make program implementation as efficient as possible, five committees were established to address different subject areas. It was recommended that every participating MS4 have a representative on at least one committee. Committee meetings have also been used to update everyone on the progress of the other committees and the program in general. The committees are as follows:

- SWPPI
- Stormwater Education Committee
- Ordinance & Strategy Committee
- Municipal Training Committee
- WMP Update Committee
- Data, Information, and Procedures (DIP) Committee

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

Table 2 - LGRW Committee Membership List as of July 31, 2012

Community	Representative	SWPPI	Stormwater Education	Ordinance & Strategy	Municipal Training	Watershed Management	DIP
Allendale Charter Township	Mr. Jerry Alkema	X	X				
Cascade Charter Township	Mr. Bill Cousins				X		
Cascade Charter Township	Mr. Steve Peterson	X	X				
East Grand Rapids, City of	Mr. Brian Donovan					X	
East Grand Rapids, City of	Mr. Ken Feldt	X					X
Ferrysburg, City of	Mr. Craig Bessinger	X					X
Forest Hills Public Schools	Mr. Ron Boezwinkle		X				
Georgetown Charter Township	Mr. Denny Bishop				X		
Grand Haven, City of	Mr. Bill Hunter	X			X		
Grand Haven, City of	Ms. Cheryl Davidson		X				
Grand Rapids Charter Township	Mr. Bob Versluys	X		X			
Grand Rapids, City of	Mr. Chuck Schroeder						Alt
Grand Rapids, City of	Mr. Mike Lunn		Alt	X	Alt		Alt

Table 2 - LGRW Committee Membership List as of July 31, 2012

Community	Representative	SWPPI	Stormwater Education	Ordinance & Strategy	Municipal Training	Watershed Management	DIP
Grand Rapids, City of	Ms. Carrie Rivette	X	X	X	X		X
Grand Rapids, City of	Mr. Gary DeKock					X	
Grandville, City of	Mr. Ken Krombeen			X		X	
Grandville, City of	Mr. Ron Carr	X	X		X		
GVSU	Mr. John Koches (Chair of DIP Committee)					X	X
GVSU	Ms. Betty Gajewski					X	
GVSU	Mr. Rod Denning					X	
Hudsonville, City of	Ms. Amy Robinson	X					X
KCDC	Mr. Bill Byl		X	X			
KCDC	Mr. Brad Boomstra	X		X			
KCDC	Mr. Doug Sporte	X		X	X		
KCDC	Ms. Lani Brown		X				
KCDC	Ms. Angie Latvaitis	X			X	X	X
KCRC	Mr. Dave Beck	X	X				
KCRC	Mr. Dave Bennett	X			X		
KCRC	Mr. Wayne Harrell	X					
Kent County Health Department	Mr. Adam London						X
Kent Resource Recovery	Ms. Kristen Wieland		X				
Kentwood, City of	Mr. Jim Beke	X			X		X
Kentwood, City of	Mr. John Gorney		X				
MDEQ	Ms. Amanda St. Amour	X	X		X	X	X
MDEQ	Ms. Dana Strouse		X			X	
OCDC	Mr. Paul Geerlings						
OCDC	Ms. Linda Brown		X				
OCRC	Mr. Steve Van Hoeven						
Plainfield Charter Township	Mr. Rick Solle	X			X		
Rockford, City of	Mr. Dennis Brinks	X					
Rockford, City of	Mr. Mike Bouwkamp	X	X		X		
Rockford, City of	Mr. Phil Vincent						
Sparta, Village of	Mr. Martin Super		X				
Sparta, Village of	Mr. Miles Ring	X			X		
Spring Lake, Village of	Ms. Chris Burns		X				
Walker, City of	Mr. Scott Conners						
Walker, City of	Ms. Bonnie Broadwater	X	X	X	X		X
WMEAC	Ms. Kristi Klomp					X	
Wyoming, City of	Mr. Aaron Vis	X		X			X

Table 2 - LGRW Committee Membership List as of July 31, 2012

Community	Representative	SWPPI	Stormwater Education	Ordinance & Strategy	Municipal Training	Watershed Management	DIP
Wyoming, City of	Mr. Bill Dooley			X			
Wyoming, City of	Mr. Myron Erickson	X		X			

Ordinance & Strategy Committee

The Ordinance & Strategy Committee did not meet during the reporting period. Meetings will continue when new post-construction stormwater control requirements become established.

WMP Update Committee

There are no plans to update the WMP. The most recent revision was prepared and approved in 2011. An electronic version of the WMP can be downloaded from the following websites:
http://www.gvmc.org/naturalresources/index.shtml
http://www.lowergrandriver.org

DIP Committee

The DIP Committee met on September 21, 2011; January 18, 2012; and May 16, 2012, during this reporting period. This is a joint committee with the LGROW. Mr. John Koches, Annis Water Resources Institute (AWRI), agreed to be the chairman of the committee and refocused efforts of collecting data, organizing monitoring information, and developing procedures of the LGRW. A new task undertaken by the DIP Committee is the revision to the Illicit Discharge Elimination Plan (IDEP). Agendas and minutes from the meetings are available as follows:

http://www.ftch.com/lowergrandriverwatersheddocuments

Municipal Training Committee

The Municipal Training Committee met on May 1, 2012, to prioritize needed training. The committee had an informal discussion about the types of municipal training that might be provided and what would be most beneficial. The viewpoints of both permit compliance and pollution reduction effectiveness were discussed. The high-priority training needs dealt with advanced technical topics. “Streambank Erosion: Prevention & Repair” ranked the highest with “BMPs for Municipal Streets and Parking Lots” next, and “Stormwater BMP Retro-fit Opportunities,” third. The need to provide basic training for elected officials was also recognized as an important need.

