

Lower Grand River Watershed

Village of Sparta 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

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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	Miles Ring
Title	DPW superintendent
Address	156 E. Division
City, State, Zip	Sparta, Mi. 49345
Telephone (with area code)	616-262-7901
Fax (with area code)	616-887-1114
E-mail	dpwdept@spartami.org
Stormwater Program Manager	
Name	Miles Ring
Title	DPW superintendent
Address	156 E. Division
City, State, Zip	Sparta, Mi. 49345
Telephone (with area code)	616-262-7901
Fax (with area code)	616-887-1114
E-mail	dpwdept@spartami.org
Stormwater Permit Fee Billing Address	
Name	Village of Sparta, Attention: Miles Ring
Title	DPW superintendent
Address	156 E. Division
City, State, Zip	Sparta, Mi 49345
Telephone (with area code)	616-262-7901
Fax (with area code)	616-887-1114
E-mail	dpwdept@spartami.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) (<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 Spote	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 Hoven						
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,

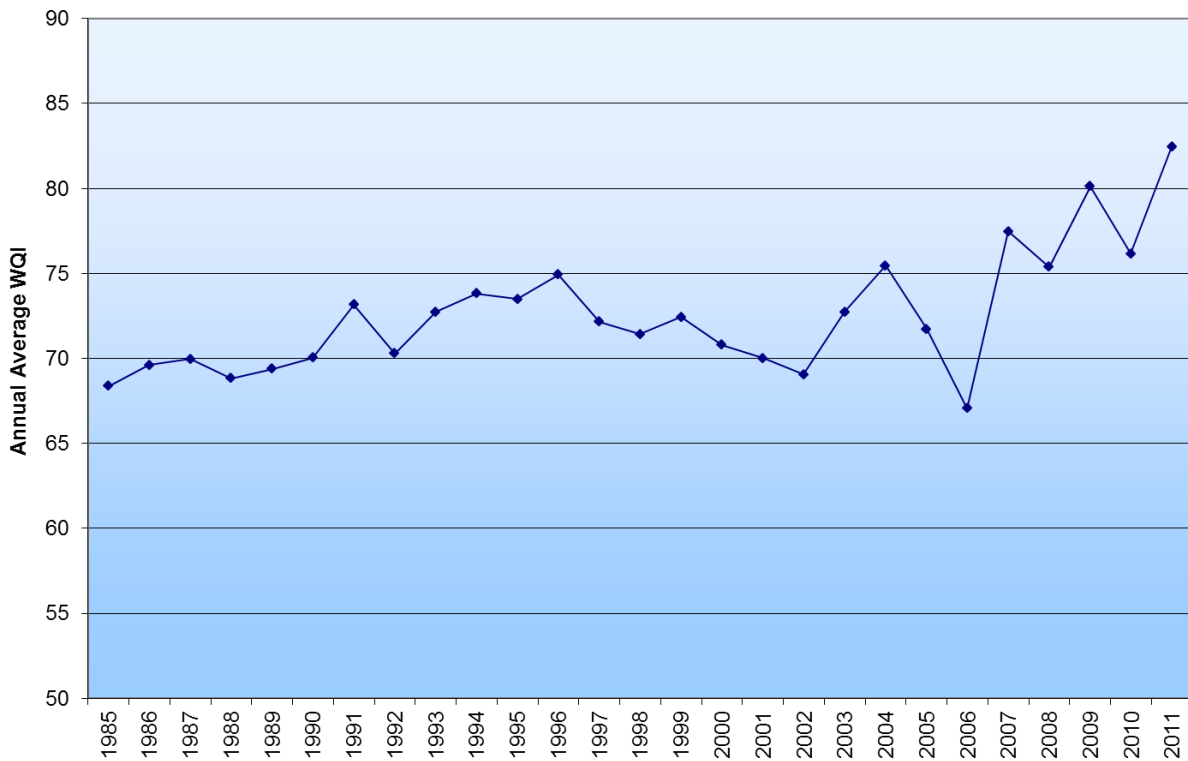
the release must be reported to the proper authority. A template of the flyer, "What Every Landscaper Must Know About Stormwater" is available on the LGRW FTC&H website: <http://www.ftch.com/lowergrandriverwatersheddocuments#MunicipalEmployeeTraining>. This brochure is intended to be provided to private 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>

