Lower Grand River Watershed Progress Report

City of Grand Rapids

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

Prepared by the:

GVMC

Grand Valley Metropolitan Council

Environmental Programs

678 Front Avenue Suite 200

Grand Rapids, Michigan 49504

(616) 776-7611

http://www.lgrow.org

Lower Grand River Watershed Progress Report

LIST OF TABLES

LIST OF ABBREVIATIONS/ACRONYMS

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

PART 1 - Contact Information

Table 1 - Contact Information for Michigan Department of Environmental Quality (MDEQ):	
Please provide current contact information for MDEQ to use regarding stormwater issues.	
Permit Application Contact	
Name	Mike Lunn
Title	Environmental Services Department Manager
Address	1300 Market Avenue SW
City, State, Zip	Grand Rapids, MI 49503
Telephone (with area code)	616-456-3625
Fax (with area code)	616-456-3711
E-mail	mlunn@grcity.us
Stormwater Program Manager	
Name	Carrie Rivette
Title	Project Engineer
Address	1300 Market Avenue SW
City, State, Zip	Grand Rapids, MI 49503
Telephone (with area code)	616-456-3057
Fax (with area code)	616-456-3711
E-mail	crivette@grcity.us
Stormwater Permit Fee Billing Address	
Name	Mike Lunn
Title	Environmental Services Department Manager
Address	1300 Market Avenue SW
City, State, Zip	Grand Rapids, MI 49503
Telephone (with area code)	616-456-3625
Fax (with area code)	616-456-3711
E-mail	mlunn@grcity.us

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

SWPPI Implementation

Committees have been working to address different subject areas to make program implementation as efficient as possible. Every participating MS4 has a representative on at least one committee. Committee meetings have also been used to update everyone on the progress of the other committees and the program in general. The committees are as follows:

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

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

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

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

Permittee: City of Grand Rapids

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

Permittee: City of Grand Rapids

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

PAM/PEP Committee

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

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

Stormwater Ordinance Committee

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

Permit Application. Minutes and agendas for the meetings are available at http://www.lgrow.org/MS4pccord.

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

DIP Committee

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

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

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

Training

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

- DVD from North Central Texas Council of Governments Municipal Employee Training Series: Preventing Stormwater Pollution: What We Can Do (includes the following videos)
    - Introduction: What We Can Do
    - Construction Activities and Land Disturbances
    - Fleet Maintenance and Material Handling
    - Streets and Drainage Maintenance

  - Parks and Grounds Maintenance
  - Solid Waste Management

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

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

DVD from Excal Visual, LLC
- IDDE – a grate concern: Illicit Discharge Detection & Elimination (14¼ Minutes)

DVD from Excal Visual, LLC
- Storm Watch - Municipal Stormwater Pollution Prevention (20 Minutes)

DVD from Excal Visual, LLC
- Stormwater Pollution Prevention - A Drop in the Bucket (16 Minutes)

DVD from Excal Visual, LLC
- Ground Control - Stormwater Pollution Prevention for Construction Sites (14.5 Minutes)

DVD from Excal Visual, LLC
- Spills & Skills - Non-Emergency HazMat Spill Response (18.5 Minutes)

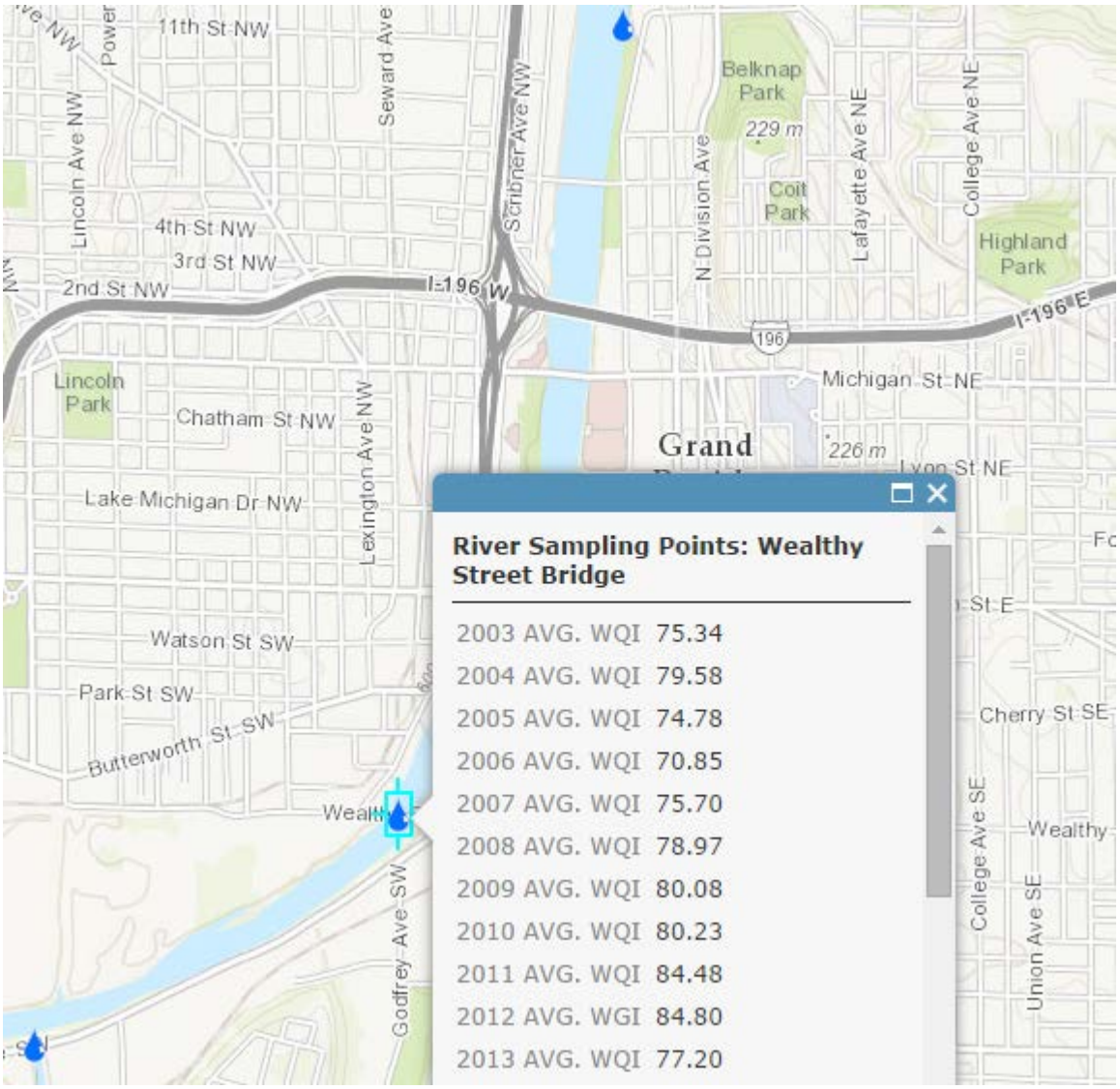
DVD from Southeast Michigan Council of Governments (SEMCOG) and the Road Commission for Oakland County
- Keep An Eye On It! - Environmental Awareness for Gravel Road Maintenance (18.5 Minutes)

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

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

Monitoring

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



MDEQ Program Audits

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

August 2, 2013	Forest Hills Public Schools
August 21, 2013	Kentwood/ Kentwood Public Schools
September 19, 2013	City of Grand Haven
March 12, 2014	Plainfield Charter Township
March 14, 2014	Cascade Charter Township
May 5, 2014	City of Walker
June 3, 2014	Kent County Administration & Drain Commissioner

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

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

Encouraging proper septic tank maintenance

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

Encouraging septage ordinance

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

Kent County has not passed an ordinance requiring point of sale septic system inspections. The permitted entities within Kent County rely on implementation of the illicit discharge elimination plan (IDEP) and

reporting/enforcement through their stormwater ordinances and the Kent County Health Department to follow up on failing or failed septic systems. In the case of failed septic system, if a sanitary sewer connection is available within 250 feet, a connection to sanitary is typically required.

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

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

Implement MDNR wildlife population management practices

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

Implement sanitary sewer maintenance practices

Sanitary Sewer service is provided by several communities to residents in expanded service areas. Through these partnerships, many communities are able to utilize sanitary sewer infrastructure instead of relying on septic fields. The City of Grand Rapids collaborates with the Cascade Charter Township, the City of East Grand Rapids, Forest Hills Public Schools, Grand Rapids Charter Township, Kent County, Kentwood, and the City of Walker. The City of Wyoming collaborates with the City of Kentwood and portions of the City of Grandville. The City of Grandville collaborates with the City of Hudsonville and portions of Georgetown Charter Township. The City of Grand Haven collaborates with the City of Ferrysburg and the Village of Spring Lake. The North Kent Sewer Authority collaborates with Plainfield

Charter Township and the City of Rockford. The City of Grand Rapids has included information related to the maintenance and upgrades of sewer infrastructure in Appendix 2B of the report.

Implement Low Impact Development Practices

Low Impact Development (LID) and green infrastructure are critical components in both the SWPPI and the PEP. Detailed information on the training related to LID practices and implementation is detailed in Appendix 2D, tracking of the installation and consideration of LID practices by permitees is tracked in Appendix 2E. The PEP incorporates messages on the implementation of LID practices such as rain gardens, buffer strips and native plantings for their direct benefits to water quality. The PEP focuses on LID practices that are feasible for individual homeowners to implement, rather than large scale development. LGROW staff has given several presentations on Low Impact Development and Green infrastructure throughout the year.

Implement watershed focused land-use planning

Throughout the watershed, construction in FEMA mapped floodplains is regulated by the Michigan Building Code to ensure that construction below the base flood elevation does not occur. Through the use of the model stormwater ordinance which has been adopted across the Watershed, the three zoned approach has been implemented to ensure that development in sensitive headwater areas (Zone A) provides the most stringent stormwater protection through post contraction controls. This is accomplished by providing prescribed release rates for Bank Erosion Control as well as Flood Control. Water Quality control is addressed with detention and infiltration where possible or delayed and restricted release where it is not.

Implement proper soil erosion and sedimentation control techniques

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

conducted by staff with either a comprehensive or inspector construction site stormwater operator certification respectively.

The SWPPI includes training (Appendix 2D) on topics related to construction site stormwater runoff. This training ensures that even if a community does not oversee their own program, field staff will be informed regarding what to look for on a construction site and who to report to if there is an offsite discharge or poorly maintained SESC measures.

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

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

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

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

Appendix 2C and perform regular training as referenced in Appendix 2D related to construction site stormwater runoff and water quality protection.

Implement turf management and proper fertilizer application practices

Permitted communities within the Lower Grand River Watershed have developed procedures for managing vegetation and using fertilizers on permitee owned Properties as outlined in Appendix 2C. All staff at the communities and their subcontractors adhere to these procedures. Training is also provided in the form of the brochure "What Every Landscaper Must Know". This brochure, is distributed as part of the comprehensive training plan on controls to reduce the discharge of pesticides, herbicides and fertilizers as described in Appendix 2D.

Appendix 2-A - Summary of Municipal Commitments
Completed August 1, 2013 to July 31, 2014

LGRW Prioritized Objectives for Permittees from 2011 WMP	Commitment	Timeline	Measures of Effectiveness
Encourage proper septic tank management.	Provide educational brochures to all homeowners with septic systems. Currently there are 10 within the City limits, none of which have storm sewers in the area.	December 2012.	Document that all brochures were sent. Report number of septic tank failures reported.
Actions completed:	Given the number of septic tanks that continue to be discovered, a search of all residential water only accounts was performed this year. This resulted in 153 additional septic tank sites being added. However, additional houses were also discovered this year. These are houses without water or sewer, so we do not have records of them. We have identified 29 additional septics as we find areas where water and sewer are not present. With the exception of 3993 Breton SE, which is discussed in Part 4 - IDEP, all of the newly-identified owners were sent the brochures. A list of the addresses, when the septic systems were identified and when their brochures were sent out is presented as Table 1.		
Encourage septage ordinance.	Continue to work with the County or the Committee on septic tank issues.	Ongoing.	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:	As noted above, 3993 Breton SE was reported to the Kent County Health Department (KCHD) as a potential failed septic system in June 2013. Details are provided in Part 4 – IDEP. However, we worked with KCHD and had the water turned off at the house. The water will not be turned on until the house is connected to sanitary sewer. In addition, the Utility Advisory Board Rate Study Sub-Committee met with KCHD staff on April 25, 2014, to discuss water wells and septic tanks. Notes from the discussion are presented as Appendix 2A1. KCHD staff also presented us with their list of septic permits from 2009 to 2014. The City compared that list with our own list and added four additional sites. The site owners received septic brochures as noted above.		

Permittee: City of Grand Rapids

LGRW Prioritized Objectives for Permittees from 2011 WMP	Commitment	Timeline	Measures of Effectiveness
Implement vegetative buffering practices. Restore and protect the stream buffer and canopy.	Continue to enforce environmental features ordinance passed in 2012 requiring a 75-foot buffer protecting rivers, wetlands, streams, water bodies and sensitive environmental receptors. Prepare and adopt tree ordinance for the protection and restoration of the City's canopy.	Continue to implement environmental features buffer. Implement tree ordinance by June 30, 2013.	Report number of sites where buffer ordinance was applied. Adoption of tree ordinance.
Actions completed:	No exceptions to the buffer zone were requested during this reporting year. The City is still in the process of drafting the tree ordinance.		
Implement MDNR wildlife population management practices.	Continue to install "Don't feed the wildlife signs" where needed. Provide online training for staff.	Ongoing. Provide training by June 2013.	Number of signs – less feeding observed. Number of staff attending training.
Actions completed:	The City's only problematic area of feeding wildlife is Riverside Park. Signage has been installed at this location. 91 staff members have been trained in person. Training will continue until all staff has been trained.		
Implement sanitary sewer maintenance practices.	Maintain compliance with CMOM (Capacity, Management, Operation & Maintenance) for sanitary sewers in order to prevent seepage to storm sewers.	Ongoing.	Refer to cmom.net. Maintenance items are tracked in an enterprise asset management system.
Actions completed:	CMOM compliance has been maintained.		
Implement Low Impact Development practices.	Continue implementing commitment to LID, as detailed in Green Grand Rapids, a 2012 addendum to our Master Plan.	Ongoing.	Number and type of LID practices utilized at City properties.
Actions completed:	Construction for two sites with LID practices was completed this reporting period. These include "bump-outs" with bio swales in the streets, porous pavement in parking lanes, a vortex filter, tree installations with expanded areas for root growth, and infiltration basins. The Indian Trails Golf Course is working with Plaster Creek Stewards and plans to replace invasive species with native vegetation in areas of the buffer strips that have been left to grow.		

Permittee: City of Grand Rapids

LGRW Prioritized Objectives for Permittees from 2011 WMP	Commitment	Timeline	Measures of Effectiveness
Implement watershed focused land-use planning.	Continue enforcement of the City's current floodplain ordinance to protect flood plains not regulated by MDEQ. Continue enforcement of the city's current pet waste ordinance. Continue implementing commitment to LID, as detailed in Green Grand Rapids, a 2012 addendum to our Master Plan.	Ongoing.	Number of plans reviewed. Number of offsite LID practices implemented.
Actions completed:	This reporting period, 180 permits were issued for City and Private. Of the permits issued, 30 were projects that incorporated LID. Typically, LID is only implemented when impervious surfaces at a site are increased. A majority of the permits reviewed had a decrease in impervious surfaces or remained the same.		
Implement proper soil erosion and sedimentation control techniques.	Continue to enforce regulations as a Municipal Enforcing Agency. Train City field staff in SESC. Maintain certifications of Construction Stormwater Operators.	As projects are reviewed. Train a majority of field staff by June 30, 2013. Continue certifications.	Maintain MEA status. Percent of field employees trained. Number of Construction Stormwater Operators.
Actions completed:	Currently, 13 of the 23 are trained. We have 4 additional staff members trained that are not required to be trained. Several of the positions where training is required were vacant for a majority of the reporting year. Inventory of positions requiring training will be taken fall of 2014 and training will be required.		
Implement channel streambank stabilization, bio engineering and erosion control techniques.	Compliance with DEQ permit conditions for any work that occurs within a stream. Flow restriction ordinance for all streams and reduced flow for impaired streams.	Continue to obtain DEQ permits for construction in a stream or channel. Continue to implement flow controls per stormwater ordinance.	Number of projects needing permits and permits obtained. Number of sites limited to reduced discharge.
Actions completed:	The City had one project within a stream this reporting year. The project involved stabilizing banks where erosion had exposed our sanitary sewer system. A permit was obtained from the MDEQ for the project. Of the LUDS permits issued by the City this reporting year, 17 had flow restrictions to protect all waterways and four had flow restrictions for impaired waterways.		

Permittee: City of Grand Rapids

LGRW Prioritized Objectives for Permittees from 2011 WMP	Commitment	Timeline	Measures of Effectiveness
Implement turf management and proper fertilizer application practices.	Continue to be in compliance with the State of Michigan Public Act 299 of 2010. Staff is trained in proper use of pesticides, herbicides and fertilizers. Contracts for these services contain language requiring proper usage. a. "No clippings of grass or weeds may be left in the street, on the curb, parkways, or sidewalk, but must be properly disposed of by the contractor." b. "All chemicals and materials which are spilled or misapplied to areas other than turf shall be cleaned up immediately. The contractor shall not allow chemicals & other materials to enter storm sewers, catch basins and/or water ways." c. "No chemical of any kind may be discharged into the gutters or sewer system. If granular(s) are used they must be swept or blown clean off all impermeable surfaces."	Ongoing.	Number of staff trained. Number of contracts issued.
Actions completed:	Four City staff members are certified in pesticide application by the state. This certification requires ongoing training, including fertilizer and herbicide application. These employees are responsible for application of pesticides, herbicides and fertilizers.		

Appendix 2-B - Storm Water Controls
Inspection, Maintenance and Effectiveness
August 1, 2013 to July 31, 2014

Property Name: City Wide				
Structural Storm Water Control	**Inspection Frequency**	**Maintenance Schedule**	**Inspection and Maintenance Conducted and Location of Log (if applicable)**	**Effectiveness of Control and Support Documentation**
Stormwater Manholes	Complaint Based	N/A	82 cleaned 19 replaced Logs are maintained in CityWorks.	Identified problems were fixed and pollutants were removed.
Stormwater Catch basins	Complaint Based	Clean 2,500 annually	2415 Catch basins were cleaned. Logs are maintained in CityWorks.	2,012 tons of solids were removed from the Stormwater system and kept from the waterways.
Discharge Points	Complaint Based	N/A	The complete IDEP sampling and inspection information is kept in an IDEP database. This was competed September 19, 2013. 7 discharge points were cleaned Logs outside of the regular complete IDEP sampling are maintained in CityWorks.	Details regarding the sampling completed in September of 2013 are included in Part 4 of this report. In addition, construction is being performed to install backflow preventers on all discharge points in the City's floodwalls. We have also worked with the City of Walker to intall them on some of their discharge points.
Stormwater Laterals	Complaint Based	N/A	2,097 ft cleaned 7 laterals repaired 5 laterals replaced Logs are maintained in CityWorks.	Identified problems were fixed.
Stormwater Pressurized Mains	Complaint Based	Bi-weekly Inspection visit	Inspections occur once every 3 weeks from May through October and once every 4 weeks from November through April.	Have not had a failure of a Stormwater pumping station during a rain event.

Stormwater Lift Stations	Complaint Based	Bi-weekly Inspection visit	All 11 wet wells were cleaned as a result of inspections. 2 wet wells were cleaned twice. Inspections occur once every 3 weeks from May through October and once every 4 weeks from November through April.	Given that the shortest gap between cleanings was two months, inspecting every two to four weeks appears to be sufficient.
Stormwater Gravity Mains	Complaint Based	N/A	10,663 ft. cleaned 1,837 ft. were root sawed and cleared 161 ft. replaced Logs are maintained in CityWorks.	Identified problems were fixed and pollutants removed.
Infiltration Basins (underground)	Complaint Based	10 yr. Inspection cycle	Inspection in CityWorks for 2019.	Basin appears to function well.
Detention Basins	Complaint Based	Maintain & Inspect three times annually	One of the 4 ponds was inspected approximately every 2 weeks. The other 3 ponds are maintained by surrounding landowners per easement agreements	Detention Pond is working well.
Hydro Separators	Complaint Based	Clean twice year	Inspections and cleaning were not performed this reporting year. Inspections will begin this fall.	Will evaluate next year after a full cycle of annual cleaning has been performed.
Siphons	Complaint Based	Clean annually	Cleaning was not performed this reporting year. Cleanings are currently being performed.	Will evaluate next year after a full cycle of annual cleaning has been performed.
Creek gates	Complaint Based	Clean annually	15 inspected 9 cleaned 4 repaired Logs are maintained in CityWorks.	Responding to complaints ensures that the worst areas are addressed more often.
Open Ditches	Complaint Based	N/A	No open ditches were cleaned.	There are complaints related to neighborhood open drains. Funds have been budgeted to address the most problematic areas.

Appendix 2-C - Procedures Status by Type of Property– Part 1
August 1, 2013 to July 31, 2014

Types of Properties	O&M Procedure	Location on http://mygrcity.us/collaboration/swppp
PW, W, WW	Concrete Waste Management	BMP Concrete Waste Management.pdf
A, C, D, F, G, L, M, Pk, Po, PW, R, T, V, W, WD, WW	Dumpster Management	BMP Dumpster Management.pdf
Pk, PW, W	Erosion and Sediment Control	BMP Erosion and Sediment Control.pdf
F, G, Po, PW	Fueling Areas	BMP Fueling Areas.pdf
A, F, G, L, M, Pk, Po, PW, T, W, WD, WW	Garbage Storage	BMP Garbage Storage.pdf
D, Pk, PW, W, WD, WW	Material Covering	BMP Material Covering.pdf
D, Pk, PW, W, WD, WW	Outdoor Storage Areas	BMP Outdoor Storage Areas.pdf
Pk, PW, W, WD, WW	Outdoor Storage, Raw Materials	BMP Outdoor Storage, Raw Materials.pdf
PW	Paving and Grinding Operations	BMP Paving and Grinding Operations.pdf
F, M, PW, W, WW	Petroleum and Chemical Storage, Small Quantities	BMP Petroleum and Chemical Storage, Small Q.pdf
F, M, PW, W, WW	Petroleum and Chemical Disposal	BMP Petroleum and Chemical Disposal.pdf
F, M, W, WW	Petroleum and Chemical Handling	BMP Petroleum and Chemical Handling.pdf
F, W, WW	Petroleum and Chemical storage bulk	BMP Petroleum and Chemical Storage, Bulk.pdf
F, L, M, Pk, Po, PW, W, WW	Salt Application	BMP Salt Application.pdf
PW	Sand and Salt Storage	BMP Sand and Salt Storage.pdf
A, D, F, G, L, M, Pk, Po, PW, W	Solid Waste Management	BMP Solid Waste Management.pdf
A, F, M, Pk, PW, W, WD, WW	Spill Cleanup	BMP Spill Cleanup.pdf
A, F, M, Pk, PW, W, WD, WW	Spill Prevention Control and Cleanup	BMP Spill Prevent_Control.pdf
PW, W	Dust Control	deq-wb-nps-dc_250612_7.pdf
A, D, F, G, M, Pk, PW, W, WD, WW	Equipment Storage and Maintenance Areas	deq-wb-nps-ems_250618_7.pdf
F, L, Pk, Po, PW, R, V, W, WD, WW	Fertilizer Management	deq-wb-nps-fm_250620_7.pdf
F, L, Pk, Po, PW, R, V, W, WD, WW	Lawn Maintenance	deq-wb-nps-lm_250884_7.pdf
D, F, L, Pk, Po, PW, W, WD, WW	Organic Debris Disposal	deq-wb-nps-odd_250887_7.pdf

Permittee: City of Grand Rapids

Types of Properties	O&M Procedure	Location on http://mygrcity.us/collaboration/swppp
F, L, Pk, Po, PW, W, WD, WW	Pesticide Management	deq-wb-nps-pm_250893_7.pdf
WW	Stream Bank Stabilization	deq-wb-nps-sbs_250898_7.pdf
PW, W, WW	Soil Management	deq-wb-nps-sm_250902_7.pdf
WW	Slope, Shoreline, Stabilization	deq-wb-nps-sss_250907_7.pdf
Pk, PW	Street Sweeping	deq-wb-nps-sw_250908_7.pdf
F, L, M, Pk, R, V, WD, WW	Trees, Shrubs and Ground Covers	deq-wb-nps-tsg_250910_7.pdf
PW	Winter Road Management	deq-wb-nps-wrm_250914_7.pdf
Pk	Golf Course Manual	ess-nps-Golf-Course-Manual_209682_7.pdf
Pk, PW	Road Salt Storage	Road Salt Application and Storage.doc

The City reviewed and customized these procedures during the 2012-2013 permit cycle.