Minutes from the meeting are available as follows:

http://www.ftch.com/lowergrandriverwatersheddocuments

Training

Training Library

A lending library of training materials is housed at FTC&H 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
- 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 the U.S. Environmental Protection Agency (USEPA) and the Weather Channel
- After the Storm (22 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

Book published by the Michigan Department of Natural Resources and Environment (MDNRE) and the National Oceanic and Atmospheric Administration (NOAA)
- FILLING THE GAPS: Environmental Protection Options for Local Governments, 2nd Edition, revised December 2010 (including appendices on CD) (90 Pages)

Campaign Tool Kit from the Center for Environmental Study (CES)

- Stormwater Savvy Resources (including resource CD) (67 Pages)
- A Guide to the Media Process (23 Pages)
- Getting In Step - A Guide for Conducting Watershed Outreach Campaigns (CD) (100 Pages)

All Municipal Employee Training

An "All Employee" training flyer, developed by FTC&H and the Municipal Training Committee, is available to watershed partners to assist with the Municipal Employee Training requirements of the discharge permit. The subject is illicit discharges and the flyer makes municipal employees aware of their special role in protecting the watershed. A template of the flyer, "How You as an Employee Can Help Reduce Pollution Entering the Grand River" is available on the LGRW FTC&H website: http://www.ftch.com/lowergrandriverwatersheddocuments#MunicipalEmployeeTraining. This flyer is intended to be provided to municipal employees by each of the watershed partners within the year.

Municipal Contractor Training

The Municipal Training Committee previously identified the topic of earthwork contractor education as the number one priority for developing training materials. A brochure was developed by FTC&H and the Municipal Training Committee and is available to watershed partners hiring contractors for earthwork. The target audience of the brochure was broadened to make it applicable to earthwork contractors working for private entities. The "What Every Contractor Must Know" brochure informs contractors they must be familiar with the potential stormwater pollution sources that may be encountered during the course of their work. Methods and tools are described in the brochure that can be utilized to prevent the release of polluting substances. If prevention is not possible, other means to treat the polluting substances to reduce the impact of the release are identified. If polluting substances are released in harmful quantities, the release must be reported to the proper authority. A template of the flyer, "What Every Earth Work Contractor Must Know About Stormwater" is available on the LGRW FTC&H website: http://www.ftch.com/lowergrandriverwatersheddocuments#MunicipalEmployeeTraining. This brochure is intended to be provided to private contractors hired by the Permittee to do earthwork on behalf of the Permittee or to municipal employees doing similar work.

The Municipal Training Committee also previously identified the topic of landscaping contractor education as a high-priority for developing training materials. A brochure was developed by FTC&H and the Municipal Training Committee and is available to watershed partners hiring contractors for landscaping. The "What Every Landscaper Must Know" brochure informs landscapers they must be familiar with the potential stormwater pollution sources that may be encountered during the course of their work. Methods and tools are described that can be utilized to prevent the release of polluting substances. Several BMPs for lawn care are discussed. If prevention is not possible, other means to treat the polluting substances to reduce the impact of the release are identified. If polluting substances are released in harmful quantities,

the release must be reported to the proper authority. A template of the flyer, “What Every Landscaper Must Know About Stormwater” is available on the LGRW FTC&H website: http://www.ftch.com/lowergrandriverwatersheddocuments#MunicipalEmployeeTraining. This brochure is intended to be provided to private contractors hired by the Permittee to perform landscaping on municipal property or to municipal employees doing similar work. The target audience of the brochure was broadened to make it applicable to landscapers working for private entities.

Monitoring

The Grand River Water Quality Index (WQI) shows the Grand River water quality continues to improve downstream of Grand Rapids. A WQI of 71-90 indicates good water quality with high diversity of aquatic life and very few limits for recreational use. Grand Rapids has been monitoring the Grand River for forty years and all of the data is available upon request. A graph of the WQI for Railroad Bridge North is provided as an example of improving water quality in the Grand River. An interactive map and data from recent sampling events can be viewed as follows:
http://grcity.us/enterprise-services/Environment-Services/Pages/Water-Quality-Index2.aspx

PART 2A - SUMMARY OF MUNICIPAL COMMITMENTS

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Encourage proper septic tank management.	City areas within the LGRW	PEP activity When a failed septic system is reported, the City of Grand Haven will enforce our Illicit Discharge ordinance to force the property owner to repair the failed system.	Ongoing	PEP Evaluation Forms Follow up with the Health Department to ensure the system has been properly repaired
Actions completed:		No failed systems were reported during this reporting period.	Ongoing	Establish contact with Health Department to ensure any future systems are properly repaired.
Encourage septage ordinance.	Applicable to entire City	Continue to enforce City of Grand Haven's ordinance that requires hook up if sewer available. Ottawa County requires point of sale inspections. We rely on their ordinance for those inspections.	Ongoing	Number of new sewer hook-ups Number of failed septic systems reported to Health Department and number of repairs and permits issued.
Actions completed:		Installation of public sewer for Indian Trail	Ongoing	5 new sewer hook ups, eliminating septic systems.
Implement vegetative buffering practices and restore and protect the stream buffer and canopy.	City-owned properties	Follow Procedure for Managing Vegetation on Municipal Property	Ongoing	Adherence to Procedure for Managing Vegetation on City owned Property.
Actions completed:		The approved procedure is followed.	Ongoing	Reviewed every year with staff.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement MDNR wildlife population management practices.	City-owned properties	Distribute PEP that FTC&H gives us each year. Monitor City for problem areas	Ongoing	PEP Evaluation Form. Results and actions of monitoring for problem areas.
Actions completed:		None this year.	N/A	
Implement sanitary sewer maintenance practices.	City-owned properties	The City of Grand Haven will maintain physical separation of our storm & sanitary sewer systems. Storm sewer is higher elevation than sanitary sewer. Perform budgeted about of around $8,000 to $10,000 per year in television work.	Ongoing	Feet of sewer televised and number of repairs identified and plan of action for repairs. Results of inspections
Actions completed:		We budget $8,000 to $10,000 each year for televising sanitary sewer lines. We are currently in the process of purchasing our own sewer camera, so that we can televise more lines in the future.	Ongoing	Approximately 4,000 linear feet of sewer line were inspected. Two spot repairs of sewer line were repaired as a result of the inspection.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement Low Impact Development practices	City-owned properties	PEP activity Consider the use of LID during site plan reviews. Inspect and Maintain LID sites in Grand Haven 1) Underground storage & green roof at the Zephyr parking lot and 2) bio swale at the DPW building, and 3) green roof on Community Building	Ongoing	PEP Evaluation Form Number of site plan reviews where LID was implemented. Results of LID inspections
Actions completed:		City of Grand Haven will continue to consider the use of LID practices when reviewing future site plan. Inspected all of our LID sites. Installed signs at LID locations to explain reasons for capturing stormwater.	Ongoing	No LID practices were implemented this year during site plan reviews. Current LID practices within the City seem to be working. Signs are visible to the public.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement watershed focused land-use planning.	Applicable to entire City	Continue to enforce resolution which stated "Whereas, the County of Ottawa, through the standards & specifications for reviewing the drainage or storm water management system of a development or site, has established best management practices for the design, construction, maintenance, and operation of storm water management systems". Developing and adopt a storm water ordinance, with natural features inventory and the Gidley Bayou study that will address water quality, detention, retention and provide additional protection to headwater areas.	Ongoing December 2014	Status of review of standards and actions taken, update storm water maps, number of plans reviewed. Status of development and adoption
Actions completed:		We continue to enforce the OCDC standards & specifications, until such time where City of Grand Haven has its own storm water ordinance.	December 2014	No actions taken under our current resolution. Currently working on draft ordinance for City ENRC committee to review and submit to City Council by the end of 2013.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement proper soil erosion and sedimentation control techniques.	City-owned properties	Training and procedures – train employees on SESC issues, defer to County for SESC inspections and enforcement The City of Grand Haven adopted & approved Procedure to Ensure Protection of Drainage System from Construction Site runoff.	Ongoing	Number of employees trained. Number of complaints recorded and number of violations reported.
Actions completed:		Trained all DPW staff, City staff and seasonal through power point presentation, email notification and City website.	ongoing	All City employees. No reports.
Implement channel and streambank stabilization, bio-engineering, and erosion control techniques.	City-owned properties	Compliance with MDEQ permit conditions for any work that occurs within a stream Include streambank protection standards in adopted storm water ordinance	as appropriate Currently being developed	Compliance with permits for projects needing permit and practices Status of development and adoption
Actions completed:		Working on draft storm water ordinance and hopefully will be passed by City Council at the end of 2013.	Currently being developed.	In process.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement turf management and proper fertilizer application practices.	City-owned properties	Train Building and grounds crew in proper practices. Revise all training procedures to include turf management (mower height, clippings) and reference to State law regarding phosphorus use All pesticides and herbicides are applied is by a licensed and certified applicators and applied in accordance to regulations. Landscaping waste (yard, tree and grass clippings) disposal site offered for residents of the community	Ongoing	Training Schedule. Revised procedures for phosphorus use. Add to our specifications for commercial contractors that apply fertilizer on City properties the exact procedure approved by City Council. Documentation of contractor training or requirement in bid documents. Indication of use by residents.
Actions completed:		City's Grounds crew is trained as well as all contractors working for the City.	Ongoing	This is required in our bid documents.