Railroad Bridge North, Water Quality Index



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.	Village area within the LGRW	<p>PEP activity</p> <p>Identify and record any septic tanks in the Village.</p> <p>Targeted mailings. Handouts to septic tank owners as identified</p> <p>Provide maintenance schedule handout to septic tank companies to give to their customers.</p>	<p>Annually</p> <p>December 2013</p> <p>June 2014 or after identifying remaining tanks</p> <p>Annual or as needed</p>	<p>PEP Evaluation Forms</p> <p>Number of septic tanks in Village</p> <p>Record any eliminated septic tanks and hook ups to Village sanitary sewer</p> <p>Number of hand outs given out</p>
Actions completed:		Identified number of septic tanks in the Village. Handed out information to residents with septic tanks.	Ongoing	<p>PEP Evaluation Forms-Refer to SWPPI logbook part 3</p> <p>Septic tanks in Village- 41</p> <p>Eliminated septic tanks- 1 at 1424 12 Mile Road</p> <p>Handouts- 12 handed out at annual Spring Clean-up event</p>

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Encourage septage ordinance.	Village -owned properties	Septage ordinance in place. Review ordinance, and possibly add seepage resolution if needed. Current ordinance requires failed septic systems to hook to Village system within 90 days if Village system is available. If property does not have sewer available, property owner must repair to county health code. Key manhole covers are pulled on a regular basis to ensure system is flowing properly	December 2013	Number of failed septic systems connected to public sewer. Number of failed septic systems reported to Health Department and number of repairs and permits issued.
Actions completed:		Follow procedures in Septage Ordinance.	2012	Failed – 1 Connected to Village – 1 Permits Issued - 1
Implement vegetative buffering practices and restore and protect the stream buffer and canopy.	Village-owned properties	Review effectiveness of existing stream buffer procedures and adopt updated ordinance if needed. Procedures are enforced that require a no-mow zone adjacent to streams. Native plantings will be considered. DPW currently works with KCDC to clear fallen trees etc. from Nash Creek, and County drains within the Village.	December 2013 December 2013 Ongoing	Miles or feet of buffer assessed, % needing improvement. Adopt and enforce Procedure for Managing Vegetation on Village-Owned Property. Number of drain projects and measures taken to protect canopy

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Actions completed:		Monitored Village -owned properties	Ongoing	Procedure adopted 4-9-12 KCRC cleaned approximately 800 ft. of Rogers Drain to improve flow and prevent backups.
Implement MDNR wildlife population management practices.	Village-owned properties	Staff training Signage – Do Not Feed Waterfowl	Ongoing	Number of staff attending training Number of signs – less feeding observed
Actions completed:		There is no known feeding of wildfowl in the Sparta Village Limits.	Ongoing	No training or signage needed at this time.
Implement sanitary sewer maintenance practices.	Village-owned properties	Village sewer is maintained, cleaned and repaired as needed. System is inspected on a regular basis for back-ups and slow-downs.	Ongoing	Results of inspections and number of repairs identified and completed.
Actions completed:		Inspect and maintain village sewer.	Ongoing	All back-ups or slowdowns detected during regular inspections corrected No repairs done
Implement Low Impact Development practices	Village-owned properties	PEP activity - Trainings LID is covered in our current storm water ordinance. Review ordinance to see if additions should be made to make sure LID procedures are understood and followed. Consider a resolution to adopt current county storm water ordinance if needed.	1 time training for staff December 2013	Number of staff attending trainings Number of LID practices installed or considered.

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Actions completed:	Village Manager and DPW Superintendant	LID training	5-15-2012	2 staff trained at the Metro Council Storm Water Managers Meeting
Implement watershed focused land-use planning.	Village-owned properties	Review development standards and Master Plan to ensure provisions for water quality and LID.	December 2013	Status of review of standards and actions taken.
Actions completed:		No work completed on this item during the reporting period.	N/A	N/A
Implement proper soil erosion and sedimentation control techniques.	Village -owned properties	PEP Activity Training and procedures – train employees on SESC issues, defer to County for SESC inspections and enforcement	Ongoing Train as procedures are developed	Number of employees trained Number of complaints recorded and number of violations reported.
Actions completed:		Village employees (DPW) are trained as needed. DPW also monitors all construction sites.	Ongoing	3 DPW employees trained. No complaints or violations recorded.
Implement channel and streambank stabilization, bio-engineering, and erosion control techniques.	Village -owned properties	Compliance with MDEQ permit conditions for any work that occurs within a stream	Permitted by MDEQ as needed	Compliance with permits for projects needing permit and practices
Actions completed:		No permits issued by MDEQ.	N/A	N/A