Property Types Legend:

A - Administration	F - Fire	M - Maintenance Grg	PW - Public Works	V – Vacant/Open Land	WW - Wastewater
C - Cemetery	G – Garage/Storage	Pk – Parking/Parks	R – Residential	W – Water Cond/Tmt	
D – Unregulated Landfill/Dump	L – Library	Po - Police	WD – Waste Disposal Area		

Appendix 2-C – Procedures - Good Housekeeping and Pollution Prevention by Property Type – Part 2 August 1, 2013 to July 31, 2014

General operations and maintenance items for Transportation, Parking , Maintenance Garages and O&M Waste Disposal.

(1) controls for reducing or eliminating the discharges of pollutants from streets, roads, highways, parking lots, and maintenance garages;

(a) Streets, roads, highways

a. Street Sweeping – goal is once every 70-90 days (weather dependent).
The City has disposed of 6,545 cubic yards of waste from street sweeping this reporting year at a cost of over $87,000. This has prevented over 9800 tons of material from entering the stormwater system.

b. Salt Application – Drivers are trained with new equipment to utilize salt, most cost effectively, which minimizes the amount used on the roadways.
c. SESC Program – tracking and construction is controlled via ordinance
d. Vehicle Accident Spills – Fire Department has a policy for cleanup and control in place as submitted with the 2011-2012 annual report.
e. Dust Control - See BMP sheet
f. Snow Removal – See BMP sheet
g. Gravel Road – See BMP sheet
h. Roadside Vegetation – See BMP sheet

(b) Parking lots

a. Every surface parking lot has a check sheet for cleaning the curb lines as a daily activity (5 days per week). Larger pieces of trash or debris are removed daily from the lot. Finer materials of grit and gravel are allowed to accumulate until there is a sufficient volume to warrant sweeping. Sweeping the curb lines is done weekly, monthly, or bi-monthly, depending on the inspection, season or activity in the lot.
b. During the winter months, curb line cleaning activity is reduced due to snow accumulation. However, when the snow melts in the spring the curb lines are cleaned as they become accessible. During the fall, falling and blowing leaves require more attention and result in an increased frequency of cleaning curb lines.
c. Parking lots associated with City owned buildings are cleaned on an as needed basis. The department responsible for the lot inspects and schedules cleaning.

(c) Maintenance garages

a. The maintenance garage and public works yard, including salt storage, has trained staff. Work has been ongoing to formalize the activities in this area. A SWPPP is being created and implemented to fully document all the procedures and ensure compliance. Implementation is expected to be complete by March 2015.

(2) procedures for the proper disposal of operation and maintenance waste from the separate storm water drainage system (dredge spoil, accumulated sediments, floatables, and other debris);

(a) dredge spoil, accumulated sediments, floatables, and other debris from the use of City staff and equipment for these activities are dumped on a concrete slab located at the wastewater treatment plant (WWTP). The liquid is discharged to the WWTP and solids disposed of in a type II landfill. The DEQ staff was shown the facility during a June 3, 2011 MS4 Inspection.
(b) Contractors are required as part of their contract to properly dispose of dredge spoil, accumulated sediments, floatables, and other debris in a type II landfill.

(3) ways to ensure that flood management projects assess the impacts on the water quality of the receiving waters and, whenever possible, examine existing water quantity structures for incorporation of additional water quality protection devices or practices.

(a) Green Master Plan Update establishes the baseline for these requirements and is complemented by Zoning and Planning Ordinances.

(b) The Sustainability Plan also includes goals and targets to address water quality.

(c) Use of Green Infrastructure and Low Impact Design is reviewed and incorporated into all public projects when affordable and appropriate.

(d) Per the Vital Streets Guidelines adopted in February of 2014, low impact design will be the default design approach for street, sidewalk and right-of-way repair, improvement and reconstruction and shall be used unless clear engineering difficulties prevent its use in order to enable the City to achieve a minimum of Stormwater Management Level C investment by FY2022 as depicted in the 2013 Stormwater Asset Management and Capital Improvement Plan.

Permittee: City of Grand Rapids

Appendix 2-D - Staff and Contractors Training on Pollution Prevention and Good Housekeeping Completed August 1, 2013 to July 31, 2014

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

Training Topic Area	Employee Group to Receive Training	Training Frequency Goal	Potential Training Type
SWPPI Requirements			
Maintenance activities, maintenance schedules, and inspection procedures	Collection System Maintenance Group	Ongoing First 6 months of hire	**Written O&M Procedures** **Office of Water Programs, California State University, Sacramento Operation and Maintenance of Wastewater Collection Systems, Volumes I & 2**
Training completed:	**There are 10 Collection System Asset Technicians. Six of them have taken and passed the CALIFORNAIA STATE UNIVERSITY, SACRAMENTO Operation and Maintenance of Wastewater Collection Systems, Volume I and II.**		
Controls on streets, parking lots, maintenance garages, and storage yards	Public Services, Facilities and Fleet Management, Field Staff and Parking Services	Hire in 2 year cycle	**Online training which may include PowerPoints and/or the following videos** **Storm Watch - Municipal Storm Water Pollution Prevention - DVD from Excal Visual, LLC** **Spills & Skills - Non-Emergency HazMat Spill Response - DVD from Excal Visual, LLC** **Keep An Eye On It! - Environmental Awareness for Gravel Road Maintenance - DVD from SEMCOG & Road Commission for Oakland County**

Permittee: City of Grand Rapids

Training Topic Area	Employee Group to Receive Training	Training Frequency Goal	Potential Training Type
Training completed:	**Training is performed on hire. Stormwater staff has been working with public services supervisors to ensure that we are performing per the BMPs and inspecting garages and storage yards. Refreshers will be provided for the remaining staff during the next reporting cycle. Two staff from Engineering, three from streets, and nine from Utilities Engineering attended Introduction to the DEQ's Soil Erosion & Sedimentation Control and Construction Storm Water NPDES Permit Programs on November 15, 2013.**		
Disposal of O&M waste	Collection System Maintenance Group Contractors	Ongoing Contract	**Written O&M Procedures** **Written contract requirements**
Training completed:	**The operation and Maintenance of Wastewater Collection Service training noted above includes managing a collection system O&M program, supervising a sewer cleaning program, and complying with the NPDES permit and applicable rules and regulations.**		
Water quality protection in flood control projects (detention basins, dams)	Stormwater Management Personnel, Field Staff & Design Personnel	Ongoing	**Training consistent with LID and other training/conferences as they become available**
Training completed:	**All stormwater management, design and lead field staff have passed the comprehensive soil erosion and sedimentation control exam through the MDEQ. In addition, additional field and design staff are trained as construction stormwater operators, as noted in Appendix 2-A. Additional Stormwater staff training is presented as Appendix 2-D1.**		

Permittee: City of Grand Rapids

Training Topic Area	Employee Group to Receive Training	Training Frequency Goal	Potential Training Type
Controls to reduce discharge of pesticides, herbicides, and fertilizers	Contractors	Ongoing	**Compliance with the State of Michigan Public Act 299 of 2010** **Staff is trained in proper use of pesticides, herbicides and fertilizers** **Contracts for these services contain language requiring proper usage** **a. "No clippings of grass or weeds may be left in the street, on the curb, parkways, or sidewalk, but must be properly disposed of by the contractor."** **b. "All chemicals and materials which are spilled or misapplied to areas other than turf shall be cleaned up immediately. The contractor shall not allow chemicals & other materials to enter storm sewers, catch basins and/or water ways."** **c. "No chemical of any kind may be discharged into the gutters or sewer system. If granular(s) are used they must be swept or blown clean off all impermeable surfaces."**
Training completed:	**All contractors involved in landscaping must agree to abide by the requirements above. As noted in Appendix 2-A, staff in charge of pesticide, herbicide and fertilizer application are certified by the State for pesticide application and their training includes herbicide and fertilizer application practices.**		
Other Topics			
Construction site stormwater runoff	Field Staff Contractors	Preconstruction meeting	**Training may include one or both of the following;** **Ground Control - Storm Water Pollution Prevention for Construction Sites - DVD from Excal Visual, LLC** **LGRW_ContractorTrainingBrochure_2011-09-16.pub**

Permittee: City of Grand Rapids

Training Topic Area	Employee Group to Receive Training	Training Frequency Goal	Potential Training Type
Training completed:	**As noted in Appendix 2-A, 13 of the 23 are trained. We have 4 additional staff members trained that are not required to be trained. Several of the positions where training is required were vacant for a majority of the reporting year. Inventory of positions requiring training will be taken fall of 2014 and training will be required. In addition, it is discussed at each pre-construction meeting for City projects, including City field staff, that our stormwater system drains directly to the river and must be protected. Contractors are presented with the LGROW brochure "What Every Earth Work Contractor Must Know About Storm Water" at every pre-construction meeting.**		
LID	Stormwater Management Personnel, Field Staff & Design Personnel	Ongoing	**Provide copies of the SEMCOG Low Impact Design manual. Provide opportunities for training and attendance of webinars and other conferences. The following videos are also available for their use;** **Reduce Runoff: Slow It Down, Spread It Out, Soak It In - DVD from USEPA** **RiverSmart Homes: Getting Smart about Runoff - DVD from USEPA** **Building Green: A Success Story in Philadelphia - DVD from USEPA** **After the Storm - DVD from USEPA** **BMP Tour of GVSU Campuses – Walking Tour**
Training completed:	**In addition to the training noted above, a presentation on LID was made of the City's Design Team in February 2014. Design Team includes representatives from all of the City's underground utilities, Planning, Engineering, Public Services, and Fire.**		
IDEP	All Employees	Ongoing	**Items will be maintained on City intranet and periodic announcements made. These items will include various brochures and include;** **WaterPollutionReportForm.doc** **Article_City_Employees.doc**

Permittee: City of Grand Rapids

Training Topic Area	Employee Group to Receive Training	Training Frequency Goal	Potential Training Type
Training completed:	**Training has been available via the GR311 materials and the Basin Buddy program and video on our website. In addition, in person training has been conducted for staff from the Environmental Services and Parking Services Departments. A total of 91 staff members have been trained. The training focused on Six Minimum Control Measures, with an emphasis on IDEP. Reporting Cards were distributed to staff during the training. Training will continue through the next reporting year.**		
General Storm Water Education	Top Management	Annually	**"Back to Basics" Storm Water Training – Live Presentations in 2013 The SWPPI report was reviewed briefly and distributed to Public Works, Engineering, Parks and the Deputy City Manager.**
Training completed:	This occurred at a TOP management meeting October 13, 2013.		

Permittee: City of Grand Rapids

Appendix 2E - Post Construction Controls Activities Completed August 1, 2013 to July 31, 2014

Implementation

The City of Grand Rapids Ordinances Ord. No. 2001-26, § 1 of 2001 and Ord. No. 2007-13, § 1 are the Stormwater Ordinances for the City. Post-construction controls for new development contained in the ordinance include:

- Limiting discharge rates to 0.13 cfs/acre for a 25-yr 24-hr storm.
- Limiting discharges to sensitive downstream receptors, including open channel banks susceptible to erosion, to 0.05 cubic feet per second per acre up to the two (2) year rain event.
- Treatment of the first ½" of rain for water quality.

A total of 180 Land Use Development Services permits were issued during this reporting period.

The City of Grand Rapids Ordinances Ord. No. 2012-01, § 1 of 2012 is a zoning ordinance establishing setbacks for rivers, wetlands, streams, water bodies, or other sensitive environmental areas. Incentives for using Low Impact Development are also included in the zoning ordinances.

In addition, the Green Grand Rapids Master Plan Update depicts Grand Rapids' commitment to using Low Impact Development, conserving green space and protecting our waterways.

Of the permits issued, 30 of the site required and implemented LID.

Operation and Maintenance

In 2010, the City had a draft stormwater ordinance that included long term operation and maintenance of post-construction controls. However, when the MS4 permit was withdrawn, the ordinance was not finalized for adoption. Upon receipt of new permit which is not expired, the stormwater ordinance will be revisited.

In preparation for the draft ordinance, however, a method for tracing and inspecting the post construction controls was established. Without the ordinance for authorization, the City cannot enter private property to inspect it therefore, all post construction controls are inspected, from public rights of way.

In addition, the City's nuisance ordinance can be utilized to inspect controls if a complaint is received by Code Enforcement.

Currently, there are 123 sites in monitor status that are due to be inspected every other year, provided that they can be inspected from public property. Inspections on 40 sites were performed this reporting period, given that a majority of the sites (over 86) went into monitor status after 7/31/2012.

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

Permittee: City of Grand Rapids

During this reporting period, no enforcement activities were required as a result of post-construction inspections.

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

Under our current ordinance, long-term operation and maintenance agreements are not required.

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 increasing open spaces

Requiring post development runoff to equal pre-development runoff is an incentive to use properties already developed, as retention/detention costs can be high. When re-using a site that is already developed, stormwater control costs can be minimal, if they are needed at all.

Permittee: City of Grand Rapids

PART 3 - PEP

REGIONAL PEP

The updated PEP was approved by MDEQ in February 2013. The purpose of the PEP is to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. This section provides a report of public education activities implemented between August 1, 2013, and July 31, 2014.

A. PUBLIC EDUCATION COMMITTEE

The LGRW Stormwater Education Committee was formed in 1999 to begin development and implementation of the PEP. Since that time, the committee has met on a regular basis to discuss and plan activities scheduled for implementation in the PEP. The 2013/2014 PAM/PEP Committee consists of the following participants:

- Steve Peterson - Cascade Charter Township
- Lea Sevigny – Forest Hills Public Schools
- Kim Hansen - Jenison Public Schools
- Cheryl Davidson - City of Grand Haven
- Carrie Rivette - City of Grand Rapids
- Ron Carr – City of Grandville
- Amber Eckert-Howe – City of Hudsonville
- Lani Brown - Kent County Drain Commissioner's Office (KCDC)
- Dave Beck - Kent County Road Commission (KCRC)
- Kristen Wieland - Kent County Resource Recovery
- John Gorney - City of Kentwood
- Amanda St. Amour - MDEQ
- Andrea Walachovic - Ottawa County Water Resource Commissioner's Office (OCWRC)
- Mary Trapp - Plainfield Township
- Mike Bouwkamp - City of Rockford
- Chris Burns - Village of Spring Lake
- Nichol DeMol – Trout Unlimited
- Ms. Becky Brown - WMEAC
- Ms. Becky Huttenga - Ottawa Conservation District
- Mr. Aaron Vis - City of Wyoming
- Ms. E. Wendy Ogilvie – GVMC
- Ms. Bonnie Broadwater –GVMC

Permittee: City of Grand Rapids

- Mr. Brian Zuber – GVMC

B. PEP IMPLEMENTATION IN YEAR 11

This section describes the public education activities implemented by the Permittees in the eleventh year of PEP implementation, August 1, 2013, and July 31, 2014. The following report is according to the updated PEP, which meets the requirements of the 2013 approved PEP. Target audiences, messages, and delivery mechanisms are described for each Public Education Topic.

Public Education Topic 1 - Personal Watershed Stewardship

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

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

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

Delivery Method:

- A link from the Permittees' websites to the LGROW's website, www.lgrow.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.

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

- Permittees distributed the following LGROW and watershed education materials to residents in the LGRW at multiple events and venues:

    - 1000 Troutie Coloring Books
    - 1992 Color Your Own Fish Hat
    - 500 Packages of Crayons with LGROW logo

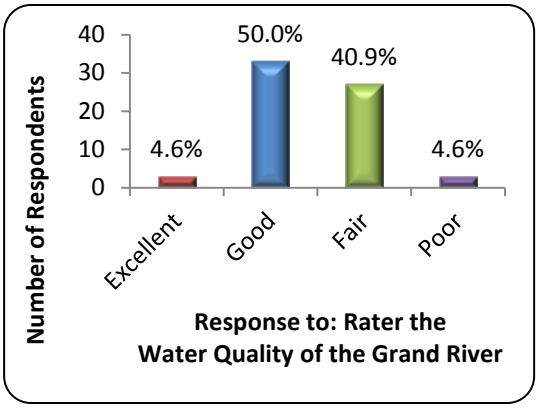
Permittee: City of Grand Rapids

- 1000 Stress Ball Fish with LGROW logo
- 1000 Tote bags with LGROW logo
- 788 Dew Drop Rain gauges with LGROW logo
- 1023 Fish magnets
- 1044 Fish Post-its
- 300 Flash Drives, with the LGROW logo, pre-loaded with PEP Materials and watershed information.

- Through cooperation of staff at permitted MS4 communities, PEP committee participants, GVMC staff and other members of LGROW, the following events were either hosted or included a watershed education component for personal watershed stewardship:

  - The Annual Science, Technology, Engineering and Mathematics (STEM) student evening was hosted at the Grand Rapids Public Museum this year on February 19, 2014. LGROW provided a 10 minute demonstration for small groups throughout the day utilizing the Kent County Drain Commissioner's Enviroscape model. The demonstration focused on non-point source water pollution and its impacts on stormwater. Each group of approximately 6-10 students watched the demonstration and then engaged in a discussion about what actions can be taken to reduce the impacts of non-point source pollution on stormwater and what they, as individuals, could do. Approximately 150 students attended the event from several Grand Rapids Public Schools and cycled through the LGROW station during the course of the event.

  - LGROW hosted the 11th Annual Grand River Forum on May 2, 2014. The half-day event had 72 attendees and featured speakers on Michigan's Water Strategy, the Blue Economy, the Restore the Rapids Project, the Hubbardston Dam removal and a tour of the Grand Rapids Museum Grand River Exhibit Renovation which is



in progress. Forum participants were asked to complete a survey after both registering and attending the event these questions will be reused in subsequent years to see if there is a measurable change in people's attitude toward and perception of the river.

- The Party for the Planet was held at the John Ball Zoo on Saturday, May 3, 2014. The event brought the public together with environmentally conscious groups. A total of 2,143 people visited the event with at least 707 interacting with our tables. LGROW, the City of Grand Rapids, Kent County Drain Commissioner's Office, and WMEAC coordinated for the event with a theme of stormwater education. Public feedback was overwhelmingly positive with many children expressing that they learned something valuable. Interaction was largely required for the public to receive give-away items. The following items were distributed: 12 rain gauges, 40 fish post-its, 25 fish magnets, 25 squishy fish, and 25 carrying bags.

- LGROW hosted a booth at the Rockford Farmer's Market on June 21, 2014 during the Rogue River Expedition which ran from June 19, 2014 through June 21, 2014. The booth featured a newly created map which asked "Where do you live in the Watershed?" Visitors who stopped by the booth were given a push pin to add to the map. Over 50 visitors added pins to the map and more than half of the visitors to the booth already understood the concept of a watershed. LGROW brochures and giveaways were provided to those who participated in the map activity. GVMC staff represented LGROW and also spoke with booth visitors about the ongoing Rogue River expedition. The expedition visited the farmer's market during the event while portaging the Rockford Dam.

Permittee: City of Grand Rapids

- LGROW also attended the following professional events on behalf of the MS4 permitees during the reporting period and staffed an outreach booth with stormwater and watershed information:
    - MWEA Watershed Seminar December 5, 2013 (55 attendees)
    - 19th Annual Quiet Water Symposium March 1, 2014
    - MWEA Watershed Summit March 26, 2014 (120 attendees)
    - Green Roofs for Healthy Cities March 27, 2014
    - Michigan Green Infrastructure Conference May 8-9, 2014

- Permittees displayed their lamppost banners purchased in 2012 to advertise the presence of the Grand River, Rogue River and Plaster Creek Watersheds. The banners featured the LGRW logo and the message "Yours to Protect."

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

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

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

Delivery Method:

- Eleven permitees ordered a total of 1500 storm drain markers; 500 cast metal markers from Almatek and 1,000 plastic makers from Das Manufacturing. Markers advertise the message "No Dumping. Drains to Waterway", "No Dumping. Drains to Lake." And "No Dumping. Drains to River." Permittees installed these markers near catch basins to discourage illicit dumping.

- Door hangers were also distributed with the drain markers to alert residents in neighborhoods where drain marking had occurred. A total of 500 door hangers were distributed with the drain markers for storm drain marking events. The hangers included information on pollution prevention, reporting illicit discharges and LGROW.

Permittee: City of Grand Rapids

- Five interior ad panels on Harbor Transit busses and trolleys were posted from July 1, 2013-September 30, 2013. These banners shared the message that anything entering a storm drain goes directly into the Grand River as shown here:

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 public service message discussing what an illicit discharge is why it is harmful to stormwater and receiving waters aired on WYCE.

- Door hangers distributed during storm drain marking events included information in reporting illicit discharges.

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

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

Permittee: City of Grand Rapids

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

Content of Message: 1) Avoid scorching your lawn. Use slow-release fertilizers only 2 to 3 times per year. Non-phosphorus types are best for the environment. 2) Lower your water bill. Install a rain barrel to capture and reuse your stormwater. 3) Wash your car at a commercial car wash or on your lawn. Otherwise, dirty, oily water on your driveway will flow to your storm drain and eventually your local lake or stream. 4) Pick up your pet waste and dispose of it properly; otherwise, it could end up in the Grand River and on your favorite Lake Michigan beach.

Delivery Method:

- Permittees distributed the newsletter article "*New Michigan Law Restricts Phosphorus Fertilizers*" to their residents via their webpage or community newsletter. This article describes the new Michigan fertilizer law and encourages homeowners to use phosphorus-free fertilizer. This article was made available to permitees via the USB drives distributed with PEP materials.

- Permittees sent eco-friendly car wash letters containing tips on ways to protect our local lakes and streams, the Grand River, and Lake Michigan, during car wash fundraisers.

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

- Permittees electronically distributed the USEPA article *"The Solution To Stormwater Pollution"* which details healthy household habits for clean water, topics include; vehicle and garage care, lawn and garden care, home repair and improvement, pet care, swimming pool/spa care, and septic system use and maintenance.

- Permittees electronically distributed the article *"Are Your Ready for Spring?"* with tips to help residents prepare for the spring thaw, reduce flooding impacts and keep harmful materials out of rivers and streams.

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

Permittee: City of Grand Rapids

Public Education Topic 5 - Waste Management Assistance

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

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

Delivery Method:

- WYCE aired a "*Water Spot"* on the topic of property disposing of household hazardous waste to keep it out of the storm drains.
- Permittees distributed the newsletter article *"How You Can Help Reduce Pollution Entering The Grand River"* to their residents via their webpage or community newsletter. This article encourages residents to dispose of pet waste, paints, motor oil, etc., in the appropriate locations, not in the storm drains.
- Permittees electronically distributed "*West Michigan, Take Back Meds*," to their residents. The pamphlet encourages the proper disposal of unused/unwanted/expired medications and lists locations for disposal.
- Permitees distributed their county's household hazardous waste guide or flyer in both Kent and Ottawa counties

Public Education Topic 6 - Septic System Maintenance

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

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

Delivery Method:

- Permittees distributed 500 copies of USEPA's *A Homeowner's Guide to Septic System* brochure to their residents. This brochure describes what a septic system is, how it works, and how to maintain it.

Permittee: City of Grand Rapids

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

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

Public Education Topic 9 - Entity of Specific Pollutants

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

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

Delivery Method:

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

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

Permittee: City of Grand Rapids

C. EVALUATION MEASURES

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

Community Quantitative and Qualitative Evaluation Measures of Effectiveness

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

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

The Harbor Transit bus & trolley advertising was posted for two months of the reporting period August 1, 2013-September 30-2013. This time period was selected to correspond with the increased ridership during the summer tourist season, and specifically during the Coast Guard Festival which was July 26 - August 4, 2013. During the two month display period five interior panels located on three busses and two trolleys were displayed. With ridership estimated at 7,545 for the trolleys and 9,207 for the busses. In total, approximately 16,752 people viewed the message.

Permittee: City of Grand Rapids

2014 Stormwater Public Education Plan (PEP) Questionnaire

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

Please complete this questionnaire to provide an evaluation of the stormwater education activities you have implemented between **August 1, 2013, and July 31, 2014**. GVMC will include this information, along with watershed-wide measures of effectiveness, in your 2014 Progress Report.
Please return this form to GVMC by August 15, 2014.

Community Name: City of Grand Rapids

Brochures, Flyers, and Give-a-ways (distributed to Permittees in May 2014)

1. Have brochures, flyers, and give-a-ways been distributed?
   ☐Yes: ☐all ☒in progress
   ☐No
   See Table 4 for Brochure Distribution.
2. Where did you distribute your brochures, flyers, and give-a-ways?
   ☐Government office ☐Library ☒Community event ☒Other _____
   See Table 4 for distribution. Misccellanous distribution included supplying the City of Wyoming and WMEAC with brochures, providing them for use at Meijer Gardens and providing them for distribution at the Cottage and Lakefront Home show. All other brochures distributed were by City staff at the events.
3. Describe any interest, comments, or discussion generated from the brochures, flyers, and give-a-ways. The best interaction was providing the squishy fish and fish post its and having the public, generally children, tell us what they can do to keep fish healthy in our river.