PART 2B - STORMWATER CONTROLS INSPECTION, MAINTENANCE AND EFFECTIVENESS

City Properties #1 - #25				
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	Spring	Annually	Cleaned spring 2012. Logs available in DPW office.	A total of 2 cubic yards of material was removed from all of the catch basins cleaned, preventing that amount from entering the waterways
City Property #26: City Garage Parking Lot				
Structural Storm Water Control	**Inspection Frequency**	**Maintenance Schedule**	**Inspection and Maintenance Conducted and Location of Log (if applicable)**	**Effectiveness of Control and Support Documentation**
Bio Swale	Spring	Annually	Inspected in Spring 2012.	
City Property #27: City Boundary				
Structural Storm Water Control	**Inspection Frequency**	**Maintenance Schedule**	**Inspection and Maintenance Conducted and Location of Log (if applicable)**	**Effectiveness of Control and Support Documentation**
Storm sewer system	As needed depending on other inspections	Annually		
City Property #28: Public Streets				
Structural Storm Water Control	**Inspection Frequency**	**Maintenance Schedule**	**Inspection and Maintenance Conducted and Location of Log (if applicable)**	**Effectiveness of Control and Support Documentation**
Curbs and Gutters	Continuously	All streets swept at least 2 times per month from March 15-November 15	Street sweeping in 2012. Asking for sediment sampling to be conducted before next cleaning takes place.	A total of 38 cubic yards of sediment were collected, preventing that amount from entering the storm sewer system.

LID Practices				
Structural Storm Water Control	**Inspection Frequency**	**Maintenance Schedule**	**Inspection and Maintenance Conducted and Location of Log (if applicable)**	**Effectiveness of Control and Support Documentation**
Green Roof	Every 2 weeks for year 1, semi-annually years 2 and 3	Weeding, watering, and replanting as needed	Roof inspected through summer and fall 2011. Maintenance included weeding, adjustments to irrigation system timing,	Practice is continuing to function as designed and capturing stormwater before it enters the City's storm sewer system
StormCeptors	Annually	As needed	Inspected in spring, no maintenance needed	Capturing trash, oils, and sediment before it enters storm sewer system.
Underground Stormwater Storage Tanks	Annually	As needed	Inspected in spring, no maintenance needed	Reducing rate and volume of stormwater entering system

PART 2C - PROCEDURES STATUS

The following Pollution Prevention and Good Housekeeping procedures were adopted by City of Grand Haven. Dates of revised procedures are listed and revisions attached.

Procedure	Date Adopted	Date Revised (if needed)
Procedure to Ensure Protection of Drainage Systems from Construction-Site Runoff	August 16, 2010	N/A
Procedure to Dispose of Storm Sewer System Operation and Maintenance Waste	August 16, 2010	N/A
Procedures to Construct, Operate, and Maintain Streets, Roads, Highways, and Parking Lots	August 16, 2010	N/A
Procedure to Reduce Runoff of Total Suspended Solids (TSS)	August 16, 2010	N/A
Procedure to Prevent Salt and Sand from Entering Receiving Streams	August 16, 2010	N/A
Procedure to Control Dust and TSS in Runoff	August 16, 2010	N/A
Procedure for Managing Vegetation on Permittee Owned Properties	August 16, 2010	N/A
Procedure for Using Fertilizers on Permittee Owned Properties	August 16, 2010	N/A

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

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Required Topics			
Maintenance activities, maintenance schedules, and inspection procedures	All DPW Operators	Annually	**Written O&M Procedures** **"Best Management Practices for Municipal Operations" Training Session – Live Presentation**
Training completed:	All DPW Operators	3/30/12	Written O & M Procedures
Controls on streets, parking lots, maintenance garages, and storage yards	All DPW Operators	Annually	**Written O&M Procedures** **"Best Management Practices for Municipal Operations" Training Session – Live Presentation**
Training completed:	All DPW Operators	3/30/12	Written O & M Procedures
Disposal of O&M waste	Crew Leaders and Assigned Operators	As Required	**Written O&M Procedures** **BMP**
Training completed:	None this period	N/A	N/A
Water quality protection in flood control projects (detention basins, dams)	All DPW Operators	Annually	**"Best Management Practices for Municipal Operations" Training Session – Live Presentation**
Training completed:	All DPW Operators	3/30/12	BMP practices training.