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
Implement turf management and proper fertilizer application practices.	Village -owned properties	<p>Train employees in proper use of fertilizers, and increase awareness of the detrimental effect of fertilizers adjacent to surface waters. Existing brochures are currently provided to lawn care companies hired by the Village. Brochures are available for residents at Village and Township offices, the business expo, and the farmers market.</p> <p>Landscaping waste (yard, tree and grass clippings) disposal site offered for residents of the community</p> <p>Calibrate irrigation schedules for wise use of water. Rain detection was added to Village irrigation systems in 2011.</p>	<p>Train current employees and new hires 1 time and update as needed</p> <p>Ongoing</p> <p>As needed</p>	<p>Number of brochures handed out. Number of employees trained.</p> <p>Number of residents using the site or volume of waste received.</p> <p>Observations that irrigation not running during rain storms</p>

LGRW Prioritized Objectives for Permittees from 2011 WMP	Extent of Activity	Commitment	Timeline	Measures of Effectiveness
<p>Actions completed:</p>		<p>Train employees; offer yard waste disposal site to residents, monitored and maintained rain detection systems, calibrated irrigation systems.</p>	<p>Ongoing</p>	<p>Approximately 100 to 150 each brochures were handed out at Sparta Business Expo on March 2nd, 2012. -A Citizens Guide To Lawn Care -Landscaping For Water Quality</p> <p>Brochures also available at Sparta Village Office, Sparta Township Office, and The Farmers Market.</p> <p>“What Every Landscaper Must Know About Storm Water” brochure handed out to 4 landscaping companies working in the Village limits.</p> <p>Village employees are not using fertilizers</p> <p>Approximately 3,500 Village residents have access to the yard waste disposal site at the DPW facility at 276 W. Division.</p> <p>During the annual Village and Township Spring Clean-up event in April approximately 10,000 residents have access to the Village yard waste disposal site</p>

PART 2B - STORMWATER CONTROLS INSPECTION, MAINTENANCE AND EFFECTIVENESS

Property Name: Water Treatment Plant (383 S. State Street)				
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 Basins	Every 5 years	As Needed	3-1-2010- Visual- Castings cleared during rain events - refer to storm water maintenance log at DPW	Prevents flooding and prevents grass clippings from entering storm system
Storm Sewer	Every 5 years	As Needed	3-1-2010-Visual	Good condition-see municipal BMP log
Vegetated Swale	Every 2 years	As Needed	Visual inspection-Mowed weekly or as needed	Regular mowing keeps water flowing and prevents adjoining properties from flooding
Property Name: E. Water Tower (100 Prospect)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual inspection-Mowed weekly or as needed	Regular mowing prevents storm water back-ups and flooding
Property Name: West Water Tower (487 Applejack Court)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Visual-Mowed weekly or as needed	Regular mowing prevents storm water back-ups and flooding
Storm Sewer	Every 5 years	As Needed	3-10-2010 – Visual	Good condition – refer to municipal BMP log
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Visual- mowed weekly or as needed	Mowed to follow property maintenance ordinance

Property Name: Well #4 (S. State Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Mowed weekly or as needed	Regular mowing prevents storm water back-ups and flooding
Storm Sewer	Every 5 years	As Needed	3-1-2010-Visual	Good condition-see municipal BMP log
Catch Basins	Every 5 years	As Needed	3-1-2010 – Castings cleared during rain events to prevent flooding – Refer to storm water maintenance log at DPW	Good condition-Prevents flooding and keeps grass clippings from storm system
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Well #5 (760 S. State)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Mowed weekly or as needed	Regular mowing prevents storm water back-ups and flooding
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Rogers Park (152 N. State Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Mowed weekly or as needed	Regular mowing prevent storm water back-ups and flooding
Detention Pond	Yearly	As Needed	Visual-Mowed weekly as part of park during dry conditions	Helps flow of storm water to storm inlet to prevent back-ups in park
Storm Sewer	Every 5 years	As Needed	3-1-10 - Visual – refer to municipal properties and BMP's	Good condition – Refer to municipal properties and BMP's
Catch Basins	Every 5 years	As Needed	3-1-2010 – Visual – also Castings cleared during	Good condition – Prevents flooding