4. What was the most popular give-a-way from the materials distributed in your community? Squishy Fish, rain gauges were also very popular.

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

Illicit Discharge Reporting (brochure available at: www.lgrow.org/uploads/files/Citizens_Reporting_Brochure_withnote.pdf

6. How many "Citizens Reporting Brochures" were customized and distributed to your residents? Posted to website.
   Was the "Citizens Reporting Brochure" posted to your city website? ☒Yes, at http://grcity.us/enterprise-services/Environment-Services/Pages/Template_Citizens_Reporting_Brochure.pdf (url) ☐No
   Please describe any interest, comments, or discussion generated from the brochure: We have more reports through 311.
   How many complaints were received from the general public regarding illicit discharges? Three from the general public and one from a contractor.

Permittee: City of Grand Rapids

Lamppost Banners

7. Did you display your lamppost banners provided to you in 2009- 2013?

☒Yes, at _Monroe_____(streets) on _since 2011_____ (dates). Please describe any public feedback generated_____
☐No, but we will display our banners at _____ (streets) on _____ (dates)
☐We did not order lamppost banners

Newsletter Articles (available at: http://www.lgrow.org/MS4information#brochuresandfliers and distributed on flash drives)

8. Did you distribute these newsletter articles to your residents?
☒Yes, on _____ (date); Via: ☐print ☒web ☒other Septic brochures as noted in Appendix 2A.
☐No, but we will on _____ (date) Other newsletters will be posted to our website periodically.

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

10. If applicable, list the newsletter name or webpage address used to distribute the articles _They will be on www.grcity.us/ESD_____

11. If applicable, how many residents received your community newsletter? ___NA_____

12. If applicable, how many total website hits did you receive for your online newsletter articles? _Unknown_____

Hold Messages

13. Did your community utilize the hold messages distributed with the public education materials? ☐Yes ☒No

14. Please describe any interest, comments, or discussion generated from the messages: __NA_____

Website

15. Is there a web link to www.lgrow.org on your community's website?
☒Yes, please describe any interest, comments, or discussion generated from the website _None_____
☐No, but we have a web link to _____
☐No

16. If you have developed your own stormwater webpage, please list the web address: www.grcity.us/esd

(url)

Stormwater Poster Board and EnviroScape

17. Did you set up your stormwater poster board display?
☐Yes, on _____ (dates) at _____ (location). Please describe any feedback generated
☒No, but we set up our display (attached, was used at the Home Show, Party for the Planet and Central Woodlands.
☐No

18. Did you use an EnviroScape interactive stormwater model to educate the public on stormwater pollution?

☐Yes, on _____ (dates) at _____ (location); ☒No Enviroscape was part of LGROW group which we were part of at Party for the Planet

Storm Drain Awareness Activities

19. Did you implement a storm drain awareness activity between August 1, 2013, and July 31, 2014?
☒Yes_____ (streets) on _____ (dates) **See Below**
☐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) See Part 4 - IDEP
☐No, but we plan to implement _____ (activities) on _____ (dates)

20. Please describe any interest, comments, or discussion generated from the activities above _____

21. Have you noticed a reduction in storm drain dumping?
☒Yes, if so, please describe Dumping decreased approximately 50% this reporting year.; ☐No, if so, please describe _____

Weather permitting, all catch basins are stenciled or have a sticker placed on them when cleaned.

Additional Efforts

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

☒Rain Barrel Workshop Date: __/__/____ Number of Attendees: __ **Sponsor WMEAC events.**
☐Rain Garden Installation Date: __/__/____ Number of Attendees: __
☐STEM (at Grand Rapids Public Museum) 2/19/2014
☒Grand River Clean up 9/14/2013 **Sponsor**
☐Grand River Green up 4/26/2014
☐Rogue River Expedition 6/21/2014
☒Michigan Green Infrastructure Conference 5/8/2014 **Planning committee, presenter, 2 attendees**
☒John Ball Park Party for the Planet 5/3/2014 **Display**
☒MWEA Watershed Summit 3/26/2014 **Presented/attended.**
☒MWEA Watershed Seminar 12/5/2014 **2 attendees**
☒11th Annual Grand River Spring Forum 5/2/2014 **Planning, 2 attendees.**
☒Green Roofs for Healthy Cities Symposium 3/27/2014 **Presented/attended.**
☐Other: _____ Date: __/__/____ Number of Attendees: __

Describe any materials distributed, number of attendees, messages distributed : _____

23. If applicable, please describe any other stormwater public education activities your community implemented beyond the requirements described above. (Submit any relevant documentation.) __9/18 Adopt a Basin brochures distributed at Art Prize, 11/13 – SESC inspector was at the Tech Center and 7-8 teens came to see what he was doing. Inspector explained the importance of keeping pollutants, even soil, from the Stormwater system. 11/14 – Plainfield sign unveiling, with explanation of filtering and reducing runoff. Fall 2013 MWEA Matters, pg 31, Basin Buddy Article. _Plant tours were conducted that discuss stormwater and native vegetation, including showing our one of the rain gardens at the plant. Approximately 1745 people from 8 years old to adult attended tours this reporting year._____

Permittee: City of Grand Rapids

PART 4 – IDEP

Regional IDEP Activities

During the previous reporting period, the DIP Committee worked with MDEQ on IDEP revisions. The Illicit Discharge Elimination Plan (IDEP) for the Lower Grand River Watershed was approved in July of 2013 as meeting requirements of the General Permit Application for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4). The IDEP is intended to prohibit and effectively eliminate illicit discharges to the MS4.

The IDEP is being implemented under a cooperative program administered by the Grand Valley Metropolitan Council (GVMC) and involving the county agencies and municipal units participating in the Watershed Approach. The approved IDEP utilizes an alternative approach which includes the sampling of all storm sewer outfalls to Waters of the State within the urbanized area for the following parameters: Surfactants, temperature, ammonia and pH. Cooperative agreements were signed by participating communities to ensure that any illicit discharges detected would be traced upstream to their point of origin within the approved timeline whether or not they crossed jurisdictional boundaries.

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

Permittee: City of Grand Rapids

Table 5 - IDEP Dry Weather Screening Analysis:											
Location:	Outfalls Expected	Outfalls Surveyed	Total Couldn't Locate	Priority Level:				Outfalls With Flow	High Ammonia Levels	Very High/Low pH Levels	Total New Outfalls
				Immediate	High	Low	None				
Cascade	7	7	2	0	0	3	4	1	0	0	0
East Grand Rapids	64	64	4	2	0	10	52	4	1	0	0
Plainfield	4	4	3	0	0	3	1	0	0	0	0
Rockford	53	54	3	0	0	8	49	15	0	0	4
Sparta	29	26	2	0	0	7	19	3	0	0	0
Walker	139	140	5	0	1	25	113	22	1	0	6
Kentwood	383	383	0	0	0	26	333	108	0	1	0
Ferrysburg, City of	28	28	0	0	2	2	26	8	0	2	0
Forest Hills Public Schools	10	10	0	0	0	0	10	0	0	0	0
Georgetown Charter Township	2	2	0	0	0	0	2	0	0	0	0
Grand Haven, City of	20	20	0	0	2	10	8	8	0	6	0
Grand Rapids, City of	364	364	0	0	3	4	355	97	2	3	0
Grand Rapids Charter Township	1	1	0	0	0	0	1	0	0	0	0
Grandville, City of	87	40	10	0	0	11	25	1	0	0	0
Hudsonville, City of	62	50	12	0	0	12	50	16	0	0	0
Kent County Drain Commissioner	522	519	3	1	0	113	410	123	3	0	5
Kent County Road Commission	373	333	40	0	2	89	282	10	4	0	2
Spring Lake, Village of	16	16	0	0	0	1	15	2	1	1	0
Wyoming	159	148	11	0	0	5	143	27			0
Totals:	1940	2209	95	3	10	329	1898	445	12	13	17
			5%	0.14%	0.45%	15%	86%	20%	1%	1%	

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

Dry weather screening of the City's 364 outfalls that discharge to waters of the State was performed from May to September of 2013. Screening results are presented on Table 2. If flow was present, the waters were tested for temperature, pH, surfactants (visual), and ammonia. All of the samples fell within the acceptable range for temperature (44 – 75 ^{o}F).

pH

50 samples were noted to have a pH of less than 6. The acceptable range of pH is 6 – 9.5. All other samples were within the acceptable range. With the exception of G11 (Outfall to the Grand River at Lyon), none of the samples had any other indication of impact. As such, ten of the points that had a pH of 4 or 5 according to the test strips were resampled on October 9, 2013, with a probe to determine if the test strips used during sampling were faulty. The resampling indicated that all ten of the sites were within the acceptable range of pH. In addition, deionized water was sampled with the strips. This had a pH of less than 6, according to the strips. As such, it is assumed that the pH of the other 40 samples would fall within the acceptable range.

Surfactants

12 of the screened IDEP points had low amounts of surfactant. Given that the surfactant test was visual and that there were no other indicators of potential pollutants (ammonia on all of these was less than 1 ppm), the points were not deemed to be resample points.

CS30 (Fulton at Holmdene) and G11 were noted to have high surfactants. The discharge area for CS30 had a large amount of organic decay and did not show any other signs of pollutants. In addition, the sampling point is after the City's discharge combines with an open drain, also heavy with organic decay. As such, it was not considered a resampling point. Further information pertaining to G11 is presented below.

Ammonia

Three samples had ammonia readings of 1 ppm. Given that 0-1 ppm is acceptable and no other pollutants were present, they were not considered resampling points.

One sample (G262) was noted to have a medium ammonia concentration (3 ppm). This sample was actually an MDOT discharge point, though, and was referred to them.

Two samples G11 and G-24 (555 Monroe Ave NW) had ammonia concentration over 3 (considered high). G11 will be discussed in detail below. Further investigation of G24 indicated that the sampling occurred from a line that had no flow, only standing water. Given the close proximity to the fish cleaning station, it is believed that fish waste may have been washed into the basin form the lot. Staff reviewed construction information and field verified that there are no connections to the storm line that discharges to G24, other than the two catch basins in the parking lot.

G11 - Louis at the Grand River (JW Marriott) – As the samplers were sampling other points on the river, they noticed that the discharge from an outfall that was not on their sampling list was cloudy. They had been trained to sample suspicious discharges, so they collected a sample. As noted above, the sample had high levels of surfactant and ammonia. Given that most of the pipes that lead to the outfall in this area are City-owned, the discharge was reported to the Kent County Drain Commissioner's

Office (KCDC) and the MDEQ, but the City has taken the lead in investigation. Subsequent sampling has been performed. Laboratory results are attached. In addition, a sample was collected for detergents and had a concentration of 1.5 ppm. Given the concentrations of test parameters, it appears that there is a low concentration of wash water going to the outfall. We will continue to sample upstream points for detergents to see if a source area can be determined. This outfall has had the cloudy discharge noted in the past and sampling results have not detected any pollutants. Given the sporadic nature of the cloudy discharge appearing, it is difficult to determine the times to sample that will show us where the discharge is coming from

3993 Breton Rd SE – As initially reported in the previous year's report, our samplers came across a discharge to a catch basin en route to a sampling point. The water appeared to be flowing out of the side of the hill at 3993 Breton SE. The water was sampled and had a high ammonia concentration and a strong odor. A file review by City staff indicated that the site had not connected to sanitary sewer, although there are two sanitary sewer laterals at the property. As such, the Kent County Health Department (KCHD) was contacted. The KCHD tested the discharge and that it had E.coli that was "too high to count." Dye testing was performed on August 1, 2013. The KCHD then mandated that the site be connected to sanitary sewer by November 15, 2013. On November 21, 2013, it was posted at the site that the water would be disconnected. The water was shut off at the site on December 3, 2013. The site went through foreclosure proceedings during this time and was vacated. The water will not be turned on until the site has been connected to sanitary sewer.

Permittee: City of Grand Rapids

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.

352 Morris SE - We received a call at 11:23 on August 2, 2013, indicating that someone was draining oil to his driveway and that it was running into the road and into the catch basin. One of our technicians, Millard Whitfield, went to the site. He said the water in the sump just had a light sheen on it and that he cleaned it out. The homeowner had a trailer with drums on the property. Millard informed the homeowner, Mr. Willie Tyler, that he had to get oil dry or something to soak it up. Mr. Tyler left to get something to soak it up. Millard called me at 12:15 pm to let me know.

I arrived onsite at ~12:45 pm. Photos are attached. Seeing the pool of oil in the yard, I contacted the MDEQ. I relayed the information to David O'Donnell who was going to send someone out.

Mr. Tyler returned while I was on the phone. He had bought back soil to soak up the spill. I told him that he needed to soak up what was on the pavement and then sweep up the soil before it rained.

I asked him what happened. He told me that he had received the drums from McGraw construction who dug them up at the former gas station site on Henry and Wealthy. When he got home, he opened them up to drain the oil. He did not realize how much was in there. I informed him that he should never drain any oil on the ground. He told me that he had learned his lesson. I also told him that he should never take a drum if he does not know exactly what is in there, as there could be some very hazardous materials in there. I recommended that he buy a drum before taking one if he did not know exactly what was in there. He informed me that the only took the drums for scrap.

I informed him that I was supposed to issue him a ticket for over $1,000 just for letting the oil enter the right of way. I told him that at the very least, he will be billed for our time to clean out the catch basin.

I informed him that I had called the MDEQ (David O'Donnell) and that he would have to dig the oil out and not just cover it up. He stated that he may have to get a small bob cat. I also noted that he was going to have to take the soil to a landfill and that they may want him to sample it. He may want to contact an environmental cleanup company.

When I left the site, he was spreading soil on the pavement where the oil was.

Given the minimal amount that reached the catch basin and the cleanup that will be required for the rest of his property, I am inclined not to issue a civil infraction.

2528 28th St SE - 10/1/2013 at 2:50 pm – email form Mike Worm of the MDEQ of a PEAS report. Caller reported that a vehicle from the business next door dumped material down a storm drain from their yellow jeep with black flares. Caller believed there was possibly anti-freeze in the dumping since it was coming from the front of the vehicle. The jeep stopped over the storm drain climbed under the vehicle and released material to the drain. Kathie Kuzawa arrived at the site at approximately 2:15 pm. A vactor truck with Collection System Asset Technician (CSAT) was already on site investigating the spill. Kathie spoke to complainant (suspected responsible party) and vactor recovered all contaminants.

The suspected responsible party (Ryan Morse) described incident. He noted that a car in disrepair came into the sales dealership (Boondox). Mr. Morse noted that he does not repair vehicles on site.

Mr. Morse agreed to be responsible for costs. Given that there was no proof that Mr. Morse was the responsible party, further action was not taken.

126 Grand Ave NE - On October 2, 2013, sanitary discharge was noted to be entering a catch basin via a lateral. On October 2, 2013, elevations were collected and it was determined that a sanitary lateral could be installed at this site without conflicts from other underground utilities. Due to staffing issues (medical leave, vacancies, retirement), the work was not performed. On December 13, it was discovered that the repairs had not been made and that the proper MDEQ notification had not been made. Kathie initially left a message for Chris Veldkamp, upon her discovery of the situation, as Chris was out. Kathie left a message informing Chris that she would follow-up upon her return.

The repair was made on December 20, 2013.

50 Ottawa Ave NW (on Louis, SE corner of Louis & Ottawa) - JK Masonry was washing brick dust from cleaning into the catch basin. Our Parking Services Dept. called at 1:37 pm on October 24, 2013. I was onsite at approximately 2 pm. Informed them that they could not wash water, soil or the brick dust into the storm system. They stopped immediately and began cleaning up the gutter. I informed them that it could be a civil infraction for $1200, but at this time we will just charge them for our time to have the basin cleaned. This was cleaned out that day.

216 Boltwood NE - The Building Department received a citizen complaint on October 23, 2013. It was relayed to me on October 24, 2013. 216 Boltwood was indicated to be dumping cat litter into the street. I went to the site at 2:30 on 10/24 and saw the cat litter on the grate. Sewer Maintenance cleaned the catch basin today and found it approximately 1/3 full of light debris.

I called Marilyn Chapman (homeowner) at 3:35 pm yesterday. Ms. Chapman worked for the city for 25 years and was appalled that anyone would accuse her of doing anything illegal, as that is illegal. Ms. Chapman has not seen anyone dumping into the street or catch basin.

Door hangers were distributed to residents on Boltwood from Monroe to Lafayette. When residents were home, it was explained to them that the catch basins go directly to the river and it is illegal to put anything down them.

1537 Cole Ave NE - During a February 26, 2014, inspection by one of our contractors, of a residential basement for our footing drain disconnect program (from sanitary), it was discovered that when the home had sewage backups, they let the water flow into the sump and then be pumped into the street (where it would inevitably enter the storm drain). A backwater valve was installed at the house and the sump was filled with concrete. Work was complete by April 30, 2014.

454 Crosby NW - During a sanitary sewer lateral lining on June 12, 2013, our plumbing inspector noted that the sanitary lateral is discharging to the stormwater system. Given the extensive rerouting that needed to be done, separation could not be performed immediately. A new lateral, over 100 feet long, was installed in August.

1627 Godwin Ave NE - On June 18, 2014, we were called to investigate flooding caused by a silt sack in the vicinity of Madison Ave and Crofton St SE. The following depicts release discovery and clean up.

2:40 pm Pat Snyder responded to a flooding call at the catch basin on the south side of Crofton St,

just west of Madison Ave SE and discovered a sheen.

He tracked it east to the Godwin Alley and then south to 1627 Godwin Ave SE. Pat informed the owner who claimed It was diesel fuel. Pat informed him that liquids cannot be leaving his site and entering our storm sewer system. The owner stated that he would get an oil-dry type material to absorb it.

3:10 pm Carrie Rivette arrived onsite with sewer maintenance. We found two areas of ponded water in the alley and the catch basin to be cleaned out. Sewer maintenance called a vactor truck to pump the impacted water.

The catch basin lateral flows to the Kent County Drain Commissioner's (KCDC's) Silver Creek Drain and almost immediately enters Southfield Pond.

3:40 pm Angie Latvaitis of the KCDC's office was notified of the release and told of our plan of action. She confirmed that copying her on our report to the MDEQ was acceptable.

A cursory inspection of Southfield Pond revealed that there was no standing water, so further investigation was not performed.

3:48 pm Amanda StAmour of the MDEQ was contacted to notify her of the release and asked to contact us if she would like to see further investigation. She was informed that a full report would be sent in on June 19, 2014.

4:00 pm A vactor truck arrived onsite and pumped the standing water and catch basin.

Ryan grant of the MDEQ was contacted to determine if a NPDES permit was necessary at the site. According to Mr. grant, neither of the SIC codes for the site require them to have an NPDES permit.

The owner was contacted and informed that no fluids from their operations can leave their site and that they will be billed for cleanup. They were also warned that future incidents will result in a civil infraction with a fee starting at over $1,000.

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.

As noted above, we will continue to monitor G11 (Louis St Outfall) and collect samples for detergents from where pipes branch off the main lines when the cloudy discharge is present.

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

Actions taken are provided above.

Permittee: City of Grand Rapids

Please provide:

- An estimated quantification of the number of discharges eliminated, and
- An estimated quantification of the volume of illicit flow eliminated (*For large spills or, where the amount discharged is possible to estimate)*.

Nine illicit discharges were eliminated. Of the nine, only 454 Crosby and 3993 Breton were cases of more continuous discharge and not an individual spill. It is estimated that approximately 200 gallons per day was eliminated from 3993 Breton and 400 gallons per day was eliminated from 454 Crosby.

Identify any specific coordination with the health department in response to illicit discharge elimination for failed or failing septic fields.

Details regarding 3993 Breton Rd Se are presented above. No other failing septic systems were identified during this reporting period.

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

The City has completed its fifth cycle of dry weather monitoring. All illicit connections that could be identified in this manner have been eliminated. Dry weather screening should be discontinued. The periodic monitoring of the Grand River and tributaries has proven effective in identifying illicit discharges and should be continued.

For IDEPs identified outside of dry weather screening, our methods seem to be working. We had two years where there were difficulties with the circus and their discharge of waste and animal wash area. For the past two years, the venue has contacted us prior to the circus arriving to have us plug off our system during their say. A private hauler pumps waste for the circus and, after we leave, we pump and clean our system and remove the plugs.

Permittee: City of Grand Rapids

PART 5 - New Point Source Discharges of Stormwater

Do you own or operate any NEW or previously unidentified stormwater discharges? ☐Yes ☒No If "yes," please indicate which discharge points are new on your outfall map or list.
Is your stormwater discharge point map attached or provided electronically? ☐ Map is attached ☐ Map is provided electronically ☒ Other. Please explain in comments section.
Is your stormwater discharge point list attached or provided electronically? ☐ List is attached ☐ List is provided electronically ☒ Other. Please explain in comments section.
Comments: Map and list were submitted to MDEQ as Appendix 2 in Illicit Discharge Elimination Plan revision, July 30, 2013.

Permittee: City of Grand Rapids

PART 6 - Nested Drainage System Agreements

Table 4 - LGRW Communities with Nested Drainage System Agreements

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

Please list all nested jurisdictions with whom you have a 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: The City of Grand rapids does not have any nested jurisdictions.

Permittee: City of Grand Rapids

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**:
• The Mayor's 10th annual Grand River Clean-up - September 14, 2013, over 800 participants. The event was held in conjunction with the cities of Walker, Wyoming and Grandville and collected over 6 tons of debris from the river banks. City employees actively participated in this event.
Please list any other actions your community has conducted to reduce stormwater pollution
• The City continues to provide a rain garden plant nursery for WMEAC. • Grand Rapids participates in LGROW, GLSLCI, West Michigan Take Back the Meds and West Michigan Soil Erosion Control Network. • The City is in the process of working on a Tree Ordinance.

Permittee: City of Grand Rapids

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:

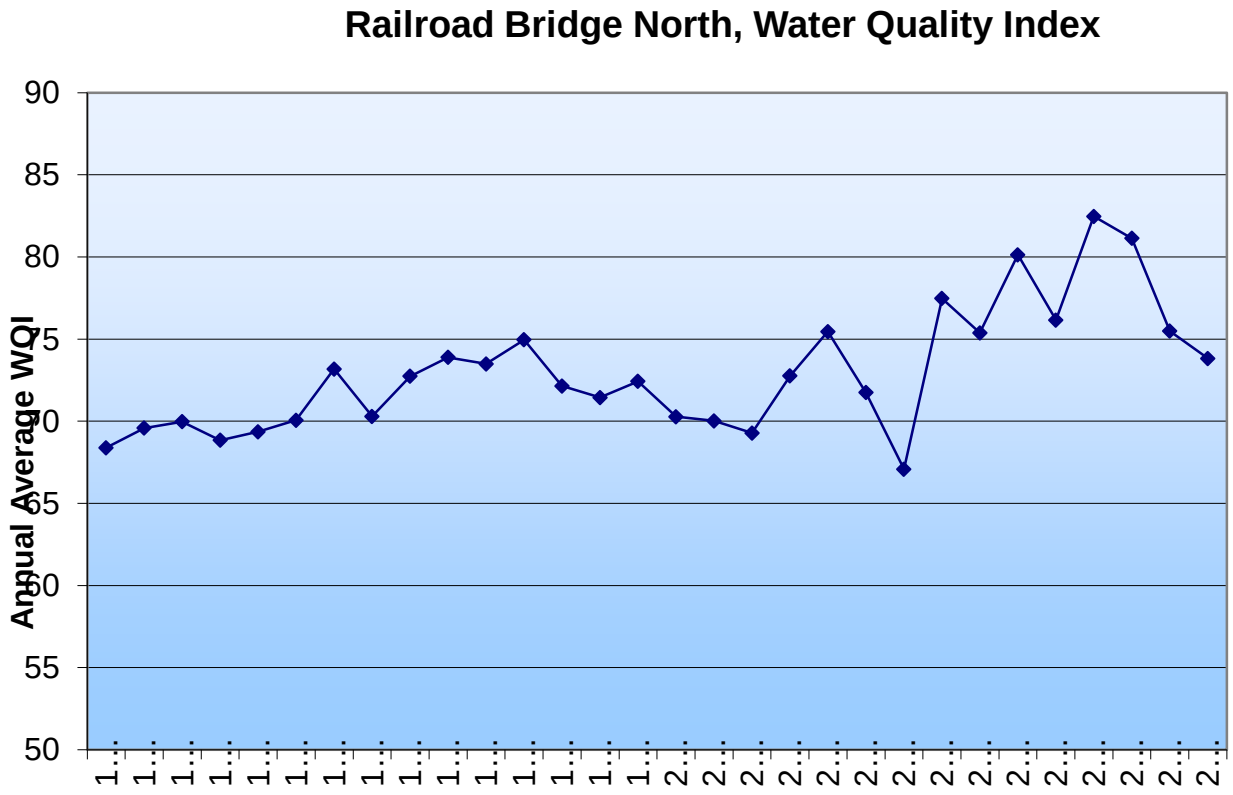
Original SWPPI Section / Subsection	Revision

Permittee: City of Grand Rapids

PART 9 – 2014 Stormwater Special Reporting Requirements

a) Environmental Impacts [40 CFR 122.42(c)(7)]

a. A Grand River Water Quality Index (WQI) of 71-90 indicates good water quality with high diversity of aquatic life and very few limits for recreational use. The WQI graph shows that the Grand River water quality continues to be good downstream of Grand Rapids. Extreme rain events in 2013 and 2014 and sampling within the first 48 hours of a rain event are likely why the WQI has decreased in 2013 and 2014. Grand Rapids has been monitoring the Grand River for forty years and the data is made available to those which request it. This summer, sampling was performed on a monthly basis for additional data.