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Controls to reduce discharge of pesticides, herbicides, and fertilizers	All DPW employees	Annually	**LGRW_LandscapingContractorTrainingBrochure_2011-08-01.pub** **Written O&M Procedures**
Training completed:	All DPW employees	3/30/12	Reviewed the training brochure.
Other Topics			
Construction site stormwater runoff	All Grand Haven Employees	Email and Bulletin Board	**LGRW_ContractorTrainingBrochure_2011-09-16.pub** **News Letter**
Training completed:	All Grand Haven Employees	Email & City Website.	Email sent out 3/30/12.
Gravel Road Maintenance	Crew Leader and Assigned Operator	As needed	**BMP** **Elizabeth Avenue is the only gravel road. No storm water leaves this segment of roadway.**
Training completed:	None this period.	N/A	N/A
LID	General Public and All City Employees	On going	**After the Storm - DVD from USEPA** **BMP Tour of GVSU Campuses – Walking Tour** **LID Brochures' at City Garage & City Hall** **LID Brochures on City website**
Training completed:	General Public and All City Employees	Ongoing	**LID brochures on City website.**
IDEP	All City Employees & City Wide	Annually through email and posted on City website	**WaterPollutionReportForm.doc** **Article_City_Employees.doc**

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Training completed:	General Public and All City Employees	5/8/12	IDEP Tip Card created and distributed through email and website (attached).

PART 2E - POST CONSTRUCTION CONTROLS ACTIVITIES

The City of Grand Haven follows OCDC standards and specifications with regards to reviewing site plans. This of course is temporary. The City of Grand Haven will be passing a storm water ordinance, with Gidley Bayou study and Natural features inventory that covers water quality, bank erosion and flood control.

Site plans that fall within any of OCDC drainage districts (Warber, Blair) are always deferred to the OCDC for review and approval.

The City of Grand Haven has several ordinances including the general code, zoning ordinance, sub division ordinance, in addition to several committees and the planning and permitting process that deal with post-construction storm water controls. This helps control storm water in areas of new development and significant redevelopment. It includes various levels of control depending on zones established based on the sensitivity of the receiving waters. The ordinance also ensures that the owners of facilities constructed to meet the stormwater requirements properly operate and maintain the facilities.

The City of Grand Haven has a Master Plan that encourages and a City Code (pg. 16 – 17) that enforces an urban boundary and requires that all medium and high density development be located within that boundary so proper sanitary services and drainage can be provided.

The City of Grand Haven has a Zoning Ordinance (mostly chapter 13) and a sub division ordinance (Chapter 3 pg. 16) that prohibits approval of site plans for any development that threatens sensitive areas such as wetlands and riparian areas. The ordinance also ensures that reasonable open space is preserved for future generations. There is also a section in the general code labeled Waterways pg. 164 that deals with the same subject matter.

The City of Grand Haven encourages through the Master Plan and requires through the General, Zoning, and Sub Division ordinances, Low Impact Development practices at sites of new development and significant redevelopment. This would encourage infill development in higher density urban areas and areas with existing infrastructure. These can be found in the general code under SESC pg. 94, Illicit Discharge pg. 104. Also in the Zoning Ordinance pgs. 52, 65, 95,103, and 139. In addition to the Sub Division ordinance “Review Standards – Required Improvements/Engineering and Design, pg 15 and recently the river and creek set backs.

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

The City had no site plans reviews during this reporting period. The City is currently revisiting adoption of Stormwater Ordinance.

How many developments were approved with stormwater controls according to Post-Construction Controls (PCC)?

0

Have any long-term operation and maintenance (O&M) agreements been signed?

0

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

0

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.

The City of Grand Haven follows OCDC standards and specifications with regards to reviewing site plans.

PART 3 - PEP

REGIONAL PEP

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. The PEP was developed by the Permittees in the LGRW and submitted to the MDEQ with the stormwater permit application in March 2003. The MDEQ approved the PEP and issued a Certificate of Coverage (CoC), which included a directive to begin implementation of the PEP by January 1, 2004. The PEP was later updated by the LGRW Stormwater Committee and FTC&H and submitted to the MDEQ on September 1, 2010. Public education activities have been reported to the MDEQ on an annual basis since October 1, 2004, to August 1, 2011. This section provides a report of public education activities implemented between August 1, 2011, and July 31, 2012.

A. PUBLIC EDUCATION COMMITTEE

A LGRW Stormwater Education Committee was formed in 1999 to begin development and implementation of the PEP. Since that time, the committee has met on a regular basis to discuss and plan activities scheduled for implementation in the PEP. The 2011/2012 committee included the following participants:

- Mr. Dave Beck - Kent County Road Commission (KCRC)
- Ms. Amanda St. Amour - MDEQ
- Ms. Bonnie Broadwater - City of Walker
- Ms. Linda Brown - Ottawa County Drain Commissioner's Office (OCDC)
- Mr. Mike Bouwkamp - City of Rockford
- Mr. Ron Carr - City of Grandville
- Mr. John Gorney - City of Kentwood
- Ms. Amy Klapko - Kent County Drain Commissioner's Office (KCDC)
- Ms. Carrie Rivette - City of Grand Rapids
- Ms. Nicole Pasch - City of Grand Rapids
- Ms. Kristen Wieland - Kent County Resource Recovery
- Ms. Cheryl Davidson - City of Grand Haven
- Mr. Ryan Cotton - Village of Spring Lake
- Mr. John Stuparits - Village of Spring Lake
- Mr. Jerry Alkema - Allendale Charter Township
- Mr. Steve Peterson - Cascade Charter Township
- Ms. E. Wendy Ogilvie - FTC&H
- Ms. Laurie Beth Nederveld - FTC&H

- Mr. Kevin Lignell - Grand Valley Metropolitan Council (GVMC)

B. PEP IMPLEMENTATION IN YEAR 9

This section describes the public education activities implemented by the Permittees in the ninth year of PEP implementation, August 1, 2011, and July 31, 2012. The following report is according to the proposed updated PEP, which meets the requirements of the 2004 approved PEP. Target audiences, messages, and delivery mechanisms are described for each Public Education Topic. Public Education Topics were defined in the Updated PEP (2010 to 2014) and were identified based on the MDEQ's PEP guidance document dated April 12, 2010.