			rain events to prevent flooding – Refer to storm water maintenance log at DPW	and grass clipping from entering storm water system
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Nash Park (350 N. Aspen)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Annual-Visual- clear ditch of fallen trees and vegetation if slowing flow and backing up – Refer to storm water maintenance log	Keeps ditch flowing to prevent flooding of nearby residents- Refer to municipal properties and BMP's
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Buth Park (428 E. Division)				
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	Every 5 years	As Needed	3-1-10 – Visual – Refer to storm water maintenance log at DPW	Good condition – Refer to municipal properties and BMP's
Catch Basins	Every 5 years	As Needed	3-1-10 – Visual Also Castings cleared during rain events to prevent flooding – Refer to storm water maintenance log at DPW	Good condition – Prevents flooding and grass clippings from entering storm water system Refer to municipal properties and BMP,s
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Balyeat Park (Olmsted Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	3-1-10 – Visual – Brush cleared as needed from Nash Creek along swale	Clearing trees and brush from creek helps flow and prevent flooding –

				Refer to 2012 PEP
Storm Sewer	Every 5 years	As Needed	3-10-2012 and 3-26-2012 – Visual – Refer to Storm water maintenance log at DPW	Good condition – Cleaned as needed to prevent flooding – refer to Municipal properties and BMP's
Catch Basins	Every 5 years	As Needed	3-1-2010 and 3-26-2012 – Castings cleared as needed during rain events. Refer to Storm Water Maintenance log at DPW	Good condition – Prevents flooding and prevents grass clippings from entering storm system – Refer to Municipal properties and BMP's
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Spartan Park (164 E. Gardner)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Lamoraux Park (Averill & Pine Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow property maintenance ordinance
Property Name: Old Elementary School (200 Alma – Central Park)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb & Gutter	Every 5 years	As Needed	3-3-2010 and 3-26-2012-visual	Replace 60 ft. of curb to prevent wash outs into Grove Street August 2012. Will prevent washouts from entering storm system .Refer to Municipal Properties and

				BMP's
Catch Basins	Every 5 years	As Needed	3-3-2010 and 3-26-2012 – Visual – Also castings are cleared during rain events – Refer to Storm Water Maintenance Log at DPW	Good condition – Prevents flooding and grass clippings from entering storm system
Storm Sewer	Every 5 years	As Needed	3-3-10 and 3-26-12 – no Maintenance needed	Good condition – Will be cleaned as needed – Refer to Municipal Properties and BMP's
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow Property Maintenance ordinance
Property Name: Old Ambulance Building (195 Washington)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow Property Maintenance Ordinance
Property Name: Sparta Nature Trails (110 acres N.E. side of town – N. of 13 Mile Rd., East of River Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	This property is undeveloped flood plain with nature trails	
Property Name: Sparta Airport (9100 Vinton)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	Yearly	As Needed	Mowed as needed	Keeps storm water flowing to prevent flooding
Dry Well	Every 5 years	As Needed	3-3-2010 and 3-26-2012 – Refer to Airport SWPPP	Good condition – Helps prevent flooding of runway – See airport SWPPP
Detention Pond	Yearly	Yearly	3-3-2010 and 3-26-2012 – Mowed as needed	Good Condition – See Airport SWPPP
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed as needed - 5 times a year- also repair washouts as needed	-Good condition- Keeps storm water away from runway – see airport SWPPP