Permittee: City of Grand Rapids

RIVER SURVEY REPORT

DATE: 12/11/2013

CITY OF GRAND RAPIDS EPSD

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201305127 Northland Drive Bridge (250120)	11:12	1.0			<2.0	1.2	32	24	42	636	0.009	<0.20	0.007	1.0
201305128 Wealthy Street Bridge (250090)	12:48	2.7	15.9	8.30	<2.0	3.0	25	23	48	624	0.014	<0.20	0.010	1.0
201305129 Railroad Bridge South (250070)	15:28	-0.2	16.0	8.31	<2.0	2.4	90		62	317	0.015	<0.20	0.009	0.8
201305130 Railroad Bridge North (250071)	15:28	-0.2	15.8	8.41	<2.0	3.0	67	70	60	567	0.026	<0.20	0.009	1.2
201305131 M-11, Wilson Avenue (250062)	14:56	2.1	15.2	8.32	<2.0	2.2	35	34	58	679	0.021	<0.20	0.010	1.0
201305132 Eastmanville (250040)	14:17	1.6	14.9	8.26	<2.0	1.4	50	48	65	706	0.028	<0.20	0.018	1.2
Streams														
201305133 Rogue River at West River Drive	10:30	1.9			<2.0	1.8	45		39	612	<0.009	<0.20	0.004	1.1
201305134 Mill Creek at West River Drive	9:53	2.0	14.4	8.45	<2.0	1.4	9		56	732	0.009	<0.20	0.010	1.1
201305135 Indian Mill Creek at Turner Aven	9:40	2.1	12.3	7.98	<2.0	4.6	440		103	922	0.012	<0.20	0.003	1.1
201305136 Silver Creek at Croften/Roy	12:38	2.3	11.5	7.81	<2.0	0.6	73		622	2680	0.019	<0.20	0.009	1.2
201305137 Plaster 1 at Burton	12:23	2.3	14.3	7.81	<2.0	2.0	2700		198	1060	0.041	<0.20	0.005	0.5
201305138 Plaster 2 at Market	13:03	2.7	14.6	8.30	<2.0	2.2	145		187	1150	0.030	0.20	0.005	0.6
201305139 Buck Creek at Chicago Drive	13:30	1.6	15.1	8.22	<2.0	3.2	45		135	1010	<0.009	<0.20	0.014	0.4
201305141 Coldbrook Storm Drain	9:30	3.2	12.1	8.04	<2.0	4.2	240		269	1220	0.041	0.26	0.006	<0.1

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201305127 Northland Drive Bridge (250120)	<5	3	180	<0.2	<5	<0.5	<5	280	
201305128 Wealthy Street Bridge (250090)	<5	3	230	<0.2	<5	<0.5	<5	288	82.0
201305129 Railroad Bridge South (250070)	<5	3	240	<0.2	<5	<0.5	<5	324	79.1
201305130 Railroad Bridge North (250071)	<5	3	230	<0.2	<5	<0.5	<5	299	76.9
201305131 M-11, Wilson Avenue (250062)	<5	3	190	<0.2	<5	<0.5	<5	274	81.1
201305132 Eastmanville (250040)	<5	3	210	<0.2	<5	<0.5	<5	313	79.2
Streams									
201305133 Rogue River at West River Drive	<5	3	140	<0.2	<5	<0.5	<5	281	
201305134 Mill Creek at West River Drive	<5	3	150	<0.2	<5	<0.5	<5	307	84.2
201305135 Indian Mill Creek at Turner Aven	<5	4	360	<0.2	<5	<0.5	8	359	72.6
201305136 Silver Creek at Croften/Roy	7	5	150	<0.2	6	<0.5	12	380	70.6
201305137 Plaster 1 at Burton	<5	5	320	<0.2	<5	1.6	6	301	66.6
201305138 Plaster 2 at Market	<5	6	370	<0.2	<5	<0.5	10	382	76.1
201305139 Buck Creek at Chicago Drive	<5	4	410	<0.2	<5	<0.5	<5	385	81.8
201305141 Coldbrook Storm Drain	<5	5	260	<0.2	<5	<0.5	7	253	72.8

Miscellaneous Information and Test Descriptions:

Weather conditions: Cold.

Air Temperature: -8 ºC

Comments: Field meter issues; no DO or pH at Northland Dr. Bridge or Rogue River . Deer Creek frozen over.

River Flow: 2040 cfs

Field Technicians: Paul Kuklewski / Jim Soper

Time samples (hh:mm)
Sample temperature (ºC)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Qulatity Index (percent)

Printed: 1/10/2014 8:08:30 AM

Permittee: City of Grand Rapids

RIVER SURVEY REPORT

DATE: 12/11/2013

CITY OF GRAND RAPIDS EPSD

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201305127 Northland Drive Bridge (250120)	11:12	1.0			<2.0	1.2	32	24	42	636	0.009	<0.20	0.007	1.0
201305128 Wealthy Street Bridge (250090)	12:48	2.7	15.9	8.30	<2.0	3.0	25	23	48	624	0.014	<0.20	0.010	1.0
201305129 Railroad Bridge South (250070)	15:28	-0.2	16.0	8.31	<2.0	2.4	90		62	317	0.015	<0.20	0.009	0.8
201305130 Railroad Bridge North (250071)	15:28	-0.2	15.8	8.41	<2.0	3.0	67	70	60	567	0.026	<0.20	0.009	1.2
201305131 M-11, Wilson Avenue (250062)	14:56	2.1	15.2	8.32	<2.0	2.2	35	34	58	679	0.021	<0.20	0.010	1.0
201305132 Eastmanville (250040)	14:17	1.6	14.9	8.26	<2.0	1.4	50	48	65	706	0.028	<0.20	0.018	1.2
Streams														
201305133 Rogue River at West River Drive	10:30	1.9			<2.0	1.8	45		39	612	<0.009	<0.20	0.004	1.1
201305134 Mill Creek at West River Drive	9:53	2.0	14.4	8.45	<2.0	1.4	9		56	732	0.009	<0.20	0.010	1.1
201305135 Indian Mill Creek at Turner Aven	9:40	2.1	12.3	7.98	<2.0	4.6	440		103	922	0.012	<0.20	0.003	1.1
201305136 Silver Creek at Croften/Roy	12:38	2.3	11.5	7.81	<2.0	0.6	73		622	2680	0.019	<0.20	0.009	1.2
201305137 Plaster 1 at Burton	12:23	2.3	14.3	7.81	<2.0	2.0	2700		198	1060	0.041	<0.20	0.005	0.5
201305138 Plaster 2 at Market	13:03	2.7	14.6	8.30	<2.0	2.2	145		187	1150	0.030	0.20	0.005	0.6
201305139 Buck Creek at Chicago Drive	13:30	1.6	15.1	8.22	<2.0	3.2	45		135	1010	<0.009	<0.20	0.014	0.4
201305141 Coldbrook Storm Drain	9:30	3.2	12.1	8.04	<2.0	4.2	240		269	1220	0.041	0.26	0.006	<0.1

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201305127 Northland Drive Bridge (250120)	<5	3	180	<0.2	<5	<0.5	<5	280	
201305128 Wealthy Street Bridge (250090)	<5	3	230	<0.2	<5	<0.5	<5	288	82.0
201305129 Railroad Bridge South (250070)	<5	3	240	<0.2	<5	<0.5	<5	324	79.1
201305130 Railroad Bridge North (250071)	<5	3	230	<0.2	<5	<0.5	<5	299	76.9
201305131 M-11, Wilson Avenue (250062)	<5	3	190	<0.2	<5	<0.5	<5	274	81.1
201305132 Eastmanville (250040)	<5	3	210	<0.2	<5	<0.5	<5	313	79.2
Streams									
201305133 Rogue River at West River Drive	<5	3	140	<0.2	<5	<0.5	<5	281	
201305134 Mill Creek at West River Drive	<5	3	150	<0.2	<5	<0.5	<5	307	84.2
201305135 Indian Mill Creek at Turner Aven	<5	4	360	<0.2	<5	<0.5	8	359	72.6
201305136 Silver Creek at Croften/Roy	7	5	150	<0.2	6	<0.5	12	380	70.6
201305137 Plaster 1 at Burton	<5	5	320	<0.2	<5	1.6	6	301	66.6
201305138 Plaster 2 at Market	<5	6	370	<0.2	<5	<0.5	10	382	76.1
201305139 Buck Creek at Chicago Drive	<5	4	410	<0.2	<5	<0.5	<5	385	81.8
201305141 Coldbrook Storm Drain	<5	5	260	<0.2	<5	<0.5	7	253	72.8

Miscellaneous Information and Test Descriptions:

Weather conditions: Cold.

Air Temperature: -8 ºC

Comments: Field meter issues; no DO or pH at Northland Dr. Bridge or Rogue River . Deer Creek frozen over.

River Flow: 2040 cfs

Field Technicians: Paul Kuklewski / Jim Soper

Time samples (hh:mm)
Sample temperature (ºC)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Quality Index (percent)

Printed: 1/10/2014 8:08:30 AM

Permittee: City of Grand Rapids

RIVER SURVEY REPORT

DATE: 01/15/2014

CITY OF GRAND RAPIDS EPSD

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201400225 Northland Drive Bridge (250120)	8:50	0.0	14.6	8.06	<2.0	3.8	70	99	49	831	0.034	0.17	0.023	1.7
201400226 Wealthy Street Bridge (250090)	10:00	0.1	14.8	8.75	<2.0	8.2	110	127	58	719	0.052	0.18	0.008	1.7
201400227 Railroad Bridge South (250070)	13:15	0.1	13.2	7.99	<2.0	6.4	150		74	668	0.049	0.18	0.018	1.4
201400228 Railroad Bridge North (250071)	13:05	0.1	13.5	8.11	<2.0	6.6	100	84	59	698	0.032	0.20	0.015	1.6
201400229 M-11, Wilson Avenue (250062)	10:55	0.3	14.8	7.26	<2.0	5.2	137	56	66	718	0.050	0.19	0.014	1.7
201400230 Eastmanville (250040)	12:20	0.4	14.5	8.23	<2.0	5.4	145	77	71	734	0.052	0.23	0.020	1.5
Streams														
201400231 Rogue River at West River Drive	8:20	0.1	15.2	8.67	<2.0	7.0	91		35	531	0.027	0.14	0.006	1.2
201400232 Mill Creek at West River Drive	7:50	0.5	13.5	8.29	<2.0	6.8	127		38	584	0.045	0.13	0.013	1.8
201400233 Indian Mill Creek at Turner Aven	7:40	1.6	12.6	8.17	<2.0	21.6	100		148	970	0.049	0.14	0.010	1.0
201400234 Silver Creek at Croften/Roy	9:45	7.2	10.5	8.10	<2.0	1.6	155		1360	5060	<0.009	0.16	0.010	1.3
201400235 Plaster 1 at Burton	9:30	0.2	14.4	8.24	2.1	23.2	680		207	1060	0.067	0.18	0.011	0.5
201400236 Plaster 2 at Market	10:20	0.2	14.6	7.93	2.3	14.6	820		221	1120	0.080	0.20	0.013	0.5
201400237 Buck Creek at Chicago Drive	11:15	1.5	12.9	7.91	<2.0	7.0	182		151	1070	0.034	0.16	0.011	0.8
201400239 Coldbrook Storm Drain	7:30	2.7	12.7	9.52	<2.0	2.2	210		314	1400	0.047	0.32	0.006	<0.1

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201400225 Northland Drive Bridge (250120)	<5	12	320	<0.2	<5	<0.5	19	285	77.2
201400226 Wealthy Street Bridge (250090)	<5	4	390	<0.2	<5	<0.5	<5	274	72.8
201400227 Railroad Bridge South (250070)	<5	4	370	<0.2	<5	<0.5	<5	274	74.9
201400228 Railroad Bridge North (250071)	<5	4	360	<0.2	<5	<0.5	9	270	75.4
201400229 M-11, Wilson Avenue (250062)	<5	4	390	<0.2	<5	<0.5	13	286	76.3
201400230 Eastmanville (250040)	<5	4	320	<0.2	<5	<0.5	9	263	74.0
Streams									
201400231 Rogue River at West River Drive	<5	3	320	<0.2	<5	<0.5	<5	232	76.0
201400232 Mill Creek at West River Drive	<5	4	370	<0.2	<5	<0.5	<5	229	75.2
201400233 Indian Mill Creek at Turner Aven	<5	5	740	<0.2	<5	<0.5	12	270	76.5
201400234 Silver Creek at Croften/Roy	<5	4	130	<0.2	<5	<0.5	13	322	64.5
201400235 Plaster 1 at Burton	<5	7	990	<0.2	<5	<0.5	12	206	68.8
201400236 Plaster 2 at Market	<5	8	860	<0.2	<5	<0.5	12	215	68.4
201400237 Buck Creek at Chicago Drive	<5	4	570	<0.2	<5	<0.5	7	283	76.5
201400239 Coldbrook Storm Drain	<5	5	240	<0.2	<5	<0.5	7	231	62.4

Miscellaneous Information and Test Descriptions:

Weather conditions: Snow.

Air Temperature: -4 °C

Comments: Deer Creek frozen over.

River Flow: 6080 cfs

Field Technicians: Greg Reno / Kurt Anderson / Brian Fraizer

Time samples (hh:mm)
Sample temperature (°C)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Quality Index (percent)

Printed: 2/7/2014 4:17:04 PM

Permittee: City of Grand Rapids

RIVER SURVEY REPORT

DATE: 06/18/2014

CITY OF GRAND RAPIDS EPSD

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201402564 Northland Drive Bridge (250120)	8:37	23.0	8.6	8.49	2.7	10.5	97	88	40	598	0.059	0.06	0.019	0.2
201402565 Wealthy Street Bridge (250090)	9:47	22.7	8.6	8.47	3.8	23.0	>1500	2420	40	553	0.090	0.08	0.017	0.2
201402566 Railroad Bridge South (250070)	12:40	22.0	8.2	8.33	5.6	30.5	>1500		43	493	0.126	0.12	0.022	0.3
201402567 Railroad Bridge North (250071)	12:25	22.4	8.6	8.36	4.9	28.5	>1500	1100	42	525	0.108	0.11	0.022	0.3
201402568 M-11, Wilson Avenue (250062)	10:52	22.1	8.1	8.36	5.0	28.0	>1500	2500	44	525	0.129	0.12	0.020	<0.1
201402569 Eastmanville (250040)	11:35	22.7	8.6	8.45	4.1	63.5	>1500	1600	50	630	0.157	0.11	0.022	<0.1
Streams														
201402570 Rogue River at West River Drive	8:17	19.1	8.0	8.32	2.9	45.0	7000		31	511	0.135	0.12	0.019	<0.1
201402571 Mill Creek at West River Drive	7:55	17.9	8.4	8.19	7.5	137	>15000		28	393	0.285	0.16	0.027	<0.1
201402572 Indian Mill Creek at Turner Aven	7:38	19.0	7.9	8.03	>8	342	>15000		32	259	0.490	0.23	0.022	0.2
201402573 Silver Creek at Croften/Roy	9:32	19.8	8.6	7.69	7.1	50.0	>15000		11	75	0.187	0.30	0.018	<0.1
201402574 Plaster 1 at Burton	9:16	20.2	7.2	7.89	7.5	77.0	>15000		78	452	0.225	0.37	0.033	<0.1
201402575 Plaster 2 at Market	10:06	20.1	7.6	7.92	>8	61.0	>15000		48	303	0.195	0.33	0.026	<0.1
201402576 Buck Creek at Chicago Drive	11:05	20.0	6.9	7.92	7.3	89.0	>15000		60	471	0.226	0.18	0.025	<0.1
201402577 Deer Creek	11:47	19.2	6.8	7.90	>8	1110	>15000		26	430	0.581	0.44	0.090	2.6
201402578 Coldbrook Storm Drain	7:27	20.2	8.7	8.83	7.8	70.0	>15000		27	170	0.235	0.30	0.015	<0.1

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201402564 Northland Drive Bridge (250120)	<5	3	350	<0.2	<5	<0.5	11	261	76.4
201402565 Wealthy Street Bridge (250090)	<5	4	640	<0.2	<5	<0.5	9	239	65.2
201402566 Railroad Bridge South (250070)	<5	6	1100	<0.2	<5	<0.5	21	195	64.4
201402567 Railroad Bridge North (250071)	<5	5	890	<0.2	<5	<0.5	15	246	64.9
201402568 M-11, Wilson Avenue (250062)	<5	8	1400	<0.2	<5	<0.5	30	235	64.7
201402569 Eastmanville (250040)	<5	6	2160	<0.2	<5	<0.5	44	285	64.5
Streams									
201402570 Rogue River at West River Drive	<5	4	1530	<0.2	<5	<0.5	10	246	58.9
201402571 Mill Creek at West River Drive	<5	8	3690	<0.2	<5	<0.5	27	197	52.6
201402572 Indian Mill Creek at Turner Aven	15	25	9850	<0.2	12	<0.5	121	167	49.5
201402573 Silver Creek at Croften/Roy	8	26	2170	<0.2	<5	<0.5	98	46	56.1
201402574 Plaster 1 at Burton	6	12	2720	<0.2	<5	<0.5	50	137	53.2
201402575 Plaster 2 at Market	7	18	2370	<0.2	<5	<0.5	64	100	54.1
201402576 Buck Creek at Chicago Drive	5	11	4500	<0.2	<5	<0.5	46	181	53.0
201402577 Deer Creek	67	35	37500	<0.2	37	<0.5	127	262	41.5
201402578 Coldbrook Storm Drain	7	14	2480	<0.2	<5	<0.5	64	60	52.0

Miscellaneous Information and Test Descriptions:

Weather conditions: Warm, rain--heavy at times.

Air Temperature: 21 °C

Comments:

River Flow: 4520 cfs

Field Technicians: Kurt Anderson / Harold Boucher / Casey Wagner

Time samples (hh:mm)
Sample temperature (°C)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Quiality Index (percent)

Printed: 7/9/2014 3:23:08 PM

Permittee: City of Grand Rapids

RIVER SURVEY REPORT **DATE: 07/16/2014** **CITY OF GRAND RAPIDS EPSD**

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201403023 Northland Drive Bridge (250120)	8:25	20.7	6.8	8.05	<2.0	12.2	123	125	21	489	0.014	0.08	0.019	0.6
201403024 Wealthy Street Bridge (250090)	9:20	20.8	7.7	8.13	<2.0	16.8	143	101	27	494	0.020	0.09	0.016	0.6
201403025 Railroad Bridge South (250070)	10:13	20.5	7.6	7.23	<2.0	15.6	190		36	524	0.079	0.08	0.017	<0.1
201403026 Railroad Bridge North (250071)	10:01	20.3	7.7	8.03	<2.0	15.6	177	142	30	508	0.055	0.09	0.012	0.2
201403027 M-11, Wilson Avenue (250062)	9:30	20.4	7.6	8.70	<2.0	16.8	170	228	32	513	0.061	0.08	0.012	0.2
201403028 Eastmanville (250040)	8:37	20.5	7.3	8.03	<2.0	17.0	143	236	37	541	0.104	0.10	0.014	0.2
Streams														
201403029 Rogue River at West River Drive	8:05	16.5	9.0	8.30	<2.0	10.6	100		31	536	0.023	0.09	0.009	0.7
201403030 Mill Creek at West River Drive	8:50	16.2	9.2	8.30	2.5	23.8	500		30	499	0.128	0.09	0.011	0.3
201403031 Indian Mill Creek at Turner Aven	7:35	15.3	8.8	8.17	<2.0	14.2	700		79	699	<0.009	0.11	0.016	0.2
201403032 Silver Creek at Crofton/Roy	7:16	16.3	9.2	8.22	<2.0	0.4	1370		210	1210	<0.009	0.09	0.012	1.0
201403033 Plaster 1 at Burton	7:10	17.5	7.8	7.94	<2.0	20.0	1200		178	1000	0.017	0.16	0.019	<0.1
201403034 Plaster 2 at Market	9:30	20.4	7.6	8.05	<2.0	12.2	600		57	605	0.054	0.11	0.023	0.9
201403035 Buck Creek at Chicago Drive	7:39	16.5	8.5	8.07	<2.0	13.8	833		135	1030	<0.009	0.11	0.014	0.3
201403036 Deer Creek	8:53	17.3	7.5	7.90	<2.0	16.6	575		26	529	0.088	0.14	0.069	1.6
201403037 Coldbrook Storm Drain	7:20	19.3	8.7	8.20	<2.0	5.0	325		160	916	0.012	0.12	<0.001	0.9

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201403023 Northland Drive Bridge (250120)	<5	2	520	<0.2	<5	<0.5	13	219	78.0
201403024 Wealthy Street Bridge (250090)	<5	2	620	<0.2	<5	<0.5	6	211	78.7
201403025 Railroad Bridge South (250070)	<5	2	500	<0.2	<5	<0.5	<5	189	79.3
201403026 Railroad Bridge North (250071)	<5	2	470	<0.2	<5	<0.5	<5	183	78.1
201403027 M-11, Wilson Avenue (250062)	<5	2	480	<0.2	<5	<0.5	<5	186	74.6
201403028 Eastmanville (250040)	<5	2	490	<0.2	<5	<0.5	<5	193	78.2
Streams									
201403029 Rogue River at West River Drive	<5	<1	360	<0.2	<5	<0.5	<5	211	78.5
201403030 Mill Creek at West River Drive	<5	2	730	<0.2	<5	<0.5	5	204	70.2
201403031 Indian Mill Creek at Turner Aven	<5	2	750	<0.2	<5	<0.5	7	240	70.8
201403032 Silver Creek at Crofton/Roy	<5	1	150	<0.2	<5	<0.5	12	288	65.9
201403033 Plaster 1 at Burton	<5	3	850	<0.2	<5	<0.5	24	236	67.8
201403034 Plaster 2 at Market	<5	2	470	<0.2	<5	<0.5	7	221	71.7
201403035 Buck Creek at Chicago Drive	<5	2	900	<0.2	<5	<0.5	11	337	70.1
201403036 Deer Creek	<5	3	930	<0.2	<5	<0.5	5	211	67.8
201403037 Coldbrook Storm Drain	<5	3	230	<0.2	<5	<0.5	6	188	71.5

Miscellaneous Information and Test Descriptions:

Weather conditions: Sunny, partly cloudy.