Public Education Topic 1 - Personal Watershed Stewardship

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

Target Audience: Watershed residents, community groups, business associations, and city and township officials.

Content of Message: You live in the Grand River Watershed, which flows into Lake Michigan. Water quality in lakes and streams is greatly affected by our everyday activities. By taking water quality protection personally, you will help improve our community's water resources.

Delivery Method:

- A link from the Permittees' websites to the LGRW's website, www.lowergrandriver.org, was maintained or was established. The watershed website provides information on nonpoint source (NPS) pollution, local watershed issues, water science education, and watershed management.

- Permittees featured the LGRW stormwater display at local libraries or municipal, township, or county offices. The display provides tips to homeowners on how to reduce stormwater pollution in their own backyards. Several Permittees have purchased their own display boards for permanent display.

- Permittees distributed 963 *Catch a Ride* coloring books to residents in the LGRW.

- Permittees displayed their lamppost banners purchased in 2011 to advertise the presence of the Grand River and Plaster Creek Watersheds. The banners featured the LGRW logo and the message "Yours to Protect."

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

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, Teachers, Schools, Businesses, and Girl/Boy Scouts.

Content of Message: 1) Storm drains connect to your local lakes and streams, not a water treatment plant. 2) Prevent pollution from entering your storm drains and protect the health of your family, your community, and the Grand River.

Delivery Method:

- For new construction, Permittees installed storm catch basin backs/grates with a fish symbol and the message "No Dumping - Drains to Lake or Stream."

- Eleven Permittees ordered a total of 214 storm drain markers from East Jordan Iron Works. Markers advertise the message "Dump No Waste. Drains to Waterway" or "Dump No Waste. Drains to Lake." Permittees installed these markers near catch basins to discourage illicit dumping.

Public Education Topic 3 - Public Reporting of Illicit Discharges

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

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

Delivery Method:

- Permittees distributed copies of the *"Citizen Report Form"* to their residents. This form included information on how to report illicit discharges and connections to one's community. Permittees individually customized these brochures for their residents.

- A reporting sheet, developed in 2005, was used by the Permittees to track resident calls concerning illicit discharges and connections.

- Permittees distributed the article *"How you as an Employee Can Help Reduce Pollution Entering the Grand River"* to their employees. This article encourages employees to report stormwater discharges to their community's stormwater coordinator.

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

Target Audience: Residents, Visitors, Riparian Landowners, Local Units of Government, Teachers, Students, Landscaping/Lawn Care Companies, Commercial Power Washers, Carpet Cleaning Companies, and Golf Courses.

Content of Message: 1) Avoid scorching your lawn. Use slow-release fertilizers only 2 to 3 times per year. Non-phosphorus types are best for the environment. 2) Lower your water bill. Install a rain barrel to capture and reuse your stormwater. 3) Wash your car at a commercial car wash or on your lawn.

Otherwise, dirty, oily water on your driveway will flow to your storm drain and eventually your local lake or stream. 4) Pick up your pet waste and dispose of it properly; otherwise, it could end up in the Grand River and on your favorite Lake Michigan beach.

Delivery Method:

- Permittees distributed the newsletter article "*New Michigan Law Restricts Phosphorus Fertilizers*" to their residents via their webpage or community newsletter. This article describes the new Michigan fertilizer law and encourages homeowners to use phosphorus-free fertilizer.

- Permittees distributed the newsletter article "*What is a Rain Garden?*" to their residents via their webpage or community newsletter. This article discusses the benefits of rain gardens and how you can plant one.

- Permittees distributed 1,000 copies of *Go Green Lawn Care Tips* card, developed by Michigan State University Extension (MSUE), to their residents. These cards provide tips on weed and insect control and give recommendations on when to fertilize and the types of fertilizers to use on your lawn.

- Permittees distributed 1,075 copies of the "*Use Phosphorus Free Fertilizer"* flyers, developed by Michigan Department of Agriculture and Rural Development, to their residents. These flyers provide information on soil testing, the fertilizer law and how to apply it, and protecting water quality.

- Permittees distributed 1,075 copies of the "*Get the Most out of Rain*" flyer, developed by Mid-America Regional Council, Kansas City, Missouri, to their residents. The flyer provides ideas for a rain friendly yard including information on how to save and reuse rain water, how to build a rain garden and how to disconnect downspouts.

- Permittees distributed the newsletter article *"How You Can Help Reduce Pollution Entering the Grand River"* to their residents via their webpage or community newsletter. This article encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.

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

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

Content of Message: 1) Protect your family's health, dispose of unwanted paints, solvents, and cleaners at your county collection center. 2) Recycle used oil and automotive fluids. Just one gallon of used motor oil dumped down a catch basin can contaminate one million gallons of your drinking water.

Delivery Method:

- Permittees distributed 755 copies of their county's household hazardous waste guide or flyer.

- Permittees distributed the newsletter article "*Guide To Household Hazardous Waste Disposal*" to their residents via their webpage or community newsletter. This article defines household hazardous water and lists common wastes, along with providing information on where to dispose of these wastes.

- Permittees distributed the newsletter article *"How You Can Help Reduce Pollution Entering The Grand River"* to their residents via their webpage or community newsletter. This article encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.

- Permittees distributed 1,075 copies of the pamphlet "West Michigan, Take Back Meds," to their residents. The pamphlet encourages the proper disposal of unused/unwanted/expired medications and lists locations for disposal.

Public Education Topic 6 - Septic System Maintenance

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

Content of Message: 1) If you have a septic system, have it pumped out every 3 to 5 years to avoid a costly septic system failure. Failing septic systems can leak bacteria into your local stream, the Grand River, and eventually Lake Michigan, causing beach closures.

Delivery Method:

- Permittees distributed the newsletter article *"Maintaining Your Septic System"* to their residents via their webpage or community newsletter. This article encourages residents to maintain their septic system.