Property Name: Waste Water Treatment Plant (611 E. Gardner Street)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb & Gutter	Every 5 years	As Needed	Refer to Waste Water Treatment Plant SWPPP	
Catch Basins	Every 5 years	As Needed	"	
Storm Sewer	Every 5 years	As Needed	"	
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	
Property Name: S.W. Water Tower (575 W. Glen Street (W. Spartan Dr.))				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Buffer Strips	As Needed	As Needed (weekly during summer)	Mowed weekly or as needed	Mowed to follow Property Maintenance Ordinance
Property Name: Paved Streets with Curb and Gutter				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb & Gutter	Every 2 years	As Needed	Swept 2 times a year or as needed – Refer to Storm water 2012 for sweeping records and amount of sweepings removed.	Prevents dirt ,trash, grass clippings and leaves from entering storm water system
Catch Basins	Every 5 years	As Needed	3-5-2010 – Visual – Cleaned as needed – all Village catch basin castings are cleaned during rain events - Refer to Storm Water maintenance Log at DPW	Good condition – Cleaning during rain events keep grass clipping, trash and leaves out of storm system
Storm Sewer	Every 5 years	As Needed	3-5-2010 – Visual – Cleaned and repaired as needed – Refer to Storm Water Maintenance Log at DPW	Good condition – Cleaning and repairing as need keeps minimum amount of unwanted debris from entering the storm system
Property Name: Paved Streets with Gravel or other Turf Shoulders				
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 Basins	Every 5 years	As Needed	Same as paved streets with curb and gutter	
Storm Sewer	Every 5 years	As Needed	Same as paved streets with curb and gutter	
Property Name: Gravel or Turf Alley Ways				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Gravel (natural runoff to yards and paved streets)	As Needed	As Needed	Graded as needed – wash outs repaired as needed	Grading helps with more uniform run off – Wash out repairs keep dirt out of storm system – Refer to Municipal properties and BMP's
Property Name: All Village of Sparta Owned Parking Lots				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb & Gutter	Every 2 years	As Needed	Visual – Swept 2 times a year or as needed – Refer to Storm Water 2012 for sweeping records	Regular Sweeping keeps unwanted debris from entering the storm system
Catch Basins	Every 5 years	As Needed	3-5-2010 and 3-26-2012 – Visual Cleaned as needed - Refer to Storm Water maintenance Log at DPW	Regular Cleaning keeps unwanted debris out of Storm water system
Storm Sewer	Every 5 years	As Needed	3-5-2010 and 3-26-2012 – Visual – Refer to Storm Water Maintenance Log at DPW	Regular cleaning keeps unwanted debris from entering the storm system
Property Name: Main Street (13 Mile Road) from State Street to River Road				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Curb & Gutter	Monthly	As Needed	Swept as needed- Visual – average 1 time each month during summer	Keeps dirt, trash and other excess debris out of storm system
Catch Basins	Every 5 years	As Needed	3-5-2010 – All catch basins cleaned out – Refer to Storm Water maintenance Log at DPW	Good condition- No sumps over flowing into storm system
Storm Sewer	Every 5 years	As Needed	3-5-10 and 3-26-12 – Visual – Refer to Storm Maintenance Log at DPW	Good condition – Very little if any debris in pipes

Property Name: DPW (276 W. Division)				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Vegetated Swale	2 times a Year	As Needed	This property has its own SWPPP-All inspections and Maintenance are up to date – Refer to DPW SWPPP	All controls for this property are working properly and in good condition- Refer to DPW SWPPP
Catch Basins	2 times a Year	As Needed	“	“
Storm Sewer	2 times a Year	As Needed	“	“
Isolated Sump	2 times a Year	As Needed	“	“
Property Name: Village of Sparta Police Department (260 W. Division)				
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 Basins	2 times a Year	As Needed	This Property is covered by DPW SWPPP – All inspection and Maintenance are up to date – Refer to DPW SWPPP	All controls for this property are working properly and in good condition – Refer to DPW SWPPP
Storm Sewer	2 times a Year	As Needed	“	“
Property Name: Paved Alley Ways				
Structural Storm Water Control	Inspection Frequency	Maintenance Schedule	Inspection and Maintenance Conducted and Location of Log (if applicable)	Effectiveness of Control and Support Documentation
Gutter	Every 2 years	Every 5 years	None	
Catch Basins	Every 2 years	Every 5 years	3-26-10 – Visual – Castings cleared as needed during rain events - Refer to Storm Water Maintenance Log At DPW	Keeps debris out of storm system – Refer to Municipal Properties and BMP's
Storm Sewer	Every 2 years	Every 5 years	3-26-12 – Visual – Cleaned in 2012 – Refer to Storm Water Maintenance Log At DPW	Slow flow during heavy rain – Better flow after cleaning – Prevented dirt from entering storm system – Refer to Storm Water Maintenance Log