Air Temperature: 17 °C

Comments:

River Flow: 8060 cfs

Field Technicians: Paul Kuklewski / Kayla J / Greg Reno / MP

Time samples (hh:mm)
Sample temperature (°C)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Quality Index (percent)

Printed: 8/6/2014 3:19:03 PM

Permittee: City of Grand Rapids

RIVER SURVEY REPORT

DATE: 04/16/2014

CITY OF GRAND RAPIDS EPSD

LOCATIONS	TIME	TEMP	DO	pH	BOD	TSS	FC	EC	CHLORIDE	CON	TP	NH3-N	NO2-N	NO3-N
Grand River														
201401503 Northland Drive Bridge (250120)	8:40	8.2	10.5	8.23	<2.0	10.2	42	86	33	501	0.063	0.43	0.011	<0.1
201401504 Wealthy Street Bridge (250090)	9:50	8.8	10.6	8.57	2.5	15.8	210	90	34	516	0.076	<0.40	0.012	<0.1
201401505 Railroad Bridge South (250070)	13:14	8.9	11.0	7.90	2.5	15.4	150		44	537	0.071	0.24	0.013	<0.1
201401506 Railroad Bridge North (250071)	13:21	8.6	10.9	8.54	2.1	14.0	110	99	38	507	0.069	0.17	0.009	<0.1
201401507 M-11, Wilson Avenue (250062)	13:00	8.7	10.8	8.05	2.4	14.2	90	79	36	494	0.070	0.17	0.010	<0.1
201401508 Eastmanville (250040)	12:22	8.9	10.5	8.46	2.5	17.2	68	81	41	526	0.079	0.16	0.010	<0.1
Streams														
201401509 Rogue River at West River Drive	8:20	5.3	11.8	8.06	2.1	13.2	173		19	331	0.070	<0.40	0.012	<0.1
201401510 Mill Creek at West River Drive	7:56	4.2	12.2	8.24	<2.0	12.0	182		31	492	0.095	<0.40	0.007	0.4
201401511 Indian Mill Creek at Turner Aven	7:39	4.4	11.5	8.22	<2.0	4.4	164		92	729	0.048	<0.40	0.005	0.3
201401512 Silver Creek at Croften/Roy	9:32	8.0	11.0	8.33	<2.0	0.6	109		208	1260	0.048	<0.40	0.005	2.0
201401513 Plaster 1 at Burton	9:17	5.6	11.2	8.49	2.1	11.4	1180		208	1050	0.084	<0.40	0.007	<0.1
201401514 Plaster 2 at Market	10:08	5.9	11.2	8.55	<2.0	10.2	640		204	1070	0.078	<0.40	0.010	<0.1
201401515 Buck Creek at Chicago Drive	10:48	6.4	12.3	7.77	<2.0	3.8	109		151	1050	0.021	0.40	0.004	<0.1
201401516 Deer Creek	12:12	5.8	11.3	7.17	2.5	15.0	200		32	469	0.209	0.19	0.023	<0.1
201401517 Coldbrook Storm Drain	7:23	6.1	11.9	8.05	2.4	5.8	460		222	1070	0.043	<0.40	0.004	<0.1

LOCATIONS	Cr	Cu	Fe	Hg	Ni	Ag	Zn	Hard	WQI
Grand River									
201401503 Northland Drive Bridge (250120)	<5	3	670	<0.2	<5	<0.5	5	221	82.1
201401504 Wealthy Street Bridge (250090)	<5	3	840	<0.2	<5	<0.5	7	207	73.8
201401505 Railroad Bridge South (250070)	<5	4	800	<0.2	<5	<0.5	12	217	77.8
201401506 Railroad Bridge North (250071)	<5	3	780	<0.2	<5	<0.5	7	208	77.3
201401507 M-11, Wilson Avenue (250062)	<5	3	810	<0.2	<5	<0.5	7	197	79.4
201401508 Eastmanville (250040)	<5	4	760	<0.2	<5	<0.5	9	197	78.1
Streams									
201401509 Rogue River at West River Drive	<5	3	860	<0.2	<5	<0.5	6	140	76.7
201401510 Mill Creek at West River Drive	<5	3	470	<0.2	<5	<0.5	6	213	76.4
201401511 Indian Mill Creek at Turner Aven	<5	3	540	<0.2	<5	<0.5	7	256	76.6
201401512 Silver Creek at Croften/Roy	<5	3	170	<0.2	<5	<0.5	11	305	72.9
201401513 Plaster 1 at Burton	<5	5	880	<0.2	<5	<0.5	10	208	65.1
201401514 Plaster 2 at Market	<5	7	970	<0.2	<5	<0.5	12	248	67.5
201401515 Buck Creek at Chicago Drive	<5	3	430	<0.2	<5	<0.5	<5	312	79.0
201401516 Deer Creek	<5	7	1450	<0.2	<5	<0.5	8	197	75.8
201401517 Coldbrook Storm Drain	<5	4	280	<0.2	<5	<0.5	7	219	70.0

Miscellaneous Information and Test Descriptions:

Weather conditions: Cold, partly cloudy.

Air Temperature: 2 °C

Comments:

River Flow: 10100 cfs

Field Technicians: Brian Frazier / Jim Soper

Time samples (hh:mm)
Sample temperature (°C)
Dissolved oxygen (mg/L)
pH (pH units)
BOD-5 (mg/L)
Total suspended solids (mg/L)
Fecal coliform (#FC/100mL)
E. coli (#EC/100mL)
Chlorides (mg/L)
Conductivity (µS/cm)
Total phosphorous (mg/L)
Ammonia as nitrogen (mg/L)
Nitrites as nitrogen (mg/L)
Nitrates as nitrogen (mg/L)
Total chromium (µg/L)
Total Copper (µg/L)
Total iron (µg/L)
Total mercury (µg/L)
Total nickle (µg/L)
Total silver (µg/L)
Total zinc (µg/L)
Hardness (mg/L CaCO3)
Water Quality Index (percent)

Printed: 5/12/2014 2:32:49 PM

b. All CSO and SSO occurrences are reported to the DEQ as required in NPDES Permit #MI0026069 when they occur.
c. Illicit Discharges can be found in Part 4 of the Report.

b) Data and Results [40 CFR 122.42(c)(4)] – see above
c) BMP Changes [40 CFR 122.42(c)(2)]
   a. None.
   b. We have a Technical Reference Manual that emphasizes green infrastructure and will be implemented upon revising our City ordinance. The ordinance revision process has begun. In lieu of the upcoming permit applications, however, proposed changes will be presented in the new permit application.

d) Revised Financial Analysis [40 CFR 122.42(c)(3)]
   a. The stormwater program continues to be funded from the City General Fund. Funding levels will be increasing due to low impact development funding through the streets tax extension. Some increase of funds for asset management is also anticipated. A fiscal analysis of City of Grand Rapids is included as an attachment. The one attached is the most current from September 2013.

e) Annual Budget [40 CFR 122.42(c)(5)]

Activity	FY14 Expenditures	FY15 Budget
Stormwater Management	$369,747.78	$554,134.55
Stormwater Maintenance	$536,878.37	$780,925.60
Street Sweeping	$980,000	$982,857

Capital Improvement Plan

KCDC	$	45,000
Emergency	$	120,000
Millbank	$	35,000
Colton Dr Culvert, Eastcastle Drain Improvements, Outfall Replacement Indian Mill at Richmond, Leffingwell Culvert Replacement and Erosion	$	52,400
Eastridge Stormwater Improvements (engineering)	$	14,100
Brookshire Outfall Replacement and Erosion Repair (engineering)	$	10,605

Summary of Enforcement Actions and Inspections

Activity	2013-2014 Reporting Cycle
Stormwater Inspections	2037
Notices of Violations	110
Corrective Action Orders	11

Summary of Street Sweeping
The City has disposed of 6,545 cubic yards of waste from street sweeping this reporting year at a cost of over $87,000. This has prevented over 9800 tons of material from entering the stormwater system.

Additional Documentation

UAB Rate Review Sub-Committee
April 25, 2014

Wells/Septic Discussion with Kent County Health Dept. Representatives

Sara Simmonds and Eric Pessel were in attendance. They reported that people are required to connect if the facility is within 200 feet of water/sewer. They wouldn't issue a permit for them if they are within the 200 feet.

Dick Wendt asked if they honor local ordinances requiring hook-up if adopted by a local municipality. Ms. Simmonds noted that this gets a little bit tricky and it depends on how the ordinance is written. They do not deny the permit. They allow the permit and let the local municipality do the enforcement of their ordinance. Mr. Pessel noted that they would do everything possible to get them to comply with the local ordinance, but they can't go too far to enforce someone else's ordinance.

Wayne Jernberg noted that if public water/sewer is available, it's required that they do connect. Eric Pessel said this is true for sewer, but he hasn't seen this for water. Mr. Jernberg then pulled up that section of the Act that speaks to this. Mr. Pessel says the key word is "available." He'd have to see how they define "available." This sounds like it would still be local enforcement, however.

Sara Simmonds believes there is something that says they have to be in compliance with all other local ordinances that might help them deny a permit, based on that language. She indicated they support helping the local municipality enforcing an ordinance as they can within the law.

It was noted that the Walker and Welfield area near Millenium Park is a concern area for water wells. The wells in this area are highly susceptible to contamination. The Middlebrook/ Hillsboro area along the Thornapple River where deeper aquifer is broken and upper is contaminated with nitrates is also an area of concern.

There is an area in Cascade with small lot sizes along Cascade Road, in the Thornhills area, which are a concern for septic. It's a challenge because of being near the water it's very expensive for them to add septic here, up to $20,000 and $25,000.

Chuck Schroeder asked if they require the ongoing operation and maintenance of septics once permitted. Eric Pessel replied that they don't really have the authority to check on these once they are in. Sara Simmonds noted that their maintenance system has really become a complaint-driven system.

A map of a subdivision was distributed and Ms. Simmonds noted that this is another area that needs utility extension due again to the nearness of water. She also noted that there are some areas in Ada that are difficult areas due to flooding. Shady Lane is extremely challenging to get onsite water or sewer because of flood plain issues and the well must be above the flood plain. It's a community decision on whether we continue to do these or if we look at these more in the long-term and make them more sustainable.

In the City of Grand Rapids there was some success around Reeds Lake in getting some easements. Mike DeVries noted that these septics are actually in Grand Rapids Township. There are a number of lots that we don't have the option of getting sewer to due to the terrain. There are 10 lots, 50 feet wide, where people bought to have deeded access to the lake. Some

don't find this as valuable anymore and some have gone to foreclosure. When this happens, the Township has taken these back and plans to make this green, public property. It would cost over $1 million to bring sewer to this area. It was noted that it could be helpful to do a community sewer if the property were flat, but this area is on a hill. Ms. Simmonds indicated that she would like to have an ongoing conversation about working on these areas in Grand Rapids Township. Each municipality and township has its own unique challenges. They want to be part of the conversation and work together.

Ron Woods asked about sewer step systems that were put in several years ago. He noted that they are high maintenance for the local municipality or water/sewer authority. Sara Simmonds noted that these do require a full-time person to manage them. Eric Pessel said you see these more in lake areas. It's cheaper to treat because you are leaving the solid waste on the site and pumping the liquid. Lots of sewer authorities have done this because you don't need lift stations, it's all pressurized. Ms. Simmonds added that she thinks there are 3 of these in northern Kent County. Ron Woods said it's still a viable option for these types of situations.

Eric Pessel said some people are looking at their utility area and adding pipes ahead of development. In some areas they are running fiber, so they also run the pipes.

Eric DeLong asked about when customers are presented with a choice and they are within 200 feet of the water/sewer, what types of questions or resistance do you get from folks about connecting to the system? Eric Pessel said that they think it's going to be too expensive and that they won't be able to use as much water as they want to use because it will be metered. The Health Department educates them that the proper maintenance of a septic system is going to cost them money as well. Ms. Simmonds agreed that people look at the immediate output and not the maintenance cost of a septic. Water is a challenge. People feel it's a right because it runs below their property, and they feel they own it. They say that there will be chemicals added to their water that they don't want if they connect to the system. Eric DeLong noted that you can still have an irrigation well and be connected to municipal system as well. Ms. Simmonds noted that irrigation wells are something they really would like to move people away from using because these can really lead to contamination of the ground water.

Joellen Thompson asked if they permitted irrigation wells. Sara Simmonds said, yes, primarily for agriculture. Another reason to discourage this is because it's a huge draw on our water supply, and we need to protect our supply. There are some areas that just have no potable water now in the north area of the county. Mike DeVries noted that this is probably within Plainfield Township.

Eric DeLong noted that Wright and Tallmadge Townships are also within our service area. We might also want to talk to the Ottawa County Health Department about their policies.

Dick Wendt asked about the life span of water wells and sewers. Both are about 25-30 years. Dick Wendt asked what they see as the approximate cost for new installs. They noted that they see costs of $8-9,000 for septic and $4-6000 on average.

Eric DeLong referred the group to the 3rd page in the minutes where we were looking at ways to lower the cost of connecting to water/sewer. He asked if people are motivated by money. Sara Simmonds said that this is usually the first question when people come to talk to them. Mr. DeLong asked if they felt we would need to be equivalent to or less than the cost of water wells or septics to make connection to the system appealing. Ms. Simmonds thinks it would have to be

less than the cost because they also look at the monthly utility bill and feel that the well/septic are a one-time cost and done. Eric Pessel added that giving people more flexibility of doing things on their own property has some value to it.

It was noted that Sycamore Woods in Grand Rapids Township is a good example that would have had huge issues if they didn't put in community sewers.

Eric DeLong asked what the maintenance consist of on a well/septic if you were doing it well. Eric Pessel noted that it depends on the types of system. It could be just pumping the septic when it needs to be done—dependent on use, this is every 3-5 years. When you get to the more sophisticated systems you are talking at least annual maintenance which might be $100-$150 per year. Joellen Thompson noted that they usually also have the cost of a water softener.

Wayne Jernberg asked if there are any districts where there is frequent water quality testing. Sara Simmonds noted that there are 14 sites where they do long-term ground water monitoring. Not all are in the Grand Rapids service area. Mr. Jernberg asked if residents are required to cover the cost of any of this monitoring. It was indicated that this is paid by the state. Ms. Simmonds noted that she is doing some research on whether there are more water issues/contamination issues with wells than with a utility.

Eric DeLong thanked Mr. Pessel and Ms. Simmonds for attending and noted that the group is just seeking information to make sure we are making good choices. We will keep them informed of our progress and let them know if we have further questions.

<u>Follow up from the Last Meeting</u>
Geri Eye referred members to the minutes of the last meeting. There was a question about how the Readiness-to-Serve charge was calculated. Ms. Eye reported that the hundred cubic feet (HCF) is the rate that has been used by the City for several years. She indicated the formula for how the rate is determined annually.

The commodity charge percent for some communities is high and Dick Wendt had noted it would be interesting to know why. Geri Eye reported that we take the rate increase or decrease percentage and simply apply that percentage to the rate from the previous year. Grand Rapids is more consistent because they set their equation such that the commodity charge is approximately 60% of its revenue. This may not be clear in the rate review meetings we have with the communities that they can do the same thing. Dick Wendt noted that this is in the contract that communities can determine how much of the rate is the readiness-to-serve charge. Grand Rapids Township's charge for sewer now is 60% and water is 40% and spread throughout all of the users. Eric DeLong noted that we were looking at this and discussing if a system-wide readiness-to-serve charge would be helpful, but everyone having their own choice is probably good too. Ms. Eye noted that there is some modeling prepared that she will be sharing on this.

There seemed to be some confusion on whether we would have enough revenue if we used 10-pay plans more. Ms. Eye noted that the revenue is actually recognized when charged and the payments would follow. So this wouldn't impact the revenues.

Ms. Eye then discussed the research done on how connection fees were set originally. It seems that they were just set at $100 to start because they felt there should be a connection fee and just chose that amount. A CPI inflator was added later. Eric DeLong noted that the spike in the water connection fee was due to the expansion of the water plant. There was a lot of added debt

at that time, and we needed a way to get that back. Then we decided to match the sewer fee to the water fee to help with rate control. Dick Wendt noted that the North Kent system has depended highly on connection fees for revenue and this has hurt them.

The group quickly looked at what items are integrated and what are non-integrated costs.
Front footage – non
Connection Fee-integrated
Stub fees (lateral or water sserve fee) – non
Meter Setting – integrated
Inspections – integrated

Geri Eye then handed out a packet of information and reviewed the information. The first item is the Analysis of Commodity Charges as a Percent of Revenue Requirements which was reviewed at the last meeting.

On Page 2 she noted that the items in bold are the current numbers from the rate study. Then she looked at a 5%, 10% and 15% reduction in the readiness-to-serve charge. On Page 7 of the packet is an article from American City and County that discusses this issue. She highlighted some areas in the article. The BMP stated in the article is 60% commodity charge and 40% readiness-to-serve. She noted that it cautions about adding too much fixed cost because we already have a lot of fixed costs in the system. She doesn't recommend reducing the readiness-to-serve charge, especially to the 15% reduction. She likes the 60%/40% split. Mike DeVries noted that adding more users drives down the readiness-to-serve charge because it's spread to more people.

Mike DeVries noted that there isn't much we can do with the front footage charges because it pays back the costs of putting in the connections. Eric DeLong said we could decide collectively that we don't want to charge a fee. Dick Wendt said that you need to be careful, though, as there has to be a way to reimburse for these costs. Eric DeLong added that it's all part of the whole cost so if we don't collect it in front footage charges, we'll collect it some other way in the rates. He noted that where we have developer pay-back agreements in place, we'll have to have a way to collect those. Dick Wendt noted that the Township then couldn't make the decision to pay to extend the system if a developer doesn't want to and then collect the charges to keep rates lower.

Geri Eye noted that the front footage charge is really a small amount in total. She referred members to Page 5 which shows the amount collected for front footages from 1976 – 2013. On Page 4, she tried to look at rates with no front footage and noted that it doesn't change rates at all because the amount is so low. Eric DeLong noted that we have contractual obligations for 10-pay plans still out there. Ron Woods wondered how much of this is a reflection of the economic times and that just no one is building right now. Pam Ritsema noted that about a $300,000 - $500,000 change in revenues or expenses equal about 1% in the rates for Grand Rapids.

Geri Eye also referred to the no stub fee line on Page 4. Eliminating that fee also doesn't make a difference to the rate. She noted that it doesn't really cost $33,000 total for all of the connections. This is sort of a worst case scenario. Eric DeLong noted that maybe there are a series of costs, and we need to know what the range might be for this.

Mike DeVries noted that a connection for a new home is just seen as part of the cost of the house. Older homes then have front footage charges in order to connect. People understand that it is going to cost money to get the line to them. Geri Eye added that the front footage charge is

a “real” cost because it is actually paying for work that gets completed putting in the infrastructure. The connection fee doesn’t seem to have that method behind it.

Ms. Eye then noted on Page 4, the line where it shows what happens with the elimination of connection fees. Sewer was impacted about 1.5% and Water was about a 2% change. Mike DeVries asked if this would be a one-time adjustment, and Ms. Eye indicated that this would be true.

Ben Swayze asked if there is a way to determine how many customers you would need to add to offset these costs. Geri Eye indicated that she isn’t sure how she would do this. There would be a lot of assumptions needed to do this. He feels like the 1.5% and 2% numbers are real numbers that could make a difference for us. Ms. Eye thinks the volume of customers needed would be high. Mike DeVries asked if you couldn’t take the amount of loss and divide it by the average customer to get a very rough estimate. Eric DeLong agreed we need just an estimated, simple way to look at this just to have an idea. We also need to have a rationale for not charging them anymore and there are things we could list for that.

Ed Robinette noted that listening to the Health Department this morning leads him to believe that if cost wasn’t a factor that most would hook up. Breese Stam asked if we couldn’t do something where you set various years when people pay different amounts so you’re still collecting, but much smaller amounts. Dick Wendt noted that is a problem because it would have to be a lien on the property if you made it a 30-year type of payment. Geri Eye noted that it’s still the same amount to connect to the system even if it’s spread over time.

Eric DeLong noted that we should spend the next meeting looking at this more thoroughly. Geri Eye will look at how many customers would be needed to make up the cost of connection fees.

A map was passed out by Chuck Schroeder for Grand Rapids as a sample of new septic and wells over the last 5 years. This is just a snapshot of the area.

/nlm

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
1512	3 Mile NE	49505	1029	28th Street	Grand Rapids, MI		4/5/2013	5/10/2013	
1516	3 Mile NE	49505					4/5/2013	5/10/2013	
1520	3 Mile NE	49505					4/5/2013	5/10/2013	
1560	3 Mile NE	49505					4/5/2013	5/10/2013	
1002	4 Mile Rd NE	49525					6/3/2013	3/28/2014	
1010	4 Mile Rd NE	49525					6/3/2013	3/28/2014	
1024	4 Mile Rd NE	49525					6/3/2013	3/28/2014	
1030	4 Mile Rd NE	49525					6/3/2013	3/28/2014	
1020	4Mile Rd NE	49525					6/3/2013	3/28/2014	
3801	Breton SE	49512					8/1/2013	3/28/2014	
1135	Maryland NE	49505					1/2/2014	3/28/2014	
1041	28TH ST SE	49508					2/18/2014	3/28/2014	
823	3 MILE RD NE	49505					2/18/2014	3/28/2014	
829	3 MILE RD NE	49505					2/18/2014	3/28/2014	
1350	3 MILE RD NE	49505					2/18/2014	3/28/2014	
1406	3 MILE RD NE	49505					2/18/2014	3/28/2014	
1516	3 MILE RD NE	49505					2/18/2014	3/28/2014	
1637	3 MILE RD NE	49505					2/18/2014	3/28/2014	
1344	36TH ST SE	49508					2/18/2014	3/28/2014	
820	4 MILE RD NE	49525					2/18/2014	3/28/2014	
840	4 MILE RD NE	49525					2/18/2014	3/28/2014	
880	4 MILE RD NE	49525					2/18/2014	3/28/2014	
890	4 MILE RD NE	49525					2/18/2014	3/28/2014	
912	4 MILE RD NE	49525					2/18/2014	3/28/2014	
924	4 MILE RD NE	49525					2/18/2014	3/28/2014	
940	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1000	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1006	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1016	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1040	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1054	4 MILE RD NE	49525					2/18/2014	3/28/2014	
1830	4TH ST NW	49504					2/18/2014	3/28/2014	
1707	8TH ST NW	49504					2/18/2014	3/28/2014	
1713	8TH ST NW	49504					2/18/2014	3/28/2014	
1611	ABERDEEN ST NE	49505					2/18/2014	3/28/2014	
2160	ABERDEEN ST NE	49505					2/18/2014	3/28/2014	
2170	ABERDEEN ST NE	49505					2/18/2014	3/28/2014	
745	ALGER ST SW	49509					2/18/2014	3/28/2014	
749	ALGER ST SW	49509					2/18/2014	3/28/2014	
3586	AUBURN AVE NE	49525					2/18/2014	3/28/2014	
3161	BAKER PARK DR SE	49508					2/18/2014	3/28/2014	
3185	BAKER PARK DR SE	49508					2/18/2014	3/28/2014	
1725	BATCHAWANA ST SE	49508	10	Orchard St	Passaic, NJ	O7055	2/18/2014	3/28/2014	
1351	BEECHWOOD ST NE	49505					2/18/2014	3/28/2014	
3540	BRADFORD ST NE	49525					2/18/2014	3/28/2014	
1515	BRISTOL AVE NW	495044					2/18/2014	3/28/2014	
2221	BURTON ST SE	49506					2/18/2014	3/28/2014	

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
4440	BURTON ST SW	49534					2/18/2014	3/28/2014	
1825	CARLTON AVE NE	49505					2/18/2014	3/28/2014	
3108	CHENEY AVE NE	49505					2/18/2014	3/28/2014	
2107	CLOVER DR NW	49525					2/18/2014	3/28/2014	
2150	CLOVER DR NW	49525					2/18/2014	3/28/2014	
2151	CLOVER DR NW	49525					2/18/2014	3/28/2014	
1017	COTTAGE GROVE ST SE	49525					2/18/2014	3/28/2014	
20	COVELL AVE SW	49525					2/18/2014	3/28/2014	
28	COVELL AVE SW	49534					2/18/2014	3/28/2014	
36	COVELL AVE SW	49525	4053	Buckbridge Lane	Grand Rapids, MI	49525	2/18/2014	3/28/2014	
52	COVELL AVE SW	49503					2/18/2014	3/28/2014	
60	COVELL AVE SW	49525					2/18/2014	3/28/2014	
102	COVELL AVE SW	49508					2/18/2014	3/28/2014	
110	COVELL AVE SW	49525					2/18/2014	3/28/2014	
118	COVELL AVE SW	49525					2/18/2014	3/28/2014	
126	COVELL AVE SW	49504					2/18/2014	3/28/2014	
134	COVELL AVE SW	49503					2/18/2014	3/28/2014	
142	COVELL AVE SW	49534					2/18/2014	3/28/2014	
3285	DAWES AVE SE	49534					2/18/2014	3/28/2014	
3290	DAWES AVE SE	49504					2/18/2014	3/28/2014	
2146	DEAN LAKE AVE NE	49503					2/18/2014	3/28/2014	
2310	DUCOMA DR NW	49505					2/18/2014	3/28/2014	
2734	DURHAM AVE NE	49534					2/18/2014	3/28/2014	
3112	EASTERN AVE SE	49525					2/18/2014	3/28/2014	
3220	EASTERN AVE SE	49534					2/18/2014	3/28/2014	
1120	EKHART ST NE	49505					2/18/2014	3/28/2014	
1124	ELMDALE ST NE	49525	260	Pettis	Grand Rapids, MI	49301	2/18/2014	3/28/2014	
1168	ELMDALE ST NE	49534	PO Box925		Grand Rapids, MI	49534	2/18/2014	3/28/2014	
1252	ELMDALE ST NE	49525					2/18/2014	3/28/2014	
1330	ELMDALE ST NE	49508					2/18/2014	3/28/2014	
1340	ELMDALE ST NE	49505					2/18/2014	3/28/2014	
827	FAIRVIEW AVE NE	49505					2/18/2014	3/28/2014	
835	FAIRVIEW AVE NE	49505					2/18/2014	3/28/2014	
2048	FULLER AVE NE	49505					2/18/2014	3/28/2014	
2820	FULLER AVE NE	49504					2/18/2014	3/28/2014	
2830	FULLER AVE NE	49506					2/18/2014	3/28/2014	
2836	FULLER AVE NE	49505					2/18/2014	3/28/2014	
2844	FULLER AVE NE	49501					2/18/2014	3/28/2014	
2902	FULLER AVE NE	49505					2/18/2014	3/28/2014	
3091	FULTON ST E	49504					2/18/2014	3/28/2014	
1354	FULTON ST W	49503					2/18/2014	3/28/2014	
1910	FULTON ST W	49504					2/18/2014	3/28/2014	
1920	FULTON ST W	49504					2/18/2014	3/28/2014	
1942	FULTON ST W	49504					2/18/2014	3/28/2014	
1950	FULTON ST W	49505					2/18/2014	3/28/2014	
399	GARFIELD AVE SW	49504	PO BOX 1808		Grand Rapids, MI	49504	2/18/2014	3/28/2014	
180	Greenwich NE	49506					2/18/2014	3/28/2014	