- Permittees distributed 460 copies of the "*Do you know where your septic system is?*" flyer, developed by the Michigan Groundwater Stewardship Program, to their residents. The flyer provides information on what a septic system and septic take are and what a septic tank and drain field do.

Public Education Topics 7 and 8 - Benefits of Native Vegetation and Management of Riparian Lands

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

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

Delivery Method:

- Permittees distributed 1,000 copies of *Go Green Lawn Care Tips* card, developed by Michigan State University Extension (MSUE), to their residents. These cards provide tips on weed and insect control and give recommendations on when to fertilize and the types of fertilizers to use on your lawn.

- Permittees distributed 1,075 copies of the "*Use Phosphorus Free Fertilizer"* flyers, developed by Michigan Department of Agriculture and Rural Development, to their residents. These flyers provide information on soil testing, the fertilizer law and how to apply it, and protection water quality.

- Permittees distributed 1,075 copies of the "*Get the Most Out of Rain*" flyer, developed by Mid-America Regional Council, Kansas City, Missouri, to their residents. The flyer provides ideas for a rain friendly yard.

- Permittees distributed the newsletter article *"Meijer Stores Encourage Non-invasive Plant"* to their residents via their webpage or community newsletter. This article encourages residents to purchase and use non-invasive plants.

Public Education Topic 9 - Entity of Specific Pollutants

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

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

Delivery Method:

- Permittees distributed 1,075 copies of the pamphlet "West Michigan, Take Back Meds," to their residents. The pamphlet encourages the proper disposal of unused/unwanted/expired medications and lists locations for disposal.

- Permittees distributed the newsletter article *"How You Can Help Reduce Pollution Entering the Grand River,"* to their employees at department meetings. This article encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.

C. EVALUATION MEASURES

This section includes a description of the quantitative and qualitative evaluation measures of PEP effectiveness implemented between August 1, 2011, and July 31, 2012.

Community Quantitative and Qualitative Evaluation Measures of Effectiveness

Permittees completed *PEP Questionnaires* to provide a quantitative and qualitative evaluation of their individual stormwater education efforts. Based on the input provided by the Permittees, the most popular brochure topics were those covering native vegetation/rain garden/riparian buffers, proper use of pesticides/fertilizers/herbicides and household hazardous waste management.

Updated 2013 PEP

An updated PEP was developed describing a new five-year strategy designed to promote, publicize, and facilitate watershed education for encouraging the public to reduce the discharge of pollutants in stormwater. As required, the PEP defines target audiences, develops specific messages, and selects delivery mechanisms to promote the goals and objectives of reducing stormwater runoff. The PEP includes mechanisms for evaluating the success and effectiveness of the plan. The measurable goals include realistic data collection and milestones to be quantified and compared. A schedule was also prepared for the implementation of the various components of the PEP, indicating the dates for distribution of educational materials and the completion of activities. The PEP also builds on the Information and Education (I&E) Strategy developed for the LGRW as part of the LGRW Management Plan (FTC&H, 2011).

2012 Storm Water Public Education Plan (PEP) Questionnaire
Reporting Period of August 1, 2011, to July 31, 2012

Please complete this questionnaire to provide an evaluation of the storm water education activities you have implemented between **August 1, 2011, and July 31, 2012**. FTC&H will include this information, along with watershed-wide measures of effectiveness, in your 2012 Progress Report.
Please return this form to FTC&H by August 31, 2012.

Community Name: City of Grand Haven

Brochures, Flyers, and Give-a-ways (distributed to Permittees in April 2012)

1. What percentage of brochures, flyers, and give-a-ways have been distributed?

- "West Michigan Take Back Meds" brochure distributed ☐0% ☐25% ☐50% ☒75% ☐100%
- Household Hazardous Waste guidebook/flyer distributed ☐0% ☐25% ☐50% ☒75% ☐100%
- "Do You Know Where Your Septic System Is?" brochure ☐0% ☐25% ☒50% ☐75% ☐ 100% distributed
- "Get The Most Out Of Rain" flyer ☐0% ☐25% ☐50% ☐75% ☒100% distributed
- "Use Phosphorus Free Fertilizer" brochure distributed ☐0% ☐25% ☐50% ☒75% ☐100%
- "Catch A Ride On The Water Cycle" coloring book distributed ☐0% ☐25% ☐50% ☐75% ☒100%
- Lunch bag give-a-ways ☐0% ☐25% ☐50% ☒75% ☐100% distributed

2. Where did you distribute your brochures, flyers, and give-a-ways?
☒Government office ☐Library ☒Community event ☒Other Grand Haven Open Door Day Care, 7/16/12

3. Describe any interest, comments, or discussion generated from the brochures, flyers, and give-a-ways
No comments.

4. What brochure topics have historically been in the highest demand in your community?
☐How to report storm water pollution
☐Storm water discharge locations/impacts
☒Native vegetation/rain gardens/riparian buffers
☐Proper vehicle care/motor oil disposal
☒Proper use of pesticides/fertilizers/herbicides
☐Proper yard waste disposal
☐Proper pet waste disposal
☐Proper septic system maintenance
☒Household hazardous waste management

Illicit Discharge Reporting (brochure available at www.ftch.com/lowergrandriverwatersheddocuments)

5. How many "Citizens Reporting Brochures" were customized and distributed to your residents? This form was put on City's web 3/17/11.
Please describe any interest, comments, or discussion generated from the brochure Did rcv. 1 call from a resident June 28, 2012 reporting paint dumped down catch basin @ Wisconsin & Orchard.

Lamppost Banners

6. Did you display your lamppost banners provided to you in 2009, 2011, or 2012?
☐Yes, at _____ (streets) on _____ (dates). Please describe any public feedback generated _____
☐No, but we will display our banners at _____ (streets) on _____ (dates)

☒We did not order lamppost banners in 2009, 2011, or 2012

Newsletter Articles (available at www.ftch.com/lowergrandriverwatersheddocuments)

7. Did you distribute these newsletter articles to your residents?

- "New Michigan Law Restricts Phosphorus Fertilizers" article ☒Yes, on 8-01-11 (date);

☐No, but we will on _____ (date); ☐No

- "Guide To Household Hazardous Waste Disposal" article ☒Yes, on 8-01-11 (date);

☐No, but we will on _____ (date); ☐No

- "What Is A Rain Garden?" article ☐Yes, on _____ (date);

☒No, but we will on Fall/Winter 2012 (date); ☐No

- "Maintaining Your Septic System" article ☐Yes, on _____ (date);

☒No, but we will on Fall/Winter 2012 (date); ☐No

- "How You Can Help Reduce Pollution Entering The Grand River" article ☒Yes, on 8-01-11 (date);

☐No, but we will on _____ (date); ☐No

8. Please describe any interest, comments, or discussion generated from the articles No comments.

9. If applicable, list the newsletter name or webpage address used to distribute the articles cityofgrandhaven.org

10. If applicable, how many residents received your community newsletter? N/A

11. If applicable, how many total website hits did you receive for your online newsletter articles? 2,054 (From 11-01-11 through 7-31-12)

Website

12. Is there a web link to www.lowergrandriver.org on your community's website?

☒Yes, please describe any interest, comments, or discussion generated from the website None known.