PART 2C - PROCEDURES STATUS

The following Pollution Prevention and Good Housekeeping procedures were adopted by the Village. 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	April 9, 2012	N/A
Procedure to Dispose of Storm Sewer System Operation and Maintenance Waste	April 9, 2012	N/A
Procedure to Construct, Operate, and Maintain Streets, Roads, Highways, and Parking Lots	April 9, 2012	N/A
Procedure to Reduce the Runoff of Total Suspended Solids	April 9, 2012	N/A
Procedure to Prevent Salt and Sand from entering Receiving Streams	April 9, 2012	N/A
Procedure to Control Dust and Suspended Solids in Runoff	April 9, 2012	N/A
Procedure for Managing Vegetation on Municipal Property	April 9, 2012	N/A
Procedure for Using Fertilizer on Municipal Property	April 9, 2012	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	DPW DPW, Water Dept., Sewer Dept. DPW, Water Dept., Sewer Dept.	Once every 2 years, new hires-update as needed 1 time 1 time	Written O&M Procedures 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:	DPW DPW	4-27-12 1-24-08	Written O & M Procedures Best Management Practices for Municipal Operations
Controls on streets, parking lots, maintenance garages, and storage yards	DPW, Water Dept., Sewer Dept. DPW, Water Dept, Sewer Dept. DPW, Water Dept., Sewer Dept, Police Dept.	1 time 1 time Annually	Storm Watch - Municipal Storm Water Pollution Prevention - DVD from Excal Visual, LLC Spills & Skills - Non-Emergency HazMat Spill Response - DVD from Excal Visual, LL Gravel Review DPW Storm Water Control Procedures

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Training completed:	DPW & Water Dept. DPW DPW DPW DPW DPW DPW, Sewer Plant, Water Plant, Police Dept., Fire Dept., Village Office, Township Office	2-28-12 1-21-12 4-27-12 4-27-12 4-27-12 4-27-12 12-21-2011 thru 2-5-2012	Spills and Skills DVD Review DPW SWPPP Mobil power Washing Catch Basin Cleaning Salt and Brine Storage DPW SWPPP Spill Response Procedures How To Use The Village Of Sparta Water Pollution Report Form
Water quality protection in flood control projects (detention basins, dams)	DPW Contractors, Inspectors	1 Time As Needed With New Projects	Retrofitting Detention Ponds for Water Quality – Live Presentation, and/or Various webinars as developed by WEF, AWWA or other similar organizations (Forrester)
Training completed:	N/A	No training completed during reporting period.	N/A
Controls to reduce discharge of pesticides, herbicides, and fertilizers	DPW Contractors Hired by Village, Contractors working in Village	DPW- Once Every 2 years As hired As contacted by DPW	LGRW_LandscapingContractorTrainingBrochure_2011-08-01.pub

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Training completed:	Contractors Hired By Village	As Needed – 4 landscapers trained in 2012	Landscapers – What Every Landscaper Must Know About Storm water
Other Topics			
Construction site stormwater runoff	DPW, Code Enforcement Officers DPW Contractors Hired By Village Contractors Working In Village	1 time 1 time As Hired As contacted By DPW	Ground Control - Storm Water Pollution Prevention for Construction Sites - DVD from Excal Visual, LLC LGRW_ContractorTrainingBrochure_2011-09-16.pub
Training completed:	DPW Superintendant	1-21-12	LGRW Contractor Training Brochure
LID	DPW Village Inspectors	1 Time As Needed	Reduce Runoff: Slow It Down, Spread It Out, Soak It In - DVD from USEPA After the Storm-DVD Attend New Training As Available
Training completed:	Village Manager and DPW superintendant	5-15-12	Metro Council Storm water Managers Meeting
IDEP	DPW, Water Dept., Sewer Dept., Police Dept., Fire Dept., Village Office Employees, Inspectors, Municipal Officials	Annually	WaterPollutionReportForm.doc Article_City_Employees.doc