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
1757	HANCHETT AVE NW	49504					2/18/2014	3/28/2014	
1632	IRA AVE NW	49504					2/18/2014	3/28/2014	
1643	IRA AVE NW	49508					2/18/2014	3/28/2014	
1720	IRA AVE NW	49504					2/18/2014	3/28/2014	
1721	IRA AVE NW	49504					2/18/2014	3/28/2014	
3230	KALAMAZOO AVE SE	49505	155	Morningside	Grand Rapids, MI	49505	2/18/2014	3/28/2014	
831	KENDALWOOD ST NE	49504					2/18/2014	3/28/2014	
901	KENDALWOOD ST NE	49504					2/18/2014	3/28/2014	
945	KENDALWOOD ST NE	49504					2/18/2014	3/28/2014	
968	KENDALWOOD ST NE	49504					2/18/2014	3/28/2014	
1760	KNAPP ST NE	49525					2/18/2014	3/28/2014	
3026	LAKE MICHIGAN DR NW	49504					2/18/2014	3/28/2014	
3030	LAKE MICHIGAN DR NW	49504	1115	Allison	Grand Rapids, MI		2/18/2014	3/28/2014	
3100	LAKE MICHIGAN DR NW	49504					2/18/2014	3/28/2014	
3134	LAKE MICHIGAN DR NW	49505					2/18/2014	3/28/2014	
3233	LAKE MICHIGAN DR NW	49505	530	Bayberry Pointe	Grand Rapids, MI	49505	2/18/2014	3/28/2014	
936	LAMBERTON ST NE	49506					2/18/2014	3/28/2014	
1516	LEONARD ST NE	49504					2/18/2014	3/28/2014	
2442	LEONARD ST NE	49504	3419	Shady Place	Grand Rapids, MI	49525	2/18/2014	3/28/2014	
2005	LEONARD ST NW	49301					2/18/2014	3/28/2014	
2221	LEONARD ST NW	49506					2/18/2014	3/28/2014	
2231	LEONARD ST NW	49546					2/18/2014	3/28/2014	
2614	Littlefield NE	49506					2/18/2014	3/28/2014	
2660	Littlefield NE	49506					2/18/2014	3/28/2014	
2700	Littlefield NE	49506					2/18/2014	3/28/2014	
2740	Littlefield NE	49506					2/18/2014	3/28/2014	
2760	Littlefield NE	49506					2/18/2014	3/28/2014	
1134	MAPLEGROVE DR NW	49505					2/18/2014	3/28/2014	
11	MARYLAND AVE NE	49505					2/18/2014	3/28/2014	
943	MARYLAND AVE NE	49504					2/18/2014	3/28/2014	
1143	Maryland NE	49505					2/18/2014	3/28/2014	
1631	MATILDA ST NE	49508					2/18/2014	3/28/2014	
429	MAYNARD AVE NW	49546					2/18/2014	3/28/2014	
449	MAYNARD AVE NW	49508					2/18/2014	3/28/2014	
505	MAYNARD AVE NW	49508					2/18/2014	3/28/2014	
1962	MICHIGAN ST NE	49525					2/18/2014	3/28/2014	
2725	MIDDLEBORO LN NE	49525					2/18/2014	3/28/2014	
1715	MILLBANK ST SE	49525					2/18/2014	3/28/2014	
1805	MILLBANK ST SE	49508					2/18/2014	3/28/2014	
1813	MILLBANK ST SE	49508					2/18/2014	3/28/2014	
1230	MONROE AVE NW	49505					2/18/2014	3/28/2014	
1241	N DORROLL ST NE	49525					2/18/2014	3/28/2014	
1313	N DORROLL ST NE	49534					2/18/2014	3/28/2014	
1048	N PARK ST NE	49504					2/18/2014	3/28/2014	
1841	OAKLEIGH RD NW	49504					2/18/2014	3/28/2014	
1062	PARMELEE AVE NW	49534					2/18/2014	3/28/2014	
1118	PARMELEE AVE NW	49534					2/18/2014	3/28/2014	

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
1142	PARMELEE AVE NW	49534					2/18/2014	3/28/2014	
1757	Perkins Ave NE	49505					2/18/2014	3/28/2014	
3085	PLAINFIELD AVE NE	49525					2/18/2014	3/28/2014	
4243	PLYMOUTH AVE SE	49525					2/18/2014	3/28/2014	
847	PROSPECT AVE NE	49525					2/18/2014	3/28/2014	
1821	RANCH DR NW	49525					2/18/2014	3/28/2014	
1706	RICHMOND ST NW	49503					2/18/2014	3/28/2014	
2988	RICHMOND ST NW	49509					2/18/2014	3/28/2014	
3339	RICKMAN AVE NE	49509					2/18/2014	3/28/2014	
714	RITZEMA CT SW	49505					2/18/2014	3/28/2014	
3403	SALERNO DR NE	49505					2/18/2014	3/28/2014	
3743	SENORA AVE SE	49503					2/18/2014	3/28/2014	
3744	SENORA AVE SE	49525					2/18/2014	3/28/2014	
1155	STOKES ST NE	49525					2/18/2014	3/28/2014	
520	TWIN LAKES DR NE	49504					2/18/2014	3/28/2014	
524	TWIN LAKES DR NE	49525	3033	Bannockburn Dr	Ada, MI	49301	2/18/2014	3/28/2014	
551	TWIN LAKES DR NE	49525					2/18/2014	3/28/2014	
620	TWIN LAKES DR NE	49505					2/18/2014	3/28/2014	
2861	VINELAND AVE SE	49525					2/18/2014	3/28/2014	
685	WELLS ST NE	49505					2/18/2014	3/28/2014	
1617	WILLIS AVE NW	49505					2/18/2014	3/28/2014	
1632	WILLIS AVE NW	49505					2/18/2014	3/28/2014	
1632	WILLIS AVE NW	49505					2/18/2014	3/28/2014	
1600	3 Mile Road NE	49505					4/4/2014	7/29/2014	
850	Freeman SW	49503					4/4/2014	7/29/2014	
901	Freeman SW	49503					4/4/2014	7/29/2014	
760	Hubert NE	49503					4/4/2014	7/29/2014	
2860	Plainfield NE	49505					4/4/2014	7/29/2014	
3319	Shadyside NE	49525					4/4/2014	7/29/2014	
1651	Vanderjagt NE	49525					4/4/2014	7/29/2014	
279	East Beltline Ave NE	49506					5/6/2014	7/29/2014	
281	East Beltline Ave NE	49506					5/6/2014	7/29/2014	
2808	Littlefield NE	49506					5/8/2014	7/29/2014	
102	ALEWA DR NW	49504					5/9/2014	7/29/2014	
105	ALEWA DR NW	49504					5/9/2014	7/29/2014	
121	ALEWA DR NW	49504					5/9/2014	7/29/2014	
129	ALEWA DR NW	49504					5/9/2014	7/29/2014	
130	ALEWA DR NW	49504					5/9/2014	7/29/2014	
135	ALEWA DR NW	49504					5/9/2014	7/29/2014	
140	ALEWA DR NW	49504					5/9/2014	7/29/2014	
149	ALEWA DR NW	49504					5/9/2014	7/29/2014	
165	ALEWA DR NW	49504					5/9/2014	7/29/2014	
200	ALEWA DR NW	49504					5/9/2014	7/29/2014	
225	ALEWA DR NW	49504					5/9/2014	7/29/2014	
233	ALEWA DR NW	49504					5/9/2014	7/29/2014	
239	ALEWA DR NW	49504					5/9/2014	7/29/2014	
240	ALEWA DR NW	49504					5/9/2014	7/29/2014	

TABLE 1

KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
248	ALEWA DR NW	49504					5/9/2014	7/29/2014	
253	ALEWA DR NW	49504					5/9/2014	7/29/2014	
264	ALEWA DR NW	49504					5/9/2014	7/29/2014	
304	ALEWA DR NW	49504					5/9/2014	7/29/2014	
3993	Breton SE	49512					Original	2/20/2013	
1529	Bristol Ave NW	49504					Original	2/20/2013	
1535	Bristol Ave NW	49504					Original	2/20/2013	
1723	Dorias Court NE	49525					Original	2/20/2013	
1729	Dorias Court NE	49525					Original	2/20/2013	
1735	Dorias Court NE	49525					Original	2/20/2013	
1742	Dorias Court NE	49525					Original	2/20/2013	
3060	Dorias Drive NE	49525					Original	2/20/2013	
3101	Dorias Drive NE	49525					Original	2/20/2013	
3104	Dorias Drive NE	49525					Original	2/20/2013	
3107	Dorias Drive NE	49525					Original	2/20/2013	

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
3110	Dorias Drive NE	49525	14221	Dallas Parkway, Ste 1000	Dallas, TX	75254	Original	2/20/2013	
3114	Dorias Drive NE	49525					Original	2/20/2013	
3115	Dorias Drive NE	49525					Original	2/20/2013	
3120	Dorias Drive NE	49525					Original	2/20/2013	
3129	Dorias Drive NE	49525					Original	2/20/2013	
3135	Dorias Drive NE	49525					Original	2/20/2013	
3139	Dorias Drive NE	49525	1345	Monroe Ste 324	Grand Rapids, MI	49505	Original	2/20/2013	
3140	Dorias Drive NE	49525					Original	2/20/2013	
3143	Dorias Drive NE	49525					Original	2/20/2013	
3155	Dorias Drive NE	49525					Original	2/20/2013	
3160	Dorias Drive NE	49525					Original	2/20/2013	
3167	Dorias Drive NE	49525					Original	2/20/2013	
3205	Dorias Drive NE	49525					Original	2/20/2013	
3210	Dorias Drive NE	49525					Original	2/20/2013	
3215	Dorias Drive NE	49525					Original	2/20/2013	
3218	Dorias Drive NE	49525					Original	2/20/2013	
3225	Dorias Drive NE	49525					Original	2/20/2013	
3226	Dorias Drive NE	49525					Original	2/20/2013	
3232	Dorias Drive NE	49525					Original	2/20/2013	
3235	Dorias Drive NE	49525					Original	2/20/2013	
3240	Dorias Drive NE	49525	1427	Pinecrest	Grand Rapids, MI	49506	Original	2/20/2013	
3245	Dorias Drive NE	49525					Original	2/20/2013	
3248	Dorias Drive NE	49525					Original	2/20/2013	
3255	Dorias Drive NE	49525					Original	2/20/2013	
3256	Dorias Drive NE	49525					Original	2/20/2013	
3262	Dorias Drive NE	49525					Original	2/20/2013	
3265	Dorias Drive NE	49525					Original	2/20/2013	
3300	Dorias Drive NE	49525					Original	2/20/2013	
3303	Dorias Drive NE	49525	2361	Morse	Columbus, OH	43229	Original	2/20/2013	
3308	Dorias Drive NE	49525					Original	2/20/2013	
3311	Dorias Drive NE	49525					Original	2/20/2013	
3353	Dorias Drive NE	49525					Original	2/20/2013	
3400	East Ridge Court NE	49525					Original	2/20/2013	
3420	East Ridge Court NE	49525					Original	2/20/2013	
3504	East Ridge Court NE	49525					Original	2/20/2013	
1761	Garfield Ave NW	49504	1723	Garfield	Grand Rapids, MI	49504	Original	2/20/2013	
1801	Garfield Ave NW	49504	2727	Michigan	Grand Rapids, MI	49506	Original	2/20/2013	
1644	Lamberton Lake Drive NE	49525					Original	2/20/2013	
1651	Lamberton Lake Drive NE	49525					Original	2/20/2013	
1658	Lamberton Lake Drive NE	49525					Original	2/20/2013	
1659	Lamberton Lake Drive NE	49525					Original	2/20/2013	
1661	Lamberton Lake Drive NE	49525	543	Greenwood	Grand Rapids, MI	49506	Original	2/20/2013	
3387	Michigan Street NE	49525					Original	2/20/2013	
3391	Michigan Street NE	49525					Original	2/20/2013	
3401	Michigan Street NE	49525					Original	2/20/2013	
3403	Michigan Street NE	49525					Original	2/20/2013	
3407	Michigan Street NE	49525	3400	Eastridge Ct	Grand Rapids, MI	49525	Original	2/20/2013	

TABLE 1
KNOWN SEPTIC SYSTEMS

Physical Property Address			Owner Mailing Address				Action Items		
Number	Street	Zip Code	Number	Street	City	Zip Code	Date Added	Brochure Sent	Comments
520	Twin Lakes Ave NE	49525					Original	2/20/2013	
524	Twin Lakes Ave NE	49525					Original	2/20/2013	

Laboratory Report

City of Grand Rapids
Environmental Services Dept. Laboratory
1300 Market SW, GR, MI 49503
616-456-3631

Parameter	*Location* / *Sample #* / *Date Collected* / *Time Collected* / *Sample Type*	Monroe Parking / **201303407** / **8/21/2013** / **11:10 AM** / **Grab**	J.W. Marriot, in pipe / **201303408** / **8/21/2013** / **11:35 AM** / **Grab**	J.W. Marriot, pool / **201303409** / **8/21/2013** / **11:40 AM** / **Grab**	**Units**	**Detection Limit**
Ammonia as Nitrogen		7.2	5.6	-	mg/L	0.2
Cadmium		<0.2	<0.2	-	ug/L	0.2
Calcium		220,000	940,000	-	ug/L	100
Chromium		<5	<5	-	ug/L	5
Conductivity		5260	22,900	21,900	us/cm	-
Copper		<1	1	-	ug/L	1
Fecal Coliform		113	67	-	#/100 mL	1
Iron		7,130	3,760	-	ug/L	20
Lead		<1	<1	-	ug/L	1
Magnesium		40,900	223,000	-	ug/L	20
Nickel		<5	<5	-	ug/L	5
pH		7.33	7.49	7.40	SU	-
Potassium		23.0	45.0	-	mg/L	0.2
Silver		<0.5	<0.5	-	ug/L	0.5
Total Hardness as Calcium Carbonate		717	3,270	-	mg/L	1
Total Phosphorus		0.80	0.12	-	mg/L	0.03
Turbidity		68.5	12.4	18.1	NTUs	-
Zinc		<5	6	-	ug/L	5

MEMORANDUM
CITY OF GRAND RAPIDS

DATE: December 1, 2013

TO: Scott Buhrer
Chief Financial Officer

FROM: Nancy Recker, Budget Analyst-Specialty Level C
Scott Saindon, Budget Analyst-Specialty Level C

TO: Gregory A. Sundstrom
City Manager

SUBJECT: FY2013 PRELIMINARY FINANCIAL RESULTS

This financial update was prepared to provide a summary of General Operating Fund FY2013 results and aid in the City Commission's understanding of the financial condition of the City and to evaluate our financial capacity. The City's FY2013 General Operating Fund (GOF) financial results ended approximately $2 million better than anticipated during the FY2014 Fiscal Plan discussions. The GOF financial results include the transfer of $3,683,466 to the Budget Stabilization Fund. Although operating results are improving, we have not yet reached the Transformation Phase I and II goals. We also need to realize further budget savings to fulfill the City Commission policy specifying 15% Fund Balance in the GOF and 10% of GOF Operating Expenditures in the Budget Stabilization Fund.

This update illustrates the need for continued vigilance and concentrated efforts to maintain fiscal control as the City has many challenges remaining before achieving true sustainability. We will need to form our expenditure levels in relation to revenues so that we generate sufficient budgetary savings (Cap Space) to fund future infrastructure needs and continue on the path to sustainability.

The City will be facing the loss of the Supplemental Income Tax at the end of FY2015, and the COPS and SAFER grants that have funded 39 Police Officers and Firefighters have already expired with our fourth year funding commitment for the COPS grant finishing at the end of December 2013. We will face a substantial revenue drop at the end of FY2015 when the temporary five year increase in the income tax rates sunsets. That Temporary Income Tax is currently providing funding for 10 Community Police Officers and a Squad of 15 Firefighters, as well as for our transformational efforts.

Operating Results – General Operating Fund, FY2013

There are two distinct bases for reporting financial information in the City. The first method, called GAAP, or Generally Accepted Accounting Principles, is used in the Comprehensive Annual Financial Report (CAFR) to show the final accounting results

each year. The focus of GAAP reporting is “Total Resources” as shown by “Fund Balance.”

The Governmental Accounting Standard Board’s (GASB) Statement No. 54 describes the relevant categories of Fund Balance as (1) non-spendable, (2) restricted, (3) committed, (4) assigned and (5) unassigned. The CAFR is audited and reviewed for adherence to GAAP principles before becoming final.

The second method of reporting financial information is the Budgetary Basis, which is used in the Fiscal Plan. Budgetary Basis focuses on the portion of Fund Balance that is available to spend, and we use the term “Spendable Equity” as the focus of this type of reporting. Spendable Equity equates to category #5 of the GAAP Fund Balance, “Unassigned.”

NOTE: The amount of this equity that needs to be retained for unforeseen events and transition purposes should be considered when deciding how much to authorize for expenditure appropriations. Current policy states that we should retain 15% of current GOF spending in the GOF and another 10% of GOF spending in the Budget Stabilization Fund. The 2013 fiscal year ended at about two thirds of the GOF policy minimum.

We feel it is appropriate to show the reconciliation between these two reporting methods before presenting the remainder of this report, which will then focus on the preliminary year end results for FY2013 from a Budgetary Basis unless noted otherwise.

The General Operating Fund (GOF) preliminary GAAP year-end operating results, as of September 30, 2013, indicate that Actual revenue will be $122,326,252, and Actual expenditures will be $115,963,093. The City’s FY2013 operating surplus according to GAAP stands at $6,363,159.

The following summary reconciles the GAAP and Budgetary Basis of revenues, expenditures and changes in spendable equity.

City of Grand Rapids, Michigan

General Operating Fund (GFGEN101)

Summary of Operations

for the year ended June 30, 2013

	Amended Budget	Budget Estimate	Actual (Unaudited)[1]
Revenue – (GAAP Basis)	$120,028,907	$118,764,404	$122,326,252
Expenditures – (GAAP Basis)	117,227,944	118,069,030	115,963,093
Excess of Revenue over Expenditures (GAAP Basis)	2,800,963	695,374	6,363,159
Adjustments to Budgetary Basis			
Add: Principal payment from Parking Services for Government Ramp	1,180,000	1,180,000	1,180,000
Excess of Revenue over Expenditures (Budgetary Basis)	3,980,963	1,875,374	7,543,159
Other items affecting Spendable Equity:			
Less: Transfer to Budget Stabilization Fund			(3,683,466)
FY2013 Change in Spendable Equity	3,980,963	1,875,374	3,859,693
Spendable Equity as of 6/30/2012	8,699,381	8,699,381	8,699,381
Spendable Equity as of 6/30/2013	**$ 12,680,344**	**$ 10,574,755**	**$12,559,074**
Spendable Equity as a % of Expenditures	10.8%	9.0%	10.5%
Assignments from CAFR:			
Change in Compensated Absences			50,193
Change in Other Purposes (Encumbrances)			(168,874)
Unassigned			12,677,755
			$**12,559,074**

[1]As of September 30, 2013.

The pertinent adjustments include the Parking Ramp payments toward loan principal that are now available to be spent, as well as the change in Accrued Vacation and Sick Leave liability that should be reserved and should not be considered available to spend. These adjustments result in an *FY2013 ending Budgetary Fund Balance (Spendable Equity) of $12,559,075 or 10.5% of actual FY2013 total expenditures.* The FY2014 Fiscal Plan had anticipated an FY2013 fund balance of $10,574,755 on a Budgetary basis, resulting in a projected year end General Operating Fund (GOF) fund balance level of 9.0%. Therefore, **the FY2013 actual results are $1,984,321 more favorable than projected.**

General Operating Fund Revenue Performance

Taxes

Total tax revenue Actuals ended FY2013 at $75,901,629. This result was $1,740,813 greater than the Estimate of $74,160,816, or 2.3%. Income tax revenue continues to be the largest revenue category for the General Operating Fund.

Here is a summary of the taxes revenue category:

	FY2013 Actuals	FY2013 Estimate	Difference Actual More/(Less) Than Estimate
Income Taxes	$62,791,752	$61,014,397	$1,777,355
Property Taxes	11,397,170	11,381,419	15,751
Property Tax Admin Fee	1,712,707	1,765,000	(52,293)
Total Taxes	$75,901,629	$74,160,816	$1,740,813

FY2013 income tax revenue was projected to grow 7.5% over FY2012 results. FY2013 actual growth was 10.63% over FY2012.

The combined property tax revenue and administration fee revenue for FY2013 was $13,109,877 which was $36,542 less than the Estimate of $13,146,419.

Intergovernmental Revenues

FY2013 Actuals for this category were $14,563,177 which was $404,514 more than the Estimate of $14,158,663.

This revenue category is primarily made up of the Constitutional portion of State Shared Revenues (which we funded from State Sales and Use Taxes) and it also includes the State's payments for Fire Protection of State-Owned Buildings and Liquor License revenue. The FY2013 Actuals for State Shared Revenues total $13,745,657 which is $171,361 more than the Estimate of $13,574,296.

Charges for Services

Actual FY2013 Charges for Services were $11,483,410 which was $621,713 more than the Estimate of $10,861,697.

This broad category of service fees would be far too numerous to list here; however, all of the categories are listed in Appendix A of the Final Fiscal Plan FY2014-FY2018 starting on page 273.

Several of the larger segments of this category are listed below:

Description	FY2013 Actuals	FY2013 Estimate	Difference Actual More/(Less) Than Estimate
Misc. Service Fees	$3,973,413	$4,016,975	$(43,562)
Cable Consent Fees	2,080,866	2,122,155	(41,289)
Code Enforcement Fees	2,043,798	1,915,669	128,129
Electric Power Distribution	1,253,904	900,000	353,904
Subtotal	9,351,981	8,954,799	397,182
Other	2,131,429	1,906,898	224,531
Total	$11,483,410	$10,861,697	$621,713

Fines and Forfeitures

Actual Fines & Forfeitures revenue of $2,202,696 was $192,696 more than the Estimate of $2,010,000. Parking fines make up the largest portion of this revenue category.

Interest and Rents

Interest and Rents were estimated at $460,280 with Actuals reported at $332,402 which is $127,878 less than anticipated, primarily due to lower interest rates.

Other Financing Sources

Other Financing Sources (Contributions from Other Funds) were estimated at $15,673,285 with FY2013 Actuals coming in at $16,445,953 which was $772,668 more than anticipated.

Actual FY2013 revenue transfers *into* the General Operating Fund include:

- From the Transformation Fund: The Preliminary Fiscal Plan anticipated $6,052,707 to maintain Fund Balance percentage of at least 9.0%. Including this transfer, the actual fund balance finished the fiscal year at 10.5%.

- From the Transformation Fund: $2,813,296 to support Police Officers and Firefighters.

- From various city funds: $5,085,797 for support services, (i.e. A-87 cost allocation).

Other Revenue

Actual Other Revenue of $941,765 was $25,328 less than the Estimate of $967,093.

The following summarizes the differences between the FY2013 Estimate and the Preliminary FY2013 Actuals on a Budgetary Basis:

Total Projected Revenue per Estimate	$119,944,404
Add: Actuals Greater Than Estimate or Subtract: (Actuals Less Than Estimate):	
Taxes	$1,740,813
Licenses and Permits	(17,349)
Intergovernmental Revenues	404,514
Charges for Services	621,713
Fines & Forfeitures	192,696
Interest & Rents	(127,878)
Other Revenue	(25,328)
Other Financing Sources (Transfers)	772,668
Total Differences	$3,561,849
Total FY2013 Actual Revenues (Budgetary Basis)	$123,506,253

Expenditures

FY2013 Actual expenditures (budgetary basis) were $119,646,559 which is $1,577,529 or 1.3% more than the Estimate of $118,069,030. Differences occurring in the major categories are discussed in the following paragraphs.