☐No, but we have a web link to _____

☐No

13. If you have developed your own storm water webpage, please list the web address cityofgrandhaven.org, sustainability & environmental.

Storm Water Poster Board and EnviroScape

14. Did you set up your storm water poster board display?

☒Yes, on 8/06/11 - Coast Guard; 9/17/11 - Salmon Fest; 10/01/11 - East Town Fall Fest; 4/21/12 - Earth Day (dates) at _____ (location). Please describe any feedback generated _____

☐No, but we will set up our display on _____ (dates) at _____ (location)

☐No

15. Did you use an EnviroScape interactive storm water model to educate the public on storm water pollution?

☐Yes, on _____ (dates) at _____ (location); ☒No

Storm Drain Awareness Activities

16. Did you implement a storm drain awareness activity between August 1, 2011, and July 31, 2012?

☒Yes, we installed 17 (no.) storm drain markers on Howard & Sand, Howard & Sherman, Howard & 5th, Sherman & Butler, Sherman & Leggatt, Sherman & Sand (streets) on February, 2012. (dates)

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

☐Yes, we have approximately _____ (no.) pre-marked catch basin backs/grates with the message "No dumping, drains to waterway"

☐Yes, we hung door knob flyers on _____ (streets) on _____ (dates)

☐No, but we plan to implement _____ (activities) on _____ (dates)

17. Please describe any interest, comments, or discussion generated from the activities above No

comments.

18. Have you noticed a reduction in storm drain dumping?
☐Yes, if so, please describe _____; ☒No, if so, please describe Because you can't notice a reduction until you know exactly how much it was being done in the past. But, I think now with all the resources folks have in this day and age to become educated, they now know not to do it and to report it when they do encounter someone dumping.

Car Wash Letters (A letter template is available at www.ftch.com/lowergrandriverwatersheddocuments)

19. Did you mail any letters on environmentally-friendly car wash fundraisers to schools/charities?
☐Yes, we sent letters to _____ (schools/charities). Please describe any feedback generated _____
☐No, but we will send letters to _____ (schools/charities) on _____ (date)
☒No

Additional Efforts

20. If applicable, please describe any other storm water public education activities your community implemented beyond the requirements described above. (Submit any relevant documentation.) None

PART 4 - IDEP

Regional IDEP Activities

IDEP activities continued to be conducted throughout the reporting period. Permittees have used the previously developed training and educational materials for preventing illicit discharges and have developed procedures for eliminating illicit discharges. Several Permittees have updated their training materials based on the documents available in the LGRW FTC&H website: http://www.ftch.com/lowergrandriverwatersheddocuments#MunicipalEmployeeTraining.

A detailed description of the IDEP activities undertaken on an individual basis is included below. The IDEP activities include dry-weather screening of discharge points, locating possible sources of contamination, responding to reported incidents, correcting the problems, and preventing new illicit connections.

Modifications to the current IDEP were drafted and submitted to MDEQ and the Permittees for preliminary review in August 2011. Comments from MDEQ were received on November 10, 2011. Modifications were made to address the comments and discussed in detail with MDEQ at the September 19, 2012, DIP Committee meeting. In response to discussion, several Permittees sent letters to MDEQ requesting approval of an alternative to MS4 to MS4 dry-weather screening. The final revised IDEP will be submitted to MDEQ for approval when this last remaining issue is resolved.

Please describe any dry-weather screening conducted during the reporting period and the findings of that screening.
Ottawa County Drain Commissioner will be conducting dry weather screen of the City of Grand Havens outfalls in 2013.

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.
No illicit discharges were reported or identified this year.
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.
None
Please describe actions taken when indications of illicit discharges have been identified, if any.
None

Please provide: ● An estimated quantification of the number of discharges eliminated, and ● An estimated quantification of the volume of illicit flow eliminated.
N/A
Describe the effectiveness of the program to prevent illicit discharges and the method used to assess effectiveness.

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: New discharge point added at Grand Haven Memorial Airpark, discharging to Pottawattomie Bayou. Mapping will be completed, including section of US 31 not previously mapped, and submitted with 2013 report.

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**
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No
Comments: No Nested Jurisdictional agreements have been signed.		

PART 7 - Other Actions

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

PART 8 - Revisions to the SWPPI

Based on your evaluation of the effectiveness of your stormwater BMPs, are there any commitments that should be added to or removed from the SWPPI? ☐ No, the SWPPI does not need any revisions ☑ The following revisions to the SWPPI could be considered:	
Original SWPPI Section/Subsection	**Revision**
Part 2B	Add LID stormwater controls as reported

BMPs—Utilize Best Management Practices (BMPs) such as, silt fence, erosion control blankets, various geosynthetic products, polyacrylamides, and/or other BMPs that will ensure the temporary stabilization of the soil until permanent vegetation can be established. Make sure all workers know about the BMPs on site and keep them properly maintained.

Storm Water Treatment—Specialized

treatment technologies are available to remove pollutants from storm water. Selection and use of these technologies should be in accordance with specifications of a qualified professional. These technologies include: oil/water separators, sedimentation basins, filtration systems, chemical coagulation systems, polymer logs, and capture systems for off-site treatment.

Reporting the Release of Polluting Materials

When polluting substances are spilled or released by a contractor or a contractor's employee in quantities that may cause environmental damage, it must be reported upon discovery. All such incidents shall be reported to the City by contacting:

Bill Hunter, Public Works Director
616.847.3493 or bhunter@grandhaven.org

When spills or releases of polluting substances are observed by a contractor or a contractor's employee, but caused by others, then reporting to the City is encouraged. Spills or releases that may cause a threat to the health or safety of the public shall be reported immediately to 911.