Training Topic Area	Employee Group to Receive Training	Training Frequency	Potential Training Type
Training completed:	DPW, Water Dept., Sewer Dept., Police Dept., Fire Dept., Village Office, Township Employees, Inspectors DPW, Airport Manager, Police Dept.	12-21-11 thru 2-5-12 4-27-12	Water Pollution Report Form DPW and Airport SWPPP Spill Response Procedures
General Storm Water Education	Municipal officials	As Hired or Elected to Office	"Back to Basics" Storm Water Training – Live Presentations
Training completed:	N/A	No training completed during reporting period.	N/A

PART 2E - POST CONSTRUCTION CONTROLS ACTIVITIES

The Village of Sparta has adopted the Kent County Model Storm Water Ordinance for Storm Water Controls.

Ordinance No. 04-10, Chapter 74, Section 1, Article VI. Stormwater, adopted 9-13-04,

The Village requires specific practices for water quality and stream protection as follows:

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

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

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

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

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

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

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

Storm water projects completed by the Village were reviewed according to our storm water ordinance.

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

One – We improved the storm water system on Hickory St. between S. Elm and Maple St. by adding storm pipe to reduce flooding up stream.

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

Yes – 2. These maintenance agreements are from 2010 and 2011 projects.

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

Two were conducted. Including the following:

- Spectrum health detention pond – 2111 12 Mile Road – June 2012
- General Formulations Storm tech Chamber System under parking lot – 309 S. Union – First inspection due 2013.

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.

Detaining storm water on new developments keeps existing infrastructure from being overwhelmed and causing flooding upstream and downstream.

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.

Public Education Topic 5 - Waste Management Assistance

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

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

Delivery Method:

- 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: Village of Sparta

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 0% 25% 50% 75% 100% distributed
- Household Hazardous Waste guidebook/flyer 0% 25% 50% 75% 100% distributed
- "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 0% 25% 50% 75% 100% distributed
- "Catch A Ride On The Water Cycle" coloring book 0% 25% 50% 75% 100% distributed
- Lunch bag give-a-ways 0% 25% 50% 75% 100% distributed

2. Where did you distribute your brochures, flyers, and give-a-ways?

X Government office Library Community event Other

3. Describe any interest, comments, or discussion generated from the brochures, flyers, and give-a-ways

Citizens frequently ask where to take unwanted meds – They are directed to The Sparta Police Dept.
DPW Gets calls to help elderly dispose of Household Hazardous Waste

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? 100 Citizens Reporting Brochures were customized and made available at The Sparta Village Office, Police Station, Sparta Township Office and DPW. Will be available on our website in the future.

Please describe any interest, comments, or discussion generated from the brochure None

Lamppost Banners

6. Did you display your lamppost banners provided to you in 2009, 2011, or 2012?
- Yes, at Main St. (13 Mi.) (streets) on 8-1-11 thru 11-11-11 and 3-1-12 thru 5-31-12 (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 April 19-21-22 (date);
 No, but we will on _____ (date); No
 - “Guide To Household Hazardous Waste Disposal” article Yes, on March 2,2012 (date);
 No, but we will on _____ (date); No
 - “What Is A Rain Garden?” article Yes, on March 2,2012 and April 19-21-22, 2012 (date);
 No, but we will on _____ (date); No
 - “Maintaining Your Septic System” article Yes, on April19-20-21,2012 (date);
 No, but we will on _____ (date); No
 - “How You Can Help Reduce Pollution Entering The Grand River” article Yes, on April-19-21-22, 2012 (date);
 No, but we will on _____ (date); No
8. Please describe any interest, comments, or discussion generated from the articles None.
9. If applicable, list the newsletter name or webpage address used to distribute the articles www.spartami.org
10. If applicable, how many residents received your community newsletter? 14,000
11. If applicable, how many total website hits did you receive for your online newsletter articles? N/A.