Personal Services

Personal services, comprised of wages and benefits, ended the fiscal year at $78,412,604 which is $1,248,974 less than the Estimate of $79,661,578. The Human Resources Department was under their Estimate by $111,550, the Fire Department by $700,442, Fiscal Services by $347,112 and Comptrollers by $117,900. The Police Department was over their Estimate by $136,436. The remaining GOF departments were over and under their estimates by lesser amounts, netting out at $73,201 under the Estimates.

Supplies

Supply costs were $1,591,145 at fiscal year-end compared to the Estimate of $1,673,509. The under Estimate amount of $82,364 was 4.9% less than had been anticipated. Again this year, departments kept a close watch of their supply expenditures. The Clerk's, Enterprise Services, and Fiscal Services Departments achieved the greatest departmental savings by being under Estimate by $31,523, $45,064 and $81,295 respectively, while the Police Department was over its supply budget by $69,095 and the remaining departments collectively were over and under their estimates by lesser amounts, netting out at $6,423 over budget.

Other Services and Charges

Actual other services and charges at fiscal year-end were $17,654,024 which was $1,302,903 or 6.9% under the Estimate of $18,956,927. Six departments were significantly under their Estimates; the Fire Department under by $116,211, Income Tax Department under by $499,213, Human Resources under by $160,733, General Administration, under by $197,482, Enterprise Services Department under by $118,069,

and the Comptroller's Office under by $131,277. The remaining departments collectively were over and under their estimates by lesser amounts, netting out at $79,918 under budget.

General Operating Fund Capital Outlay

Capital outlay (does not include Capital Improvement Fund outlays) actuals ended the fiscal year at $340,032 which was $168,954 or 32.8% under the Estimate of $508,986. The Fire Department was under budget by $88,002 and Fiscal Services Department was under budget by $48,280 accounting for the majority of this difference with the remaining departments over and under their Estimates by a net under of $32,672.

Transfers Out

Actual final fiscal year end transfers out of $17,620,947 were over the Estimate of $15,745,668 by $1,875,279, with $702,765 attributable to the Police Department for maintenance of the COPS funded personnel, $949,597 to General Administration, and the remaining $222,917 to the other departments collectively.

Summary

Total actual expenditures were $1,577,529 greater than estimated previously, because Appropriation Lapse was estimated at $2,500,000 and actual Lapse was only $922,471. The following summarizes the differences between the FY2013 Estimate and the Preliminary FY2013 Actuals on a Budgetary Basis:

Total FY2013 Estimated Expenditures		$118,069,030
Appropriation Lapse (Negative Budget Spending Authority)		2,500,000
Subtotal		121,569,030
Add Actuals Greater Than Estimate or Subtract (Actuals Less Than Estimate):		
Personal Services	$(1,248,974)	
Supplies	(82,364)	
Other Services and Charges	(1,302,903)	
Capital Outlay	(166,954)	
Debt Service	3,445	
Transfers Out	1,875,279	$(874,188)
Total FY2013 Actuals		$119,646,559

Summary and Highlights

Budgetary Fund Balance (Spendable Equity)

FY2013 began the year with Spendable Equity of $8,699,381. FY2013 ended the year with an Actual GAAP operating surplus of $2,729,887; however, this needed to be adjusted for cash received from the Parking Ramp principal payment, which increased the total Budgetary Basis surplus to $3,909,887. This amount increased Spendable Equity. An item that decreased Spendable Equity was the increase in Accrued Vacation and Sick Leave liability, in the amount of $50,193. The FY2013 total increase in

Spendable Equity was $3,859,694. The final Spendable Equity at the end of FY2013 is $12,559,075, which is $1,984,321 more than projected.

City Commission policy specifies that the City should maintain a Fund Balance of 15% of total expenditures. We ended FY2013 with Spendable Equity at 10.5% of FY2013 expenditures. This would not have been achievable without a planned transfer of $6,052,707 from the Transformation Fund. The combination of rigorous implementation of the City's Transformation Plan and a slowly improving economy at all levels will continue to be required to secure a stable and fiscally sustainable financial position.

Although the fiscal year ended slightly better than we projected, we cannot become complacent or underestimate the difficulty of the decisions that will be required going forward. Good preparation has been done through the Transformation Investment Plan to reduce departmental costs. This has positioned the City to make the tough choices that will be required going forward.

Sustainability

City of Grand Rapids, Michigan
General Operating Fund (GFGEN101)
Analysis of Operating Results
for the year ended June 30, 2013

Actual Change in Spendable Equity			$ 3,859,693
Less: Temporary/One-Time Revenues			
Financial Impacts from sale of Government Ramp			
Principal Payment from Parking Ramp		(1,180,000)	
Interest Income from Parking Ramp		(384,000)	
	Subtotal	(1,564,000)	
Support from Transformation Fund and Federal Grants			
Police:			
Police Support from Transformation Fund (10 Officers)		(1,043,404)	
Fire:			
Fire Support from Transformation Fund		(180,233)	
17 Firefighters after SAFER Grants		(1,589,659)	
	Subtotal:	(1,769,892)	
Transfers to Maintain General Operating Fund's Fund Balance			
Subsidy from Transformation Fund to maintain Fund Balance		(6,052,707)	
Transfer Out to Budget Stabilization Fund		3,683,466	
		(2,369,241)	
			(6,746,537)
Loss from Ongoing Revenues and Ongoing Expenditures			**$ (2,886,844)**

The above analysis illustrates the amount of one-time or limited duration funding used to support service and staffing levels for FY2013. More specifically, the analysis illustrates the revenue shortfall that would have resulted if we did not have the income tax-funding and grant-funding for the Police and Fire positions.

Last year, in FY2012, there was a significant mismatch between revenues and the current service levels being provided by the City to the tune of approximately $18.5M. With careful planning, labor negotiations and financial targets to guide resource allocation (i.e. budgeting) within the context of financial targets, this shortfall was reduced to $2.9 million in FY2013. The FY2014 – FY2018 Fiscal Plan indicates that from FY2014 and thereafter, the mismatch between ongoing revenues and expenditures has been resolved. However, there are financial responsibilities that are not included in the FY2014 - FY2018 projections that are discussed later in this report.

The Economic Vitality Incentive Program (EVIP) funds should continue to be held separate from the General Operating Fund for now, to hedge against the potential for increasingly more stringent eligibility criteria and the possible complete elimination of EVIP funding during the next economic downturn.

Funds with Accumulated Deficits and Growing Financial Pressure

Refuse Fund

Upon review of the fiscal year end June 30, 2013 final audited numbers, it has been determined that the City of Grand Rapids Refuse Fund finished the fiscal year with a fund deficit of $500,206. Since the issue was identified, significant additional analysis has been completed to determine the underlying causes of the deficit and the appropriate steps to eliminate the June deficit.

Public Museum Support

The Museum has never fully recovered from endowment investment losses in 2009, with a current shortfall of $3.3 million. Their budget is being balanced with loans from endowed investments, and potential donors are reluctant to contribute until endowment spending policy is changed and there is firm evidence of financial stability.

In FY2013, the Museum made a one-time appeal for help from the City to directly pay usage/rent costs at the Community Archive and Research Center (CARC) building which stores the Museum's collection. The request is for $1.2M to be spread over 3 years.

The $1.2 million request was approved and paid out of GOF Contingency funds for FY2013, but rather than providing a direct rental payment, the City will reimburse the Museum's CARC rent payments on a periodic basis for the next two years.

Major & Local Streets Funds

The Streets Funds are utilized by several departments in the City, including Public Safety, Street Lighting, and Environmental Protection. Without a large influx of new revenues, these funds will be headed for large structural deficits beginning in FY2014

for Local Streets and FY2016 for Major Streets. Measures taken to date to stop the decline in Fund Balance are as follows:

- The Forestry division was moved to the Parks Fund
- Additional Revenue was added from Intelligent Transportation System (ITS)
- Traffic Safety eliminated one position
- Funding for cape sealing was eliminated
- A lapse of $750,000 was added as a placeholder for reductions required in general spending

Streets Capital Projects Fund

The Streets Capital Projects Fund has this same financial situation where revenue is far less than needed to finance urgently required street projects. In past years, transfers from the General Operating Fund were the financing source for grant match requirements and all locally funded Street Capital projects. That source was eliminated in the current year budget and for all future years. The Major Street Fund is now the only source of funds for the Street Capital Fund, with a projected transfer of only $494,000 in FY2014. However, the current status of the Major Street fund, with State Shared Gas & Weight Tax revenue projected to remain flat, indicates the future ability to increase street projects is not encouraging. Here again, only critical projects can currently be undertaken. Even with only a minimum of street projects being funded, transfers from the Major Streets Fund are not close to being adequate. These revenues are insufficient to reverse the deterioration of our street system. New revenues are required to address our street capital needs.

Capital Reserve Fund

The Capital Reserve Fund is the funding source for capital projects needed by General Operating Fund departments. The City annually deposits revenues of 1.25 mills of the General Operating Fund millage levy and 4% of the base City Income Tax revenues into the Capital Reserve Fund. This revenue is used for two purposes; to repay debt issued by this fund to finance prior capital projects, and to finance new capital projects requested by General Operation Fund departments and other funds dependent on the General Operating Fund.

Unfortunately, the combination of debt repayment and new project requests far exceeds the revenue coming into the fund. In fact, FY2014 revenue is budgeted at $7,762,688 and expenditures at $7,553,548, of which $5,868,840 is for debt repayment (75% of revenue). Projects have had to be prioritized with only those of a critical nature financed and all other pushed back into subsequent fiscal years.

The amount of resources available (from the 4% Income Tax revenue and 1.25 mills) is insufficient to address our capital requirements. Transformation cannot fix the shortage of resources necessary to adequately address our General Capital needs. New revenues must be identified to adequately address our capital maintenance and replenishment.

The Great Flood of 2013

During the period of April 16 to May 14, 2013, heavy rains, high winds and river flooding caused the waters to rise along the Grand River and Plaster Creek flooding the City of Grand Rapids and threatening the Waste Water Treatment Plant which needed to be extensively protected with sandbags and trap bags. A number of parks also had major flooding which required extensive debris removal, and several roads and bridges needed to be closed due to flooding and lighting outages. City of Grand Rapids employees performed emergency protective measures to protect the Waste Water Treatment Plant, and Citizen Volunteers assisted with filling and placing sandbags throughout the City.

Immediately following the flood, the City submitted a report to FEMA with an estimated cost of damages totaling nearly $1.3 million. Actual costs approved for reimbursement totaled $1,167,427, of which 75%, or $875,570 will be reimbursed to the City by FEMA (subject to audit and insurance reimbursement). The remaining 25% is considered a local match.

Environmental Services' Wastewater Treatment plant incurred the largest segment of reimbursable costs at 64%, with the rest of the reimbursement divided among several other areas, including Streets, Parks, Traffic Safety and Fire.

The Citizens of Grand Rapids provided 4,812 volunteer hours which was reimbursed at $12.57 per hour to the City resulting in a total of $60,487.

Transformation

Phase I

In FY2013, the City began to see success from the seventy-six value streams designed to make City operations sustainable. The plan is evolving as progress is made, as learning continues, and as opportunities are created. Beginning in FY2014, most City Departments are projected to hit their financial targets. In FY2014 we project increasing General Operating Fund reserves and the Budget Stabilization Fund. As further evidence of improving financial health, no General Operating Fund transfers from the Transformation Fund are anticipated beyond FY2013.

Phase I of the Transformation Plan is working but not completed. The City does not view transformation as an event but rather as a permanent way of conducting business. The City's utilization of aggressive target setting combined with an intense focus on outcomes is now producing results as ongoing revenues are beginning to align with ongoing expenditures.

Phase II

As the City migrates to Phase II of the Transformation plan, $30M per year of unfunded work related to address infrastructure needs remains. Over the past decade, the City has not adequately funded the maintenance and replenishment of its infrastructure. Infrastructure issues cannot be addressed through operational efficiencies and

expenditure reduction; rather, returning the City's infrastructure to a state of good repair will require considerable investment as well as the implementation of Sustainable Asset Management Strategies. It is critical to the creation of a sustainable future that the City has both a strong operational platform and a sustainable asset platform. Achievement of both of these critical outcomes is essential to our transformation and our future as a community.

Phase II, the Sustainable Asset Management Plan, is built on three pillars: Green, Mobility and Public. "Green" is the portion of the Phase II Transformation Plan relating to the maintenance of the City's parks. The citizens overwhelmingly approved the Parks Millage on November 5th. This puts the "Green" pillar in place. The millage will be in place for seven years at 0.98 mills and will be included in property tax bills from July 1, 2014 through June 30, 2020. Each year, the parks millage will generate approximately $4M for repairing current park equipment and buildings (45-55%), investing in new park improvements (25-35%), and operating the swimming pools (15-20%).

"Mobility" relates to the Sustainable Streets Task Force which has identified a need for approximately $22M in order to adopt a Complete Streets focus, and bring the assets into a state of good repair. **The source of this funding has not yet been identified.**

Finally, "Public" is the Capital Investment that is not able to be funded from any other source of funding. Historically these investments have been made from the Capital Reserve Fund. The Capital Reserve Fund is funded from Capital Set-Aside revenues and the City has been under-investing in General Capital Assets for over a decade.

A portion of income tax and property tax revenues are set-aside for dedicated capital purposes. Capital Set-Aside revenues need to be increased. On December 17, 2013, we will recommend that City Commission Policy No. 700-09 be amended to increase the capital set-aside guidelines.

Management has sized the amount necessary, and developed a strategy for implementation.

- "Public" will require an additional one percent of the GOF Income Tax Revenues (increasing Capital Set-Aside from 4% to 5% of the base income tax revenues (i.e. of the 0.65/1.3% rate)
- "Public" will require half of the State Economic Vitality Incentive Program (EVIP) revenues on an ongoing basis
- "Public" will also require increased GOF expenditures for Stormwater Level C.
- The General Operating Fund will require increased investments for Fire Apparatus, Stormwater and Labor Contracts

The General Operating Fund Budget Savings provides a portion of the funding, but not all. "Public" is dependent on the successful implementation of strategies that will provide adequate funding to make the required investments for the "Green" and "Mobility" pillars. If all of the revenue projections are met, and if we are successful in identifying the $22 million per year in new Complete Streets funding, then Budget

Stabilization contributions will continue at a modest rate, growing to 7.67% by the end of FY2019. See Attachments II and III.

Transformation Fund

There was a separate report prepared for the Transformation Fund. This report was delivered to the City Commission on September 10, 2013 and is available at http://grcity.us/city-manager/retreat/CompletepackageFALL2013.pdf. In FY2011, actual Transformation Fund tax revenues were $8,517,255 slightly exceeding budget. FY2011 expenditures were focused on public safety and amounted to $1,198,094 for both police and fire support. This resulted in $7,319,161 being carried forward and available for future appropriations.

In FY2012 actual tax revenues were up 6.3% from FY2011 and amounted to $9,057,217. This exceeded budget by almost $211,000 or 2.3%. In addition to the tax revenues, the Transformation Fund also received EVIP revenue in the amount of $4,570,056 as well as interest payments totaling $49,616. In total, FY2012 Transformation Fund revenues amounted to $13,676,889.

In FY2012, the public safety appropriations continued for fire and police at about the same level as in FY2011. However, transformational savings projects now began to receive funding in FY2012. Including ongoing public safety and GOF support, total Transformation Fund appropriations totaled $12,599,472, which equaled the amount of actual expenditures. In other words, the total amount programmed and expended was nearly the same in FY 2012. This resulted in net income of $1,077,417 (see Attachment II).

At June 30, 2012, $8,396,578 of cumulative Transformation Fund revenues remained unspent; however, $2,502,727 of this total was reserved to fund Firefighters after the SAFER One funding was exhausted.

In FY2013, Police and Fire were again funded, however, because the first SAFER Grant had ended, the Transformation Fund began using up reserve funds to support those firefighters; the reserve amount available at the end of FY2012 was $2,498,964, and the final amount transferred out of this reserve to maintain SAFER One positions in FY2013 was $1,376,486.

The amount of Income Tax revenue spent in FY2013 to pay for two of the 15 Fire Squad Positions was $180,233, with the remaining 13 Squad positions funded by the SAFER Two grant. This allowed $1,316,725 of unspent Income Tax revenue for the Squad to be transferred into the firefighter reserve. The balance in the reserve at the end of FY2013 after reducing it to fund the 17 SAFER One positions and depositing the Squad's unspent Income Tax revenue, netted out to $2,439,203.

Additional projects funded from the Transformation Fund in FY2013 were: 311 Customer Service support on behalf of General Fund Departments for $173,315; a Stormwater Asset Management Plan for $450,000; a Fire Apparatus Fuel Efficiency Initiative for $75,550; the Police Department's Automated License Plate Recognition System for $104,616; the match for a Fire Prevention grant from FEMA in the amount of

$108,808; a Community Development Services Study for $20,000; and support for the General Operating Fund of $6,052,707.

The FY2014 Adopted Budget did not require Transformation Fund resources to supplement the General Operating Fund revenues. A semi-annual Transformation Fund update as of the FY2013 Year End was provided to the City Commission with relevant financial data in September 2013.

Targets

New financial targets have been developed based on the FY2014 Budget with allowances for upcoming labor negotiations. There are several reasons why we think now is the time to review and adjust the original targets that we have been working with for the last three budgets.

First, the target reductions of 8.2% of personnel and 10% of other costs were applied evenly to everyone, regardless of any special circumstances. Over time, individual adjustments were necessary to address changing circumstances. These individual changes became difficult to track.

Secondly, over time, departments were also provided financial targets for revenues and the combination of revenue targets and expenditure targets have become the principal focal point.

Third, service levels and allocations have been changed in several Departments, for example, Single Family Rental Certification activity for Code Compliance, and the revised method of allocating Risk Insurance, using experience ratings.

A fourth significant reason for changing targets is that there have been reorganizations of Departments; for example, the Design & Development Department included Planning, Economic Development and Building Inspections when the original targets were calculated. Last year Economic Development became a stand-alone Department, and Design & Development added Community Engagement; and Treasury, which originally included the Income Tax and Assessors activities that are now in Fiscal Services.

If we look at the General Operating Fund as a whole, the original (FY2012) target goals have been achieved early with the development of the FY2014 Budget, and the Budget Stabilization Fund was re-established. So, it was determined that the time was right to revisit and update the financial targets using the FY2014 budget as a base.

Conclusions

The City's General Operating Fund ended FY2013 with reserves (Spendable Equity) at approximately $2 million more than the projected Estimate accompanying the FY2014 adopted budget.

Although total final results were better than expected, adjusting for the one-time revenues and expenditures we realize that the ongoing expenditures to support existing

service levels and existing staffing levels exceed the ongoing, sustainable revenues by approximately $2.9 million during FY2013.

The City must continue transforming so that we may become sustainable in all areas of operation. Difficult decisions will continue to be required, and complacency is not an option. Phase II of the Transformation Plan, Sustainable Asset Management, is underway, containing the three themes: Public, Green, and Mobility with 37 value streams, adding a new layer in addition to the current plan.

In summary, all options must be on the table in the coming weeks, months, and years. Transformational change, although daunting at times, must be pursued methodically and without reservation. Sound judgment and careful action are critical for successfully navigating these challenging times and returning the City to a financially sustainable future on an ongoing basis.

Work products arising from the Transformation Investment Plan value stream will provide the tools necessary for the City Commission to identify the spending priorities that will balance all of the competing interest to result in a community in which our citizens, businesses and visitors can prosper.

Attachment I

Budget 2014, Version 1 | **City of Grand Rapids** | 10/22/13

GENERAL FUND OPERATING (GFGEN)
STATEMENT OF OPERATIONS

Organizations	2012 Actuals	2013 Adopted	2013 Amended	2013 Adopted Estimate	2013 Actuals as of 10-1-13	2014 Adopted Proposed	2015 Adopted Forecast	2016 Adopted Forecast	2017 Adopted Forecast	2018 Adopted Forecast
REVENUE					***10.63%***					
GENERAL FUND OPERATING (GFGEN)										
438 Taxes - Income	56,757,578	57,330,930	61,865,760	61,014,397	62,791,752	62,234,684	63,479,378	64,748,965	66,043,945	67,364,824
402 Taxes - Property	13,453,120	13,335,610	13,335,610	13,146,419	13,109,877	13,004,672	13,266,944	13,470,308	13,671,421	13,865,322
450 Licenses And Permits	489,182	416,498	416,498	472,570	455,221	499,045	507,000	520,044	528,178	536,407
501 Intergovernmental Revenues	14,136,326	14,097,947	14,097,947	14,158,663	14,563,177	14,693,908	14,971,086	15,254,548	15,544,368	15,840,628
600 Charges For Services	10,286,591	10,602,198	10,602,198	10,861,697	11,483,410	11,365,923	11,523,212	11,679,595	11,840,188	12,005,108
655 Fines And Forfeitures	1,960,584	2,165,700	2,165,700	2,010,000	2,202,696	2,071,500	2,072,000	2,072,500	2,122,500	2,122,500
664 Interest And Rents	573,069	575,000	575,000	460,280	332,402	451,500	501,500	531,500	551,500	551,500
671 Other Revenue	960,751	944,935	959,935	967,093	941,765	945,985	915,985	1,065,077	920,985	920,985
695 Other Financing Sources	16,115,746	15,848,940	16,010,259	15,673,285	16,445,953	11,702,555	11,672,951	7,978,507	8,105,665	8,236,008
695 Principal Payment Rec'd on Gov't Center Ramp	1,130,000	1,180,000	1,180,000	1,180,000	1,180,000	1,365,000	1,420,000	1,475,000	1,535,000	1,595,000
GENERAL FUND OPERATING Total Revenue	***115,862,946***	***116,497,758***	***121,208,907***	***119,944,404***	***123,506,253***	***118,334,772***	***120,330,056***	***118,796,044***	***120,863,750***	***123,038,282***
EXPENDITURES										
GENERAL FUND OPERATING (GFGEN)										
701 Personal Services	79,887,911	82,314,182	82,284,561	79,661,578	78,412,604	78,642,286	78,534,396	76,637,841	77,174,573	77,895,786
726 Supplies	1,592,769	1,804,401	1,804,401	1,673,509	1,591,145	1,993,622	1,999,108	2,084,520	2,084,960	2,191,181
800 Other Services And Charges	18,441,470	18,371,710	18,652,141	18,956,927	17,654,024	19,993,084	20,483,994	20,919,768	21,477,286	22,090,520
970 Capital Outlay	591,230	449,690	645,262	506,986	340,032	381,784	381,875	412,974	405,118	415,051
990 Debt Service	433,893	340,896	340,896	340,896	344,341	331,795	327,423	322,583	112,262	57,918
996 Appropriation Lapse	0	(3,000,000)	(3,000,000)	(2,500,000)	0	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)
999 Contingent Appropriation	0	1,500,000	1,407,721	0	0	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
999 Transfers Out	19,679,688	14,916,743	15,092,962	15,745,668	17,620,947	16,333,999	16,468,224	16,703,997	17,145,859	17,539,700
999 Transfers Out - Budget Stabilization Fund	0	0	0	3,683,466	3,683,466	2,158,203	2,656,994	2,101,910	1,210,500	64,400
GENERAL FUND OPERATING Total Expenditures	***120,626,960***	***116,697,622***	***117,227,944***	***118,069,030***	***119,646,559***	***118,334,772***	***119,352,014***	***117,683,593***	***118,110,558***	***118,754,556***
GF OPERATING REV OVER/(UNDER) EXPENDITURES	(4,764,014)	(199,864)	3,980,963	1,875,373	3,859,694	(0)	978,042	1,112,451	2,753,192	4,283,726
Beginning Fund Balance	13,463,395	8,699,381	8,699,381	8,699,381	8,699,381	12,559,075	12,559,074	13,537,117	14,649,568	17,402,760
Ending Fund Balance	**8,699,381**	**8,499,517**	**12,680,344**	**10,574,754**	**12,559,075**	**12,559,074**	**13,537,117**	**14,649,568**	**17,402,760**	**21,686,486**
	7.2%	7.3%	10.8%	9.0%	10.5%	10.6%	11.3%	12.4%	14.7%	18.3%
Assigned to Operations - 15% of Total Spending	18,094,044	17,504,643	17,584,192	17,710,355	17,946,984	17,750,216	17,902,802	17,652,539	17,716,584	17,813,183
Unassigned Fund Balance	(9,394,663)	(9,005,126)	(4,903,847)	(7,135,600)	(5,387,909)	(5,191,141)	(4,365,685)	(3,002,971)	(313,824)	3,873,303
Total	8,699,381	8,499,517	12,680,344	10,574,754	12,559,075	12,559,074	13,537,117	14,649,568	17,402,760	21,686,486
Unassigned FB as a % of Total Expenditures	-7.8%	-7.7%	-4.2%	-6.0%	-4.5%	-4.4%	-3.7%	-2.6%	-0.3%	3.3%