The City of Grand Haven

Grand Haven City Hall
519 Washington Avenue
Grand Haven, MI 49417-1486

Phone: 616-842-3210

The City of Grand Haven

What Every Contractor Must Know About Storm Water in Grand Haven

Maintenance of a natural buffer strip between spoils and reconstructed drain prior to drain bank stabilization.
Source: Sarah Pistro, Tuscola County Drain Commissioner

Protecting Water Quality in the City of Grand Haven

The City of Grand Haven is Regulated by the US EPA and Michigan DEQ. So You Are, Too. Help Prevent Water Pollution.

Before commencing work on behalf of the City of Grand Haven, you must be familiar with the potential storm water pollution sources that may be encountered during the course of your work. There are methods and tools that can be utilized to **prevent the release** of these polluting substances. If prevention is not possible there are means to **treat the polluting substances** to reduce the impact of the release. If polluting substances are released in harmful quantities, then the release must be **reported to the proper authority.**

The City of Grand Haven
Grand Haven City Hall
519 Washington Avenue
Grand Haven, MI 49417-1486

REPORT POLLUTION PROBLEMS TO:
Department of Public Works
1120 Jackson St
Grand Haven, MI 49417
616-847-3493 or
bhunter@grandhaven.org

Potential Storm Water Pollution Sources

Sediment—Sediment is a word used to describe pollution caused by soil erosion. In other words, when soil or dirt is washed into the waterways it is called sediment. Sediment is one of the most serious water pollution problems in Michigan today. Sediment can smother the eggs of fish and aquatic insects, phosphorus attached to the soil particles can cause excessive nutrient enrichment, and bacteria in the soil can be a public health concern.

Spills—In the course of almost any project, various pollutants may be spilled. Examples include: oil, hydraulic fluid, gasoline or diesel, paint or solvents, tar, adhesives or bonding agents, herbicides or pesticides, salts, and chemicals. Before bringing these materials onto a job site, someone present must be trained on the proper procedures for cleaning up spills.

Sanitary Sewage—When portable toilets are brought to the job site, they should be properly secured to avoid spillage.

Construction Debris—Pallets, cardboard, styrofoam, buckets, tubes, crates, straw, plasterboard, wrappers, scrap wood/pipe, cans, jugs, sawdust, spent batteries, etc. These materials should be contained in a water-tight roll-off box or dumpster. Better yet, recycling these materials is highly encouraged.

Methods and Tools to Prevent Release of Polluting Materials

Awareness—Be aware of the potentially polluting materials on the job site and the drainage patterns leading to waterways. Use common sense to keep these materials away from storm water and drainage ways as much as possible.

Vegetated Buffer—Keep a well vegetated buffer strip between spoil piles and drainage ways. Similarly, keep other polluting materials away from storm water flow paths.

Staging Activity—Do not disturb any more vegetation at a time than is necessary to do the job. Stabilize disturbed earth as soon as possible, then move on to the next stage of the project.

Secondary Containment—Store all oil and fuel inside a special containment area to prevent spills from reaching the environment.

Reducing the Impact of Polluting Materials

Soil Erosion and Sedimentation Control Plan—Most construction activity requires a SESC plan prior to start of work. One may have been prepared prior to the award of a contract or preparation may be a contract requirement. Either way, all construction must be in accordance with the SESC Plan. All earth disturbances must comply with MDEQ Part 91 Rules.

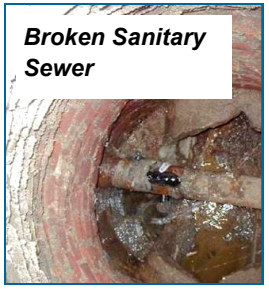
What are the Signs of an Illicit Discharge?

Sanitary Sewer Discharges

Observations:
- Sanitary debris
- Staining on pipe
- Soap suds
- Gray or discolored water
- Odors: sewage, rotten eggs or detergents

Soap Suds

Gray Staining


Broken Sanitary Sewer

Industrial and Commercial Discharges

Observations:
- Discolored water
- Odor: petroleum, chemical
- Open or Leaky Dumpsters
- Foam or Debris

Dumpster Juice

White Foam

Improper Storage

Illegal Dumping, Spills or Floor Drain Connections

Observations:
- Oil sheen
- Petroleum or chemical odor
- Stained sediment, rocks or vegetation
- Suds

Oil Sheen

Soapy Discharge

Dumping Oil, Grease, or Mop Water

Unusual Discharges

Observations:
- Colored, Silty, Foamy, or Smelly Water
- Unauthorized pipes

Suspicious discharge

Paint Discharge

Construction Site Pollution

Observations:
- Bare soils or banks with no soil erosion control fencing
- Construction Debris (sawdust, plaster, paint, concrete, etc.)
- Muddy discharge from an outfall

Improper Disposal

Soil Erosion

Important Numbers

EMERGENCIES

- Police/Fire — 911; 24 hrs
- Michigan Department of Environmental Quality Pollution Emergency Alert — 800-292-4706; 24 hrs

NON-EMERGENCIES

City of Grand Haven

Mr. William Hunter — 616-847-3493

Director of Public Works
(C) 616-638-7696
(F) 616-847-3470

City of Grand Haven
519 Washington Ave.
Grand Haven, MI 49417

Developed by the Southeast Michigan Regional IDEP Work Group — 1/25/2012
Adapted for the City of Grand Haven — 6/20/2012

How to Spot Illicit Discharges

A Tip Card for Municipal Staff

An illicit discharge is any discharge containing polluting material, such as sediment, nutrients, oil and bacteria. These discharges can drain to lakes and streams via storm drains. The communities in the Lower Grand River Watershed are required to prevent illicit discharges from entering storm water. You can do your part by notifying the appropriate agency when you spot a potential illicit discharge.

What to Report?

- Spills and contamination to lakes, rivers and streams
- Suspicious dumping to catch basins or waterways
- Unusual discharges from pipes
- Sewage on the ground or draining to surface water
- Large number of dead fish in waterways
- Failing or leaky septic systems
- Polluted runoff from storage piles or dumpsters to catch basins or waterways
- Sewage, detergent, chemical, petroleum or rotten egg odors
- Soil erosion from construction sites