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. 2 brochures requested by E mail. Both requests were sent to The Village office to pick up requested brochures.
 - No, but we have a web link to _____
 - No
13. If you have developed your own storm water webpage, please list the web address www.spartami.org N/A

Storm Water Poster Board and EnviroScape

14. Did you set up your storm water poster board display?
- Yes, all year (dates) at The Sparta Village Office and March 2nd at Sparta Business Expo (location). Please describe any feedback generated There were Village employees on hand at the Expo to answer storm water questions. The Expo was attended by an estimated 1000 people. These brochures were handed out at the Expo :
 1. Clean Up After Your Pet
 2. Illicit Discharges And Connections
 3. A Citizens Guide To Lawn Care
 4. A Citizens Guide To Storm Water

- 5. A Citizens Guide To Auto And Boat Care
- 6. Citizens Storm Water Pollution Reporting Form
- 7. Rain Rain
- 8. A Citizens Guide To Native Landscaping
- 9. Landscaping For Water Quality
- 10. Kent County Recycling Guide
- 11. Also displayed banner – Rouge River Watershed Yours to Protect

- 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

16. Did you implement a storm drain awareness activity between August 1, 2011, and July 31, 2012?
 Yes, we installed 12 (no.) storm drain markers on State Street, Grove, Union, Olmstead (streets) on June 7, 2012 (dates)
 Yes, we held a storm drain stenciling event on _____ (dates) and stenciled _____ (streets)
 Yes, we have approximately 50 (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: 1 Email asking what the markers meant.

18. Have you noticed a reduction in storm drain dumping?
 Yes, if so, please describe Because illicit discharges are being reported by citizens and employees.; No, if so, please describe _____

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 Sparta High School (schools/charities). Please describe any feedback generated – None
 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.)
1. Brochures mailed with water bills to 3800 residents Jan. 2012 – Is Your home Hazardous, Why we put Dog Poo In Bags, Caring For Your Car And The Environment.
2. The Grand River Yours To protect – Published in “ Sparta Today “ community news paper. Delivered to approximately 14,000 homes in The Village of Sparta ,Sparta Township and surrounding area.
3.Rotary creek clean-up event – Held 5-14-2012- Attended by 8 club members – Cleaned up garbage along Nash Creek .
4. Annual Spring Clean-up Event- Sparta Village and Sparta Township residents drop off trash, metals, electronics, batteries, tires, propane tanks, and brush to be recycled or hauled to Kent County landfill.

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.

No dry-weather screening performed during the reporting period.

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 known or reported illicit discharges during reporting period.

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.

1. 8-1-11, 50 S. St., 1 cup motor oil in gutter pan, cleaned up by DPW
2. 10-12-11, municipal lot on S. Union, 2 pints leaked from vehicle, cleaned up by DPW
3. 1-7-12 thru 3-6-12, vehicle leaked anti freeze several times, cleaned up by DPW and owner.
4. 5-3-11, used motor oil dumped on gravel alley by resident to keep down dust. Resident dug up oil soaked gravel supervised by DPW and put in dumpster.
5. 4-7-12, Restaurant power washing fryer in parking lot. Owner cleaned up supervised by Sparta police.
6. 4-23-12 Motorcycle dripping oil in lot, cleaned up by DPW
7. 4-25-11, Dirt on street (Anderson and W. Gardner) after driveway tear out. Cleaned up by company doing work.
8. 4-30-12, Oil leaking from car on private driveway. Cleaned up by owner.
9. 5-7-12, DPW observed gas station employee dumping mop water into storm drain. Contacted manger to tell employees to stop this practice.
10. 7-23-12, 48 Alma, gas leaking from vehicle on to street (approximately 5 gallons). Contained to gutter pan and cleaned up by fire dept.
11. Residents observed mowing grass clippings into street are told that they have to remove them by the DPW and police dept.

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

All identified or reported illicit discharges are followed up on by the DPW. The ordinance officer is called to help enforce the storm water ordinance as needed.

Please provide:

- An estimated quantification of the number of discharges eliminated, and
- An estimated quantification of the volume of illicit flow eliminated.

of discharges eliminated = 10

Volume of illicit flow eliminated = approximately 7 gallons, plus grass clippings

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

The program is effective as a result of employee and public training. The effectiveness of the program can be assessed by amount of reported discharges eliminated and the volume of illicit flow eliminated.

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:

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
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Comments: No nested drainage system agreements.		

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**:

Kent County Drain Commission cleared approximately 1,000 ft. of Rogers Drain to prevent flooding during heavy rain events.

Sparta Middle school teachers and students eliminated invasive plants and planted native plants on School properties (ongoing project).

Sparta Schools also maintain a rain garden that helps control runoff from the elementary roof and parking lot.

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

N/A

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