Attachment II

Budget 2014, Version 1

City of Grand Rapids
GENERAL FUND OPERATING (GFGEN)
STATEMENT OF OPERATIONS
PRO-FORMA

11/01/13

Organizations		2012 Actuals	2013 Adopted	2013 Amended	2013 Adopted Estimate	2013 Actuals as of 10-1-13	2014 Adopted	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast
REVENUE						***10.63%***						
GENERAL FUND OPERATING (GFGEN)												
438	Taxes - Income	56,757,578	57,330,930	61,865,760	61,014,397	62,791,752	62,234,684	63,479,378	64,748,965	66,043,945	67,364,824	70,514,100
402	Taxes - Property	13,453,120	13,335,610	13,335,610	13,146,419	13,109,877	13,004,672	13,266,944	13,470,308	13,671,421	13,865,322	14,061,973
450	Licenses And Permits	489,182	416,498	416,498	472,570	455,221	499,045	507,000	520,044	528,178	536,407	544,764
501	Intergovernmental Revenues	14,136,326	14,097,947	14,097,947	14,158,663	14,563,177	14,693,908	14,971,086	15,254,548	15,544,368	15,840,628	16,142,534
600	Charges For Services	10,286,591	10,602,198	10,602,198	10,861,697	11,483,410	11,365,923	11,523,212	11,679,595	11,840,188	12,005,108	12,172,325
655	Fines And Forfeitures	1,960,584	2,165,700	2,165,700	2,010,000	2,202,696	2,071,500	2,072,000	2,072,500	2,122,500	2,122,500	2,122,500
664	Interest And Rents	573,069	575,000	575,000	460,280	332,402	451,500	501,500	531,500	551,500	551,500	551,500
671	Other Revenue	960,751	944,935	959,935	967,093	941,765	945,985	915,985	1,065,077	920,985	920,985	920,985
695	Other Financing Sources	16,115,746	15,848,940	16,010,259	15,673,285	16,445,953	11,702,555	11,672,951	7,978,507	8,105,665	8,236,008	8,368,447
695	Principal Payment Rec'd on Gov't Center Ramp	1,130,000	1,180,000	1,180,000	1,180,000	1,180,000	1,365,000	1,420,000	1,475,000	1,535,000	1,595,000	0
	Increase Capital Set-aside by 1%	*0*	*0*	*0*	*0*	*0*	*0*	*(661,164)*	*(674,388)*	*(687,875)*	*(701,633)*	*(705,141)*
GENERAL FUND OPERATING Total Revenue		***115,862,946***	***116,497,758***	***121,208,907***	***119,944,404***	***123,506,253***	***118,334,772***	***119,668,892***	***118,121,657***	***120,175,875***	***122,336,649***	***124,693,988***
EXPENDITURES												
GENERAL FUND OPERATING (GFGEN)												
701	Personal Services	79,887,911	82,314,182	82,284,561	79,661,578	78,412,604	78,642,286	78,534,396	76,637,841	77,174,573	77,895,786	78,623,738
726	Supplies	1,592,769	1,804,401	1,804,401	1,673,509	1,591,145	1,993,622	1,999,108	2,084,520	2,084,960	2,191,181	2,302,814
800	Other Services And Charges	18,441,470	18,371,710	18,652,141	18,956,927	17,654,024	19,993,084	20,483,994	20,919,768	21,477,286	22,090,520	22,721,264
970	Capital Outlay	591,230	449,690	645,262	506,986	340,032	381,784	381,875	412,974	405,118	415,051	425,228
990	Debt Service	433,893	340,896	340,896	340,896	344,341	331,795	327,423	322,583	112,262	57,918	29,881
996	Appropriation Lapse	0	(3,000,000)	(3,000,000)	(2,500,000)	0	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)
999	Contingent Appropriation	0	1,500,000	1,407,721	0	0	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
999	Transfers Out	19,679,688	14,916,743	15,092,962	15,745,668	17,620,947	16,333,999	16,468,224	16,703,997	17,145,859	17,539,700	17,942,588
999	**Transfers Out - Budget Stabilization Fund**	**0**	**0**	**0**	**3,683,466**	**3,683,466**	**1,071,311**	**1,897,174**	**154,727**	**559,541**	**833,919**	**1,196,816**
	Increase in Stormwater Support						*0*	*89,056*	*142,611*	*252,439*	*362,056*	*474,458*
	Allowance for Labor Negotiations						*1,086,892*	*512,642*	*1,692,635*	*1,618,996*	*1,563,437*	*1,545,765*
	Allowance for Fire Apparatus Capital Reserve						*0*	*475,000*	*550,000*	*844,840*	*887,082*	*931,437*
GENERAL FUND OPERATING Total Expenditures		***120,626,960***	***116,697,622***	***117,227,944***	***118,069,030***	***119,646,559***	***118,334,772***	***119,668,892***	***118,121,656***	***120,175,875***	***122,336,650***	***124,693,988***
GF OPERATING REV OVER/(UNDER) EXPENDITURES		(4,764,014)	(199,864)	3,980,963	1,875,373	3,859,694	(0)	(0)	0	0	(0)	(0)
Beginning Fund Balance		13,463,395	8,699,381	8,699,381	8,699,381	8,699,381	12,559,075	12,559,074	12,559,074	12,559,075	12,559,075	12,559,074
Ending Fund Balance		**8,699,381**	**8,499,517**	**12,680,344**	**10,574,754**	**12,559,075**	**12,559,074**	**12,559,074**	**12,559,075**	**12,559,075**	**12,559,074**	**12,559,074**
		7.2%	7.3%	10.8%	9.0%	10.5%	10.6%	10.5%	10.6%	10.5%	10.3%	10.1%
	Assigned to Operations - 15% of Total Spending	18,094,044	17,504,643	17,584,192	17,710,355	17,946,984	17,750,216	17,950,334	17,718,248	18,026,381	18,350,497	18,704,098
	Unassigned Fund Balance	(9,394,663)	(9,005,126)	(4,903,847)	(7,135,600)	(5,387,909)	(5,191,141)	(5,391,260)	(5,159,174)	(5,467,307)	(5,791,423)	(6,145,024)
	Total	8,699,381	8,499,517	12,680,344	10,574,754	12,559,075	12,559,074	12,559,074	12,559,075	12,559,075	12,559,074	12,559,074
Unassigned FB as a % of Total Expenditures		-7.8%	-7.7%	-4.2%	-6.0%	-4.5%	-4.4%	-4.5%	-4.4%	-4.5%	-4.7%	-4.9%

Attachment III

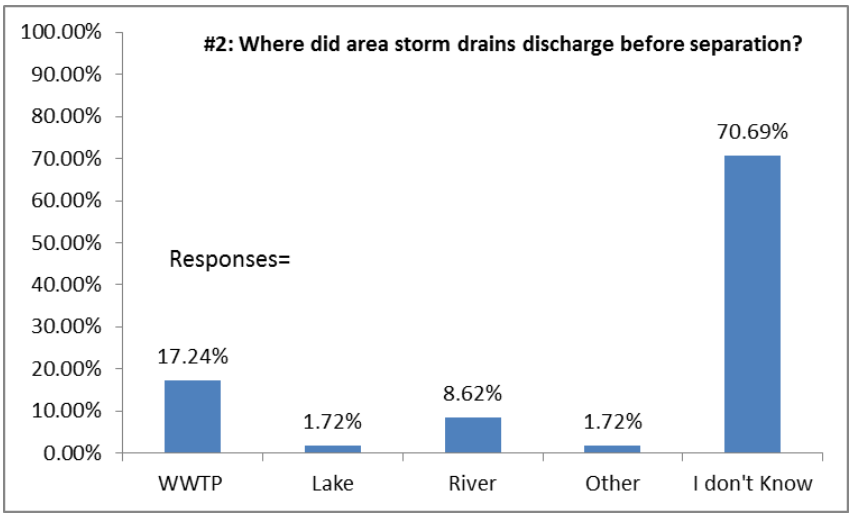
City of Grand Rapids
TRANSFORMATION FUND (SRTRN207)
STATEMENT OF OPERATIONS

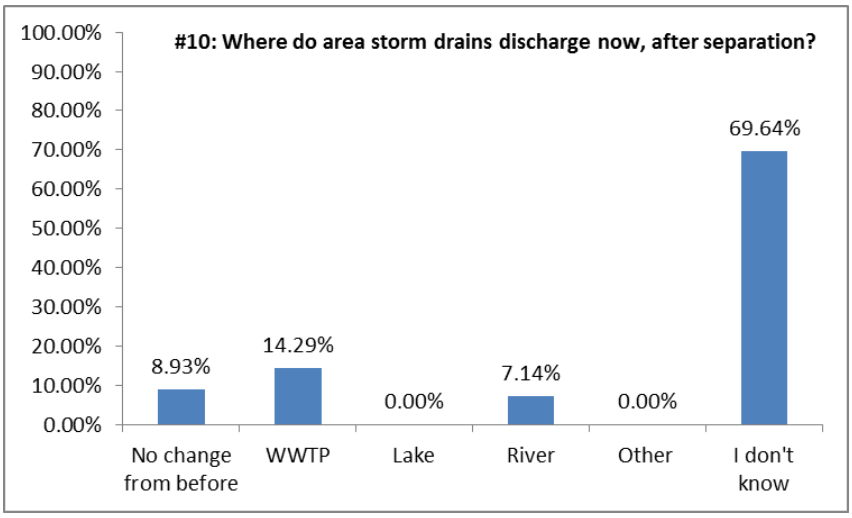
Budget 2014, Version 1

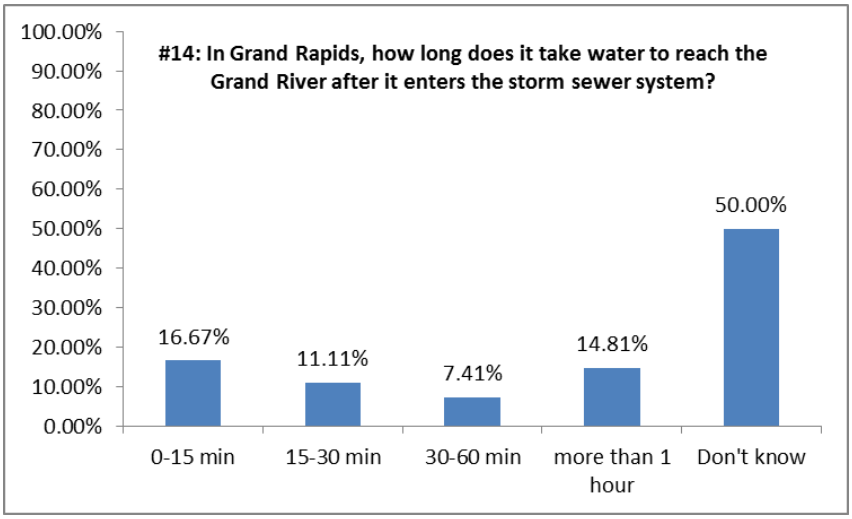
Organizations	FY2011 Amended Budget	Actual	FY2012 Amended Budget	Actual	FY2013 Amended Budget	Preliminary Actual	2014 Revised Estimate	2015 Revised Estimate	2016 Revised Estimate	2017 Revised Estimate	2018 Revised Estimate
REVENUE											
SUPPLEMENTAL INCOME TAX (SRTRN207)	Income Tax Growth Rate:	5.0%	4.0%	4.0%	9.0%	9.0%					
Taxes-Temporary Five Year Income Tax	$ 8,505,998	$ 8,517,255	$ 8,846,238	$ 9,057,217	$ 9,872,367	$ 9,872,367	$ 9,892,991	$ 10,090,851	$ -	$ -	$ -
Intergovernmental Revenues (EVIP)	-	-	4,570,056	4,570,056	4,661,457	4,896,488	4,896,486	5,043,381	5,194,682	5,350,522	5,511,038
Increase Capital Set-Aside by 1/2 of EVIP Revenues								(2,521,690)	(2,597,341)	(2,675,261)	(2,755,519)
Interest And Rents	-	-	-	49,616	64,000	91,516	35,000	40,000	20,000	10,000	5,000
Return of Consultant Fees from Cemetery					5,000	-	-	-	-	-	-
Loan Repayment from Refuse Fund	-	-	-	-	535,000	535,000	-	535,000	535,000	535,000	535,000
SUPPLEMENTAL INCOME TAX Total Revenue	***8,505,998***	***8,517,255***	***13,416,294***	***13,676,889***	***15,137,824***	***15,395,371***	***14,824,477***	***13,187,541***	***3,152,341***	***3,220,261***	***3,295,519***
EXPENDITURES											
SUPPLEMENTAL INCOME TAX (SRTRN207)											
Transfers Out											
Approved For:											
Support for Ten Community Police Officers	1,005,160	1,005,160	1,005,160	1,005,160	1,043,404	1,043,404	1,110,492	1,125,093	-	-	-
Support for Fifteen Firefighters	192,934	192,934	198,339	198,339	180,233	180,233	1,173,989	1,606,671	-	-	-
Support for 17 Firefighters after SAFER One	-	-	-	-	1,589,659	1,589,659	1,696,168	1,119,234	-	-	-
Business Planning for City Cemeteries	-	-	20,000	20,000	-	(5,000)	-	-	-	-	-
Business Planning for Indian Trails Golf Course	-	-	20,000	20,000	-	-	-	-	-	-	-
Fire Dept. - Fire Squad Vehicles	-	-	931,781	931,781	(3,171)	(3,171)	-	-	-	-	-
Joint Police and Fire Study	-	-	69,000	69,000	-	-	-	-	-	-	-
Fee Study	-	-	50,000	50,000	-	-	-	-	-	-	-
Curbside Refuse Collection Carts	-	-	2,400,000	2,400,000	-	-	-	-	-	-	-
3-1-1 Customer Service	-	-	225,640	225,640	336,599	173,315	-	-	-	-	-
Stormwater Asset Management Plan	-	-	-	-	450,000	450,000	-	-	-	-	-
Fire Apparatus Fuel Efficiency Initiative	-	-	-	-	75,550	75,550	-	-	-	-	-
Police Dept. Automated License Plate Recognition System	-	-	-	-	104,616	104,616	-	-	-	-	-
Fire Dept. FEMA Grant Match - Prevention Grant	-	-	-	-	100,808	100,808	-	-	-	-	-
Community Development Services Study	-	-	-	-	20,000	20,000	-	-	-	-	-
Transfers to General Operating Fund	-	-	7,679,552	7,679,552	6,052,707	6,052,707	-	-	-	-	-
Street Lighting Audit	-	-	-	-	-	-	500,000	-	-	-	-
Fire Dept. - Apparatus Plan Reset	-	-	-	-	-	-	4,397,225	-	-	-	-
Reserved For:											
Cemetery Trust*	-	-	-	-	-	-	6,000,000	-	-	-	-
Street Lighting Retofit*	-	-	-	-	-	-	-	10,000,000	-	-	-
Violent Crime Reduction Strategy*							600,000	600,000	600,000	600,000	
Available For:											
Operational Transformation and Sustainable Asset Management*	-	-	-	-	-	-	1,500,000	5,250,000	4,500,000	4,500,000	4,500,000
SUPPLEMENTAL INCOME TAX Total Requested Expenditures	**1,198,094**	**1,198,094**	**12,599,472**	**12,599,472**	**9,950,405**	**9,782,121**	**16,977,874**	**19,700,998**	**5,100,000**	**5,100,000**	**4,500,000**
SUPPLEMENTAL INCOME TAX NET INCOME (LOSS)	**7,307,904**	**7,319,161**	**816,822**	**1,077,417**	**5,187,419**	**5,613,250**	**(2,153,397)**	**(6,513,457)**	**(1,947,659)**	**(1,879,739)**	**(1,204,481)**
Fund Balance - Beginning of Year	-	-	7,319,161	7,319,161	8,396,578	8,396,578	14,009,828	11,856,431	5,342,974	3,395,315	1,515,577
Fund Balance - End of Year	**7,307,904**	**7,319,161**	**8,135,983**	**8,396,578**	**13,583,997**	**14,009,828**	**11,856,431**	**5,342,974**	**3,395,315**	**1,515,577**	**311,096**
Reserve Targets:											
Assigned Reserves to Maintain Firefighters After SAFER Grant & After Income Tax	1,254,066	1,254,066	2,498,964	2,498,964	2,176,072	2,439,203	1,119,234	-	-	-	-
Unassigned Fund Balance	6,053,838	6,065,095	5,637,019	5,897,614	11,407,925	11,570,625	10,737,197	5,342,974	3,395,315	1,515,577	311,096
Total	7,307,904	7,319,161	8,135,983	8,396,578	13,583,997	14,009,828	11,856,431	5,342,974	3,395,315	1,515,577	311,096
Unassigned FB as a % of Total Expenditures	505.29%	506.23%	44.74%	46.81%	114.65%	118.28%	63.24%	27.12%	66.57%	29.72%	6.91%
Programmed for Fire Squad (15 personnel) [Total Cost of Squad]	1,447,000	1,447,000	1,447,000	1,447,000	1,447,000	1,496,958	428,956	1,606,671	-	-	-
Expenditure for Squad (Income Tax) [Portion not Covered by SAFER II]	192,934	192,934	202,102	202,102	180,233	180,233	52,757	1,606,671	-	-	-
Difference (SAFER II)	1,254,066	1,254,066	1,244,898	1,244,898	1,266,767	1,316,725	376,199	-	-	-	-
Expenditure for 17 Firefighters after SAFER I Ends	-	-	-	-	(1,589,659)	(1,376,486)	(1,696,168)	(1,119,234)	-	-	-
Net Difference	1,254,066	1,254,066	1,244,898	1,244,898	(322,892)	(59,761)	(1,319,969)	(1,119,234)	-		
Reserved for Firefighters Beginning of Year	-	-	1,254,066	1,254,066	2,498,964	2,498,964	2,439,203	1,119,234	-	-	-
Reserved for Firefighters End of Year	$ 1,254,066	$ 1,254,066	$ 2,498,964	$ 2,498,964	$ 2,176,072	$ 2,439,203	$ 1,119,234	$ -	$ -	$ -	$ -

*Illustrative - projects under development, subject to review and approval process

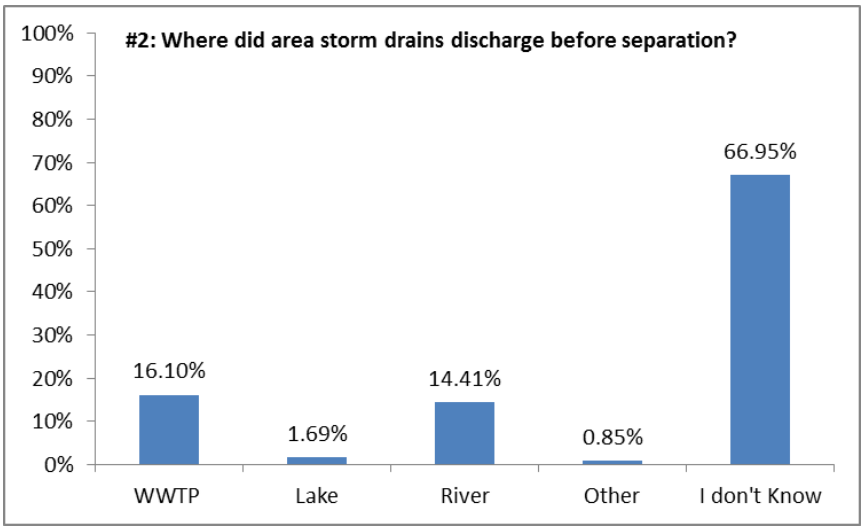
Business

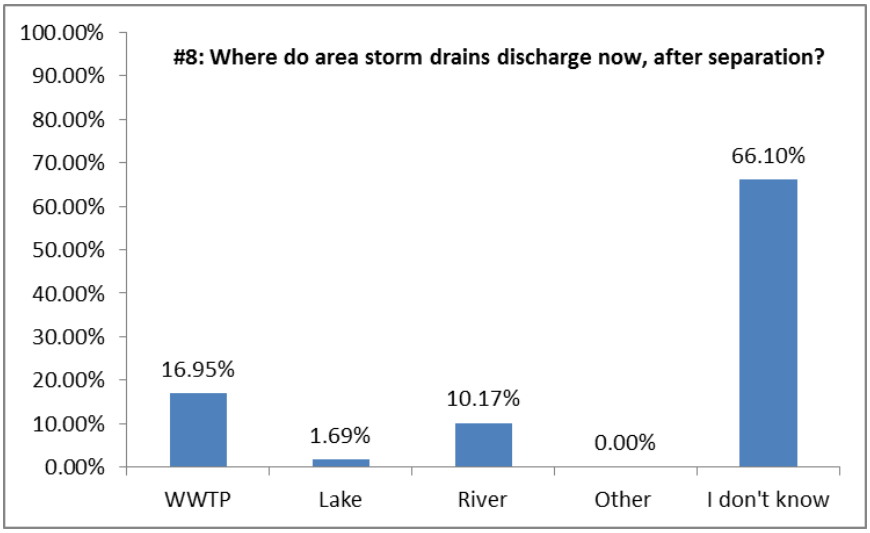

#2: Where did area storm drains discharge before separation?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Responses=
17.24%
1.72%
8.62%
1.72%
70.69%
WWTP
Lake
River
Other
I don't Know

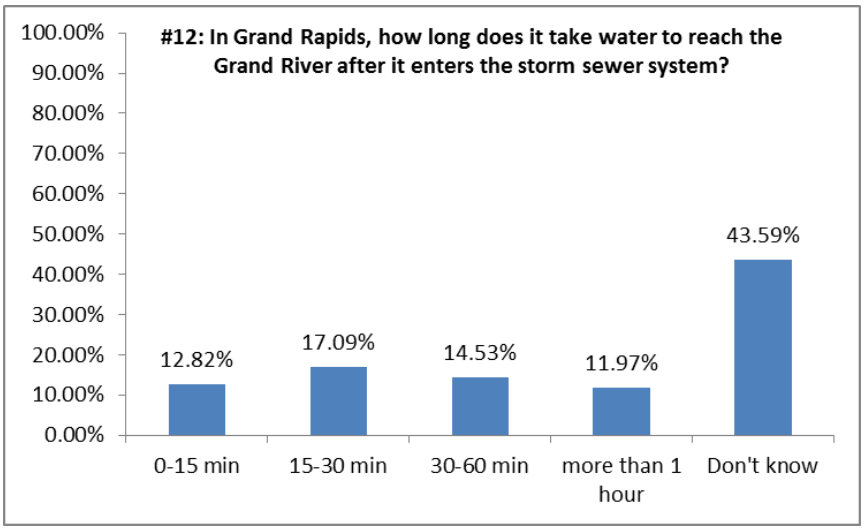

#10: Where do area storm drains discharge now, after separation?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
8.93%
14.29%
0.00%
7.14%
0.00%
69.64%
No change from before
WWTP
Lake
River
Other
I don't know


#14: In Grand Rapids, how long does it take water to reach the Grand River after it enters the storm sewer system?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
16.67%
11.11%
7.41%
14.81%
50.00%
0-15 min
15-30 min
30-60 min
more than 1 hour
Don't know

Residential





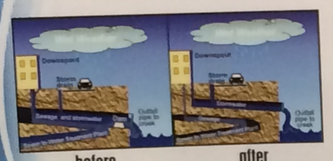


lichigan
nd Tile Inc.

Combined Sewer Overflows

All but eliminated

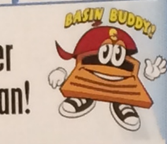
- Flows reduced 99.8%
- Complete construction 2015
- $237 Million spent (Sewer fund only)

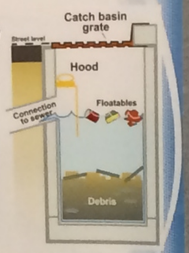


Adopt-a-Catch Basin

How can you help?

- Keep sewer grates clean!
- Allow only rainwater to enter
- Report all Dumping





Environmental Services

Environmental Protection TIP #1
Proper grease disposal
Water and oil do NOT mix!
What can YOU do to help?

Environmental Protection TIP #2
Proper medicine disposal
Don't rush to flush!
What can YOU do to help?

Environmental Protection TIP #3

Environmental Protection TIP #4
Rain water is not wastewater
Drain the Rain

Environmental Protection TIP #5
Report it - Don't ignore it!
GRCity311
311
What can YOU do to help?

GRAND RAPIDS Environmental Services